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March 31, 2025

**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 Direct Testimony of Dylan D'Ascendis and Exhibit No. DD-1.

Thank you for your assistance with this matter.

(Document 8 of 16)

Sincerely,

A handwritten signature in blue ink that reads 'Jeffrey Wahlen'.

J. Jeffrey Wahlen

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

JJW/dh  
Attachments

BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20250029-GU

IN RE: PETITION FOR RATE INCREASE  
BY PEOPLES GAS SYSTEM, INC.

PREPARED DIRECT TESTIMONY AND EXHIBIT  
OF  
DYLAN D'ASCENDIS

ON BEHALF OF  
PEOPLES GAS SYSTEM, INC.

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OF  
DYLAN D'ASCENDIS  
ON BEHALF OF PEOPLES GAS SYSTEM, INC.

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT 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, NJ 08003. I am employed by ScottMadden, Inc. as a Partner.

Q. Please provide a brief outline of your educational background and relevant business experience.

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

I have offered expert testimony on behalf of investor-owned utilities before more than 40 state regulatory commissions in the United States, the Federal Energy Regulatory Commission,

1 the Alberta Utility Commission, an American Arbitration  
2 Association panel, and the Superior Court of Rhode Island on  
3 issues including, but not limited to, common equity cost rate,  
4 rate of return, valuation, capital structure, class cost of  
5 service, and rate design.

6  
7 On behalf of the American Gas Association ("AGA"), I calculate  
8 the AGA Gas Index, which serves as the benchmark against which  
9 the performance of the American Gas Index Fund ("AGIF") is  
10 measured on a monthly basis. The AGA Gas Index and AGIF are  
11 a market capitalization weighted index and mutual fund,  
12 respectively, comprised of the common stocks of the publicly  
13 traded corporate members of the AGA.

14  
15 I am a member of the Society of Utility and Regulatory  
16 Financial Analysts ("SURFA"). In 2011, I was awarded the  
17 professional designation "Certified Rate of Return Analyst"  
18 by SURFA, which is based on education, experience, and the  
19 successful completion of a comprehensive written examination.

20  
21 I am also a member of the National Association of Certified  
22 Valuation Analysts ("NACVA") and was awarded the professional  
23 designation "Certified Valuation Analyst" by the NACVA in  
24 2015.

25

1 The details of my educational background and expert witness  
2 appearances are provided in Document No. 12 to my direct  
3 testimony.

4  
5 **Q.** What is the purpose of your prepared direct testimony in this  
6 proceeding?

7  
8 **A.** The purpose of my direct testimony is to present evidence,  
9 provide the Florida Public Service Commission ("Commission")  
10 with a recommendation regarding Peoples Gas System, Inc.'s  
11 ("Peoples" or the "company") return on common equity ("ROE")  
12 for its natural gas operations, and to provide an assessment  
13 of the capital structure to be used for ratemaking purposes,  
14 as proposed in the direct testimony of Peoples witness Andrew  
15 Nichols.

16  
17 **Q.** Did you prepare any exhibits in support of your prepared  
18 direct testimony?

19  
20 **A.** Yes. Exhibit No. DD-1 was prepared by me or under my  
21 direction and supervision. My analyses and conclusions are  
22 supported by the data presented in Document Nos. 1 through 12  
23 of my exhibit, entitled:

24  
25 Document No. 1 Summary of Common Equity Cost Rate

|    |                 |   |
|----|-----------------|---|
| 1  | Document No. 2  | Financial Profile of the Utility Proxy      |
| 2  |                 | Group                                       |
| 3  | Document No. 3  | Application of the Discounted Cash Flow     |
| 4  |                 | Model                                       |
| 5  | Document No. 4  | Application of the Risk Premium Model       |
| 6  | Document No. 5  | Application of the Capital Asset Pricing    |
| 7  |                 | Model                                       |
| 8  | Document No. 6  | Basis of Selection for the Non-Price        |
| 9  |                 | Regulated Companies Comparable in Total     |
| 10 |                 | Risk to the Utility Proxy Group             |
| 11 | Document No. 7  | Application of Cost of Common Equity Models |
| 12 |                 | to the Non-Price Regulated Proxy Group      |
| 13 | Document No. 8  | Derivation of the Flotation Cost Adjustment |
| 14 |                 | to the Cost of Common Equity                |
| 15 | Document No. 9  | Derivation of the Indicated Size Premium    |
| 16 |                 | for Peoples Relative to the Utility Proxy   |
| 17 |                 | Group                                       |
| 18 | Document No. 10 | Referenced Endnotes for the Prepared Direct |
| 19 |                 | Testimony of Dylan W. D'Ascendis            |
| 20 | Document No. 11 | Fama & French - Figure 2                    |
| 21 | Document No. 12 | Resume and Testimony Listing of Dylan W.    |
| 22 |                 | D'Ascendis                                  |

23

24 **II. SUMMARY**

25 **Q.** What is your recommended common equity cost rate?

