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ELECTRONIC FILING

Mr. Adam J. Teitzman, Commission Clerk
Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket 20250029-GU, Petition for Rate Increase by Peoples Gas System, Inc.

Dear Mr. Teitzman:

Attached for filing on behalf of Peoples Gas System, Inc. in the above-referenced docket is the Rebuttal Testimony of Dylan D'Ascendis and Exhibit No. DD-2.

Thank you for your assistance with this matter.

(Document 3 of 7)

Sincerely,

VPonder

Virginia Ponder

cc: Major Thompson, OGC
Jacob Imig, OGC
Walt Trierweiler, Public Counsel
Jon Moyle, FIPUG

VLP/dh
Attachments

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20250029-GU

PETITION FOR RATE INCREASE

BY PEOPLES GAS SYSTEM, INC.

REBUTTAL TESTIMONY AND EXHIBIT

OF

DYLAN D'ASCENDIS

ON BEHALF OF

PEOPLES GAS SYSTEM, INC.

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PREPARED DIRECT TESTIMONY AND EXHIBIT

OF

DYLAN D'ASCENDIS

ON BEHALF OF PEOPLES GAS SYSTEM, INC.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF

DYLAN D'ASCENDIS

ON BEHALF OF PEOPLES GAS SYSTEM, INC.

I. INTRODUCTION

Q. Please state your name, address, occupation, and employer.

A. My name is Dylan D'Ascendis. My business address is 1820 Chapel Avenue W., Suite 300, Cherry Hill, New Jersey 08003. I am employed by ScottMadden, Inc. as a Partner.

Q. Are you the same Dylan D'Ascendis who filed direct testimony in this proceeding?

A. Yes, I am.

II. PURPOSE, SUMMARY AND OVERVIEW

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is two-fold. First, due to the passage of time since the analysis in my direct testimony, I have updated my return on equity ("ROE") analyses to reflect more recent market data. Second, I respond to the direct testimony of witness David J. Garrett, on behalf of the Florida Office of Public Counsel ("OPC"), concerning Peoples Gas System, Inc.'s ("Peoples" or the "company") ROE on its Florida rate base.

Q. Have you prepared an exhibit supporting your rebuttal testimony?

A. Yes. I have prepared Exhibit No. DD-2, comprising Document Nos. 1 through 21, which have been prepared by me or under my direction.

Document No. 1	Updated Cost of Common Equity Results
Document No. 2	Financial Profile of the Utility Proxy Group
Document No. 3	Application of the Discounted Cash Flow Model
Document No. 4	Application of the Risk Premium Model
Document No. 5	Application of the Capital Asset Pricing Model
Document No. 6	Basis of Selection for the Non-Price Regulated Companies Comparable in Total Risk to the Utility Proxy Group
Document No. 7	Application of Cost of Common Equity Models to the Non-Price Regulated Proxy Group

Document No. 8	Derivation of the Indicated Size Premium for Peoples Relative to the Utility Proxy Group
Document No. 9	Derivation of the Flotation Cost Adjustment to the Cost of Common Equity
Document No. 10	Gross Domestic Product (“GDP”) by Industry, 1947 - 2024
Document No. 11	Growth Rate Regressions
Document No. 12	Garrett Corrected Discounted Cash Flow Model
Document No. 13	Evaluation of Implied Risk Premium Approach
Document No. 14	Evaluation of Forecast Bias of Mr. Garrett’s Historical Market Risk Premiums
Document No. 15	Garrett Corrected CAPM
Document No. 16	Size and Volatility of Returns
Document No. 17	Evaluation of Size (Market Capitalization) and Volatility of Returns (Annualized Returns)
Document No. 18	Evaluation of Size (Market Capitalization) and Volatility of Returns (Safety Ranking)
Document No. 19	Flotation Cost Illustration
Document No. 20	Frequency Distribution of Observed

	Market Risk Premiums (“MRP”), 1926 - 2024
Document No. 21	Referenced Endnotes for the Rebuttal Testimony of Dylan D’Ascendis

Q. How is the remainder of your rebuttal testimony organized?

A. The remainder of my rebuttal testimony is organized as follows:

- Section III – Provides my updated analyses;
- Section IV – Contains my response to OPC witness Garrett; and
- Section V – Summarizes my recommendations and conclusions.

Q. Please summarize the key issues addressed in your rebuttal testimony.

A. First, I discuss my updated analyses for the company using market data as of June 30, 2025.

Next, I respond to Mr. Garrett’s testimony concerning the appropriate ROE for Peoples. As discussed in Section IV, Mr. Garrett’s shortcomings in his analyses include:

1. His misinterpretation of the relationship between various returns referenced in an ROE analysis.
2. His misapplication of the Discounted Cash Flow (“DCF”)

model.

3. His misapplication of the Capital Asset Pricing Model ("CAPM"); and
4. His failure to consider flotation costs and other company-specific risk factors in his ROE recommendation.

Finally, my rebuttal testimony also addresses Mr. Garrett's unfounded critiques of my direct testimony.

Q. Please summarize your recommendations and conclusions.

A. My updated analytical results indicate the reasonable range of ROEs applicable to Peoples is between 10.66 percent and 11.16 percent. The indicated range of ROEs applicable to the Utility Proxy Group excluding the Predictive Risk Premium Model ("PRPM") from the calculation of the market risk premium is 10.66 percent to 11.14 percent. In view of current markets and the results of my ROE models, the 9.00 percent ROE proffered by Mr. Garrett is woefully inadequate. However, making reasonable adjustments to Mr. Garrett's DCF and CAPM analyses produces results that are consistent with my recommended range.

III. UPDATED ANALYSES

Q. Have you updated your analyses to reflect current market conditions?

A. Yes, I have. As noted above, given the passage of time since my direct testimony analyses (data as of January 15, 2025), I have updated my analyses using data as of June 30, 2025.

Q. Have you applied any of your ROE models differently in your updated analyses?

A. No, I have not.

Q. What are the results of your updated analyses?

A. Using market data available as of June 30, 2025, my updated analytical results are summarized in Document No. 1 of Exhibit No. DD-2. As presented on page 2 of Document No. 1, the updated indicated range of common equity cost rates for the company is between 10.66 percent and 11.16 percent, and between 10.66 percent and 11.14 percent, excluding the PRPM.

Q. Did you consider the indicated ROE from your Non-Price Regulated Proxy Group in the determination of your recommended ROE in this proceeding?

A. No, I did not. As stated on page 6 of my direct testimony, "I did not consider the analytical results applied to my Non-Price Regulated Proxy Group in the determination of my recommended range." Because I did not rely on the results of the Non-Price Regulated Proxy Group in my recommendation, and in an effort to limit the scope of this rebuttal testimony, I will not respond to any critiques of my Non-Price Regulated Proxy Group even though I maintain the applicability of the results of the model to the cost of common equity for utilities.

IV. RESPONSE TO OPC WITNESS GARRETT

Q. Please provide a brief summary of Mr. Garrett's analyses and recommendations regarding Peoples' ROE.

A. Mr. Garrett believes an ROE of 9.00 percent is reasonable if the Commission approves his recommended imputed debt ratio of 51.00 percent for Peoples; otherwise, he suggests the company's cost of equity is only 8.60 percent if the Commission approves Peoples' proposed debt ratio of approximately 45.00 percent.[1] Mr. Garrett estimates the ROE using the DCF model and CAPM. His DCF model results are estimated using two sources of growth rates: (1) his view of sustainable growth, which produces an average result of 7.40 percent; and (2) projected dividend per share ("DPS") growth rates from *Value Line Investment Services ("Value Line")*, which produce an average result of 7.80 percent. In addition, Mr. Garrett performs a CAPM analysis, which produces results of 9.00 percent if the Commission approves Mr. Garrett's proposed capital structure and 8.60 percent after applying the Hamada adjustment.[2]

Q. In what key areas are Mr. Garrett's analyses and recommendations incorrect or unsupported?

A. There are several areas in which Mr. Garrett's analyses and conclusions are incorrect or unsupported, including: (1) his misinterpretation of the relationship between the cost of equity, the investor-required ROE, and the awarded ROE for regulated utilities; (2) his misapplication of the DCF model; (3) his misapplication of the CAPM; and (4) his failure to consider flotation costs and company-specific risk factors in his recommended ROE. Those points are discussed in turn below.

A. <u>RELATIONSHIP BETWEEN THE COST OF EQUITY, THE INVESTOR-REQUIRED ROE, AND THE AWARDED ROE</u>

Q. Please summarize Mr. Garrett's views on the relationship between the cost of equity, the investor-required ROE, and the awarded ROE for regulated utilities.

A. Mr. Garrett initially correctly points out that the required return from the investor's perspective is synonymous with the cost of capital from the utility's perspective but then states that he believes the above specified returns are different, yet related concepts.[3] Mr. Garrett's views regarding the relationship between allowed and investor-required ROEs for utilities change throughout the course of his testimony.

For example, on page 8 of his testimony, Mr. Garrett discusses the equivalency of the cost of equity and the awarded ROE, stating:

> The *Hope* Court makes it clear that the awarded return should be based on the actual cost of capital. Moreover, the awarded return must also be fair, just, and reasonable under the circumstances of each case. Under the rate base rate of return model, a utility should be allowed to recover all its reasonable expenses, its capital investments through depreciation, and a return on its capital investments sufficient to satisfy the required return of its investors. The "required return" from the investors' perspective is synonymous with the "cost of capital" from the utility's perspective. Scholars agree that the allowed rate of return should be based on the actual cost of capital:

> Since by definition the cost of capital of a regulated firm represents precisely the expected return that investors could anticipate from other investments while bearing no more or less risk, and since investors will not provide capital unless the investment is expected to yield its opportunity cost of capital, the correspondence of the definition of the cost of capital with the court's definition of legally required earnings appears clear.[4,5]

Then, on page 9 of his testimony, Mr. Garrett contradicts his above testimony by stating that awarded ROEs and cost of equity (i.e., investor-required returns) are very different concepts because of the regulatory process that may be influenced by factors other than objective market drivers.[6]

Mr. Garrett continues to change his position regarding the equivalency, or non-equivalency, of the allowed and required ROE, sometimes in consecutive sentences. For example, on page 9 of his testimony, Mr. Garrett states that "The two concepts [allowed and required ROEs] are related in that the legal and technical standards encompassing this issue require that the awarded return reflect the true cost of capital. On the other hand, the two concepts are different in that the legal standards do not mandate that awarded returns exactly match the cost of capital."[7]

Q. What is your reaction to Mr. Garrett's views on the relationship between allowed and required ROEs for utility companies?

A. Mr. Garrett is unnecessarily complicating a simple relationship. For regulated utilities, the ROE equals the investor-required ROE, which equals the allowed ROE, as reflected in the *Hope* and *Bluefield* Supreme Court decisions cited in both my direct testimony[8] and Mr. Garrett's testimony.[9] This relationship holds because utility regulation by regulatory commissions acts as a substitute for competition.

Q. Is the concept of utility regulation as a substitute for market competition widely accepted as a fact and reflected as such in academic literature?

A. Yes, it is. The *Cost of Capital Manual*, which is the training manual for the Society of Utility and Financial Analysts, of which Mr. Garrett and I are members, states:

> In a sense, the "visible hand of public regulation was (created) to replace the invisible hand of Adam

> Smith in order to protect consumers against exorbitant charges, restriction of output, deterioration of service, and unfair discrimination."[footnote omitted]
>
> * * *
>
> As indicated above, regulation of public utilities reflects a belief that the competitive mechanism alone cannot be relied upon to protect the public interest. Essentially, it is theorized that a truly competitive market involving utilities cannot survive and, thereby, will fail to promote the general economic welfare. But this does not mean that regulation should alter the norm of competitive behavior for utilities. On the contrary, the primary objective of regulation is to produce market results (*i.e.*, price and quantity supplied) in the utility sectors of the economy closely approximating those conditions which would be obtained if utility rates and services were determined competitively.[10]

Additionally, in *Principles of Public Utility Rates*, Dr. Bonbright states:

> Lest the reader of this chapter gain the impression that it is intended to deny the relevance of any

tests of reasonable rates derived from the theory or the behavior of competitive prices, let me state my conviction that no such conclusion would be warranted. On the contrary, a study of price behavior both under assumed conditions of pure competition and under actual conditions of mixed competition is essential to the development of sound principles of utility rate control. Not only that: any good program of public utility rate making must go a certain distance in accepting competitive-price principles as guides to monopoly pricing. For rate regulation must necessarily try to accomplish the major objectives that unregulated competition is designed to accomplish; and the similarity of purpose calls for a considerable degree of similarity of price behavior.

Regulation, then, as I conceive it, is indeed a substitute for competition; and it is even a partly imitative substitute. But so is a Diesel locomotive a partly imitative substitute for a steam locomotive, and so is a telephone message a partly imitative substitute for a telegraph message. What I am trying to emphasize by these crude analogies is that the very nature of a

> monopolistic public utility is such as to preclude an attempt to make the emulation of competition very close. The fact, for example, that theories of pure competition leave no room for rate discrimination, while suggesting a reason for viewing the practice with skepticism, does not prove that discrimination should be outlawed. And a similar statement would apply alike to the use of an original-cost or a fair value rate base, neither of which is defensible under the theory or practice of competitive pricing.[11]

Finally, Dr. Charles F. Phillips states in *The Regulation of Public Utilities*:

> Public utilities are no longer, if they ever were, isolated from the rest of the economy. It is possible that the expanding utility sector has been taking too large a share of the nation's resources, especially of investment.[footnote omitted] At a minimum, regulation must be viewed in the context of the entire economy – and evaluated in a similar context. Public utilities have always operated within the framework of a competitive system. They must obtain capital, labor and materials in competition with unregulated industries. Adequate

> profits are not guaranteed to them. Regulation then, should provide incentives to adopt new methods, improve quality, increase efficiency, cut costs, develop new markets and expand output in line with customer demand. In short, regulation is a substitute for competition and should attempt to put the utility sector under the same restraints competition places on the industrial sector.[12]

In view of the legal standard cited by me and Mr. Garrett, and treatises on regulation likening regulation of utilities and the competitive market, it is plain to see that allowed returns and investor-required returns are also equal.

Q. Do you have any concerns with Mr. Garrett's 8.60 percent ROE estimate if the company's proposed capital structure is approved?

A. Yes, I do. As discussed in my direct testimony,[13] credit ratings reflect a company's combined business risk and financial risk (with the exception of size). Since the company's credit rating is equivalent to the Utility Proxy Group's average credit rating, any adjustment to the ROE based on financial risk (i.e. equity ratio) would serve as a double count.

Further, Mr. Garrett derives his 8.60 percent ROE estimate using the Hamada model, which can be used to adjust the cost of equity based on changes in the debt ratio, assuming Peoples' proposed debt ratio of approximately 45.00 percent.[14] To estimate the change in the cost of equity based on the change in the debt ratio, Mr. Garrett had to assume a debt ratio to estimate the unlevered Beta coefficient ("beta"). Mr. Garrett's assumption that 51.00 percent is an appropriate debt ratio for the proxy group is unfounded.

Q. Why do you disagree with Mr. Garrett's assumed 51.00 percent debt ratio?

A. While I agree that it is reasonable to review the capital structures of the proxy companies, the range of common equity ratios depicts the range of typical or proper equity ratios maintained by comparable risk companies. As shown in Mr. Garrett's Exhibit DJG-13 and in Exhibit No. DD-2, Document No. 2, pages 2 and 3, the company's proposed debt ratio is within the range of the proxy companies. Because Peoples' requested capital structure is consistent with the proxy companies, Mr. Garrett's Hamada adjustment, and his adjustment to the ROE to reflect Peoples' proposed capital structure, is unnecessary and should be ignored.

B. MISAPPLICATION OF THE DISCOUNTED CASH FLOW MODEL

Q. Please briefly describe Mr. Garrett's constant growth DCF analyses and results.

A. Mr. Garrett applied "sustainable" growth rates to the constant growth DCF Model, which produced an ROE estimate of 7.40 percent.[15] For the dividend yield component, Mr. Garrett relied on annualized dividend payments and 30-day average stock prices as of June 9, 2025.[16] To estimate expected growth, Mr. Garrett looked to two measures: (1) nominal Gross Domestic Product ("GDP") and (2) real GDP.[17] Of those two measures, he chose the highest estimate, 3.70 percent.[18] In addition, Mr. Garrett calculated his DCF results based on projected DPS growth rates from *Value Line*, which produce an average DCF result of 7.80 percent.[19]

Q. What are your general concerns with the sustainable growth rates on which Mr. Garrett's DCF analysis relies?

A. First, Mr. Garrett assumed a single, perpetual growth rate of 3.70 percent for all his proxy companies.[20] By reference to the Congressional Budget Office's expected inflation rate of 2.10 percent, Mr. Garrett's method assumed his proxy companies all will grow at real rates of approximately 1.60 percent, in perpetuity.[21] It is unlikely an investor would be willing to assume the risks of equity ownership in exchange for expected growth only modestly greater than expected inflation. The risk simply is not worth the expected return.[22] In addition, as a practical matter, because they are generic in nature, his estimate fails to account for the risks and prospects faced by the proxy companies.

Q. What other concerns do you have with the 3.70 percent growth rate assumed for all companies in Mr. Garrett's DCF analysis?

A. Mr. Garrett's 3.70 percent growth rate is not based on any measure of company-specific growth, or growth in the utility industry in general. Rather, his proxy group serves the sole purpose of calculating the dividend yield. Under the DCF model's strict assumptions, however, expected growth and dividend yields are inextricably related. Mr. Garrett's assumption that one growth rate applies to all companies, even though dividend yields vary across those companies, has no basis in theory or practice.

Q. It is Mr. Garrett's opinion that growth in a DCF model is limited by the long-term growth in GDP.[23] Why is long-term growth in GDP not an upper limit for terminal growth as Mr. Garrett contends?

A. First, GDP is not a market measure – rather, it is a measure of the value of the total output of goods and services, excluding inflation, in an economy. While I understand that earnings per share ("EPS") growth is also not a market measure, it is well established in the financial literature that projected growth in EPS is the superior measure of dividend growth in a DCF model.[24] Furthermore, GDP is simply the sum of all private industry and government output in the United States, and its growth rate is simply an average of the value of those industries. To illustrate, Document No. 10 of my exhibit presents the compound annual growth rate of the industries that comprise GDP from 1947 to 2024. Of the 15 industries represented, seven industries (including utilities) grew faster than the overall GDP, and eight industries grew slower than the overall GDP.[25] Given that utilities have grown faster than the overall GDP over the 1947-2024 time period, I disagree with Mr. Garrett's suggestion that "it is reasonable to consider nominal GDP as a limit of 'ceiling' for long-term earnings or dividend growth."[26]

Q. Did you conduct another analysis that calculates the amount of time it would take an industry to overtake the entire economy?

A. Yes. I examined the value added by industry from 1947 to 2024 in Document No. 10 of my exhibit and used the compound annual growth rates for the highest growth rate industry (i.e., Educational Services, Healthcare, and Social Assistance at 8.55 percent per year) to see when that industry would comprise the entire economy. In the year 2300, or 353 years from the 1947 starting point, the industry would comprise over 50 percent of GDP, and in the year 7963, or 6,016 years after the 1947 starting point, the industry would comprise 100 percent of GDP.[27] Not only have individual companies or industries consistently grown at rates beyond GDP growth, but they have done so without overtaking the entire economy. While Mr. Garrett's argument may be technically correct, it is unrealistic at best.

Q. Please respond to Mr. Garrett's comment regarding "steady-state" growth rates.

A. On page 26 of his testimony, Mr. Garrett states, "it is not necessary to use multi-stage DCF Models to analyze the cost of equity of regulated utility companies. This is because regulated utilities are already in their 'sustainable,' low growth stage." While I agree with Mr. Garrett's statement regarding regulated utilities being in the "mature" stage in the company/industry life cycle, I disagree with his conclusion regarding the long-term growth rates of regulated utilities.

As Mr. Garrett describes, the multi-stage DCF and its growth rates reflect the company/industry life cycle, which is typically described in three stages: (1) the growth stage, which is characterized by rapidly expanding sales, profits, and earnings. In the growth stage, dividend payout ratios are low in order to grow the firm; (2) the transition stage, which is characterized by slower growth in sales, profits, and earnings. In the transition stage, dividend payout ratios increase, as their need for exponential growth diminishes; and (3) the maturity (steady-state) stage, which is characterized by limited, slightly attractive investment opportunities, steady earnings growth, dividend payout ratios, and returns on equity.

Since the utility industry is in the mature phase of the company life cycle, it is the company-specific projected EPS growth rate that is the appropriate measure of growth in a constant growth DCF model, not the projected GDP growth rate, as Mr. Garrett asserts.

Q. Are there examples in basic finance texts that support your position?

A. Yes. For example, in <u>Investments</u>, life cycles and multi-stage growth models are discussed:

> As useful as the constant-growth DDM (dividend discount model) formula is, you need to remember that it is based on a simplifying assumption, namely, that the dividend growth rate will be constant forever. In fact, firms typically pass through life cycles with very different dividend profiles in different phases. In early years, there are ample opportunities for profitable reinvestment in the company. Payout ratios are low, and growth is correspondingly rapid. In later years, the firm matures, production capacity is sufficient to meet market demand, competitors enter the market, and attractive opportunities for reinvestment may become harder to find. In this mature phase, the firm may choose to increase the dividend payout ratio, rather than retain earnings. The dividend level increases, but thereafter it grows at a slower pace because the company has fewer growth opportunities.
>
> Table 18.2 illustrates this pattern. It gives Value Line's forecasts of return on assets, dividend payout ratio, and 3-year growth in

earnings per share for a sample of the firms in the computer software industry versus those of east coast electric utilities…

By in large, the software firms have attractive investment opportunities. The median return on assets of these firms is forecast to be 19.5 percent, and the firms have responded with high plowback ratios. Most of these firms pay no dividends at all. The high return on assets and high plowback result in rapid growth. The median growth rate of earnings per share in this group is projected at 17.6 percent.

In contrast, the electric utilities are *more representative of mature firms*. Their median return on assets is lower, 6.5 percent; dividend payout is higher, 68 percent; and median growth is lower, 4.6 percent.

* * *

To value companies with temporarily high growth, analysts use a multistage version of the dividend discount model. Dividends in the early high-growth period are forecast and their combined present value is calculated. Then, once the firm is

> projected to settle down to *a steady-growth phase, the constant-growth DDM is applied to value the remaining stream of dividends.*[28] (Clarification and emphasis added)

The economics of the public utility business indicate that the industry is in the steady-state, or constant-growth stage of a multi-stage DCF, which would mean that the three- to five-year projected growth rates for each company would be the "steady-state" or terminal growth rate appropriate for the DCF model for utility companies, not the GDP growth rate, which is not a company-specific growth rate, nor is it an upward bound for growth, as discussed previously.

Q. Has the Commission previously stated a position with respect to Mr. Garrett's use of GDP-derived growth rates as inputs in the DCF Model?

A. Yes. In Peoples' previous rate case, Docket No. 20230023-GU, the Commission found Mr. Garrett's use of GDP growth rates inappropriate for reasons similar to those noted above, stating:

> Witness Garrett's argument to use the GDP growth rate in his DCF model is not supported by persuasive evidence. We agree with witness D'Ascendis that the

> growth rate should reflect a measure of the utilities' individual growth, and not a generic measure of the output of the entire economy.[29]

Q. Do you agree with Mr. Garrett's use of projected DPS growth rates in his DCF model based on analyst growth rates?

A. No, I do not. First, as discussed in my direct testimony,[30] earnings growth enables dividend growth. Under the strict assumptions of the constant growth DCF model, earnings, dividends, book value, and stock prices all grow at the same, constant rate in perpetuity.

Simply, earnings are the fundamental driver of dividend growth. The ability to pay dividends depends fundamentally on expected earnings. Because dividend policy contemplates additional factors, including the disproportionately negative effect on prices resulting from dividend cuts, as opposed to dividend increases, in the short-run dividend growth may be disconnected from earnings growth. In the long run, however, dividends cannot be increased without earnings growth.

Furthermore, earnings expectations have a more significant, but not sole, influence on market prices than dividend expectations. Thus, the use of earnings growth rates in a

DCF analysis provides a better match between investors' market appreciation expectations implicit in market prices and the growth rate component of the DCF. Consequently, earnings expectations have a significant influence on market prices, which affect market price appreciation, and hence, the "growth" experienced by investors. This should be evident by listening to financial news reports on radio, TV, or reading newspapers. In fact, Morin states:

> Because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run growth rates provide a sound basis for estimating required returns. Financial analysts exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of growth. The accuracy of these forecasts in the sense of whether they turn out to be correct is not at issue here, as long as they reflect widely held expectations. As long as the forecasts are typical and/or influential in that they are consistent with current stock price levels, they are relevant. The use of analysts' forecasts in the DCF model is sometimes denounced on the grounds that it is difficult to forecast earnings and dividends for

> only one year, let alone for longer time periods. This objection is unfounded, however, because it is present investor expectations that are being priced; it is the consensus forecast that is embedded in price and therefore in required return, and not the future as it will turn out to be.
>
> * * *
>
> Published studies in the academic literature demonstrate that growth forecasts made by security analysts represent an appropriate source of DCF growth rates, are reasonable indicators of investor expectations and are more accurate than forecasts based on historical growth. These studies show that investors rely on analysts' forecasts to a greater extent than on historic data.[31]

In addition, studies performed by Cragg and Malkiel demonstrate that analysts' forecasts are superior to historical growth rate extrapolations. They state:

> Efficient market hypotheses suggest that valuation should reflect the information available to investors. Insofar as analysts' forecasts are more precise than other types we should therefore expect their differences from other measures to be reflected in the market. It is therefore

noteworthy that our regression results do support the hypothesis that analysts' forecasts are needed even when calculated growth rates are available. As we noted when we described the data, security analysts do not use simple mechanical methods to obtain their evaluations of companies. The growth-rate figures we obtained were distilled from careful examination of all aspects of the companies' records, evaluation of contingencies to which they might be subject, and whatever information about their prospects the analysts could glean from the companies themselves of from other sources. It is therefore notable that the results of their efforts are found to be so much more relevant to the valuation than the various simpler and more "objective" alternatives that we tried.[32]

In addition, Vander Weide and Carleton conclude:

. . . our studies affirm the superiority of analysts' forecasts over simple historical growth extrapolations in the stock price formation process. Indirectly, this finding lends support to the use of valuation models whose input includes expected growth rates.[33]

Burton G. Malkiel, the Chemical Bank Chairman's Professor of Economics at Princeton University and author of the widely read national bestseller book on investing entitled, A Random Walk Down Wall Street (2011), also expressed support for projected EPS growth rates in testimony before the Public Service Commission of South Carolina in November 2002. Malkiel affirmed his belief in the superiority of analysts' earnings forecasts when he testified:

> With all the publicity given to tainted analysts' forecasts and investigations instituted by the New York Attorney General, the National Association of Securities Dealers, and the Securities & Exchange Commission, I believe the upward bias that existed in the late 1990s has indeed diminished. In summary, I believe that current analysts' forecasts are more reliable than they were during the late 1990s. *Therefore, analysts' forecasts remain the proper tool to use in performing a Gordon Model DCF analysis.*[34]

Q. In reviewing the financial literature, did you discover any publications that supported the use of projected DPS growth rates for use in a DCF model?

A. No, I did not.

Q. Did Mr. Garrett provide any evidence from the academic literature supporting his use of DPS growth rates?

A. No, he did not.

Q. Likewise, are you aware of any sources of data that provide projected DPS growth rates to investors?

A. *Value Line* is the only source of which I am aware that publishes projected DPS growth rates. If investors indeed valued projected DPS growth rates, there would be a market for that data. As they are not relied on by investors to determine their required returns on investments, there is no such market. Conversely, projected EPS growth rates are widely available to investors through many sources.

Q. Have you performed any analyses to determine which measures of growth are statistically related to the proxy companies' stock valuation levels?

A. Yes, I have. My analysis is based on the methodological approach used by Carleton and Vander Weide, who compared the predictive capability of historical growth estimates and analysts' forecasts on the valuation levels of 65 utility companies.[35] I structured the analysis to understand whether projected earnings or dividend growth rates best explain utility stock valuations. In particular, my analysis examined the statistical relationship between the price-to-earnings ("P/E") ratios of water, electric, and gas utilities as classified by *Value Line*, and the projected EPS and DPS growth rates as reported by *Value Line*. To determine which, if any, of those growth rates are statistically related to utility stock valuations, I performed two regression analyses in which the projected growth rates were explanatory variables and the trailing P/E ratio was the dependent variable. The results of those analyses are presented in Document No. 11 of my exhibit.

Q. What did those analyses reveal?

A. As shown in Document No. 11 of my exhibit, the only growth rate that was statistically significant and positively related to the trailing P/E ratio was the projected EPS growth rate.

Q. What is your conclusion as to the appropriate growth rate for use in the DCF Model?

A. Given the above, I recommend the Commission rely solely on projected EPS growth rates when determining the indicated ROE for the company using the DCF model.

Q. Did you make any corrections to Mr. Garrett's DCF model?

A. Yes, I did. I corrected the growth rate in his DCF model to be based on projected EPS growth rates from *Value Line*, which is the same source Mr. Garrett relies on for his projected DPS growth rates. As shown in Document No. 12 of my exhibit, had Mr. Garrett correctly applied projected EPS growth rates in his DCF model, the average result would be 10.51 percent. Mr. Garrett's corrected DCF analysis produces a more reasonable estimate of the company's ROE and falls within my updated recommended range (prior to adjustments).

C. <u>MISAPPLICATION OF THE CAPITAL ASSET PRICING MODEL</u>

Q. Please summarize Mr. Garrett's CAPM analysis and results.

A. Mr. Garrett's CAPM estimate relied on a risk-free rate of 4.89 percent,[36] an MRP of 5.10 percent,[37] and betas as reported by *Value Line*.[38] Those assumptions combined to produce an average CAPM estimate of 9.00 percent.[39]

Q. Do you agree with Mr. Garrett's CAPM analysis?

A. No, I do not. I disagree with Mr. Garrett's sole reliance on historical Treasury yields to estimate the risk-free rate and the various methods he used to estimate the MRP.

Q. How did Mr. Garrett derive his MRP estimate?

A. Mr. Garrett estimated his MRP by reviewing: (1) a survey of expected returns from IESE Business School (5.50 percent); (2) an expected return reported by Kroll (5.50 percent); (3) an implied MRP from Damodaran (4.30 percent); and (4) an "Implied Equity Risk Premium" calculation (5.00 percent).[40] Based on those results, Mr. Garrett concluded that 5.10 percent, the average of his range, is appropriate.

Q. Do any of the surveys cited by Mr. Garrett provide support for your approach to estimating the current MRP?

A. Yes. As discussed in my direct testimony,[41] I calculated *ex-ante* MRPs in a similar manner to a study by Pablo Fernandez, *et al* (cited by Mr. Garrett), using the market capitalization-weighted constant growth DCF calculation on the individual companies in the S&P 500 Index.[42]

Q. Is there academic literature that supports the conclusion that MRPs using surveys are not widely used by practitioners?

A. Yes. Damodaran, who was cited by Mr. Garrett throughout his testimony, states the following about the applicability of survey MRPs:

> While survey premiums have become more accessible, very few practitioners seem to be inclined to use the numbers from these surveys in computations and there are several reasons for this reluctance:
>
> 1. Survey risk premiums are responsive to recent stock prices movements, with survey numbers generally increasing after bullish periods and decreasing after market decline. Thus, the peaks in the SIA survey premium of individual investors occurred in the bull market of 1999, and the more moderate premiums of 2003 and 2004 occurred after the market collapse in 2000 and 2001.
> 2. Survey premiums are sensitive not only to whom the question is directed at but how the question is asked. For instance, individual investors seem to have higher (and more volatile) expected returns on equity than institutional investors and the survey numbers vary depending upon the framing of the question.[footnote omitted] Kaustia, Lehtoranta and Puttonen (2011) surveyed 1,465 Finnish

investment advisors and note that not only are male advisors more likely to provide an estimate but that their estimated premiums are roughly 2 percent lower than those obtained from female advisors, after controlling for experience, education and other factors.[footnote omitted]

3. Studies that have looked at the efficacy of survey premiums indicate that if they have any predictive power, it is in the wrong direction. Fisher and Statman (2000) document the negative relationship between investor sentiment (individual and institutional) and stock returns.[footnote omitted] In other words, investors becoming more optimistic (and demanding a larger premium) is more likely to be a precursor to poor (rather than good) market returns.

As technology aids the process, the number and sophistication of surveys of both individual and institutional investors will also increase. However, it is also likely that these survey premiums will be more reflective of the recent past rather than good forecasts of the future.[43]

Q. What is your position on the 5.50 percent MRP quoted by Kroll?

A. A forecast is only as good as its inputs, and if the assumptions within those forecasts are, by their nature, unpredictable (e.g., productivity growth forecasts), they are of little value. In addition, the determination of the MRP as calculated by Kroll is not transparent, especially in view of the historical data presented in 2023 SBBI® Yearbook, Stocks, Bonds, Bills, and Inflation ("SBBI-2023"), or the composition of its supply side method, which are already well known by investors. Because of the transparency of the historical data and how to gather and use the components of the supply side model, both the historical MRP (using the long-term arithmetic mean return on large company stocks less the long-term arithmetic income returns on long-term Government bonds) and the supply side model are superior measures of the MRP, when comparing to Kroll's simplistic and opaque MRP forecast.

Q. Why is the Kroll MRP more opaque than other measures of the MRP?

A. The MRP is calculated by subtracting a risk-free rate from the investor-required return on the market. Typically, the return on the market uses observable market measures (e.g.

historical average returns, Ibbotson and Chen Supply Side Model ("Ibbotson-Chen")), but the Kroll MRP does not define how they calculate their expected return on the market. Similarly, the risk-free rate is typically also based on market measures (e.g., historical interest rates, forecasted interest rates), but Kroll does not explain how they derive their 3.5 percent normalized risk-free rate. As shown in Exhibit DJG-7, 30-year Treasury bond yields have been close to 5.00 percent, which further calls Kroll's estimates into question. Because Kroll does not reveal how the 5.5 percent MRP is estimated, we do not know if it is indeed based on market measures.

Q. Do you have any concerns with the historical data presented by Kroll?

A. No, I do not. In fact, I rely on historical market returns and risk-free rate data from Kroll in my estimation of the MRP. As noted above, my primary concern is with the lack of transparency of Kroll's reported MRP estimate and, as discussed in more detail below, the relative usefulness of the estimate as compared to more common historical measures.

Q. Please now describe the method by which Mr. Garrett calculated his fourth estimate, the implied MRP.

A. As Mr. Garrett points out, his method developed the Internal Rate of Return that sets equal the current value of the market index to the projected value of cash flows associated with owning the market index.[44] Mr. Garrett observes that Damodaran "promotes the implied ERP method."[45] Although there are some differences, Mr. Garrett's approach is similar to the model Damodaran provides on his website.[46]

Mr. Garrett's method, which is a two-stage form of the DCF model, calculates the present value of cash flows over the five-year initial period, together with the terminal price (based on the Gordon Model[47]), to be received in the last (i.e., fifth) year. The model's principal inputs include the following assumptions:

- Over the coming five years, the S&P 500 Index (the "Index") will appreciate at a rate equal to the compound growth rate in "Operating Earnings" from 2014 through 2024;
- Cash flows associated with owning the Index will be equal to the historical average earnings, dividends, and buyback yields, applied to the projected Index value each year; and
- Beginning in the terminal year, the Index will appreciate, in perpetuity, at a rate equal to the 30-day average yield on 30-year Treasury securities, as of June 9, 2025.[48]

As discussed below, reasonable changes to those assumptions have a considerable effect on Mr. Garrett's calculated expected market return.

Q. Do you have any observations regarding Mr. Garrett's assumed first-stage growth rate?

A. Yes. Mr. Garrett's 6.96 percent growth rate relates to growth in operating earnings and does not reflect capital appreciation, growth in dividends, or buy-backs.[49] In addition, if Mr. Garrett's position is that historical growth rates are meant to reflect expected future growth, they should reflect year-to-year variation (i.e., uncertainty). That is best accomplished using the arithmetic mean. I therefore calculated the average growth (i.e., arithmetic mean) for the four metrics included in Mr. Garrett's exhibit as shown in Document No. 13 of my exhibit. The average growth rate, 9.04 percent, produced an estimated market return of 10.34 percent,[50] which is still well below historical experience.

Q. Why did the market return increase by only 46 basis points (from 9.89 percent to 10.34 percent) when the first-stage growth rate increased by 208 basis points (from 6.96 percent to 9.04 percent)?

A. Because Mr. Garrett's model assumed the first stage lasts for five years and the terminal stage is perpetual, the results are sensitive to changes in the assumed terminal growth rate. To put that effect in perspective, the terminal value, which is directly related to the terminal growth rate, represents approximately 78.97 percent of the "Intrinsic Value" in Mr. Garrett's analysis.[51]

Q. How did Mr. Garrett develop his assumed terminal growth rate?

A. The terminal growth rate represents investors' expectations of the rate at which the broad stock market will grow, in perpetuity, beginning in the terminal year. Mr. Garrett assumed terminal growth is best measured by the average yield on 30-year Treasury securities over the 30 days ended June 9, 2025. That is, Mr. Garrett assumed the average 30-year Treasury yield between April 28, 2025 and June 9, 2025 is the best measure of expected earnings growth beginning five years from now and extending indefinitely into the future.

Q. Do you agree with Mr. Garrett's assumption?

A. No, I do not. I recognize Mr. Garrett followed the approach described in Damodaran's method, which Damodaran refers to as a "default" assumption.[52] In terms of historical experience, over the long-term, the broad economy has grown at a long-term compound average growth rate of approximately 6.11 percent.[53] Considered from another perspective, the long-term rate of capital appreciation on Large Company stocks has been 8.27 percent.[54] Mr. Garrett has not explained why growth beginning five years in the future, and extending in perpetuity, will be less than one-half of long-term historical growth.[55] From a somewhat different perspective, assuming long-term inflation will be approximately 2.00 percent[56] implies perpetual real growth will be approximately 2.83 percent.[57] Nowhere in his testimony has Mr. Garrett explained the fundamental, systemic changes that would so dramatically reduce long-term economic growth, or why they are best measured by the long-term Treasury yield over 30 days between April 28, 2025 and June 9, 2025.

Further, research by the Federal Reserve Bank of San Francisco calls into question the relationship between interest rates and macroeconomic growth. As the authors noted, "[o]ver the past three decades, it appears that private forecasters have incorporated essentially no link between potential growth and the natural rate of interest: The two data series have a zero correlation."[58]

Q. Please briefly summarize your response to Mr. Garrett's

Implied Equity Risk Premium calculation.

A. Mr. Garrett's calculation is based on a series of questionable assumptions, to which a small set of very reasonable adjustments produces a market return estimate more consistent with (yet still below) historical experience. Although the revised results still produce ROE estimates far below any reasonable measure, they do point out the sensitive nature of Mr. Garrett's analyses and the tenuous nature of the conclusions he draws from them.

Q. Did you conduct a study to determine the forecast accuracy of the Kroll recommended market return and the Damodaran implied market return relative to the SBBI-2023 historical market return and Ibbotson-Chen study?

A. Yes, I did. I have calculated the forecast bias[59] of the long-term historical average return, the Ibbotson-Chen study, and the implied market returns from Kroll and Damodaran to determine the most accurate measure of the following years' market return.[60] For example, the long-term average market return from 1926-2008 was used to determine the forecasted return for 2009. As shown in Document No. 14 of my exhibit, while all measures of the projected market return under-forecast the observed market return on average (i.e., forecast bias values less than 100 percent), the long-term arithmetic mean return is the most accurate predictor of the next year's return as compared to the other measures. This result is consistent with Campbell, who states that when returns are serially uncorrelated, the arithmetic average represents the best forecast of future returns in any randomly selected future year.[61] Given this analysis, the Commission should reject Mr. Garrett's MRPs used in his CAPM analysis.

Q. Have you made any corrections to Mr. Garrett's CAPM analysis?

A. Yes, I have. As described above, the historical average MRP is a more appropriate predictor of the forward-looking MRP than Mr. Garrett's various approaches. As shown in Document No. 15 of my exhibit, I have updated Mr. Garrett's CAPM analysis using the historical long-term arithmetic mean MRP of 7.31 percent (as calculated in note 1 of Document No. 5 of my exhibit, page 2). That correction produces an average CAPM result of 10.79 percent, which is within my recommended range.

Q. Does Mr. Garrett employ an Empirical CAPM ("ECAPM") in his CAPM analysis?

A. No, he does not. Mr. Garrett fails to consider the ECAPM, despite the fact that numerous tests of the CAPM have confirmed that the empirical security market line ("SML") described by the traditional CAPM is not as steeply sloped as the predicted SML. Because of the empirical findings presented in my direct testimony[62], Mr. Garrett should have considered the ECAPM in his CAPM analysis.

Q. Does Mr. Garrett raise any specific concerns with the specifications of the ECAPM?

A. Mr. Garrett seems to believe that using adjusted betas in a CAPM analysis addresses the empirical issues with the CAPM. By increasing the expected returns for low beta stocks and decreasing the expected returns for high beta stocks, he concludes there is no need to use the ECAPM. To the contrary, using adjusted betas in a CAPM analysis is not equivalent to using the ECAPM, nor is it a duplicative adjustment.

Betas are adjusted because of their general regression tendency to converge toward 1.0 over time, i.e., over successive calculations of beta. As also noted above, numerous studies have determined that the SML described by the CAPM formula at any given moment in time is not as steeply sloped as the predicted SML. Morin states:

> …some critics of the ECAPM argue that the use of

Value Line adjusted betas in the traditional CAPM amounts to using an ECAPM. This is incorrect. The use of adjusted betas in a CAPM analysis is not equivalent to the ECAPM. Betas are adjusted because of the regression tendency of betas to converge toward 1.0 over time.