1 **A.** I recommend that the Commission authorize Peoples the  
2 opportunity to earn an ROE of 11.10 percent on its  
3 jurisdictional rate base, based on its proposed ratemaking  
4 capital structure. The company's requested ratemaking  
5 capital structure consists of 41.69 percent long-term debt  
6 and 54.70 percent common equity, to which my recommended ROE  
7 of 11.10 percent would apply. That common equity ratio is  
8 consistent with the company's historical equity ratios, and  
9 the equity ratios maintained by the Utility Proxy Group  
10 (discussed below) and their operating subsidiary utility  
11 companies. The overall rate of return is summarized on page  
12 1 of Document No. 1.

13  
14 **Q.** Please summarize your recommended ROE.

15  
16 **A.** My recommended ROE of 11.10 percent is summarized on page 2  
17 of Document No. 1. I have assessed the market-based common  
18 equity cost rates of companies of relatively similar, but not  
19 necessarily identical, risk to Peoples. Using companies of  
20 relatively comparable risk as proxies is consistent with the  
21 principles of fair rate of return established by the U.S.  
22 Supreme Court in two cases: (1) *Federal Power Comm'n v. Hope*  
23 *Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*"); and (2)  
24 *Bluefield Water Works Improvement Co. v. Public Serv. Comm'n*,  
25 262 U.S. 679 (1923) ("*Bluefield*"). No proxy group can be

1        identical in risk to any single company. Consequently, there  
2        must be an evaluation of relative risk between the company  
3        and the proxy group to determine if it is appropriate to  
4        adjust the proxy group's indicated rate of return.

5  
6        My recommendation results from the application of several  
7        cost of common equity models, specifically the Discounted  
8        Cash Flow ("DCF") model, the Risk Premium Model ("RPM"), and  
9        the Capital Asset Pricing Model ("CAPM"), to the market data  
10       of a proxy group of seven natural gas distribution utilities  
11       ("Utility Proxy Group") whose selection criteria will be  
12       discussed below. In addition, I applied the DCF model, RPM,  
13       and CAPM to a Non-Price Regulated Proxy Group similar in total  
14       risk to the Utility Proxy Group. To be conservative, I did  
15       not consider the analytical results applied to my Non-Price  
16       Regulated Proxy Group in the determination of my recommended  
17       range. The results derived from each are summarized on page  
18       2 of Document No. 1.

19  
20       As shown in Document No. 1, I adjusted the indicated common  
21       equity cost rate to reflect the effect of flotation costs, as  
22       well as Peoples' specific business risks. These adjustments  
23       resulted in a company-specific indicated range of common  
24       equity cost rates between 10.78 percent and 11.46 percent.  
25       The indicated range of ROEs applicable to the Utility Proxy

1 Group excluding the Predictive Risk Premium Model ("PRPM")  
2 from the calculation of the market risk premium is 10.78  
3 percent to 11.45 percent. Given the Utility Proxy Group and  
4 company-specific ranges of common equity cost rates, I  
5 recommend the Commission adopt an ROE of 11.10 percent for  
6 ratemaking purposes in this case.  
7

### 8 **III. GENERAL PRINCIPLES**

9 **Q.** What general principles have you considered in arriving at  
10 your recommended common equity cost rate of 11.10 percent?  
11

12 **A.** In unregulated industries, marketplace competition is the  
13 principal determinant of the price of products or services.  
14 For regulated public utilities, regulation must act as a  
15 substitute for marketplace competition. Assuring that the  
16 utility can fulfill its obligations to the public, while  
17 providing safe and reliable service at all times, requires a  
18 level of earnings sufficient to maintain the integrity of  
19 presently invested capital. Sufficient earnings also permit  
20 the attraction of needed new capital at a reasonable cost,  
21 for which the utility must compete with other companies of  
22 comparable risk, consistent with the fair rate of return  
23 standards established by the U.S. Supreme Court in the  
24 previously cited *Hope* and *Bluefield* cases.  
25

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

3 The rate-making process under the Act, *i.e.*, the  
4 fixing of 'just and reasonable' rates, involves a  
5 balancing of the investor and the consumer  
6 interests.