* * *

The use of an adjusted beta by Value Line is correcting for a different problem than the ECAPM. The adjusted beta captures the fact that betas regress toward one over time. The ECAPM corrects for the fact that the CAPM under-predicts observed returns when beta is less than one and over-predicts observed returns when beta is greater than one.

* * *

Another way of looking at it is that the Empirical CAPM and the use of adjusted betas comprise two separate features of asset pricing. Assuming arguendo a company's beta is estimated accurately, the CAPM will still understate the return for low-beta stocks. Furthermore, if a company's beta is understated, the Empirical CAPM will also understate the return for low-beta stocks. Both adjustments are necessary.[63]

Moreover, the slope of the SML should not be confused with beta. As Brigham and Gapenski state:

> The slope of the SML reflects the degree of risk aversion in the economy – the greater the average investor's aversion to risk, then (1) the steeper is the slope of the line, (2) the greater is the risk premium for any risky asset, and (3) the higher is the required rate of return on risky assets.
>
> Students sometimes confuse beta with the slope of the SML. This is a mistake. As we saw earlier in connection with Figure 6-8, and as is developed further in Appendix 6A, beta does represent the slope of a line, but not the Security Market Line. This confusion arises partly because the SML equation is generally written, in this book and throughout the finance literature, as ki = RF + bi(kM – RF), and in this form bi looks like the slope coefficient and (kM – RF) the variable. It would perhaps be less confusing if the second term were written (kM – RF)bi, but this is not generally done.[64]

As noted in Appendix 6A of Brigham and Gapenski's textbook, beta, which accounts for regression bias, is not a return adjustment but rather is based on the slope of a different line.

A 1980 study by Litzenberger, et al. found the CAPM underestimates the ROE for companies, such as public utilities, with betas less than 1.00. In that study, the authors applied adjusted betas and still found the CAPM to underestimate the ROE for low-beta companies. Similarly, The Brattle Group's ("Brattle") Risk and Return for Regulated Industries supports the use of adjusted betas in the ECAPM:

> Note that the ECAPM and the Blume adjustment are attempting to correct for different empirical phenomena and therefore both may be applicable. It is not inconsistent to use both, as illustrated by the fact that the Litzenberger et.al (1980) study relied on Blume adjusted betas and estimated an alpha of 2 percent points in a short-term version of the ECAPM. This issue sometimes arises in regulatory proceedings.[65]

Hence, using adjusted betas does not address the previously discussed empirical issues with the CAPM. In view of the foregoing, my use of adjusted betas in both the traditional and empirical applications of the CAPM is neither incorrect nor inconsistent with the financial literature, nor is it a duplicative adjustment.

Q. Does Mr. Garrett raise any other concerns with the ECAPM?

A. Yes. Although not a specific criticism of the applicability of the ECAPM, Mr. Garrett states that he believes *Value Line* betas for utilities are already overstated because they rely on the Blume adjustment, and as such, he appears to imply that the ECAPM would further overstate the ROE. In addition, he believes the Vasicek beta adjustment is more appropriate.

Q. What is your response to Mr. Garrett's concern?

A. Mr. Garrett's concern is unfounded and inconsistent with his own analysis. Although Mr. Garrett states in Appendix B to his testimony that he believes the Vasicek beta adjustment is more appropriate than the commonly used Blume adjustment, he relies on betas from *Value Line* in his CAPM, which utilizes the Blume adjustment. The high end of his analytical range, which is equal to his recommended ROE, is set by his CAPM results. Mr. Garrett has given significant weight to his CAPM analysis in determining his recommended ROE, while on the other hand, he questions the validity of one of the inputs to that analysis in his criticism of the ECAPM. As such, Mr. Garrett's argument should be given no weight because: (1) it has no bearing on the applicability of the ECAPM; (2) the Blume adjustment is common among data sources that calculate beta, including those on which we both rely; and (3) is inconsistent with his own analysis.

D. <u>ADJUSTMENTS TO THE COST OF COMMON EQUITY</u>

Q. Did Mr. Garrett address the issue of a size premium in his testimony?

A. Yes. Mr. Garrett lists several reasons for his decision not to include a size premium in his recommendation, including: (1) numerous studies show that "the performance of large-cap stocks was basically equal to that of small cap stocks,"[66] and (2) that the "discovery of the size effect phenomenon likely caused its own demise."[67]

Q. Is Mr. Garrett's review of the size premium correct?

A. No, it is not. First, as discussed on pages 7 through 10 of my direct testimony, when determining an appropriate ROE, the relevant issue is where investors see the subject company in relation to other similarly situated utility companies. To the extent investors view a company as being exposed to higher risk, the required return will increase, and vice versa. Peoples' 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.

Further, Mr. Garrett notes that after 1983, U.S. small-cap stocks underperformed large-cap stocks.[68] The issue with Mr. Garrett's position is that the size premium measures the increased risk associated with a company's smaller size; Mr. Garrett is only focused on returns. As I discussed in my direct testimony, smaller companies face increased business risk as they are less equipped to cope with significant events that affect sales, revenues, and earnings, as the loss of a few larger customers will have a greater effect on a smaller company than a larger company.[69]

This is further evident when we consider that increasing capital costs (i.e., risk) for one set of securities will put downward pressure on those securities as investors transition to securities with lower risk. Under this premise, the underperformance is directly tied to the increase in risk. As such, Mr. Garrett's premise that smaller companies' underperformance indicates a reduction of risk is in fact the opposite – underperformance indicates an increasing level of risk.

Q. Mr. Garrett points to a passage published in 2015 by Ibbotson[70] that states that the size premium no longer exists. What is your response?

A. Despite their findings, Kroll (which now owns Ibbotson) continues to publish data on their findings on the presence of a size premium in the market and has provided additional measures of size and relative risk premiums. In addition to market capitalization, Kroll includes book common equity, market value of invested capital, five-year average net income, five-year average earnings before interest, taxes, depreciation, and amortization, total assets, total sales, and total employees as valid measures of size from which relative size premiums are derived. If Kroll found that the size premium ceased to exist, it would not publish that it did.

Q. Do you agree with Mr. Garrett that the size effect no longer exists?

A. No, I do not. While the historical returns of large companies may have outperformed small utilities over the last several years, risk is measured by volatility, not returns. A study by Clifford Ang detailed the returns and volatility of returns of companies by size, showing that while larger companies outperformed smaller companies, smaller companies exhibited more risk.[71] Reviewing data from the same source as the Ang study, I replicated the study through May 2025. Document No. 16 of my exhibit, presents the largest monthly gain and loss for each value-weighted decile for the period 1981 through May 2025. As shown in Document No. 16 of my exhibit, small capitalization stocks exhibit more volatility (i.e., risk) in their returns than larger capitalization stocks.

Further, SBBI-2023 shows that the total return of large-cap stocks over the 1926-2022 period has a standard deviation of 19.8 percent, compared to 31.2 percent for small-cap stocks, echoing the findings of Document No. 16 of my exhibit.[72] The higher level of risk indicates a higher level of required return.

Q. Have you performed studies for utility companies that link size and risk?

A. Yes, I have performed two studies which link size and risk for utilities. The first study included the universe of electric, gas, and water companies included in *Value Line* Standard Edition. From each of the utilities' *Value Line* Ratings & Reports, I calculated the annualized volatility (a measure of risk) and current market capitalization (a measure of size) for each company. After ranking the companies by size (largest to smallest) and risk (least risky to most risky), I made a scatter plot of the data, as shown on Document No. 17 of my exhibit.

As shown in Document No. 17 of my exhibit, as company size decreases (increasing size rank), the annualized volatility increases, linking size and risk for utilities, which is significant at 95 percent confidence level.

The second study used the same universe of companies, but instead of using annualized volatility, I used the *Value Line* Safety Ranking, which is another measure of total risk.[73] After ranking the companies by size and Safety Ranking, I made a scatterplot of those data, as shown in Document No. 18 of my exhibit.

Similar to the first study, as company size decreases, Safety Ranking degrades, indicating a link between size and risk for utilities. This study is also significant at the 95 percent confidence level.

Q. Did Mr. Garrett address the issue of flotation costs in his testimony?

A. Yes. Mr. Garrett reasons that flotation costs for stock issuances are not out-of-pocket costs, which investors already have considered when deciding to invest in a company's shares at a given market price.[74] On that basis, he argues against considering the effect of flotation costs in setting the company's ROE.

Q. What is your response to Mr. Garrett regarding the need to recover flotation costs?

A. First, Mr. Garrett's observation that underwriter fees are not "out-of-pocket" expenses[75] is a distinction without a meaningful difference. Whether paid directly or indirectly through an underwriting discount, the cost results in net proceeds that are less than the gross proceeds. As shown in Document No. 9 of my exhibit, because those costs were incurred, the net proceeds were less than the gross proceeds. Whether the issuer wrote a check or received the proceeds at a discount does not matter. What does matter is that issuance costs are a permanent reduction to common equity, and absent a recovery of those costs, the issuing company will not be able to earn its required return.

Lastly, as shown in the illustrative examples provided in Document No. 19 of my exhibit,[76] because of flotation costs, an authorized return of 10.85 percent would be required to realize an ROE of 10.75 percent (i.e., a 10-basis point flotation cost adjustment). If flotation costs are not recovered, the growth rate falls and the ROE decreases to 10.65 percent (i.e., below the required return).[77]

Q. Is the fact that investors are aware of equity issuance costs when they decide to purchase stock[78] relevant to the determination of the appropriate compensation for those costs?

A. No, it is not. Although Mr. Garrett suggests current prices account for flotation costs, he has not provided any explanation as to how market prices compensate shareholders for flotation costs or any analyses to support his position. In that important respect, common stock is closely analogous to long-term debt, both in the sense that its purpose is to provide funding for long-term investments that are part of rate base, and that it remains a part of the utility's operations over the long run. Equity flotation costs and debt issuance expenses both are necessary and legitimate costs enabling the investment in assets needed to provide safe and reliable utility service; both should be recovered.

E. <u>RESPONSE TO MR. GARRETT'S CRITIQUES OF COMPANY TESTIMONY</u>

Q. Does Mr. Garrett have any critiques of your analyses presented in your direct testimony?

A. Yes, he does. Mr. Garrett's critiques of my direct testimony are: (1) my requested ROE is in excess of the investor-required return on the market; (2) my growth rates used in the DCF model exceed GDP growth; (3) my MRP is unreasonable because it is not in line with his MRP estimates; (4) my use of the ECAPM; (5) my use of a non-regulated proxy group; (6) my inclusion of a small size premium is unnecessary; and (7) my application of flotation costs.

I have already addressed critiques 1, 2, 4, 6 and 7 previously and will not address them here. I will discuss Mr. Garrett's remaining arguments in turn.

Q. Mr. Garrett states that your MRP is unreasonable given his measures of MRP as presented in his CAPM analysis.[79] Please respond.

A. I have discussed the inapplicability of Mr. Garrett's MRP estimates for cost of capital purposes previously in this rebuttal testimony and will not repeat that discussion here. Since Mr. Garrett's MRP measures are not valid MRPs, they cannot be comparable to my MRP estimates. Even though Mr. Garrett has presented no reliable evidence upon which to gauge the reasonableness of the MRP estimate, my estimates of 8.41 percent and 8.91 percent in my direct and rebuttal testimonies, respectively (including the PRPM), are consistent with actual realized MRPs. As shown in Document No. 20 of my exhibit, my estimates fall within the 49th percentile of historical MRPs, respectively. The MRPs excluding the PRPM similarly fall in the 49th percentile.

Given all of the above, my calculation of the MRPs in my CAPM and ECAPM analyses is reasonable in view of historical returns and other expected measures of the MRP and is supported by financial literature. Thus, Mr. Garrett's concern should be dismissed.

V. SUMMARY

Q. Please summarize your rebuttal testimony.

A. Based on the analyses discussed throughout my rebuttal testimony, the reasonable range of ROE estimates for Peoples is from 10.66 percent to 11.16 percent, including the PRPM and 10.66 percent to 11.14 percent excluding the PRPM. None of the arguments made by Mr. Garrett should persuade the Commission to approve an ROE below those ranges.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

REBUTTAL EXHIBIT

OF

DYLAN D’ASCENDIS

ON BEHALF OF PEOPLES GAS SYSTEM, INC.

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Peoples Gas System
Brief Summary of Common Equity Cost Rate

Line No.	Principal Methods	Proxy Group of Eight Natural Gas Companies	Proxy Group of Eight Natural Gas Companies (exc. PRPM)
1.	Discounted Cash Flow Model (DCF) (1)	10.39%	10.39%
2.	Risk Premium Model (RPM) (2)	10.77%	10.82%
3.	Capital Asset Pricing Model (CAPM) (3)	10.89%	10.87%
4.	Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4)	10.97%	10.96%
5.	Indicated Common Equity Cost Rate before Adjustment for Unique Risk	10.39% - 10.89%	10.39% - 10.87%
6.	Size Adjustment (5)	0.20%	0.20%
7.	Credit Risk Adjustment (6)	0.00%	0.00%
8.	Flotation Cost Adjustment (7)	0.07%	0.07%
9.	Indicated Common Equity Cost Rate after Adjustment	10.66% - 11.16%	10.66% - 11.14%

Notes:
(1) From page 1 of Document No. 1.
(2) From page 1 of Document No. 4.
(3) From page 1 of Document No. 5.
(4) From page 1 of Document No. 7.
(5) Size adjustment to reflect the Company's smaller size compared to the Utility Proxy Group's as detailed in Mr. D'Ascendis' Direct Testimony.
(6) The company does not have a credit rating from Moody's. However, it's A- rating from Fitch Ratings is consistent with an A3 rating from Moody's. No credit risk adjustment is necessary as the bond rating of the company (A- from Fitch Ratings) is identical to the average credit rating of the utility proxy group (A3).
(7) From page 1 of Document No. 9.

Proxy Group of Eight Natural Gas Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2020 - 2024, Inclusive

	2024	2023	2022	2021	2020	5 YEAR AVERAGE
			(MILLIONS OF DOLLARS)			
Capitalization Statistics						
Amount of Capital Employed						
Total Permanent Capital	$9,170.577	$8,342.185	$7,637.912	$6,680.015	$5,975.223	
Short-Term Debt	$475.576	$685.596	$745.435	$577.929	$285.218	
Total Capital Employed	$9,646.153	$9,027.781	$8,383.347	$7,257.944	$6,260.441	
Indicated Average Capital Cost Rates (2)						
Total Debt	4.40 %	4.01 %	3.12 %	2.88 %	3.35 %	
Preferred Stock	4.75 %	5.22 %	4.84 %	5.33 %	6.19 %	
Capital Structure Ratios						
Based on Total Permanent Capital:						
Long-Term Debt	51.17 %	51.86 %	50.99 %	50.41 %	49.24 %	50.73 %
Preferred Stock	0.42	0.75	1.61	1.73	1.34	1.17
Common Equity	48.41	47.39	47.40	47.86	49.42	48.10
Total	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Based on Total Capital:						
Total Debt, Including Short-Term Debt	54.55 %	54.75 %	56.00 %	55.53 %	52.87 %	54.74 %
Preferred Stock	0.37	0.66	1.44	1.63	1.24	1.07
Common Equity	45.08	44.59	42.56	42.84	45.89	44.19
Total	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Financial Statistics						
Financial Ratios - Market Based						
Earnings / Price Ratio	5.33 %	5.28 %	4.17 %	5.06 %	3.95 %	4.76 %
Market / Average Book Ratio	159.44	163.70	192.50	186.11	192.40	178.83
Dividend Yield	3.60	3.56	3.10	3.22	2.99	3.30
Dividend Payout Ratio	67.28	67.84	56.13	58.54	72.76	64.51
Rate of Return on Average Book Common E	8.51 %	8.60 %	8.45 %	9.73 %	7.64 %	8.59 %
Total Debt / EBITDA (3)	5.03 x	5.26 x	5.33 x	5.40 x	5.50 x	5.30 x
Funds from Operations / Total Debt (4)	17.35 %	25.75 %	11.70 %	10.07 %	15.22 %	16.02 %
Total Debt / Total Capital	54.55 %	54.75 %	56.00 %	55.53 %	52.87 %	54.74 %

Notes:
(1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.
(2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.
(3) Total debt relative to EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).
(4) Funds from operations (sum of net income, depreciation, amortization, net deferred income tax and investment tax credits, less total AFUDC) plus interest charges as a percentage of total debt.

Source of Information: Company Annual Forms 10-K

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Eight Natural Gas Companies
2020 - 2024, Inclusive

	2024	2023	2022	2021	2020	5 YEAR AVERAGE
Atmos Energy Corporation						
Long-Term Debt	39.04 %	37.62 %	45.81 %	39.35 %	40.02 %	40.37 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	60.96	62.38	54.19	60.65	59.98	59.63
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Chesapeake Utilities Corporation						
Long-Term Debt	48.08 %	49.17 %	41.87 %	42.31 %	42.82 %	44.85 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	51.92	50.83	58.13	57.69	57.18	55.15
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
New Jersey Resources Corporation						
Long-Term Debt	58.24 %	59.16 %	58.49 %	57.81 %	55.35 %	57.81 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	41.76	40.84	41.51	42.19	44.65	42.19
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
NiSource Inc.						
Long-Term Debt	60.60 %	57.26 %	55.77 %	57.09 %	61.64 %	58.47 %
Preferred Stock	0.00	2.51	9.03	9.55	5.87	5.39
Common Equity	39.40	40.23	35.20	33.36	32.49	36.14
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Northwest Natural Holding Company						
Long-Term Debt	55.25 %	55.11 %	53.21 %	52.12 %	51.81 %	53.50 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	44.75	44.89	46.79	47.88	48.19	46.50
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
ONE Gas, Inc.						
Long-Term Debt	40.71 %	44.05 %	42.10 %	41.74 %	41.76 %	42.07 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	59.29	55.95	57.90	58.26	58.24	57.93
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Southwest Gas Holdings, Inc.						
Long-Term Debt	55.54 %	58.43 %	59.25 %	59.90 %	50.90 %	56.80 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	44.46	41.57	40.75	40.10	49.10	43.20
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Spire Inc.						
Long-Term Debt	51.88 %	54.01 %	51.42 %	52.98 %	49.62 %	51.98 %
Preferred Stock	3.35	3.52	3.84	4.28	4.83	3.96
Common Equity	44.77	42.47	44.74	42.74	45.55	44.06
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Proxy Group of Eight Natural Gas Companies						
Long-Term Debt	51.17 %	51.86 %	50.99 %	50.41 %	49.24 %	50.73 %
Preferred Stock	0.42	0.75	1.61	1.73	1.34	1.17
Common Equity	48.41	47.39	47.40	47.86	49.42	48.10
Total Capital	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %

Source of Information
Annual Forms 10-K

Peoples Gas System
Operating Subsidiary Company Capital Structures of the
Proxy Group of Eight Natural Gas Companies

Company Name	Parent Company Ticker	2024 Common Equity	2024 Total Debt	2024 Total Capital
Atmos Energy Corporation	ATO	59.93%	40.07%	100.00%
Chesapeake Utilities Corporation	CPK	48.19%	51.81%	100.00%
New Jersey Natural Gas Company	NJR	53.37%	46.63%	100.00%
Northern Indiana Public Service Company	NI	58.24%	41.76%	100.00%
Northwest Natural Gas Company	NWN	45.61%	54.39%	100.00%
ONE Gas, Inc.	OGS	48.13%	51.87%	100.00%
Southwest Gas Corporation	SWX	48.28%	51.72%	100.00%
Spire Alabama Inc.	SR	53.66%	46.34%	100.00%
Spire Missouri Inc.	SR	46.05%	53.95%	100.00%
	Average	51.27%	48.73%	
	Maximum	59.93%	54.39%	
	Minimum	45.61%	40.07%	

Source: S&P Global Market Intelligence.
Company Financial Statements.
Northern Indiana Public Service Company is from FERC financial Report Form Form No. 1.