7  
8 Thus we stated in the *Natural Gas Pipeline Co. Case*  
9 that 'regulation does not insure that the business  
10 shall produce net revenues.' 315 U.S. at page 590,  
11 62 S.Ct. at page 745. But such considerations  
12 aside, the investor interest has a legitimate  
13 concern with the financial integrity of the company  
14 whose rates are being regulated. From the investor  
15 or company point of view it is important that there  
16 be enough revenue not only for operating expenses  
17 but also for the capital costs of the business.  
18 These include service on the debt and dividends on  
19 the stock. *Cf. Chicago & Grand Trunk R. Co. v.*  
20 *Wellman*, 143 U.S. 339, 345, 346 12 S.Ct. 400,402.  
21 By that standard the return to the equity owner  
22 should be commensurate with returns on investments  
23 in other enterprises having corresponding risks.  
24 That return, moreover, should be sufficient to  
25 assure confidence in the financial integrity of the

1           enterprise, so as to maintain its credit and to  
2           attract capital.<sup>1</sup>

3  
4           In summary, the U.S. Supreme Court has found a return that is  
5           adequate to attract capital at reasonable terms enables the  
6           utility to provide service while maintaining its financial  
7           integrity.     As discussed above, and in keeping with  
8           established regulatory standards, that return should be  
9           commensurate with the returns expected elsewhere for  
10          investments of equivalent risk. The Commission's decision in  
11          this proceeding, therefore, should provide the company with  
12          the opportunity to earn a return that is: (1) adequate to  
13          attract capital at reasonable cost and terms; (2) sufficient  
14          to ensure its financial integrity; and (3) commensurate with  
15          returns on investments in enterprises having corresponding  
16          risks.

17  
18          Lastly, the required return for a regulated public utility is  
19          established on a stand-alone basis, *i.e.*, for the utility  
20          operating company at issue in a rate case. Parent entities,  
21          like other investors, have capital constraints and must look  
22          at the attractiveness of the expected risk-adjusted return of  
23          each investment alternative in their capital budgeting  
24          process. That is, utility holding companies that own many  
25          utility operating companies have choices as to where they

1 will invest their capital within the holding company family.  
2 Therefore, the opportunity cost concept applies regardless of  
3 the source of the funding, public funding or corporate  
4 funding.

5  
6 It therefore is important that the authorized ROE reflects  
7 the risks and prospects of the utility's operations and  
8 supports the utility's financial integrity from a stand-alone  
9 perspective, as measured by its combined business and  
10 financial risks. Consequently, the ROE authorized in this  
11 proceeding should be sufficient to support the operational  
12 (*i.e.*, business risk) and financing (*i.e.*, financial risk) of  
13 the company's utility subsidiary on a stand-alone basis.

14  
15 **Q.** Within that broad framework, how is the cost of capital  
16 estimated in regulatory proceedings?

17  
18 **A.** Regulated utilities primarily use common stock and long-term  
19 debt to finance their permanent property, plant, and  
20 equipment (*i.e.*, rate base). The fair rate of return for a  
21 regulated utility is based on its weighted average cost of  
22 capital, in which, as noted earlier, the costs of the  
23 individual sources of capital are weighted by their  
24 respective book values.

25

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

6  
7 The cost of capital (*i.e.*, the combination of the costs of  
8 debt and equity) is based on the economic principle of  
9 "opportunity costs." Investing in any asset (whether debt or  
10 equity securities) represents a forgone opportunity to invest  
11 in alternative assets. For any investment to be sensible,  
12 its expected return must be at least equal to the return  
13 expected on alternative, comparable risk investment  
14 opportunities. Because investments with like risks should  
15 offer similar returns, the opportunity cost of an investment  
16 should equal the return available on an investment of  
17 comparable risk.

18  
19 Whereas the cost of debt is contractually defined and can be  
20 directly observed as the interest rate or yield on debt  
21 securities, the cost of common equity must be estimated based  
22 on market data and various financial models. Because the  
23 cost of common equity is premised on opportunity costs, the  
24 models used to determine it are typically applied to a group  
25 of "comparable" or "proxy" companies.

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

5  
6 **Q.** Is the authorized return set in regulatory proceedings  
7 guaranteed?

8  
9 **A.** No, it is not. Consistent with the *Hope* and *Bluefield*  
10 standards, the ratemaking process should provide the utility  
11 a reasonable opportunity to recover its return of, and return  
12 on, its reasonably incurred investments, but it does not  
13 guarantee that return. While a utility may have control over  
14 some factors that affect the ability to earn its authorized  
15 return (e.g., management performance, operating and  
16 maintenance expenses, etc.), there are several factors beyond  
17 a utility's control that affect its ability to earn its  
18 authorized return. Those may include factors such as weather,  
19 the economy, and the prevalence and magnitude of regulatory  
20 lag.

21  
22 **A.** BUSINESS RISK

23 **Q.** Please define business risk and explain why it is important  
24 for determining a fair rate of return.

25

1 **A.** The investor-required return on common equity reflects  
2 investors' assessment of the total investment risk of the  
3 subject firm. Total investment risk is often discussed in  
4 the context of business and financial risk.<sup>2</sup>

5  
6 Business risk reflects the uncertainty associated with owning  
7 a company's common stock without the company's use of debt  
8 and/or preferred stock financing. One way of considering the  
9 distinction between business and financial risk is to view  
10 the former as the uncertainty of the expected earned return  
11 on common equity, assuming the firm is financed with no debt.

12  
13 Examples of business risks generally faced by utilities  
14 include, but are not limited to, the regulatory environment,  
15 mandatory environmental compliance requirements, customer mix  
16 and concentration of customers, service territory economic  
17 growth, market demand, risks and uncertainties of supply,  
18 operations, capital intensity, size, the degree of operating  
19 leverage, emerging technologies, the vagaries of weather, and  
20 the like, all of which have a direct bearing on earnings.

21  
22 Although analysts, including ratings agencies, may categorize  
23 business risks individually, as a practical matter, such  
24 risks are interrelated and not wholly distinct from one  
25 another. When determining an appropriate return on common

1 equity, the relevant issue is where investors see the subject  
2 company in relation to other similarly situated utility  
3 companies (e.g., those in the Utility Proxy Group). To the  
4 extent investors view a company as being exposed to higher  
5 risk, the required return will increase, and vice versa.

6  
7 For regulated utilities, business risks are both long-term  
8 and near-term in nature. Whereas near-term business risks  
9 are reflected in year-to-year variability in earnings and  
10 cash flow brought about by economic or regulatory factors,  
11 long-term business risks reflect the prospect of an impaired  
12 ability of investors to obtain both a fair rate of return on,  
13 and return of, their capital. Moreover, because utilities  
14 accept the obligation to provide safe, adequate, and reliable  
15 service at all times (in exchange for a reasonable opportunity  
16 to earn a fair return on their investment), they generally do  
17 not have the option to delay, defer, or reject capital  
18 investments. Since those investments are capital-intensive,  
19 utilities generally do not have the option to avoid raising  
20 external funds during periods of capital market distress, if  
21 necessary.

22  
23 Because utilities invest in long-lived assets, long-term  
24 business risks are of paramount concern to equity investors.  
25 That is, the risk of not recovering the return on their

1 investment extends far into the future. The timing and nature  
2 of events that may lead to losses, however, also are uncertain  
3 and, consequently, those risks and their implications for the  
4 required return on equity tend to be difficult to quantify.  
5 Regulatory commissions (like investors who commit their  
6 capital) must review a variety of quantitative and  
7 qualitative data and apply their reasoned judgment to  
8 determine how long-term risks weigh in their assessment of  
9 the market-required return on common equity.

10  
11 B. FINANCIAL RISK

12 Q. Please define financial risk and explain why it is important  
13 for determining a fair rate of return.

14  
15 A. Financial risk is the additional risk created by the  
16 introduction of debt and preferred stock into the capital  
17 structure. The higher the proportion of debt and preferred  
18 stock in the capital structure, the higher the financial risk  
19 to common equity owners (*i.e.*, failure to receive dividends  
20 due to default or other covenants). Therefore, consistent  
21 with the basic financial principle of risk and return, common  
22 equity investors require higher returns as compensation for  
23 bearing higher financial risk.

24  
25 Q. Can bond and credit ratings be a proxy for a firm's combined

1 business and financial risks to equity owners (i.e.,  
2 investment risk)?

3  
4 **A.** Yes, similar bond ratings/issuer credit ratings reflect, and  
5 are representative of, similar combined business and  
6 financial risks (i.e., total risk) faced by bond investors.<sup>3</sup>  
7 Although specific business or financial risks may differ  
8 between companies, the same bond/credit rating indicates that  
9 the combined risks are roughly similar from a debtholder  
10 perspective. The caveat is that these debtholder risk  
11 measures do not translate directly to risks for common equity.

12  
13 **Q.** Do ratings agencies account for company size in their bond  
14 ratings?

15  
16 **A.** No. Neither Standard & Poor's Ratings Services ("S&P") nor  
17 Moody's Investors Service ("Moody's") have minimum company  
18 size requirements for any given rating level. This means,  
19 all else being equal, a relative size analysis must be  
20 conducted for equity investments in companies with similar  
21 bond ratings.

22  
23 **IV. PEOPLES AND THE UTILITY PROXY GROUP**

24 **Q.** Are you familiar with Peoples' operations?  
25

1 **A.** Yes. Peoples, a wholly owned subsidiary of TECO Gas  
2 Operations, Inc. whose ultimate parent is Emera Incorporated  
3 ("Emera"), provides natural gas distribution service to  
4 approximately 508,000 residential, commercial, industrial and  
5 electric power generation customers in the state of Florida.<sup>4</sup>  
6 Peoples has a long-term issuer rating of A- from Fitch  
7 Ratings; the company is not rated by Moody's or S&P. Emera  
8 has electric generation, transmission and distribution  
9 operations, natural gas transmission and distribution  
10 operations, and non-regulated energy marketing operations in  
11 the U.S., Canada, and Caribbean Islands.<sup>5</sup> Emera is publicly  
12 traded on the Toronto Stock Exchange under ticker symbol EMA.

13  
14 **Q.** Why is it necessary to develop a proxy group when estimating  
15 the ROE for the company?