Peoples Gas System
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
Proxy Group of Eight Natural Gas Companies

Proxy Group of Eight Natural Gas Companies	[1] Average Dividend Yield (1)	[2] Value Line Projected Five Year Growth in EPS (2)	[3] Zack's Five Year Projected Growth Rate in EPS	[4] S&P Capital IQ Projected Five Year Growth in EPS	[5] Average Projected Five Year Growth in EPS (3)	[6] Adjusted Dividend Yield (4)	[7] Indicated Common Equity Cost Rate (5)
Atmos Energy Corporation	2.24 %	7.00 %	7.20 %	7.28 %	7.16 %	2.32 %	9.48 %
Chesapeake Utilities Corporation	2.18	8.00	NA	8.33	8.16	2.27	10.43
New Jersey Resources Corporation	3.85	5.00	NA	7.90	6.45	3.97	10.42
NiSource Inc.	2.86	9.50	7.90	7.96	8.45	2.98	11.43
Northwest Natural Holding Company	4.73	6.50	NA	5.75	6.13	4.87	11.00
ONE Gas, Inc.	3.57	4.50	5.60	5.84	5.31	3.66	8.97
Southwest Gas Holdings, Inc.	3.44	10.00	9.90	10.38	10.09	3.61	13.70 (6)
Spire Inc.	4.20	4.50	6.50	8.08	6.36	4.33	10.69
						Average	10.35 %
						Median	10.43 %
						Average of Mean and Median	10.39 %

NA= Not Available

Notes:
(1) Indicated dividend at 06/30/2025 divided by the average closing price of the last 60 trading days ending 06/30/2025 for each company.
(2) From pages 2 through 9 of this Document.
(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, 2.24% x (1+(1/2 x 7.16%)) = 2.32%.
(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 06/30/2025
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

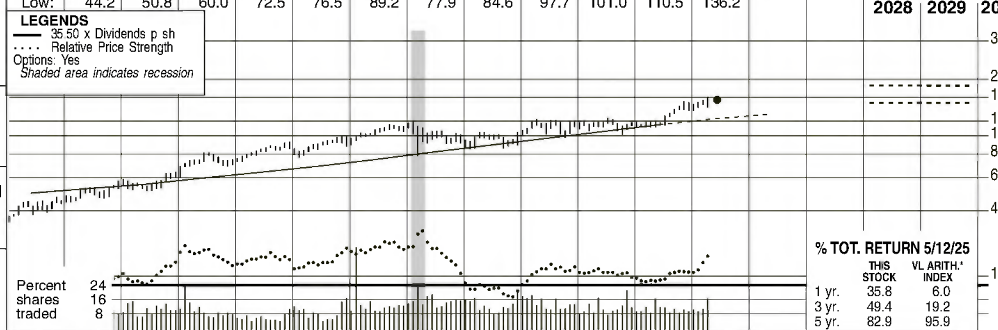
	Price	Gain	Ann'l Total Return
High	185	(+20%)	7%
Low	150	(-5%)	2%

Institutional Decisions

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

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

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*		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	*Value Line*		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%	*estimates*		Avg Ann'l Div'd Yield	**2.7%**

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)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		28-30
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%**

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**

Cal-endar	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)

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

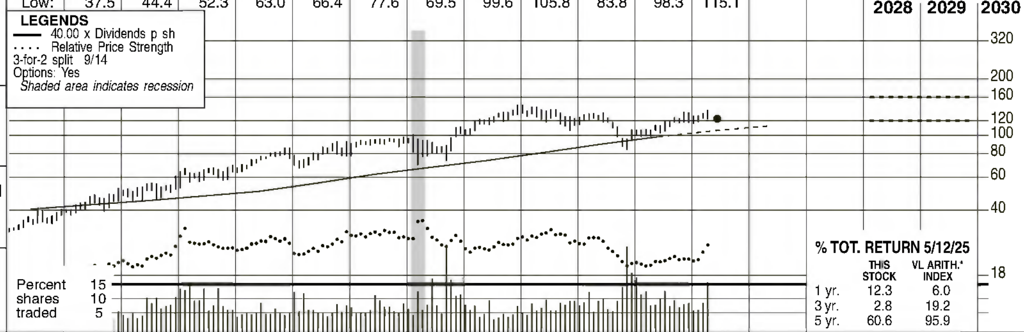
18-Month Target Price Range
Low-High: $95-$148 | Midpoint (% to Mid): $122 (0%)

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



% 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	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	estimates		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%

Cal-endar	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

Cal-endar	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

Cal-endar	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)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
High:	32.1	34.1	38.9	45.4	51.8	51.2	44.7	44.4	51.4	55.8	51.9	50.8
Low:	21.9	26.8	30.5	33.7	35.6	40.3	21.1	33.3	37.8	38.9	39.4	44.9

18-Month Target Price Range

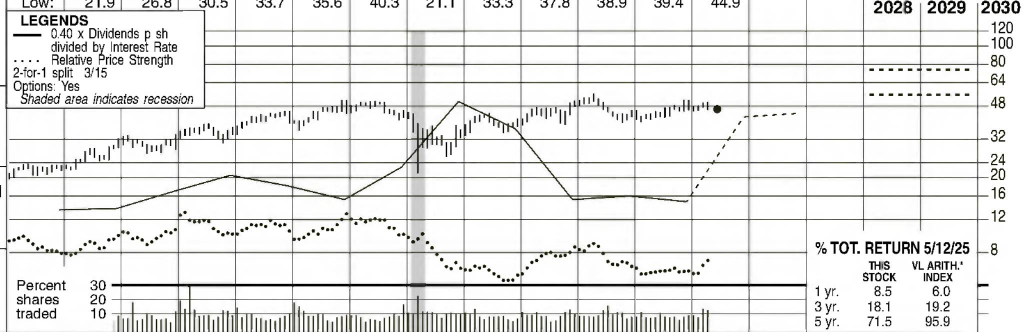
Low-High	Midpoint (% to Mid)
$42-$67	$55 (20%)

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



% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	8.5	6.0
3 yr.	18.1	19.2
5 yr.	71.5	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
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%

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)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		28-30
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%

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

Cal-endar	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)

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

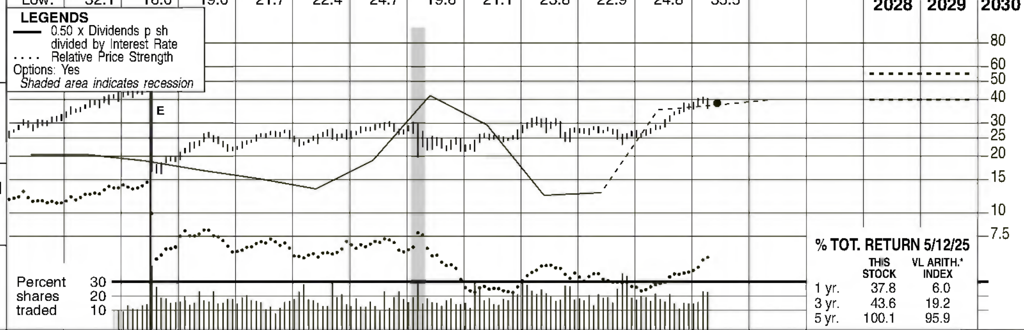
18-Month Target Price Range
Low-High $28-$45 | Midpoint (% to Mid) $37 (-5%)

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



% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	37.8	6.0
3 yr.	43.6	19.2
5 yr.	100.1	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
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*		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	*Value Line*		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%	*estimates*		Avg Ann'l Div'd Yield	*3.0%*

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)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		28-30
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%*

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%

Cal-endar	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*

Cal-endar	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*

Cal-endar	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: $30-$50 | Midpoint (% to Mid): $40 (-5%)

2028-30 PROJECTIONS

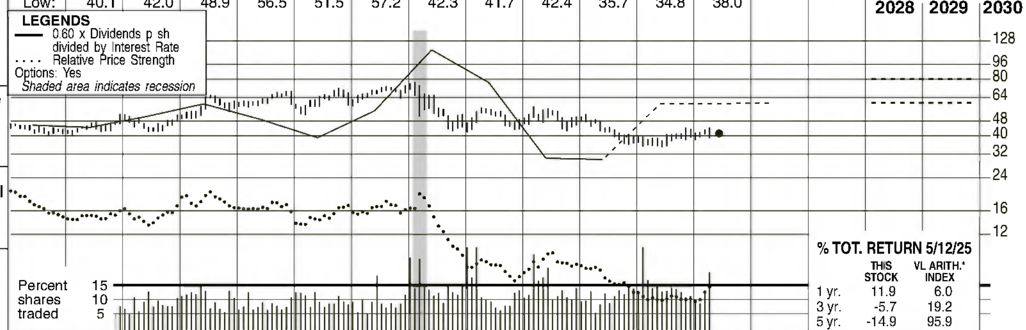
	Price	Gain	Ann'l Total Return
High	80	(+95%)	*21%*
Low	60	(+45%)	*13%*

Institutional Decisions

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

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
High:	52.6	52.3	66.2	69.5	71.8	74.1	77.3	56.8	57.6	52.4	44.3
Low:	40.1	42.0	48.9	56.5	51.5	57.2	42.3	41.7	42.4	35.7	34.8

(High/Low row continues: 2025 High 44.4, Low 38.0)



Target Price Range 2028 | 2029 | 2030

% 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*		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	*Value Line*		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%	*estimates*		Avg Ann'l Div'd Yield	*2.9%*

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)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		28-30
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%*

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%*

QUARTERLY REVENUES ($ mill.)

Cal-endar	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*

EARNINGS PER SHARE A

Cal-endar	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*

QUARTERLY DIVIDENDS PAID B ■

Cal-endar	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.

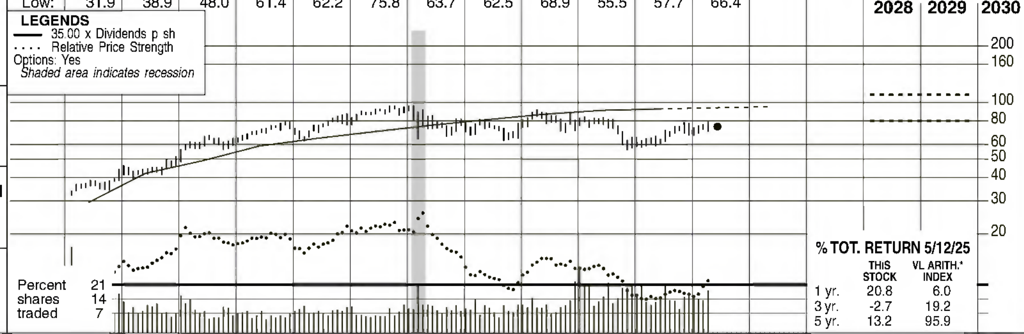
Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	20
Earnings Predictability	25

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)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
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



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

% 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.

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
29.62	27.30	29.43	31.08	31.32	28.78	33.72	46.58	41.95	34.80	*37.65*	*38.80*	Revenues per sh	*55.00*
4.82	5.43	5.96	6.32	6.96	7.36	7.71	8.13	9.04	8.68	*9.45*	*9.85*	"Cash Flow" per sh	*11.00*
2.24	2.65	3.02	3.25	3.51	3.68	3.85	4.08	4.14	3.91	*4.30*	*4.50*	Earnings per sh A	*5.25*
1.20	1.40	1.68	1.84	2.00	2.16	2.32	2.48	2.60	2.64	*2.68*	*2.72*	Div'ds Decl'd per sh B■	*2.90*
5.63	5.91	6.81	7.50	7.91	8.87	9.23	11.01	11.79	11.74	*11.65*	*11.60*	Cap'l Spending per sh	*11.15*
35.24	36.12	37.47	38.86	40.35	42.01	43.81	46.69	48.91	51.85	*53.75*	*55.50*	Book Value per sh	*56.60*
52.26	52.28	52.31	52.57	52.77	53.17	53.63	55.35	56.55	59.88	*61.50*	*63.00*	Common Shs Outst'g C	*70.00*
19.8	22.7	23.5	23.1	25.3	21.7	18.9	19.9	18.0	17.0	*Bold figures are*		Avg Ann'l P/E Ratio	*18.0*
1.00	1.19	1.18	1.25	1.35	1.11	1.02	1.15	1.01	.90	*Value Line*		Relative P/E Ratio	*1.00*
2.7%	2.3%	2.4%	2.5%	2.3%	2.7%	3.2%	3.1%	3.5%	4.0%	*estimates*		Avg Ann'l Div'd Yield	*3.1%*
1547.7	1427.2	1539.6	1633.7	1652.7	1530.3	1808.6	2578.0	2372.0	2083.6	*2315*	*2445*	Revenues ($mill)	*3850*
119.0	140.1	159.9	172.2	186.7	196.4	206.4	221.7	231.2	222.9	*260*	*280*	Net Profit ($mill)	*370*
38.0%	37.8%	36.4%	23.7%	18.7%	17.5%	16.3%	17.3%	14.9%	14.0%	*17.5%*	*17.5%*	Income Tax Rate	*20.0%*
7.7%	9.8%	10.4%	10.5%	11.3%	12.8%	11.4%	8.6%	9.7%	10.7%	*11.2%*	*11.5%*	Net Profit Margin	*9.6%*
39.5%	38.7%	37.8%	38.6%	37.7%	41.5%	61.1%	50.7%	43.8%	43.5%	*43.0%*	*43.0%*	Long-Term Debt Ratio	*45.0%*
60.5%	61.3%	62.2%	61.4%	62.3%	58.5%	38.9%	49.3%	56.2%	56.5%	*57.0%*	*57.0%*	Common Equity Ratio	*55.0%*
3042.9	3080.7	3153.5	3328.1	3415.5	3815.7	6032.9	5246.2	4926.3	5489.8	*5800*	*6135*	Total Capital ($mill)	*7200*
3511.9	3731.6	4007.6	4283.7	4565.2	4867.1	5190.8	5628.8	6135.2	6645.9	*7050*	*7400*	Net Plant ($mill)	*8500*
4.7%	5.2%	5.8%	5.9%	6.4%	6.0%	3.9%	5.0%	5.9%	5.4%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
6.5%	7.4%	8.2%	8.4%	8.8%	8.8%	8.8%	8.6%	8.4%	7.2%	*8.0%*	*8.0%*	Return on Shr. Equity	*9.5%*
6.5%	7.4%	8.2%	8.4%	8.8%	8.8%	8.8%	8.6%	8.4%	7.2%	*8.0%*	*8.0%*	Return on Com Equity	*9.5%*
3.1%	3.5%	3.7%	3.7%	3.8%	3.7%	3.5%	3.4%	3.2%	2.4%	*3.0%*	*3.0%*	Retained to Com Eq	*4.0%*
53%	52%	55%	56%	56%	58%	60%	60%	62%	67%	*63%*	*61%*	All Div'ds to Net Prof	*55%*

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%*

Cal-endar	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*

Cal-endar	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*

Cal-endar	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			

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

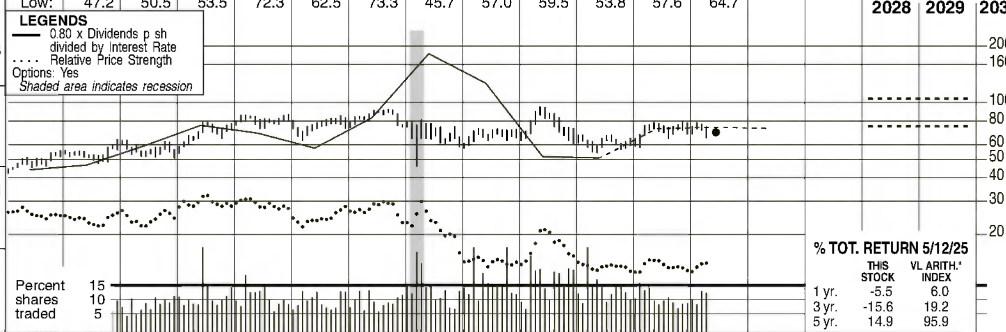
SOUTHWEST GAS NYSE-SWX

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)

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	

Target Price Range 2028 | 2029 | 2030



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

% 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%***

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)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		28-30
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%***

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%*

Cal-endar	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***

Cal-endar	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***

Cal-endar	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: $55-$90 | Midpoint (% to Mid): $73 (0%)

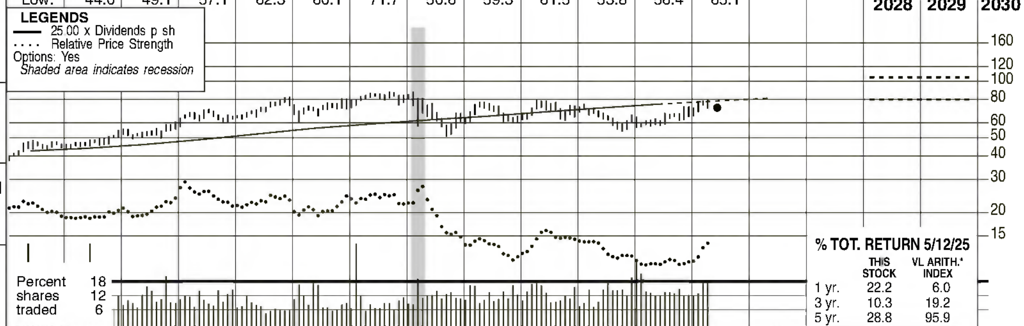
2028-30 PROJECTIONS

	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

High:	55.2	61.0	71.2	82.9	81.1	88.0	88.0	77.9	79.2	75.8	73.6	79.8
Low:	44.0	49.1	57.1	62.3	60.1	71.7	50.6	59.3	61.5	53.8	56.4	65.1



Target Price Range: 2028 | 2029 | 2030

% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	22.2	6.0
3 yr.	10.3	19.2
5 yr.	28.8	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
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*		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	*Value Line*		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%	*estimates*		Avg Ann'l Div'd Yield	**4.0%**

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)

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		28-30
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%**

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***

Cal-endar	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

Peoples Gas System
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	Proxy Group of Eight Natural Gas Companies (excl. PRPM)
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	5.23 %	5.23 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A2 Rated Public Utility Bonds (2)	0.48	0.48
3.	Adjusted Prospective Yield on A2 Rated Public Utility Bonds	5.71 %	5.71 %
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group (3)	0.06	0.06
5.	Adjusted Bond Yield	5.77 %	5.77 %
6.	Equity Risk Premium (4)	5.00	5.05
7.	Risk Premium Derived Common Equity Cost Rate	10.77 %	10.82 %

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

(2) The average yield spread of A2 rated public utility bonds over Aaa rated corporate bonds of 0.48% from page 2 of this Document.

(3) Adjustment to reflect the A3 Moody's LT issuer rating of the Utility Proxy Group as shown on page 4 of this Document. 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 Document.

(4) From page 5 of this Document.

Peoples Gas System
Interest Rates and Bond Spreads for
Moody's Corporate and Public Utility Bonds

Selected Bond Yields

	[1]	[2]	[3]
	Aaa Rated Corporate Bond	A2 Rated Public Utility Bond	Baa2 Rated Public Utility Bond
Jun-2025	5.46 %	5.93 %	6.12 %
May-2025	5.54	6.05	6.23
Apr-2025	5.45	5.91	6.11
Average	5.48 %	5.96 %	6.15 %

Selected Bond Spreads

A2 Rated Public Utility Bonds Over Aaa Rated Corporate Bonds:
0.48 % (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

Peoples Gas System
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Eight Natural Gas Companies

	Moody's Long-Term Issuer Rating June 2025		Standard & Poor's Long-Term Issuer Rating June 2025	
Proxy Group of Eight Natural Gas Companies	Long-Term Issuer Rating (1)	Numerical Weighting (2)	Long-Term Issuer Rating (1)	Numerical Weighting (2)
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 proxy company's utility operating subsidiaries.
(2) From page 4 of this Document.

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-

Peoples Gas System
Judgment of Equity Risk Premium for the
Proxy Group of Eight Natural Gas Companies

Line No.		Proxy Group of Eight Natural Gas Companies	Proxy Group of Eight Natural Gas Companies (excl. PRPM)
1.	Calculated equity risk premium based on the total market using the beta approach (1)	5.39 %	5.39 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A2 rated bonds (2)	4.86	5.02
3.	Predicted Equity Risk Premium Based on Regression Analysis of 849 Fully-Litigated Natural Gas Cases (3)	4.74	4.74
4.	Average equity risk premium	5.00 %	5.05 %

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

Peoples Gas System
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	Proxy Group of Eight Natural Gas Companies (excl. PRPM)
1.	Kroll Equity Risk Premium (1)	6.10 %	6.10 %
2.	Regression on Kroll Risk Premium Data (2)	6.97	6.97
3.	Kroll Equity Risk Premium based on PRPM (3)	8.08	NA
4.	Equity Risk Premium Based on Value Line Summary and Index (4)	8.66	8.66
5.	Equity Risk Premium Based on Bloomberg, Value Line, and S&P Global Market Intelligence S&P 500 Companies (5)	10.43	10.43
6.	Conclusion of Equity Risk Premium	8.05 %	8.04 %
7.	Adjusted Beta (6)	0.67	0.67
8.	Forecasted Equity Risk Premium	5.39 %	5.39 %

Notes:

(1) Based on the arithmetic mean historical monthly returns on large company common stocks from Kroll 2023 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 5.23% (from page 1 of this Document).

(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 June 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 5.23% (from page 1 of this Document) from the projected 3-5 year total annual market return of 13.89% (described fully in note 1 on page 2 of Document No. 5 of this Document).

(5) Using data from Bloomberg Professional Services, Value Line, and S&P Global Market Intelligence for the S&P 500, an expected total return of 15.66% 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 5.23% results in an expected equity risk premium of 10.43%.

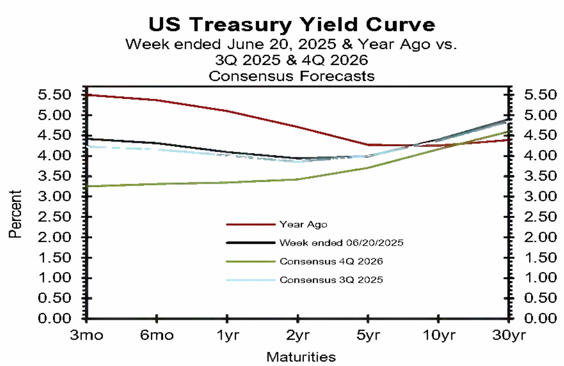
(6) Average of mean and median beta from page 2 of Document No. 5.