16  
17 **A.** Because the company is not publicly traded and does not have  
18 publicly traded equity securities, it is necessary to develop  
19 groups of publicly traded, comparable companies to serve as  
20 "proxies" for the company. In addition to the analytical  
21 necessity of doing so, the use of proxy companies is  
22 consistent with the *Hope* and *Bluefield* comparable risk  
23 standards, as discussed above. I have selected two proxy  
24 groups that, in my view, are fundamentally risk-comparable to  
25 the company: a Utility Proxy Group, and a Non-Price Regulated

1 Proxy Group that is comparable in total risk to the Utility  
2 Proxy Group.<sup>6</sup>

3  
4 Even when proxy groups are carefully selected, it is common  
5 for analytical results to vary from company to company.  
6 Despite the care taken to ensure comparability, because no  
7 two companies are identical, market expectations regarding  
8 future risks and prospects will vary within the proxy group.  
9 It therefore is common for analytical results to reflect a  
10 seemingly wide range, even for a group of similarly situated  
11 companies. At issue is how to estimate the ROE from within  
12 that range. That determination will be best informed by  
13 employing a variety of sound analyses that necessarily must  
14 consider the sort of quantitative and qualitative information  
15 discussed throughout my direct testimony. Additionally, a  
16 relative risk analysis between the company and the Utility  
17 Proxy Group must be made to determine whether or not explicit  
18 company-specific adjustments need to be made to the Utility  
19 Proxy Group's indicated results.

20  
21 **Q.** Please explain how you selected the companies in the Utility  
22 Proxy Group.

23  
24 **A.** The companies selected for the Utility Proxy Group met the  
25 following criteria:

- 1 • They were included in the Natural Gas Utility Group of  
2 *Value Line's Standard Edition* ("Value Line");
- 3 • They have 60 percent or greater of fiscal year 2023 total  
4 operating income derived from, and 60 percent or greater  
5 of fiscal year 2023 total assets attributable to,  
6 regulated gas distribution operations;
- 7 • At the time of preparation of this testimony, they had  
8 not publicly announced that they were involved in any  
9 major merger or acquisition activity (*i.e.*, one publicly-  
10 traded utility merging with or acquiring another) or any  
11 other major development;
- 12 • They have not cut or omitted their common dividends during  
13 the five years ended 2023 or through the time of  
14 preparation of this testimony;
- 15 • They have *Value Line* and Bloomberg Professional Services  
16 ("Bloomberg") adjusted Beta coefficients ("beta");
- 17 • They have positive *Value Line* five-year dividends per  
18 share ("DPS") growth rate projections; and
- 19 • They have *Value Line*, Zacks, or S&P Capital IQ consensus  
20 five-year earnings per share ("EPS") growth rate  
21 projections.

22  
23 **Q.** Please identify the companies that met the above-stated  
24 criteria.

25

1 **A.** The following seven companies met these criteria: Atmos  
2 Energy Corporation (Ticker: ATO); New Jersey Resources  
3 Corporation (Ticker: NJR); NiSource Inc. (Ticker: NI);  
4 Northwest Natural Gas Company (Ticker: NWN); ONE Gas, Inc.  
5 (Ticker: OGS); Southwest Gas Holdings, Inc. (Ticker: SWX) and  
6 Spire Inc. (Ticker: SR).

7  
8 **Q.** Please describe Document No. 2, page 1.

9  
10 **A.** Page 1 of Document No. 2 contains comparative capitalization  
11 and financial statistics for the Utility Proxy Group for the  
12 five years from 2019 to 2023.

13  
14 During the five-year period ending December 31, 2023, the  
15 historically achieved average earnings rate on book common  
16 equity for the group was 8.41 percent, the average common  
17 equity ratio based on total permanent capital (excluding  
18 short-term debt) was 48.03 percent, and the average dividend  
19 payout ratio was 67.03 percent.

20  
21 Total debt to earnings before interest, taxes, depreciation,  
22 and amortization for the years 2019 to 2023 ranges between  
23 4.81 and 5.72 times, with an average of 5.34 times. Funds  
24 from operations to total debt range from 11.51 percent to  
25 27.32 percent, with an average of 15.50 percent.

1 **V. CAPITAL STRUCTURE**

2 **Q.** What is Peoples' requested capital structure?

3

4 **A.** Peoples' requested capital structure consists of 41.69  
5 percent long-term debt and 54.70 percent common equity, as  
6 shown in my Document No. 1 that is based on data included in  
7 the company's MFR Schedule G-3, page 2.

8

9 **Q.** What are the typical sources of capital commonly considered  
10 in establishing a utility's capital structure?

11

12 **A.** Common equity and long-term debt are commonly considered in  
13 establishing a utility's capital structure, because they are  
14 the typical sources of capital financing for a utility's rate  
15 base.

16

17 **Q.** Please explain.

18

19 **A.** Long-lived assets are typically financed with long-lived  
20 securities, so that the overall term structure of the  
21 utility's long-term liabilities (both debt and equity)  
22 closely match the life of the assets being financed. As  
23 stated by Brigham and Houston:

24

25

In practice, firms don't finance each specific  
asset with a type of capital that has a maturity

1 equal to the asset's life. However, academic  
2 studies do show that most firms tend to finance  
3 short-term assets from short-term sources and long-  
4 term assets from long-term sources.<sup>7</sup>

5  
6 Whereas short-term debt has a maturity of one year or less,  
7 long-term debt may have maturities of 30 years or longer.  
8 Although there are practical financing constraints, such as  
9 the need to "stagger" long-term debt maturities, the general  
10 objective is to extend the average life of long-term debt.  
11 Still, long-term debt has a finite life, which is likely to  
12 be less than the life of the assets included in rate base.  
13 Common equity, on the other hand, is outstanding into  
14 perpetuity. Thus, common equity more accurately matches the  
15 life of the going concern of the utility, which is also  
16 assumed to operate in perpetuity. Consequently, it is both  
17 typical and important for utilities to have significant  
18 proportions of common equity in their capital structures.

19  
20 **Q.** Why is it important that the company's requested capital  
21 structure, consisting of 41.69 percent long-term debt and  
22 54.70 percent common equity, be authorized in this  
23 proceeding?

24  
25 **A.** In order to continue to provide safe and reliable service to

1 its customers, Peoples must meet the needs and serve the  
2 interests of its various stakeholders, including its  
3 customers, shareholders, and bondholders. The interests of  
4 these stakeholder groups are aligned with maintaining a  
5 healthy balance sheet, strong credit ratings, and a  
6 supportive regulatory environment, so that the company has  
7 access to capital on reasonable terms in order to make  
8 necessary investments.

9  
10 Safe and reliable service cannot be maintained at a reasonable  
11 cost if utilities do not have the financial flexibility and  
12 strength to access competitive financing markets on  
13 reasonable terms. The authorization of a capital structure  
14 that understates the company's actual common equity will  
15 weaken the financial condition of its operations and  
16 adversely impact the company's ability to address expenses  
17 and investments, to the detriment of customers and  
18 shareholders. Safe and reliable service for customers cannot  
19 be sustained over the long term if the interests of  
20 shareholders and bondholders are minimized such that the  
21 public interest is not optimized.

22  
23 **Q.** How does the company's requested common equity ratio of 54.70  
24 percent compare with the common equity ratios maintained by  
25 the Utility Proxy Group?

1 **A.** The company's requested ratemaking common equity ratio of  
2 54.70 percent is reasonable and consistent with the range of  
3 common equity ratios maintained by the Utility Proxy Group.

4  
5 As shown on page 2 of Document No. 2, common equity ratios  
6 for the Utility Proxy Group range from 40.23 percent to 62.38  
7 percent for fiscal year 2023.<sup>8</sup> I also considered *Value Line*  
8 projected capital structures for the Utility Proxy Group for  
9 2027-2029. That analysis showed a range of projected common  
10 equity ratios between 44.00 percent and 60.00 percent for the  
11 Utility Proxy Group (see, pages 2 through 8 of Document No.  
12 3).

13  
14 In addition to comparing the company's proposed common equity  
15 ratio with common equity ratios currently and expected to be  
16 maintained by the Utility Proxy Group, I also compared the  
17 company's proposed common equity ratio with the equity ratios  
18 maintained by the operating subsidiaries of the Utility Proxy  
19 Group. As shown on page 3 of Document No. 2, common equity  
20 ratios of the operating utility subsidiaries of the companies  
21 in the Utility Proxy Group range from 37.70 percent to 60.41  
22 percent for fiscal year 2023.

23  
24 **Q.** Given the range of equity ratios present within the Utility  
25 Proxy Group, is the equity ratio of 54.70 percent proposed by

1 Peoples appropriate for ratemaking purposes?

2

3 **A.** Yes, it is. The company's equity ratio of 54.70 percent is  
4 appropriate for ratemaking purposes in the current proceeding  
5 because it is within the range of the common equity ratios  
6 currently maintained, and expected to be maintained, by the  
7 Utility Proxy Group and their utility operating subsidiaries.

8

9 **VI. COMMON EQUITY COST RATE MODEL**

10 **Q.** Is it important that cost of common equity models be market-  
11 based?

12

13 **A.** Yes. While a public utility operates a regulated business  
14 within the states in which it operates, it still must compete  
15 for equity in capital markets along with all other companies  
16 of comparable risk, which includes non-utilities. The cost  
17 of common equity is thus determined based on equity market  
18 expectations for the returns of those companies. If an  
19 individual investor is choosing to invest their capital among  
20 companies of comparable risk, they will choose a company  
21 providing a higher return over a company providing a lower  
22 return.

23

24 **Q.** Are your cost of common equity models market-based?