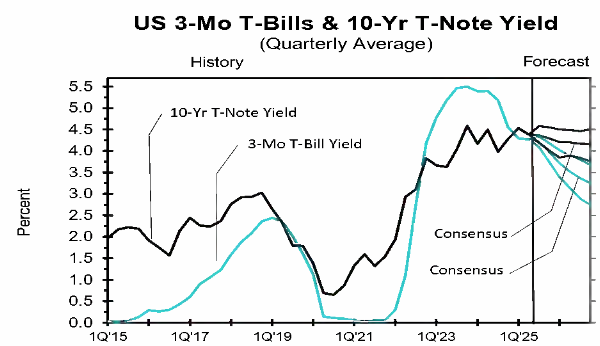
Sources of Information:
Kroll 2023 SBBI® Yearbook
Industrial Manual and Mergent Bond Record Monthly Update.
Value Line Summary and Index
Blue Chip Financial Forecasts, June 2, 2025 and July 1, 2025
S&P Capital IQ
Bloomberg Professional Services

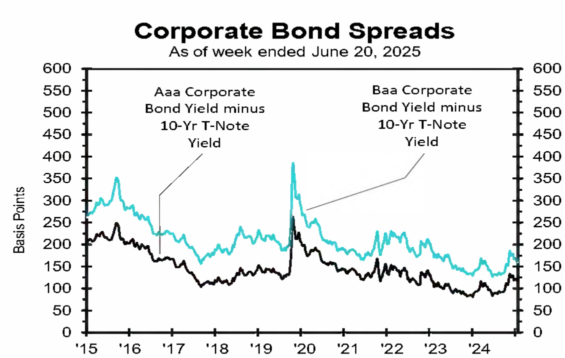
Consensus Forecasts of U.S. Interest Rates and Key Assumptions

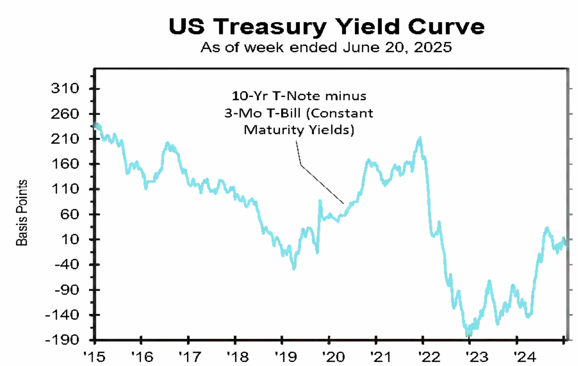
	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month			*Latest Qtr*	3Q	4Q	1Q	2Q	3Q	4Q
Interest Rates	Jun 20	Jun 13	Jun 6	May 30	May	Apr	Mar	2Q 2025*	**2025**	**2025**	**2026**	**2026**	**2026**	**2026**
Federal Funds Rate	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	**4.3**	**4.1**	**3.8**	**3.6**	**3.4**	**3.3**
Prime Rate	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	**7.4**	**7.2**	**6.9**	**6.7**	**6.6**	**6.4**
SOFR	4.30	4.28	4.31	4.32	4.30	4.35	4.33	4.32	**4.3**	**4.1**	**3.8**	**3.6**	**3.4**	**3.2**
Commercial Paper, 1-mo.	4.33	4.33	4.32	4.32	4.32	4.34	4.32	4.33	**4.3**	**4.0**	**3.8**	**3.6**	**3.4**	**3.3**
Treasury bill, 3-mo.	4.42	4.45	4.44	4.36	4.36	4.32	4.34	4.37	**4.2**	**4.0**	**3.7**	**3.5**	**3.4**	**3.3**
Treasury bill, 6-mo.	4.31	4.31	4.30	4.36	4.30	4.20	4.27	4.27	**4.2**	**3.9**	**3.7**	**3.6**	**3.4**	**3.3**
Treasury bill, 1 yr.	4.09	4.10	4.10	4.14	4.09	3.95	4.06	4.04	**4.0**	**3.8**	**3.6**	**3.5**	**3.4**	**3.3**
Treasury note, 2 yr.	3.94	3.96	3.95	3.92	3.92	3.78	3.97	3.87	**3.9**	**3.7**	**3.5**	**3.5**	**3.4**	**3.4**
Treasury note, 5 yr.	3.99	4.04	4.02	4.01	4.02	3.91	4.04	3.97	**4.0**	**3.9**	**3.8**	**3.8**	**3.7**	**3.7**
Treasury note, 10 yr.	4.40	4.43	4.44	4.44	4.42	4.28	4.28	4.37	**4.4**	**4.3**	**4.2**	**4.2**	**4.2**	**4.2**
Treasury note, 30 yr.	4.90	4.91	4.94	4.94	4.90	4.71	4.60	4.84	**4.8**	**4.7**	**4.7**	**4.7**	**4.6**	**4.6**
Corporate Aaa bond	5.59	5.60	5.64	5.66	5.66	5.56	5.38	5.61	**5.5**	**5.4**	**5.3**	**5.2**	**5.1**	**5.1**
Corporate Baa bond	6.01	6.02	6.08	6.12	6.14	6.06	5.81	6.08	**6.3**	**6.2**	**6.1**	**6.0**	**5.9**	**5.9**
State & Local bonds	4.43	4.46	4.49	4.47	4.47	4.50	4.22	4.47	**4.6**	**4.5**	**4.4**	**4.3**	**4.3**	**4.3**
Home mortgage rate	6.81	6.84	6.85	6.89	6.82	6.73	6.65	6.79	**6.8**	**6.6**	**6.5**	**6.4**	**6.3**	**6.3**
	History								**Consensus Forecasts-Quarterly**					
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**
Key Assumptions	2023	2023	2024	2024	2024	2024	2025	2025**	**2025**	**2025**	**2026**	**2026**	**2026**	**2026**
Fed's AFE $ Index	115.0	116.6	115.5	117.3	114.9	117.9	119.8	113.2	**112.6**	**112.3**	**112.1**	**112.0**	**111.9**	**111.8**
Real GDP	4.4	3.2	1.6	3.0	3.1	2.4	-0.5	1.3	**0.7**	**0.9**	**1.6**	**1.9**	**1.9**	**2.1**
GDP Price Index	3.2	1.5	3.0	2.5	1.9	2.3	3.8	2.9	**3.3**	**2.9**	**2.6**	**2.2**	**2.2**	**2.2**
Consumer Price Index	3.5	2.8	3.7	2.8	1.4	3.0	3.8	2.7	**3.7**	**3.2**	**2.8**	**2.5**	**2.4**	**2.4**
PCE Price Index	2.7	1.7	3.4	2.5	1.5	2.4	3.7	2.7	**3.5**	**3.0**	**2.7**	**2.4**	**2.2**	**2.2**

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. *Interest rate data for 2Q 2025 based on historical data through the week ended June 20. **Data for 2Q 2025 for the Fed's AFE $ Index based on data through the week ended June 20. Figures for 2Q 2025 Real GDP, GDP Chained Price Index, Consumer Price Index, and PCE Price Index are consensus forecasts from the June 2025 survey.









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	Implied Equity Risk Premium (excl. PRPM)
1.	Historical Equity Risk Premium (1)	4.16 %	4.16 %
2.	Regression of Historical Equity Risk Premium (2)	4.82	4.82
3.	Forecasted Equity Risk Premium Based on PRPM (3)	4.39	NA
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)	6.09	6.09
5.	Average Equity Risk Premium (5)	4.86 %	5.02 %

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.

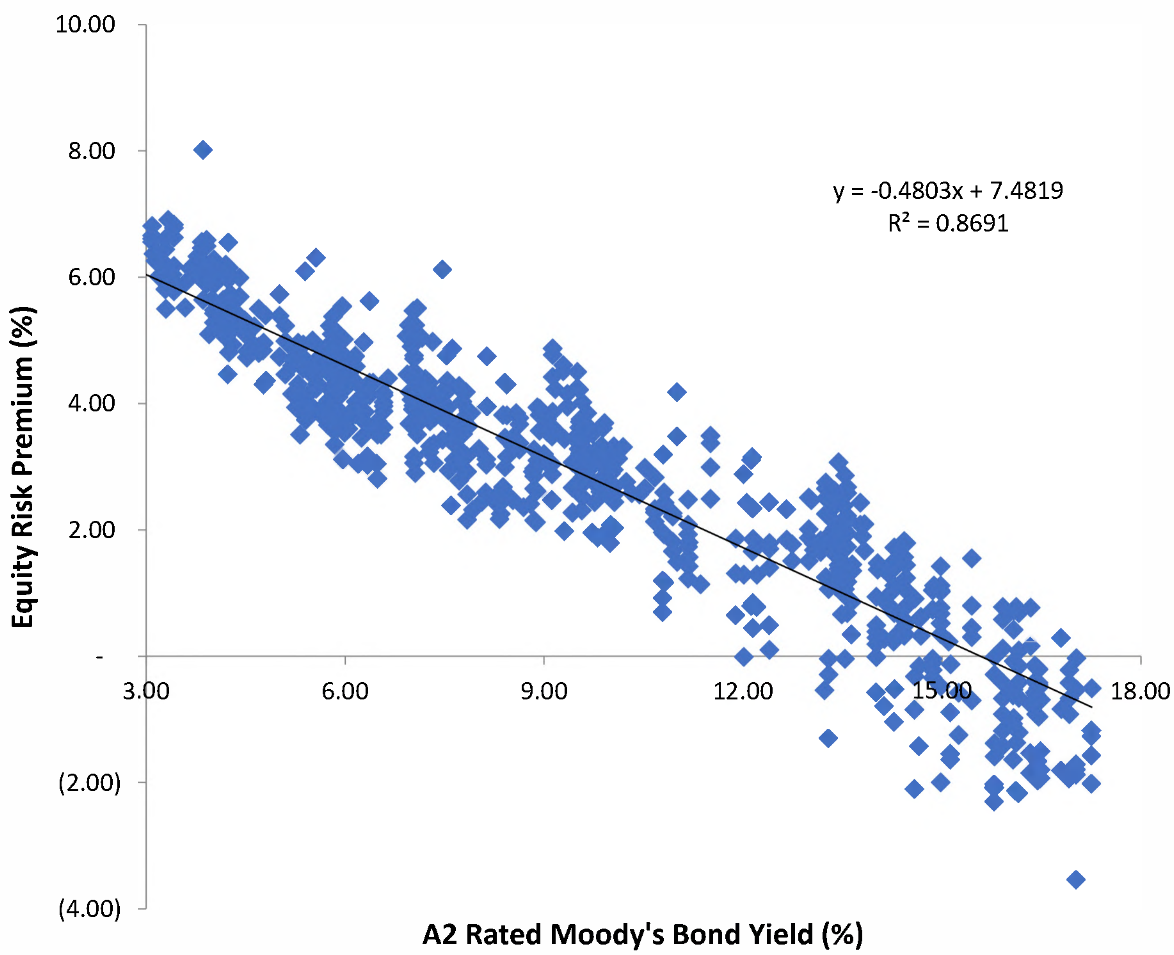
(2) This equity risk premium is based on a regression of the monthly equity risk premiums of the S&P Utility Index relative to Moody's A2 rated public utility bond yields from 1928 - 2024 referenced in note 1 above. Using the equation generated from the regression, an expected equity risk premium is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

(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 June 2025.

(4) Using data from Bloomberg, Value Line, and S&P Capital IQ for the S&P Utilities Index, an expected return of 11.80% 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 Document results in an equity risk premium of 6.09% (11.80% - 5.71% = 6.09%).

(5) Average of lines 1 through 4.

Peoples Gas System
Prediction of Equity Risk Premiums Relative to
Moody's A2 Rated Utility Bond Yields - Electric Utilities



Constant	Slope	Prospective A2 Rated Utility Bond (1)	Prospective Equity Risk Premium
7.4819 %	-0.4803	5.71 %	4.74 %

Notes:
(1) From line 3 of page 1 of this Document.

Source of Information: Regulatory Research Associates.

Peoples Gas System
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]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Eight Natural Gas Companies	Value Line Adjusted Beta	Bloomberg Adjusted Beta	Average Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate	ECAPM Cost Rate	Indicated Common Equity Cost Rate (3)
Atmos Energy Corporation	0.75	0.52	0.64	8.91 %	4.60 %	10.31 %	11.11 %	10.71 %
Chesapeake Utilities Corporation	0.75	0.49	0.62	8.91	4.60	10.13	10.97	10.55
New Jersey Resources Corporation	0.85	0.48	0.67	8.91	4.60	10.57	11.31	10.94
NiSource Inc.	0.85	0.59	0.72	8.91	4.60	11.02	11.64	11.33
Northwest Natural Holding Company	0.80	0.53	0.66	8.91	4.60	10.48	11.24	10.86
ONE Gas, Inc.	0.80	0.51	0.65	8.91	4.60	10.39	11.17	10.78
Southwest Gas Holdings, Inc.	0.80	0.64	0.72	8.91	4.60	11.02	11.64	11.33
Spire Inc.	0.80	0.52	0.66	8.91	4.60	10.48	11.24	10.86
Mean			0.67			10.55 %	11.29 %	10.92 %
Median			0.66			10.48 %	11.24 %	10.86 %
Average of Mean and Median			0.67			10.52 %	11.27 %	10.89 %

Results Excluding PRPM MRP

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Eight Natural Gas Companies	Value Line Adjusted Beta	Bloomberg Adjusted Beta	Average Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate	ECAPM Cost Rate	Indicated Common Equity Cost Rate (3)
Atmos Energy Corporation	0.75	0.52	0.64	8.89 %	4.60 %	10.29 %	11.09 %	10.69 %
Chesapeake Utilities Corporation	0.75	0.49	0.62	8.89	4.60	10.11	10.95	10.53
New Jersey Resources Corporation	0.85	0.48	0.67	8.89	4.60	10.55	11.29	10.92
NiSource Inc.	0.85	0.59	0.72	8.89	4.60	11.00	11.62	11.31
Northwest Natural Holding Company	0.80	0.53	0.66	8.89	4.60	10.46	11.22	10.84
ONE Gas, Inc.	0.80	0.51	0.65	8.89	4.60	10.38	11.15	10.76
Southwest Gas Holdings, Inc.	0.80	0.64	0.72	8.89	4.60	11.00	11.62	11.31
Spire Inc.	0.80	0.52	0.66	8.89	4.60	10.46	11.22	10.84
Mean			0.67			10.53 %	11.27 %	10.90 %
Median			0.66			10.46 %	11.22 %	10.84 %
Average of Mean and Median			0.67			10.50 %	11.25 %	10.87 %

Notes on page 2 of this Document.

Peoples Gas System

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 Kroll Historical Data
(1926-2024) 7.88 %

Measure 3: Application of the PRPM to Kroll Historical Data
(January 1928 through June 2025) 9.03 %

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

Total projected return on the market 3-5 years hence*:	13.89	%
Risk-Free Rate (see note 2):	4.60	
MRP based on Value Line Summary & Index:	9.29	%

*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:	15.66	%
Risk-Free Rate (see note 2):	4.60	
MRP based on Bloomberg, Value Line, and S&P Capital IQ data	11.06	%

Average of all MRP Measures:	8.91	%
Average MRP Excluding the PRPM MRP:	8.89	%

(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 this Document. The projection of the risk-free rate is illustrated below:

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

(3) Average of Column 6 and Column 7.

Sources of Information:
Value Line Summary and Index
Blue Chip Financial Forecasts, June 2, 2025 and July 1, 2025
Kroll 2023 SBBI® Yearbook
S&P Capital IQ
Bloomberg Professional Services

Peoples Gas System
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 0.45 - 0.79 and residual standard error of the regression range of 2.6575 - 3.1695 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 0.1280. 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

$$\text{Thus,} \quad 0.128 = \frac{2.9135}{\sqrt{518}} = \frac{2.9135}{22.7596}$$

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

Peoples Gas System
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

	[1]	[2]	[3]	[4]
Proxy Group of Eight Natural Gas Companies	Value Line Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
Atmos Energy Corporation	0.75	0.59	2.4122	0.0683
Chesapeake Utilities Corporation	0.70	0.54	3.1342	0.0888
New Jersey Resources Corporation	0.80	0.67	2.9138	0.0825
NiSource Inc.	0.85	0.70	2.4888	0.0705
Northwest Natural Holding Company	0.75	0.60	3.0651	0.0868
ONE Gas, Inc.	0.75	0.60	3.1352	0.0888
Southwest Gas Holdings, Inc.	0.80	0.62	3.3016	0.0935
Spire Inc.	0.75	0.61	2.8570	0.0809
Average	0.77	0.62	2.9135	0.0825
Beta Range (+/- 2 std. Devs. of Beta)	0.45	0.79		
2 std. Devs. of Beta	0.17			
Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.)	2.6575	3.1695		
Std. dev. of the Res. Std. Err.	0.1280			
2 std. devs. of the Res. Std. Err.	0.2560			

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

Peoples Gas System
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Eight Natural Gas Companies

	[1]	[2]	[3]	[4]
Proxy Group of Twenty-Eight Non-Price Regulated Companies	Value Line Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
AbbVie Inc.	0.70	0.48	2.9984	0.0849
Amgen	0.70	0.52	2.9231	0.0828
AutoZone Inc.	0.75	0.61	2.9796	0.0844
Becton, Dickinson	0.75	0.55	2.9156	0.0826
Bristol-Myers Squibb	0.70	0.53	3.0636	0.0868
Casella Waste Sys.	0.85	0.74	2.8152	0.0797
Cencora	0.65	0.47	2.7020	0.0765
Chemed Corp.	0.70	0.50	2.9028	0.0822
Constellation Brands	0.80	0.63	2.9286	0.0829
Costco Wholesale	0.80	0.66	2.7408	0.0776
Gilead Sciences	0.75	0.56	2.9551	0.0837
Henry (Jack) & Assoc	0.80	0.68	2.9558	0.0837
Int'l Business Mach.	0.80	0.67	2.9091	0.0824
L3Harris Technologie	0.80	0.69	3.0374	0.0860
Labcorp Holdings	0.75	0.62	2.9139	0.0825
McCormick & Co.	0.70	0.50	3.0004	0.0850
McKesson Corp.	0.70	0.51	2.8601	0.0810
Monster Beverage	0.75	0.55	2.7035	0.0766
NewMarket Corp.	0.80	0.62	2.9198	0.0827
O'Reilly Automotive	0.80	0.62	2.7740	0.0786
Philip Morris Int'l	0.80	0.64	2.8039	0.0794
Prestige Consumer	0.75	0.62	3.0893	0.0875
Progressive Corp.	0.80	0.63	3.0075	0.0852
RLI Corp.	0.85	0.77	2.8552	0.0809
VeriSign Inc.	0.90	0.78	2.8545	0.0808
Walmart Inc.	0.75	0.56	2.7251	0.0772
Wendy's Company	0.85	0.72	2.9914	0.0847
Werner Enterprises	0.85	0.76	3.0727	0.0870
Average	0.77	0.61	2.9071	0.0823
Proxy Group of Eight Natural Gas Companies	0.77	0.62	2.9135	0.0825

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

Peoples Gas System
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 Twenty-Eight Non-Price Regulated Companies		Proxy Group of Twenty-Eight Non-Price Regulated Companies (excl. PRPM)	
Discounted Cash Flow Model (DCF) (1)	10.76	%	10.76	%
Risk Premium Model (RPM) (2)	11.31		11.31	
Capital Asset Pricing Model (CAPM)	10.94	(3)	10.92	(4)
Mean	11.00	%	11.00	%
Median	10.94	%	10.92	%
Average of Mean and Median	10.97	%	10.96	%

Notes:
(1) From page 2 of this Document.
(2) From page 3 of this Document.
(3) From page 6 of this Document.
(4) From page 7 of this Document.

Peoples Gas System
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 Twenty-Eight 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)
AbbVie Inc.	3.54 %	7.00 %	12.30 %	12.94 %	10.75 %	3.73 %	14.48 %
Amgen	3.37	5.50	5.30	5.26	5.35	3.46	8.81
AutoZone Inc.	-	7.50	11.40	10.85	9.92	-	NA
Becton, Dickinson	2.29	7.50	9.30	10.33	9.04	2.39	11.43
Bristol-Myers Squibb	5.09	30.00	5.00	NMF	17.50	5.54	23.04 (3)
Casella Waste Sys.	-	6.50	25.80	(3.06)	16.15	-	NA
Cencora	0.76	6.50	12.80	12.66	10.65	0.80	11.45
Chemed Corp.	0.35	8.00	10.30	9.78	9.36	0.37	9.73
Constellation Brands	2.28	6.50	1.40	1.28	3.06	2.31	5.37
Costco Wholesale	0.52	10.00	9.40	9.11	9.50	0.54	10.04
Gilead Sciences	2.97	16.00	19.50	24.79	20.10	3.27	23.37 (3)
Henry (Jack) & Assoc	1.31	5.50	10.10	10.10	8.57	1.37	9.94
Int'l Business Mach.	2.61	3.00	4.30	6.90	4.73	2.67	7.40
L3Harris Technologie	2.08	14.50	12.00	11.99	12.83	2.21	15.04
Labcorp Holdings	1.18	6.00	9.80	9.55	8.45	1.23	9.68
McCormick & Co.	2.41	6.00	6.60	6.17	6.26	2.49	8.75
McKesson Corp.	0.40	10.00	13.50	10.84	11.45	0.42	11.87
Monster Beverage	-	12.00	15.20	13.77	13.66	-	NA
NewMarket Corp.	1.77	5.50	NA	NA	5.50	1.82	7.32
O'Reilly Automotive	-	10.50	12.60	11.91	11.67	-	NA
Philip Morris Int'l	3.14	5.00	9.30	11.38	8.56	3.27	11.83
Prestige Consumer	-	6.50	7.00	7.67	7.06	-	NA
Progressive Corp.	0.15	16.50	9.80	13.62	13.31	0.16	13.47
RLI Corp.	0.86	13.50	NA	NA	13.50	0.92	14.42
VeriSign Inc.	1.13	10.50	NA	NA	10.50	1.19	11.69
Walmart Inc.	0.98	10.00	7.90	7.92	8.61	1.02	9.63
Wendy's Company	4.62	11.00	6.90	6.93	8.28	4.81	13.09
Werner Enterprises	2.06	NA	NMF	NMF	NA	NA	NA
						Mean	10.77 %
						Median	10.74 %
						Average of Mean and Median	10.76 %

NA = Not Available
NMF = Not Meaningful Figure

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 Group. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of 6/30/2025. 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 06/30/2025
S&P Capital IQ

Peoples Gas System
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

Line No.		Proxy Group of Twenty-Eight Non-Price Regulated Companies	Proxy Group of Twenty-Eight Non-Price Regulated Companies (excl. PRPM)
1.	Prospective Yield on Baa2 Rated Corporate Bonds (1)	6.05 %	6.05
2.	Adjustment to Reflect Bond rating Difference of Non-Price Regulated Companies (2)	(0.21)	(0.21)
3.	Adjusted Bond Yield	5.84	5.84
4.	Equity Risk Premium (3)	5.47	5.47
5.	Risk Premium Derived Common Equity Cost Rate	11.31 %	11.31

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 and July 1, 2025 (see pages 7 and 8 of this Document. The estimates are detailed below.

Third Quarter 2025	6.30 %
Fourth Quarter 2025	6.20
First Quarter 2026	6.10
Second Quarter 2026	6.00
Third Quarter 2026	5.90
Fourth Quarter 2026	5.90
2027-2031	6.00
2032-2036	6.00
Average	6.05 %

(2) The average yield spread of Baa2 rated corporate bonds over A2 corporate bonds for the three months ending June 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
Jun-25	5.86 %	6.15 %	0.29 %
May-25	5.97	6.29	0.32
Apr-25	5.85	6.18	0.33
		Average yield spread	0.31
		2/3 of spread	0.21

(3) From page 5 of this Document.

Peoples Gas System
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Twenty-Eight Non-Price Regulated Companies

	Moody's Long-Term Issuer Rating		Standard & Poor's Long-Term Issuer Rating	
	June 2025		June 2025	
Proxy Group of Twenty-Eight Non-Price Regulated Companies	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
AbbVie Inc.	A3	7.0	A-	7.0
Amgen	Baa1	8.0	BBB+	8.0
AutoZone Inc.	Baa1	8.0	BBB	9.0
Becton, Dickinson	Baa2	9.0	BBB	9.0
Bristol-Myers Squibb	A2	6.0	A	6.0
Casella Waste Sys.	NA	--	BB	12.0
Cencora	Baa2	9.0	BBB+	8.0
Chemed Corp.	WR	--	NR	--
Constellation Brands	Baa2	9.0	BBB	9.0
Costco Wholesale	Aa3	4.0	AA	3.0
Gilead Sciences	A3	7.0	A-	7.0
Henry (Jack) & Assoc	NA	--	NA	--
Int'l Business Mach.	A3	7.0	A-	7.0
L3Harris Technologie	Baa2	9.0	BBB	9.0
Labcorp Holdings	NA	--	BBB	9.0
McCormick & Co.	Baa2	9.0	BBB	9.0
McKesson Corp.	A3	7.0	BBB+	8.0
Monster Beverage	NA	--	NA	--
NewMarket Corp.	Baa2	9.0	BBB+	8.0
O'Reilly Automotive	Baa1	8.0	BBB	9.0
Philip Morris Int'l	A2	6.0	A-	7.0
Prestige Consumer	NA	--	BB	12.0
Progressive Corp.	A2	6.0	A	6.0
RLI Corp.	WR	--	BBB	9.0
VeriSign Inc.	Baa3	10.0	BBB	9.0
Walmart Inc.	Aa2	3.0	AA	3.0
Wendy's Company	NA	--	B+	14.0
Werner Enterprises	NA	--	NA	--
Natural Gas CEM Proxy Group	A3	7.4	BBB+	8.2

Average Notes:
(1) From page 4 of Document No. 4

Source of Information:
Bloomberg Professional Services.

Peoples Gas System
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 Twenty-Eight Non-Price Regulated Companies	Proxy Group of Twenty-Eight Non-Price Regulated Companies (excl. PRPM)
1.	Kroll Equity Risk Premium (1)	6.10 %	6.10 %
2.	Regression on Kroll Risk Premium Data (2)	6.97	6.97
3.	Kroll Equity Risk Premium based on PRPM (3)	8.08	NA
4.	Equity Risk Premium Based on Value Line Summary and Index (4)	8.66	8.66
5.	Equity Risk Premium Based on Bloomberg, Value Line, and S&P Global Market Intelligence S&P 500 Companies (5)	10.43	10.43
6.	Conclusion of Equity Risk Premium	8.05 %	8.04 %
7.	Adjusted Beta (6)	0.68	0.68
8.	Forecasted Equity Risk Premium	5.47 %	5.47 %

Notes:
(1) From note 1 of page 6 of Document No. 4.
(2) From note 2 of page 6 of Document No. 4.
(3) From note 3 of page 6 of Document No. 4.
(4) From note 4 of page 6 of Document No. 4.
(5) From note 5 of page 6 of Document No. 4.
(6) Average of mean and median beta from pages 6 and 7 of this Document.

Sources of Information:
Stocks, Bonds, Bills, and Inflation - 2023 SBBI Yearbook, Kroll.
Value Line Summary and Index.
Blue Chip Financial Forecasts, June 2, 2025 and July 1, 2025.
Bloomberg Professional Services.

Peoples Gas System
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

Proxy Group of Twenty-Eight Non-Price Regulated Companies

Proxy Group of Twenty-Eight Non-Price Regulated Companies	[1] Value Line Adjusted Beta	[2] Bloomberg 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)
AbbVie Inc.	0.70	0.55	0.62	8.91 %	4.60 %	10.13 %	10.97 %	10.55 %
Amgen	0.70	0.56	0.63	8.91	4.60	10.22	11.04	10.63
AutoZone Inc.	0.75	0.56	0.66	8.91	4.60	10.48	11.24	10.86
Becton, Dickinson	0.75	0.56	0.65	8.91	4.60	10.39	11.17	10.78
Bristol-Myers Squibb	0.70	0.45	0.57	8.91	4.60	9.68	10.64	10.16
Casella Waste Sys.	0.85	0.63	0.74	8.91	4.60	11.20	11.78	11.49
Cencora	0.70	0.43	0.57	8.91	4.60	9.68	10.64	10.16
Chemed Corp.	0.70	0.47	0.58	8.91	4.60	9.77	10.71	10.24
Constellation Brands	0.80	0.61	0.71	8.91	4.60	10.93	11.58	11.25
Costco Wholesale	0.75	0.77	0.76	8.91	4.60	11.37	11.91	11.64
Gilead Sciences	0.75	0.58	0.67	8.91	4.60	10.57	11.31	10.94
Henry (Jack) & Assoc	0.80	0.53	0.67	8.91	4.60	10.57	11.31	10.94
Int'l Business Mach.	0.85	0.74	0.79	8.91	4.60	11.64	12.11	11.88
L3Harris Technologie	0.85	0.73	0.79	8.91	4.60	11.64	12.11	11.88
Labcorp Holdings	0.75	0.60	0.67	8.91	4.60	10.57	11.31	10.94
McCormick & Co.	0.65	0.50	0.58	8.91	4.60	9.77	10.71	10.24
McKesson Corp.	0.75	0.51	0.63	8.91	4.60	10.22	11.04	10.63
Monster Beverage	0.75	0.58	0.66	8.91	4.60	10.48	11.24	10.86
NewMarket Corp.	0.75	0.68	0.71	8.91	4.60	10.93	11.58	11.25
O'Reilly Automotive	0.75	0.50	0.63	8.91	4.60	10.22	11.04	10.63
Philip Morris Int'l	0.80	0.42	0.61	8.91	4.60	10.04	10.91	10.47
Prestige Consumer	0.80	0.58	0.69	8.91	4.60	10.75	11.44	11.10
Progressive Corp.	0.75	0.59	0.67	8.91	4.60	10.57	11.31	10.94
RLI Corp.	0.85	0.50	0.67	8.91	4.60	10.57	11.31	10.94
VeriSign Inc.	0.80	0.64	0.72	8.91	4.60	11.02	11.64	11.33
Walmart Inc.	0.70	0.77	0.74	8.91	4.60	11.20	11.78	11.49
Wendy's Company	0.85	0.50	0.68	8.91	4.60	10.66	11.37	11.02
Werner Enterprises	0.80	0.85	0.83	8.91	4.60	12.00	12.38	12.19 (4)
		Mean	0.68			10.62 %	11.34 %	10.93 %
		Median	0.67			10.57 %	11.31 %	10.94 %
		Average of Mean and Median	0.68			10.60 %	11.33 %	10.94 %

Notes:
(1) From note 1 of page 2 of Document No. 5.
(2) From note 2 of page 2 of Document No. 5.
(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.

Peoples Gas System
Traditional CAPM and ECAPM Results (excl. PRPM MRP) for the Proxy Groups of Non-Price-Regulated Companies Comparable in Total Risk to the Proxy Group of Eight Natural Gas Companies

Proxy Group of Twenty-Eight Non-Price Regulated Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Twenty-Eight 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)
AbbVie Inc.	0.70	0.55	0.62	8.89 %	4.60 %	10.11 %	10.95 %	10.53 %
Amgen	0.70	0.56	0.63	8.89	4.60	10.20	11.02	10.61
AutoZone Inc.	0.75	0.56	0.66	8.89	4.60	10.46	11.22	10.84
Becton, Dickinson	0.75	0.56	0.65	8.89	4.60	10.38	11.15	10.76
Bristol-Myers Squibb	0.70	0.45	0.57	8.89	4.60	9.66	10.62	10.14
Casella Waste Sys.	0.85	0.63	0.74	8.89	4.60	11.18	11.75	11.46
Cencora	0.70	0.43	0.57	8.89	4.60	9.66	10.62	10.14
Chemed Corp.	0.70	0.47	0.58	8.89	4.60	9.75	10.69	10.22
Constellation Brands	0.80	0.61	0.71	8.89	4.60	10.91	11.55	11.23
Costco Wholesale	0.75	0.77	0.76	8.89	4.60	11.35	11.89	11.62
Gilead Sciences	0.75	0.58	0.67	8.89	4.60	10.55	11.29	10.92
Henry (Jack) & Assoc	0.80	0.53	0.67	8.89	4.60	10.55	11.29	10.92
Int'l Business Mach.	0.85	0.74	0.79	8.89	4.60	11.62	12.09	11.85
L3Harris Technologie	0.85	0.73	0.79	8.89	4.60	11.62	12.09	11.85
Labcorp Holdings	0.75	0.60	0.67	8.89	4.60	10.55	11.29	10.92
McCormick & Co.	0.65	0.50	0.58	8.89	4.60	9.75	10.69	10.22
McKesson Corp.	0.75	0.51	0.63	8.89	4.60	10.20	11.02	10.61
Monster Beverage	0.75	0.58	0.66	8.89	4.60	10.46	11.22	10.84
NewMarket Corp.	0.75	0.68	0.71	8.89	4.60	10.91	11.55	11.23
O'Reilly Automotive	0.75	0.50	0.63	8.89	4.60	10.20	11.02	10.61
Philip Morris Int'l	0.80	0.42	0.61	8.89	4.60	10.02	10.89	10.45
Prestige Consumer	0.80	0.58	0.69	8.89	4.60	10.73	11.42	11.08
Progressive Corp.	0.75	0.59	0.67	8.89	4.60	10.55	11.29	10.92
RLI Corp.	0.85	0.50	0.67	8.89	4.60	10.55	11.29	10.92
VeriSign Inc.	0.80	0.64	0.72	8.89	4.60	11.00	11.62	11.31
Walmart Inc.	0.70	0.77	0.74	8.89	4.60	11.18	11.75	11.46
Wendy's Company	0.85	0.50	0.68	8.89	4.60	10.64	11.35	11.00
Werner Enterprises	0.80	0.85	0.83	8.89	4.60	11.97	12.35	12.16 (4)
		Mean	0.68			10.60 %	11.32 %	10.91 %
		Median	0.67			10.55 %	11.29 %	10.92 %
		Average of Mean and Median	0.68			10.58 %	11.31 %	10.92 %

Notes:
(1) From note 1 of page 2 of Document No. 5.
(2) From note 2 of page 2 of Document No. 5.
(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.

Peoples Gas System
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 June 30, 2025 (1) (millions)	(times larger)	[2] Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	[3] Applicable Size Premium (3)	[4] Spread from Applicable Size Premium (4)
1.	Peoples Gas System	$ 2,730.002		6	1.00%	
2.	Proxy Group of Eight Natural Gas Companies	$ 8,193.226	3.0 x	4	0.50%	0.50%

	[A] Decile	[B] Market Capitalization of Smallest Company (millions)	[C] Market Capitalization of Largest Company (millions)	[D] 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 Document.
(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 0.50% in Column [4], Line No. 2 is derived as follows 0.50% = 1.00% - 0.50%.

Peoples Gas System
Market Capitalization of Peoples Gas System 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 2024 (1)	[3] Total Common Equity at Fiscal Year End 2024 (millions)	[4] Closing Stock Market Price on June 30, 2025	[5] Market-to-Book Ratio on June 30, 2025 (2)	[6] Market Capitalization on June 30, 2025 (3) (millions)
Peoples Gas System		NA	NA	1,615.386 (4)	NA		
Based upon Proxy Group of Eight Natural Gas Companies						169.0 (5)	$ 2,730.002 (6)
Proxy Group of Eight Natural Gas Companies							
Atmos Energy Corporation	NYSE	155.259	$ 78.306	$ 12,157.67	$ 154.110	196.80 %	$ 23,926.941
Chesapeake Utilities Corporation	NYSE	22.899	60.710	1,390.20	120.220	198.00	2,752.918
New Jersey Resources Corporation	NYSE	99.461	22.124	2,200.44	44.820	202.60	4,457.862
NiSource Inc.	NYSE	469.822	18.484	8,684.20	40.340	218.20	18,952.639
Northwest Natural Holding Company	NYSE	40.222	34.443	1,385.37	39.720	115.30	1,597.630
ONE Gas, Inc.	NYSE	59.877	51.849	3,104.55	71.860	138.60	4,302.751
Southwest Gas Holdings, Inc.	NYSE	71.783	48.817	3,504.19	74.390	152.40	5,339.919
Spire Inc.	NYSE	57.750	55.978	3,232.70	72.990	130.40	4,215.148
Average		122.134	$ 46.339	$ 4,457.415	$ 77.306	169.0 %	$ 8,193.226

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 Peoples Gas System on June 30, 2025 is assumed to be equal to the market-to-book ratio of Proxy Group of Eight Natural Gas Companies on June 30, 2025 as appropriate.
(6) Column [3] multiplied by Column [5].

Source of Information: 2024 Annual Forms 10-K
Bloomberg Professional

Peoples Gas System
Derivation of the Flotation Cost Adjustment to the Cost of Common Equity

Equity Issuances

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Date	Issuing Company	Shares Issued (1)	Market Price per Share (1)	Average Offering Price per Share (1)	Underwriting Discount (1)	Total Offering Expense per Share (1)	Net Proceeds per Share (2)	Total Flotation Costs (3)	Gross Equity Issue before Costs (4)	Net Proceeds (5)	Flotation Cost Percentage (6)
At-The-Market 2024	Emera Incorporated	5,117,273	NA	51.520	NA	$ 0.586	$ 51.00	$ 3,000,000	$ 264,000,000	$ 261,000,000	1.14%
At-The-Market 2023	Emera Incorporated	8,287,037	NA	48.270	NA	$ 0.362	$ 47.91	$ 3,000,000	$ 400,000,000	$ 397,000,000	0.75%
At-The-Market 2022	Emera Incorporated	4,072,469	NA	61.310	NA	$ 0.491	$ 60.90	$ 2,000,000	$ 250,000,000	$ 248,000,000	0.80%
At-The-Market 2021	Emera Incorporated	4,987,123	NA	57.630	NA	$ 0.602	$ 56.95	$ 3,000,000	$ 287,000,000	$ 284,000,000	1.05%
At-The-Market 2020	Emera Incorporated	4,544,025	NA	56.040	NA	$ 0.880	$ 55.24	$ 4,000,000	$ 255,000,000	$ 251,000,000	1.57%
At-The-Market 2019	Emera Incorporated	1,768,120	NA	56.560	NA	$ 0.735	$ 55.82	$ 1,300,000	$ 100,000,000	$ 98,700,000	1.30%
12/18/2017	Emera Incorporated	14,614,000	47.980	47.900	1.916	$ 0.031	$ 45.95	$ 29,619,544	$ 701,179,720	$ 671,560,176	4.22%
12/8/2016	Emera Incorporated	7,624,500	44.260	45.250	1.810	$ 0.059	$ 43.38	$ 6,702,090	$ 337,460,370	$ 330,758,280	1.99%
	Total Public Issuances							$ 52,621,634	$ 2,594,640,090	$ 2,542,018,456	2.03%

Flotation Cost Adjustment

	[11]	[12]	[13]	[14]	[15]	[16]
	Average Dividend Yield (7)	Average Projected EPS Growth Rate (7)	Adjusted Dividend Yield (8)	Average DCF Cost Rate Unadjusted for Flotation (9)	DCF Cost Rate Adjusted for Flotation (10)	Flotation Cost Adjustment (11)
Proxy Group of Eight Natural Gas Companies	3.38 %	7.26 %	3.51 %	10.77 %	10.85 %	0.07 %

Notes:
(1) From Company prospectuses, annual filings, or Company provided.
(2) Column [3] - Column [4] - Column [5].
(3) (Column [2] - Column [6]) x Column [1].
(4) Column [1] x Column [2].
(5) Column [1] x Column [6].
(6) Column [7] / Column [8].
(7) From page 1 of Document No. 3.
(8) Column [11] x (1 + 0.5 x Column [12]).
(9) Column [12] + Column [13].
(10) (Column [13] / (1 - Column [10])) + Column [12].
(11) Column [15] - Column [14].