25

1 **A.** Yes. The DCF model uses market prices in developing the  
2 model's dividend yield component. The RPM uses bond ratings  
3 and expected bond yields that reflect the market's assessment  
4 of bond/credit risk. In addition, betas ( $\beta$ ), which reflect  
5 the market/systematic risk component of equity risk premium,  
6 are derived from regression analyses of market prices. The  
7 Predictive Risk Premium Model ("PRPM") uses monthly market  
8 returns in addition to expectations of the risk-free rate.  
9 The CAPM is market-based for many of the same reasons that  
10 the RPM is market-based (*i.e.*, the use of expected bond yields  
11 and betas). Selection criteria for comparable risk, non-  
12 price regulated companies are based on regression analyses of  
13 market prices and reflect the market's assessment of total  
14 risk.

15  
16 **Q.** What analytical approaches did you use to determine the  
17 company's ROE?

18  
19 **A.** As discussed earlier, I have relied on the DCF model, the  
20 RPM, and the CAPM, which I applied to the Utility Proxy Group  
21 described above. I also applied these same models to a Non-  
22 Price Regulated Proxy Group described later in this section.  
23  
24 I rely on these models because reasonable investors use a  
25 variety of tools and do not rely exclusively on a single

1 source of information or single model. Moreover, the models  
2 on which I rely focus on different aspects of return  
3 requirements and provide different insights to investors'  
4 views of risk and return. The DCF model, for example,  
5 estimates the investor-required return assuming a constant  
6 expected dividend yield and growth rate in perpetuity, while  
7 Risk Premium-based methods (i.e., the RPM and CAPM  
8 approaches) provide the ability to reflect investors' views  
9 of risk, future market returns, and the relationship between  
10 interest rates and the cost of common equity. Just as the  
11 use of market data for the Utility Proxy Group adds the  
12 reliability necessary to inform expert judgment in arriving  
13 at a recommended common equity cost rate, the use of multiple  
14 generally accepted common equity cost rate models also adds  
15 reliability and accuracy when arriving at a recommended  
16 common equity cost rate.

17  
18 **Q.** Has the Commission approved the use of multiple methods in  
19 determining the cost of equity during past rate cases of  
20 Peoples?

21  
22 **A.** Yes. In Docket No. 20080318-GU, the Commission stated that  
23 there are several models which satisfy the terms for  
24 determining a fair rate of return as laid out by *Hope* and  
25 *Bluefield*:

1 While the logic of the legal and economic concepts  
2 of a fair rate of return are fairly straight  
3 forward, the actual implementation of these  
4 concepts is more controversial. Unlike the cost  
5 rate on debt that is fixed and known due to its  
6 contractual terms, the cost of equity must be  
7 estimated. **Financial models have been developed to**  
8 **estimate the investor-required ROE for a company.**  
9 Market-based approaches such as the Discounted Cash  
10 Flow (DCF) model and the Capital Asset Pricing  
11 Model (CAPM) are generally recognized as being  
12 consistent with the market-based standards of a  
13 fair return enunciated in Hope, 320 U.S. 591 and  
14 Bluefield, 262 U.S. 679. [Emphasis added]<sup>9</sup>

15  
16 More recently, in Order No. PSC-2023-0388-FOF-GU, issued on  
17 December 27, 2023, the Commission considered the results of  
18 the witnesses DCF, CAPM, and RPM analyses to determine the  
19 appropriate range of ROEs in which to set Peoples' authorized  
20 return.<sup>10</sup>

21  
22 A. DISCOUNTED CASH FLOW

23 Q. What is the theoretical basis of the DCF model?

24  
25 A. The theory underlying the DCF model is that the present value

1 of an expected future stream of net cash flows during the  
2 investment holding period can be determined by discounting  
3 those cash flows at the cost of capital, or the investors'  
4 capitalization rate. DCF theory indicates that an investor  
5 buys a stock for an expected total return rate, which is  
6 derived from the cash flows received from dividends and market  
7 price appreciation. Mathematically, the dividend yield on  
8 market price plus a growth rate equals the capitalization  
9 rate (i.e., the total common equity return rate expected by  
10 investors), as depicted in the formula below:

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

12 Where:

13  $K_e$  = the required return on common equity;

14  $D_0$  = the annualized dividend per share;

15  $P$  = the current stock price; and

16  $g$  = the growth rate.

17  
18 **Q.** Which version of the DCF model did you use?

19  
20 **A.** I relied on the single-stage constant growth DCF model in my  
21 analyses.

22  
23 **Q.** Please describe the dividend yield you used in applying the  
24 constant growth DCF model.

25

1 **A.** The unadjusted dividend yields are based on the proxy  
2 companies' dividends as of January 15, 2025, divided by the  
3 average closing market price for the 60 trading days ended  
4 January 15, 2025 (see, Column 1, page 1 of Document No. 3).