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FILED: 07/28/2025

Peoples Gas System
Gross Domestic Product by Industry
from 1947 - 2024

Industry	1947	2024	CAGR
Agriculture, forestry, fishing, and hunting	19.9	248.4	3.33%
Mining	5.8	393.7	5.63%
Utilities	3.5	437.3	**6.47%**
Construction	8.9	1,312.3	**6.70%**
Manufacturing	63.4	2,913.1	5.10%
Wholesale trade	15.6	1,706.8	6.29%
Retail trade	23.2	1,841.7	5.85%
Transportation and warehousing	14.1	969.2	5.65%
Information	7.7	1,569.5	**7.15%**
Finance, insurance, real estate, rental, and leasing	25.8	6,190.0	**7.38%**
Professional and business services	8.2	3,847.4	**8.32%**
Educational services, health care, and social assistance	4.6	2,542.0	**8.55%**
Arts, entertainment, recreation, accommodation, and food services	8.0	1,293.2	**6.83%**
Other services, except government	7.5	626.7	5.92%
Government	33.5	3,293.7	6.14%
Total Gross domestic product	249.7	29,185.0	6.38%

Source: Bureau of Economic Analysis

Industry	Gross Domestic Product	1947-2024 CAGR	Beginning Year	Ending Year	Gross Domestic Product In	% of Total
Agriculture, forestry, fishing, and hunting	248.4	3.33%	1	276	2.E+06	
Mining	393.7	5.63%	1	276	1.E+09	
Utilities	437.3	6.47%	1	276	1.E+10	
Construction	1,312.3	6.70%	1	276	8.E+10	
Manufacturing	2,913.1	5.10%	1	276	3.E+09	
Wholesale trade	1,706.8	6.29%	1	276	3.E+10	
Retail trade	1,841.7	5.85%	1	276	1.E+10	
Transportation and warehousing	969.2	5.65%	1	276	4.E+09	
Information	1,569.5	7.15%	1	276	3.E+11	
Finance, insurance, real estate, rental, and leasing	6,190.0	7.38%	1	276	2.E+12	
Professional and business services	3,847.4	8.32%	1	276	1.E+13	
Educational services, health care, and social assistance	2,542.0	8.55%	1	276	2.E+13	50.02%
Arts, entertainment, recreation, accommodation, and food services	1,293.2	6.83%	1	276	1.E+11	
Other services, except government	626.7	5.92%	1	276	5.E+09	
Government	3,293.7	6.14%	1	276	5.E+10	
Total Gross domestic product	29,185.0				3.E+13	

Industry	Gross Domestic Product	1947-2024 CAGR	Beginning Year	Ending Year	Gross Domestic Product In	% of Total
Agriculture, forestry, fishing, and hunting	248.4	3.33%	1	5,939	9.E+86	
Mining	393.7	5.63%	1	5,939	8.E+143	
Utilities	437.3	6.47%	1	5,939	2.E+164	
Construction	1,312.3	6.70%	1	5,939	2.E+170	
Manufacturing	2,913.1	5.10%	1	5,939	5.E+131	
Wholesale trade	1,706.8	6.29%	1	5,939	3.E+160	
Retail trade	1,841.7	5.85%	1	5,939	6.E+149	
Transportation and warehousing	969.2	5.65%	1	5,939	5.E+144	
Information	1,569.5	7.15%	1	5,939	2.E+181	
Finance, insurance, real estate, rental, and leasing	6,190.0	7.38%	1	5,939	2.E+187	
Professional and business services	3,847.4	8.32%	1	5,939	4.E+209	
Educational services, health care, and social assistance	2,542.0	8.55%	1	5,939	8.E+214	100.00%
Arts, entertainment, recreation, accommodation, and food services	1,293.2	6.83%	1	5,939	3.E+173	
Other services, except government	626.7	5.92%	1	5,939	1.E+151	
Government	3,293.7	6.14%	1	5,939	2.E+157	
Total Gross domestic product	29,185.0				8.E+214	

Source: Bureau of Economic Analysis

Peoples Gas System
Growth Rate Regressions

Company	Ticker	Trailing P/E Ratio	Proj. Earnings Growth Rate	Proj. Dividend Growth Rate
ALLETE, Inc.	ALE	20.4	6.00%	3.50%
Alliant Energy Corporation	LNT	21.3	6.00%	6.00%
Ameren Corporation	AEE	20.6	6.50%	6.50%
American Electric Power Company, Inc.	AEP	17.5	6.50%	5.50%
American States Water Company	AWR	24.6	7.00%	8.00%
American Water Works Company	AWK	26.2	4.50%	8.50%
Artesian Resources Corporation	ARTNA	16.5	NA	NA
Atmos Energy Corporation	ATO	21.6	7.00%	7.00%
Avista Corporation	AVA	17.4	5.50%	4.00%
Black Hills Corporation	BKH	14.5	3.50%	3.50%
California Water Service Group	CWT	19.8	9.50%	5.50%
CenterPoint Energy, Inc.	CNP	25.2	6.50%	6.00%
Chesapeake Utilities	CPK	23.3	8.00%	7.00%
CMS Energy Corporation	CMS	20.7	5.50%	4.00%
Consolidated Edison, Inc.	ED	20.7	6.00%	4.50%
Consolidated Water Company	CWCO	30.0	NA	NA
Dominion Energy Inc.	D	19.5	6.00%	0.00%
DTE Energy Company	DTE	18.4	4.50%	3.00%
Duke Energy Corporation	DUK	20.5	6.00%	3.50%
Edison International	EIX	10.9	6.50%	6.00%
Entergy Corporation	ETR	26.8	3.00%	5.50%
Essential Utilities	WTRG	17.0	6.00%	6.50%
Evergy, Inc.	EVRG	17.3	7.50%	7.00%
Eversource Energy	ES	12.9	5.50%	5.50%
Exelon Corporation	EXC	19.0	NMF	NMF
FirstEnergy Corp.	FE	15.5	4.50%	4.50%
Global Water Resources	GWRS	46.8	15.00%	NA
H2O America	HTO	18.0	6.00%	4.00%
Hawaiian Electric Industries, Inc.	HE	NMF	NMF	NMF
IDACORP, Inc.	IDA	20.8	6.00%	5.50%
MGE Energy, Inc.	MGEE	25.4	7.00%	6.50%
Middlesex Water Company	MSEX	23.9	7.50%	4.50%
New Jersey Resources	NJR	12.0	5.00%	5.00%
NextEra Energy, Inc.	NEE	18.9	8.50%	9.50%
NiSource Inc.	NI	20.4	9.50%	4.50%
Northwest Natural Gas Holding	NWN	14.7	6.50%	0.50%
NorthWestern Corporation	NWE	16.7	4.50%	1.50%
OGE Energy Corp.	OGE	18.4	6.50%	3.00%
One Gas, Inc.	OGS	18.0	4.50%	2.00%
Otter Tail Corporation	OTTR	10.8	4.50%	7.00%
PG&E Corporation	PCG	11.8	9.50%	NMF
Pinnacle West Capital Corporation	PNW	17.2	5.00%	1.50%
Portland General Electric Company	POR	13.2	6.50%	5.50%
PPL Corporation	PPL	21.7	7.50%	-0.50%
Public Service Enterprise Group Incorporated	PEG	22.0	7.00%	6.00%
RGC Resources	RGCO	16.6	NA	NA
Sempra Energy	SRE	13.8	5.50%	5.50%
Southern Company	SO	22.4	6.50%	3.50%
Southwest Gas Holdings	SWX	25.4	10.00%	5.50%
Spire Inc.	SR	17.8	4.50%	4.00%
TXNM Energy	TXNM	18.2	4.50%	5.00%
UGI Corporation	UGI	9.9	6.50%	3.50%
Unitil Corp.	UTL	18.7	NA	NA
WEC Energy Group, Inc.	WEC	20.6	6.00%	7.00%
Xcel Energy Inc.	XEL	19.2	7.00%	6.50%
York Water Company	YORW	23.9	NA	NA

Source: Value Line as of June 30, 2025

Peoples Gas System
Growth Rate Regressions

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.53521709
R Square	0.28645733
Adjusted R Square	0.27127557
Standard Error	4.96457231
Observations	49

ANOVA

	df	SS	MS	F	Significance F
Regression	1	465.0520227	465.0520227	18.86852085	7.4224E-05
Residual	47	1158.407977	24.64697824		
Total	48	1623.46			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	9.24218235	2.443651669	3.782119385	0.000438887	4.32618928	14.1581754
Proj. Earnings Growth Rate	158.261706	36.43400508	4.343791068	7.42241E-05	84.9659418	231.55747

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.20222231
R Square	0.04089386
Adjusted R Square	0.01958039
Standard Error	4.14625342
Observations	47

ANOVA

	df	SS	MS	F	Significance F
Regression	1	32.98493846	32.98493846	1.918686378	0.17283012
Residual	45	773.6137849	17.19141744		
Total	46	806.5987234			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	17.0537135	1.515628271	11.25191042	1.13779E-14	14.0010815	20.1063456
Proj. Dividend Growth Rate	39.7694348	28.71094075	1.385166552	0.172830119	-18.0573682	97.5962379

Peoples Gas System
Witness Garrett Corrected DCF Results

Company	Ticker	Annualized Dividend (1)	Stock Price (1)	Dividend Yield
Atmos Energy Corp	ATO	3.48	156.36	2.23%
New Jersey Resources Corp	NJR	1.80	46.32	3.89%
NiSource Inc	NI	1.12	39.15	2.86%
Northwest Natural Holding Company	NWN	1.96	41.57	4.71%
ONE Gas Inc	OGS	2.68	75.45	3.55%
Southwest Gas Holdings Inc	SWX	2.48	71.51	3.47%
Spire Inc.	SR	3.14	74.62	4.21%

Company	Ticker	Dividend Yield	EPS Growth Rate (2)	DCF Result
Atmos Energy Corp	ATO	2.2%	7.0%	9.38%
New Jersey Resources Corp	NJR	3.9%	5.0%	9.08%
NiSource Inc	NI	2.9%	9.5%	12.63%
Northwest Natural Holding Company	NWN	4.7%	6.5%	11.52%
ONE Gas Inc	OGS	3.6%	4.5%	8.21%
Southwest Gas Holdings Inc	SWX	3.5%	10.0%	13.81%
Spire Inc.	SR	4.2%	4.5%	8.90%
Average				10.51%

Notes
(1) Exhibit DJG-4
(2) Source: Value Line as of June 9, 2025

Peoples Gas System
Mr. Garrett's Implied ERP Calculation

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Year	Market Value	Operating Earnings	Dividends	Buybacks	Earnings Yield	Dividend Yield	Buyback Yield	Gross Cash Yield
2014	18,245	1,004	350	553	5.50%	1.92%	3.03%	4.95%
2015	17,900	885	382	572	4.95%	2.14%	3.20%	5.33%
2016	19,268	920	397	536	4.77%	2.06%	2.78%	4.85%
2017	22,821	1,066	420	519	4.67%	1.84%	2.28%	4.12%
2018	21,027	1,282	456	806	6.10%	2.17%	3.84%	6.01%
2019	26,760	1,305	485	729	4.88%	1.81%	2.72%	4.54%
2020	31,659	1,019	480	520	3.22%	1.52%	1.64%	3.16%
2021	40,356	1,739	511	882	4.31%	1.27%	2.18%	3.45%
2022	32,133	1,656	565	923	5.15%	1.76%	2.87%	4.63%
2023	36,870	1,790	588	795	4.85%	1.60%	2.16%	3.75%
2024	49,805	1,968	630	943	3.95%	1.26%	1.89%	3.16%

Cash Yield	4.36%	[9]
Growth Rate	6.96%	[10]
Risk-free Rate	4.89%	[11]
Current Index Value	5,817	[12]

	[13]	[14]	[15]	[16]	[17]
Year	1	2	3	4	5
Expected Dividends	271	290	310	332	355
Expected Terminal Value					7446
Present Value	247	240	234	228	4869

Intrinsic Index Value	5817	[18]
% Terminal Value	79.89%	
Required Return on Market	9.89%	[19]
Implied Equity Risk Premium	**5.0%**	[20]

[1-4] S&P Quarterly Press Releases, data found at https://us.spindices.com/indices/equity/sp-500 (additional info tab) (all dollar figures are in $ billions)
[1] Market value of S&P 500
[5] = [2] / [1]
[6] = [3] / [1]
[7] = [4] / [1]
[8] = [6] + [7]
[9] = Average of [8]
[10] = Compund annual growth rate of [2] = (end value / beginning value)$^{\wedge 1/10}$-1
[11] Risk-free rate from DJG risk-free rate exhibit
[12] 30-day average of closing index prices from DJG stock price exhibit
[13-16] Expected dividends = [9]*[12]*(1+[10])^n ; Present value = expected dividend / (1+[11]+[19])^n
[17] Expected terminal value = expected dividend * (1+[11]) / [19] ; Present value = (expected dividend + expected terminal value) / (1+[11]+[19])^n
[18] = Sum([13-17]) present values.
[19] = [20] + [11]
[20] Internal rate of return calculation setting [18] equal to [12] and solving for the discount rate

Peoples Gas System
Mr. Garrett's Corrected Implied ERP Calculation

Year	[1] Market Value	[2] Operating Earnings	[3] Dividends	[4] Buybacks	[5] Earnings Yield	[6] Dividend Yield	[7] Buyback Yield	[8] Gross Cash Yield
2014	18,245	1,004	350	553	5.50%	1.92%	3.03%	4.95%
2015	17,900	885	382	572	4.95%	2.14%	3.20%	5.33%
2016	19,268	920	397	536	4.77%	2.06%	2.78%	4.85%
2017	22,821	1,066	420	519	4.67%	1.84%	2.28%	4.12%
2018	21,027	1,282	456	806	6.10%	2.17%	3.84%	6.01%
2019	26,760	1,305	485	729	4.88%	1.81%	2.72%	4.54%
2020	31,659	1,019	480	520	3.22%	1.52%	1.64%	3.16%
2021	40,356	1,739	511	882	4.31%	1.27%	2.18%	3.45%
2022	32,133	1,656	565	923	5.15%	1.76%	2.87%	4.63%
2023	36,870	1,790	588	795	4.85%	1.60%	2.16%	3.75%
2024	49,805	1,968	630	943	3.95%	1.26%	1.89%	3.16%

	ARITHMETIC AVERAGE			
Year	Market Value	Operating Earnings	Dividends	Buybacks
2014				
2015	-1.89%	-11.83%	9.10%	3.41%
2016	7.65%	3.89%	3.90%	-6.25%
2017	18.44%	15.89%	5.68%	-3.17%
2018	-7.86%	20.23%	8.70%	55.26%
2019	27.26%	1.79%	6.39%	-9.63%
2020	18.31%	-21.89%	-1.05%	-28.69%
2021	27.47%	70.61%	6.42%	69.66%
2022	-20.38%	-4.78%	10.43%	4.65%
2023	14.74%	8.11%	4.19%	-13.82%
2024	35.08%	9.93%	7.04%	18.54%
	11.88%	9.20%	6.08%	9.00%

Cash Yield	4.36%	[9]
Growth Rate	9.04%	[10]
Risk-free Rate	4.89%	[11]
Current Index Value	5,817	[12]

	[13]	[14]	[15]	[16]	[17]
Year	1	2	3	4	5
Expected Dividends	276	301	329	358	391
Expected Terminal Value					7515
Present Value	250	248	245	242	4833

Intrinsic Index Value	5817	[18]
% Terminal Value	78.97%	
Required Return on Market	10.34%	[19]
Implied Equity Risk Premium	5.5%	[20]

[1-4] S&P Quarterly Press Releases, data found at https://us.spindices.com/indices/equity/sp-500 (additional info tab) (all dollar figures are in $ billions)
[1] Market value of S&P 500
[5] = [2] / [1]
[6] = [3] / [1]
[7] = [4] / [1]
[8] = [6] + [7]
[9] = Average of [8]
[10] = Average of arithmetic mean of Market Value, Operating Earnings, Dividends and Buybacks
[11] Risk-free rate from DJG risk-free rate exhibit
[12] 30-day average of closing index prices from DJG stock price exhibit
[13-16] Expected dividends = [9]*[12]*(1+[10])^n ; Present value = expected dividend / (1+[11]+[19])^n
[17] Expected terminal value = expected dividend * (1+[11]) / [19] ; Present value = (expected dividend + expected terminal value) / (1+[11]+[19])^n
[18] = Sum([13-17]) present values.
[19] = [20] + [11]
[20] Internal rate of return calculation setting [18] equal to [12] and solving for the discount rate

Peoples Gas System
Comparison of Market Return Measures

	[1]	[2]	[3]	[4]	[5]
	Actual Market Return (1)	LT average Market Return (2)	Kroll (3)	Ibbotson Chen Supply-Side (4)	Damodaran (5)
2009	26.46%	11.67%	10.50%	11.65%	8.64%
2010	15.06%	11.85%	10.08%	11.12%	8.20%
2011	2.11%	11.88%	9.63%	10.54%	8.49%
2012	16.00%	11.77%	10.00%	11.34%	7.89%
2013	32.39%	11.82%	9.50%	11.49%	7.54%
2014	13.69%	12.05%	9.00%	11.43%	8.00%
2015	1.38%	12.07%	9.00%	11.41%	7.95%
2016	11.96%	11.95%	9.00%	11.46%	8.39%
2017	21.83%	11.95%	9.00%	11.28%	8.14%
2018	-4.38%	12.06%	8.50%	11.19%	7.49%
2019	31.49%	11.88%	9.00%	11.23%	8.64%
2020	18.40%	12.09%	8.00%	11.31%	7.12%
2021	28.71%	12.16%	8.00%	11.32%	5.65%
2022	-18.11%	12.33%	8.00%	11.11%	5.75%
2023	26.61%	12.02%	9.00%	11.31%	9.82%
Sum	223.60%	179.55%	136.21%	169.20%	117.71%
Forecast Bias (6)		**80.30%**	**60.92%**	**75.67%**	**52.64%**

Notes:
(1) Source: Kroll, 2023 SBBI, Appendix A-1, A-7; Cost of Capital Navigator
(2) Rolling historic long-term average of data in Column 1 since 1926
(3) Source: Kroll Recommended ERP + Corresponding Risk-Free Rate
(4) Source: SBBI 2023
(5) Damodaran Predicted Market Return
(6) Sum of forecasts divided by sum of actual observations

Peoples Gas System
Witness Garrett Corrected CAPM Results

Company	Ticker	30-Year Treasury (1)	Beta (2)	Market Risk Premium (3)	Corrected CAPM Result
Atmos Energy Corp	ATO	4.89%	0.75	7.31%	10.37%
New Jersey Resources Corp	NJR	4.89%	0.85	7.31%	11.10%
NiSource Inc	NI	4.89%	0.85	7.31%	11.10%
Northwest Natural Holding Company	NWN	4.89%	0.80	7.31%	10.73%
ONE Gas Inc	OGS	4.89%	0.80	7.31%	10.73%
Southwest Gas Holdings Inc	SWX	4.89%	0.80	7.31%	10.73%
Spire Inc.	SR	4.89%	0.80	7.31%	10.73%
Average					10.79%

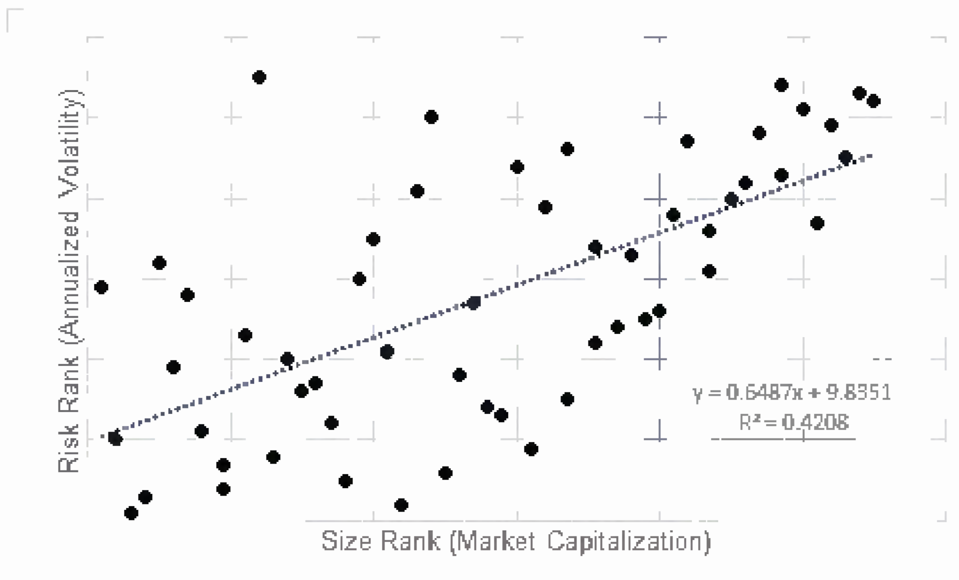
Notes:
(1) Exhibit DJG-7
(2) Exhibit DJG-8
(3) Document No. 5, page 2, note 1

Size and Volatility of Returns

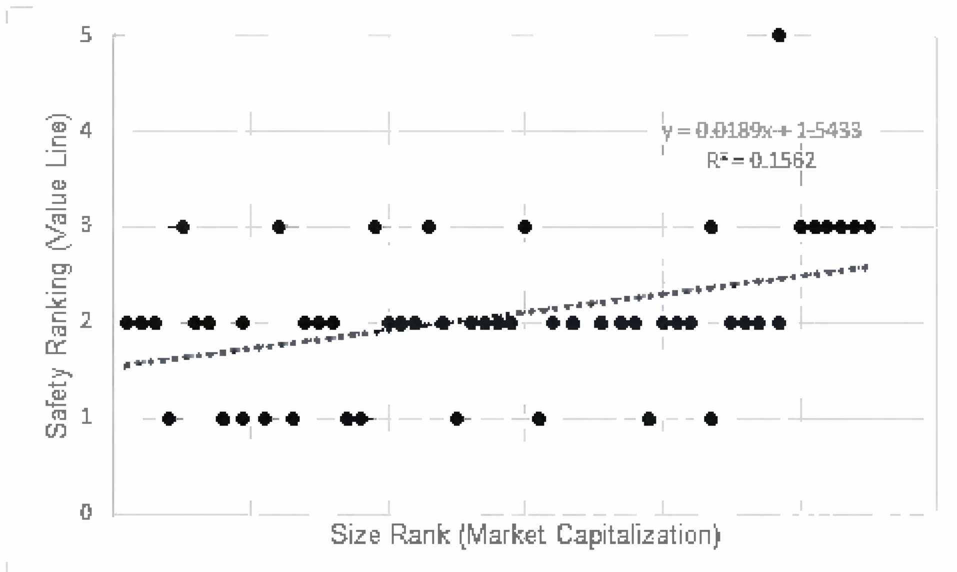
Decile:	1	2	3	4	5	6	7	8	9	10
Largest Gain:	29.4%	25.3%	21.2%	20.0%	19.8%	16.9%	17.2%	14.5%	14.1%	13.4%
Largest Loss:	-28.8%	-30.2%	-28.8%	-29.7%	-27.8%	-26.3%	-26.0%	-23.9%	-22.5%	-19.8%

Note: Deciles in ascending order with one (1) representing the smallest stocks by market capitalization. Source: http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

Evaluation of Size (Market Capitalization) and Volatility of Returns (Annualized Returns)



Evaluation of Size (Market Capitalization) and Volatility of Returns (Safety Ranking)



Peoples Gas System
Hypothetical Example: Flotation Cost Recovery

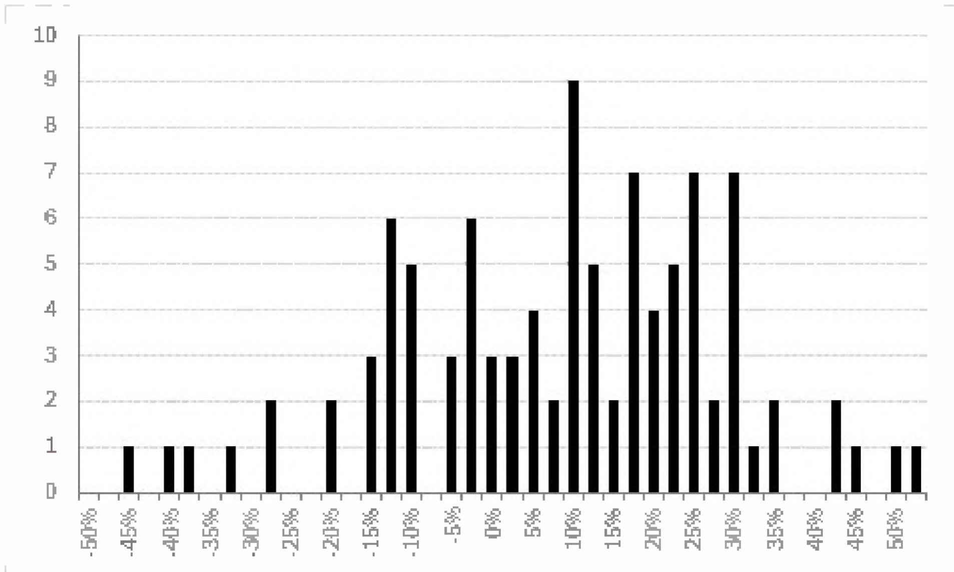
Return on Equity	10.75%
Flotation Costs	2.75%
Market Value	$ 25.00
Dividend Yield	3.50%
Growth Rate	7.25%
Adjusted ROE	10.85%
Flotation Cost Recovery:	**No**
DCF Estimate	**10.65%**

	Common Stock	Retained Earnings	Book Value	Market Price	Market/ Book Value	Earnings Per Share	Dividends Per Share	Payout Ratio
1	$ 24.31		$ 24.31	$ 25.00	1.0283	$ 2.61	$ 0.88	33.48%
2	$ 24.31	$ 1.74	$ 26.05	$ 26.79	1.0283	$ 2.80	$ 0.94	33.48%
3	$ 24.31	$ 3.60	$ 27.91	$ 28.70	1.0283	$ 3.00	$ 1.00	33.48%
4	$ 24.31	$ 5.60	$ 29.91	$ 30.76	1.0283	$ 3.22	$ 1.08	33.48%
5	$ 24.31	$ 7.74	$ 32.05	$ 32.96	1.0283	$ 3.45	$ 1.15	33.48%
6	$ 24.31	$ 10.03	$ 34.34	$ 35.31	1.0283	$ 3.69	$ 1.24	33.48%
7	$ 24.31	$ 12.48	$ 36.80	$ 37.84	1.0283	$ 3.96	$ 1.32	33.48%
8	$ 24.31	$ 15.12	$ 39.43	$ 40.54	1.0283	$ 4.24	$ 1.42	33.48%
9	$ 24.31	$ 17.94	$ 42.25	$ 43.44	1.0283	$ 4.54	$ 1.52	33.48%
10	$ 24.31	$ 20.96	$ 45.27	$ 46.55	1.0283	$ 4.87	$ 1.63	33.48%
	Growth Rate		7.15%	7.15%		7.15%	7.15%	

Return on Equity	10.75%
Flotation Costs	2.75%
Market Value	$ 25.00
Dividend Yield	3.50%
Growth Rate	7.25%
Adjusted ROE	10.85%
Flotation Cost Recovery:	**Yes**
DCF Estimate	**10.75%**

	Common Stock	Retained Earnings	Book Value	Market Price	Market/ Book Value	Earnings Per Share	Dividends Per Share	Payout Ratio
1	$ 24.31		$ 24.31	$ 25.00	1.0283	$ 2.64	$ 0.88	33.17%
2	$ 24.31	$ 1.76	$ 26.08	$ 26.81	1.0283	$ 2.83	$ 0.94	33.17%
3	$ 24.31	$ 3.65	$ 27.97	$ 28.76	1.0283	$ 3.03	$ 1.01	33.17%
4	$ 24.31	$ 5.68	$ 29.99	$ 30.84	1.0283	$ 3.25	$ 1.08	33.17%
5	$ 24.31	$ 7.86	$ 32.17	$ 33.08	1.0283	$ 3.49	$ 1.16	33.17%
6	$ 24.31	$ 10.19	$ 34.50	$ 35.48	1.0283	$ 3.74	$ 1.24	33.17%
7	$ 24.31	$ 12.69	$ 37.00	$ 38.05	1.0283	$ 4.01	$ 1.33	33.17%
8	$ 24.31	$ 15.37	$ 39.68	$ 40.81	1.0283	$ 4.31	$ 1.43	33.17%
9	$ 24.31	$ 18.25	$ 42.56	$ 43.76	1.0283	$ 4.62	$ 1.53	33.17%
10	$ 24.31	$ 21.33	$ 45.65	$ 46.94	1.0283	$ 4.95	$ 1.64	33.17%
	Growth Rate		7.25%	7.25%		7.25%	7.25%	

Frequency Distribution of Observed Market Risk Premiums, 1926 - 2024



	Large Company Stocks Total Returns	Long-Term Government Bond Income Returns	MRP
Year	**Jan-Dec***	**Jan-Dec***	**Jan-Dec***
1926	11.62%	3.73%	7.89%
1927	37.49%	3.41%	34.08%
1928	43.61%	3.22%	40.39%
1929	-8.42%	3.47%	-11.89%
1930	-24.90%	3.32%	-28.22%
1931	-43.34%	3.33%	-46.67%
1932	-8.19%	3.69%	-11.88%
1933	53.99%	3.12%	50.87%
1934	-1.44%	3.18%	-4.62%
1935	47.67%	2.81%	44.86%
1936	33.92%	2.77%	31.15%
1937	-35.03%	2.66%	-37.69%
1938	31.12%	2.64%	28.48%
1939	-0.41%	2.40%	-2.81%
1940	-9.78%	2.23%	-12.01%
1941	-11.59%	1.94%	-13.53%
1942	20.34%	2.46%	17.88%
1943	25.90%	2.44%	23.46%
1944	19.75%	2.46%	17.29%
1945	36.44%	2.34%	34.10%
1946	-8.07%	2.04%	-10.11%
1947	5.71%	2.13%	3.58%
1948	5.50%	2.40%	3.10%
1949	18.79%	2.25%	16.54%
1950	31.71%	2.12%	29.59%
1951	24.02%	2.38%	21.64%
1952	18.37%	2.66%	15.71%
1953	-0.99%	2.84%	-3.83%
1954	52.62%	2.79%	49.83%
1955	31.56%	2.75%	28.81%
1956	6.56%	2.99%	3.57%
1957	-10.78%	3.44%	-14.22%
1958	43.36%	3.27%	40.09%
1959	11.96%	4.01%	7.95%
1960	0.47%	4.26%	-3.79%
1961	26.89%	3.83%	23.06%
1962	-8.73%	4.00%	-12.73%
1963	22.80%	3.89%	18.91%
1964	16.48%	4.15%	12.33%
1965	12.45%	4.19%	8.26%
1966	-10.06%	4.49%	-14.55%
1967	23.98%	4.59%	19.39%
1968	11.06%	5.50%	5.56%
1969	-8.50%	5.95%	-14.45%
1970	3.86%	6.74%	-2.88%
1971	14.30%	6.32%	7.98%
1972	19.00%	5.87%	13.13%
1973	-14.69%	6.51%	-21.20%
1974	-26.47%	7.27%	-33.74%
1975	37.23%	7.99%	29.24%
1976	23.93%	7.89%	16.04%
1977	-7.16%	7.14%	-14.30%
1978	6.57%	7.90%	-1.33%
1979	18.61%	8.86%	9.75%
1980	32.50%	9.97%	22.53%
1981	-4.92%	11.55%	-16.47%
1982	21.55%	13.50%	8.05%
1983	22.56%	10.38%	12.18%
1984	6.27%	11.74%	-5.47%
1985	31.73%	11.25%	20.48%
1986	18.67%	8.98%	9.69%
1987	5.25%	7.92%	-2.67%
1988	16.61%	8.97%	7.64%
1989	31.69%	8.81%	22.88%
1990	-3.10%	8.19%	-11.29%
1991	30.47%	8.22%	22.25%
1992	7.62%	7.26%	0.36%
1993	10.08%	7.17%	2.91%
1994	1.32%	6.59%	-5.27%
1995	37.58%	7.60%	29.98%
1996	22.96%	6.18%	16.78%
1997	33.36%	6.64%	26.72%
1998	28.58%	5.83%	22.75%
1999	21.04%	5.57%	15.47%
2000	-9.10%	6.50%	-15.60%
2001	-11.89%	5.53%	-17.42%
2002	-22.10%	5.59%	-27.69%
2003	28.68%	4.80%	23.88%
2004	10.88%	5.02%	5.86%
2005	4.91%	4.69%	0.22%
2006	15.79%	4.68%	11.11%
2007	5.49%	4.86%	0.63%
2008	-37.00%	4.45%	-41.45%
2009	26.46%	3.47%	22.99%
2010	15.06%	4.25%	10.81%
2011	2.11%	3.82%	-1.71%
2012	16.00%	2.47%	13.53%
2013	32.39%	2.90%	29.49%
2014	13.69%	3.41%	10.28%
2015	1.38%	2.47%	-1.09%
2016	11.96%	2.30%	9.66%
2017	21.83%	2.67%	19.16%
2018	-4.38%	2.82%	-7.20%
2019	31.49%	2.55%	28.94%
2020	18.40%	1.53%	16.87%
2021	28.71%	1.73%	26.98%
2022	-18.11%	2.61%	-20.72%
2023	26.61%	4.17%	22.44%
2024	25.62%	4.34%	21.28%
Average	12.30%	4.84%	7.46%
Std. Dev.	19.67%	2.61%	19.80%

Source: Kroll, 2023 SBBI, Appendix A-1, A-7; Cost of Capital Navigator

	MRP	
Bin	*Frequency*	*Cumulative %*
-50.00%	0	0.0%
-47.50%	0	0.0%
-45.00%	1	1.0%
-42.50%	0	1.0%
-40.00%	1	2.0%
-37.50%	1	3.0%
-35.00%	0	3.0%
-32.50%	1	4.0%
-30.00%	0	4.0%
-27.50%	2	6.1%
-25.00%	0	6.1%
-22.50%	0	6.1%
-20.00%	2	8.1%
-17.50%	0	8.1%
-15.00%	3	11.1%
-12.50%	6	17.2%
-10.00%	5	22.2%
-7.50%	0	22.2%
-5.00%	3	25.3%
-2.50%	6	31.3%
0.00%	3	34.3%
2.50%	3	37.4%
5.00%	4	41.4%
7.50%	2	43.4%
10.00%	9	52.5%
12.50%	5	57.6%
15.00%	2	59.6%
17.50%	7	66.7%
20.00%	4	70.7%
22.50%	5	75.8%
25.00%	7	82.8%
27.50%	2	84.8%
30.00%	7	91.9%
32.50%	1	92.9%
35.00%	2	94.9%
37.50%	0	94.9%
40.00%	0	94.9%
42.50%	2	97.0%
45.00%	1	98.0%
47.50%	0	98.0%
50.00%	1	99.0%
51.00%	1	100.0%
Count:	99	

	Average MRP from Direct	Rank
Incl. PRPM	8.41%	49.10%
Excl. PRPM	8.40%	49.10%

	Average MRP from Rebuttal	Rank
Incl. PRPM	8.91%	49.40%
Excl. PRPM	8.89%	49.40%

Referenced Endnotes

for the

Rebuttal Testimony

of

Dylan D'Ascendis

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1 Garrett Direct Testimony, at 66. 45.00 percent includes short-term and long-term debt.

2 Exhibits DJG-12.

3 Garrett Direct Testimony, at 6-9.

4 A. Lawrence Kolbe, George A. Read, Jr, George Hall, *The Cost of Capital: Estimating the Rate of Return for Public Utilities*, The MIT Press, 1984, at 21.

5 Garrett Direct Testimony, at 8.

6 Garrett Direct Testimony, at 9.

7 Garrett Direct Testimony, at 9. Clarification and emphasis added.

8 D'Ascendis Direct Testimony, at 7-10.

9 Garrett Direct Testimony, at 8-9.

10 David C. Parcell, *Cost of Capital Manual*, Society of Utility and Regulatory Financial Analysts, 2010 Edition, at 3-4.

11 James C. Bonbright, *Principles of Public Utility Rates*, Columbia University Press, 1961, at 106-107.

12 Charles F. Phillips, *The Regulation of Public Utilities*, Public Utility Reports, Inc., 1993, at 173.

13 D'Ascendis Direct Testimony, at 16.

14 Garrett Direct Testimony, at 64-66.

15 Garrett Direct Testimony, at 30.

16 Exhibits DJG-3 and DJG-4.

17 Exhibit DJG-5.

18 Garrett Direct Testimony, at 29.

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19 Exhibit DJG-6.

20 Exhibit DJG-6.

21 Exhibit DJG-5; 2.10 percent equals nominal GDP of 3.70 percent minus real GDP of 1.60 percent.

22 In the risk/return space, debt securities, with a higher yield and considerably less risk of capital loss (if held to maturity) may be the preferred alternative.

23 Garrett Direct Testimony, at 28-29.

24 *See*, for example, Harris, *Using Analysts' Growth Forecasts to Estimate Shareholder Required Rate of Return*, Financial Management, Spring 1986; Christofi, Christofi, Lori and Moliver, *Evaluating Common Stocks Using Value Line's Projected Cash Flows and Implied Growth Rate*, Journal of Investing, Spring 1999; Harris and Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management, Summer 1992; and Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988.

25 Source: Bureau of Economic Analysis.

26 Garrett Direct Testimony, at 29.

27 To put the amount of time that will take these two milestones to happen in perspective, approximately 300 years ago, in the year 1719, France and Spain were at war in New France (now Louisiana), and approximately 3,476 years ago, in the year 1457 BC, the first recorded battle in military history, the Battle of Megiddo, was waged between the Egyptians, led by Pharaoh Thutmose III against Kadesh, Canaanite, Mitanni, and Amurru forces. *See also* Zager and Evans, *In the Year 2525*, *on* 2525 (Exordium & Terminus) (RCA 1968).

28 Bodie, Kane, and Marcus, Investments, 7th Edition, McGraw-Hill Irwin, 2008, at 616-617.

29 In re: Petition for rate increase by Peoples Gas System, Inc., Docket No. 20230023-GU, Order Granting in Part and Denying in Part Peoples Gas System, Inc.'s Petition for a Rate Increase, at 62 (December 27, 2023).

30 D'Ascendis Direct Testimony, at 31.

31 Roger A. Morin, Modern Regulatory Finance, PUR Books, 2021, at 371-373. ("Morin").

32 John G. Cragg and Burton G. Malkiel, Expectations and the Structure of Share Prices (University of Chicago Press, 1982) Chapter 4.

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33 James H. Vander Weide and Willard T. Carleton, *Investor Growth Expectations: Analysts vs. History* (The Journal of Portfolio Management, Spring 1988) 78-82.

34 Malkiel rebuttal testimony, South Carolina Electric and Gas Co., pp. 16-17, Docket No. 2002-223-E) (italics added for emphasis).

35 James H. Vander Weide and Willard T. Carleton, *Investor Growth Expectations: Analysts vs. History* (The Journal of Portfolio Management, Spring 1988) 78-82.

36 Exhibit DJG-7.

37 Exhibit DJG-10.

38 Exhibit DJG-8. On page 35 of his direct testimony, Mr. Garrett states to have relied upon an average of both *Value Line* and Bloomberg betas, while his Exhibit DJG-8 indicates only betas from *Value Line* were utilized in his CAPM.

39 Exhibit DJG-11.

40 Garrett Direct Testimony, Figure 6, at 41; and Exhibit DJG-10.

41 D'Ascendis Direct Testimony, at 51.

42 *See*, Pablo Fernandez, Diego Garcia de la Garza, and Lucia Fernandez Acin, *Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025*, IESE Business School, May 20, 2025, at 9. Specifically, the study states: [t]he [implied equity premium] is the implicit [required equity premium] used in the valuation of a stock (or market index) that matches the current market price. The most widely used model to calculate the [implied equity premium] is the dividend discount model: the current price per share (P_0) is the present value of expected dividends discounted at the required rate of return (K_e). If d_1 is the dividend per share expected to be received in year 1, and g the expected long-term growth rate in dividends per share,
$P_0 = d_1 / (Ke - g)$, which implies:
[implied equity premium] = $d_1/P_0 + g - R_f$

43 Aswath Damodaran, Stern School of Business, *Equity Risk Premiums (ERP): Determinants, Estimation and Implications – The 2025 Edition*, Updated March 25, 2025, at 30-31.

44 Garrett Direct Testimony, at 38-41.

45 Garrett Direct Testimony, at 40.

46 *See*, http://pages.stern.nyu.edu/~adamodar.

47 Exhibit DJG-9.

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48 Exhibit DJG-9. The model also assumes that all payments are received at year-end, rather than during the year. That assumption also tends to under-state the implied MRP.

49 Exhibit DJG-9.

50 Document No. 13, page 2.

51 Document No. 13. Please note that regardless of the assumed first and terminal-stage growth rates, the terminal stage consistently represents approximately 79.00 percent of the Intrinsic Value.

52 *See*, http://pages.stern.nyu.edu/~adamodar.

53 Source: Bureau of Economic Analysis for the years 1929 to 2024. *See also*, https://www.bea.gov/data/gdp/gross-domestic-product.

54 SBBI-2023, 137; Bloomberg Professional.

55 As measured by the long-term rate of capital appreciation.

56 For example, in line with the Federal Reserve's target average rate of inflation.

57 2.83 percent = [(1.0489/1.020)-1]. Please note that the long-term historical average rate of inflation, measured by the difference between real and nominal GDP growth, has been approximately 2.93 percent, which would also imply perpetual real growth of 1.91 percent. Similarly, the projected difference in nominal GDP and real GDP from the Congressional Budget Office as reported in Exhibit DJG-5 has been approximately 2.10 percent, which implies perpetual real growth of 2.73 percent.

58 FRBSF Economic Letter, *Does Slower Growth Imply Lower Interest Rates?*, November 10, 2014, at 3.

59 Forecast bias can be described as a tendency to either over-forecast or under-forecast a given variable.

60 2008 was selected as the starting year as it is the first year Kroll published its recommended MRP and risk-free rate.

61 John Y. Campbell, "Forecasting US Equity Returns in the 21st Century," Social Security Administration, July 2001.

62 D'Ascendis Direct Testimony, at 46-49.

63 Morin, at 223-224.

64 Eugene F. Brigham and Louis C. Gapenski, Financial Management: Theory and Practice, The Dryden Press, 1985, at 201-204.

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65 Bente Villadsen, *et. al*, Risk and Return for Regulated Industries (2017) at 95, endnote 147 of Chapter 4.

66 Garrett Direct Testimony, at 52-54.

67 Garrett Direct Testimony, at 53.

68 Garrett Direct Testimony, at 53.

69 D'Ascendis Direct Testimony, at 63.

70 Garrett Direct Testimony, at 54.

71 Clifford S. Ang, "The Absence of a Size Effect Relevant to the cost of Equity", Business Valuation Review, Volume 37, No. 3, 2018.

72 SBBI-2023, at 137. Note: Utility companies are included in this data set.

73 *Value Line* also ranks stocks for Safety by analyzing the total risk of a stock compared to the approximately 1,700 stocks in the *Value Line* universe. Each of the stocks tracked in the *Value Line Investment Survey* is ranked in relationship to each other, from 1 (the highest rank) to 5 (the lowest rank). Safety is a quality rank, not a performance rank, and stocks ranked 1 and 2 are most suitable for conservative investors; those ranked 4 and 5 will be more volatile. Volatility means prices can move dramatically and often unpredictably, either down or up. The major influences on a stock's Safety rank are the company's financial strength, as measured by balance sheet and financial ratios, and the stability of its price over the past five years.

74 Garrett Direct Testimony, at 50.

75 Garrett Direct Testimony, at 50.

76 This example is based on an analysis performed by Dr. Roger Morin. See, Roger A. Morin, Modern Regulatory Finance, Public Utility Reports, Inc., 2021, at 337-340.

77 Document No. 19 is provided for illustrative purposes only. Please note that I have not relied on the results of the analysis in determining my recommended ROE or range.

78 Garrett Direct Testimony, at 50-51.

79 Garrett Direct Testimony, at 45.