5  
6 **Q.** Please explain your adjustment to the dividend yield.

7  
8 **A.** Because dividends are paid periodically (e.g., quarterly), as  
9 opposed to continuously (daily), an adjustment must be made  
10 to the dividend yield. This is often referred to as the  
11 discrete, or the Gordon Periodic, version of the DCF model.

12  
13 DCF theory calls for using the full growth rate, or  $D_1$ , in  
14 calculating the model's dividend yield component. Since the  
15 companies in the Utility Proxy Group increase their quarterly  
16 dividends at various times during the year, a reasonable  
17 assumption is to reflect one-half the annual dividend growth  
18 rate in the dividend yield component, or  $D_{1/2}$ . Because the  
19 dividend should be representative of the next 12-month  
20 period, this adjustment is a conservative approach that does  
21 not overstate the dividend yield. Therefore, the actual  
22 average dividend yields in Column 1, page 1 of Document No.  
23 3 have been adjusted upward to reflect one-half the average  
24 projected growth rate shown in Column 5.

25

1 Q. Please explain the basis for the growth rates you apply to  
2 the Utility Proxy Group in your constant growth DCF model.

3

4 A. Investors are likely to rely on widely available financial  
5 information services, such as *Value Line*, Zacks, and S&P  
6 Capital IQ. Investors realize that analysts have significant  
7 insight into the dynamics of the industries and individual  
8 companies they analyze, as well as companies' abilities to  
9 effectively manage the effects of changing laws and  
10 regulations, and ever-changing economic and market  
11 conditions. For these reasons, I used analysts' five-year  
12 forecasts of earnings per share growth in my DCF analysis.

13

14 Over the long run, there can be no growth in dividends per  
15 share without growth in earnings per share. Security  
16 analysts' earnings expectations have a more significant  
17 influence on market prices than dividend expectations. Thus,  
18 using projected earnings growth rates in a DCF analysis  
19 provides a better match between investors' market price  
20 appreciation expectations and the growth rate component of  
21 the DCF.

22

23 Q. Please summarize the constant growth DCF model results.

24

25 A. As shown on page 1 of Document No. 3, the application of the

1 constant growth DCF model to the Utility Proxy Group results  
2 in a range of indicated ROEs from 6.64 percent to 11.74  
3 percent. The mean of those results is 10.49 percent, the  
4 median result is 10.50 percent, and the average of the two is  
5 10.50 percent.

6  
7 In arriving at a conclusion for the constant growth DCF-  
8 indicated common equity cost rate for the Utility Proxy Group,  
9 I relied on an average of the mean and the median results of  
10 the DCF, specifically 10.50 percent, applicable to the  
11 Utility Proxy Group. This approach takes into consideration  
12 all proxy company results while mitigating high and low side  
13 outliers of those results.

14  
15 **B.** THE RISK PREMIUM MODEL

16 **Q.** Please describe the theoretical basis of the Risk Premium  
17 Model.

18  
19 **A.** The RPM is based on the fundamental financial principle of  
20 risk and return; namely, that investors require greater  
21 returns for bearing greater risk. The RPM recognizes that  
22 common equity capital has greater investment risk than debt  
23 capital, as common equity shareholders are behind debt  
24 holders in any claim on a company's assets and earnings. As  
25 a result, investors require higher returns from common stocks

1 than from bonds to compensate them for bearing the additional  
2 risk.

3  
4 While it is possible to directly observe bond returns and  
5 yields, common equity returns required by investors cannot be  
6 directly determined or observed. According to RPM theory,  
7 one can estimate a common equity risk premium over bonds  
8 (either historically or prospectively) and use that premium  
9 to derive a cost rate of common equity. The cost of common  
10 equity equals the expected cost rate for long-term debt  
11 capital, plus a risk premium over that cost rate, to  
12 compensate common shareholders for the added risk of being  
13 unsecured and last-in-line for any claim on the corporation's  
14 assets and earnings upon liquidation.

15  
16 **Q.** Please explain the total market approach RPM.

17  
18 **A.** The total market approach RPM adds a prospective public  
19 utility bond yield to an average of: (1) an equity risk  
20 premium that is derived from a beta-adjusted total market  
21 equity risk premium, (2) an equity risk premium based on the  
22 S&P Utilities Index, and (3) an equity risk premium based on  
23 authorized ROEs for natural gas distribution utilities.

24  
25 **Q.** Please explain how you determined the expected bond yield

1 applicable to the Utility Proxy Group.

2  
3 **A.** The first step in the total market approach RPM analysis is  
4 to determine the expected bond yield. Because both  
5 ratemaking and the cost of capital, including the common  
6 equity cost rate, are prospective in nature, a prospective  
7 yield on similarly rated long-term debt is essential. I  
8 relied on a consensus forecast of about 50 economists of the  
9 expected yield on Aaa-rated corporate bonds for the six  
10 calendar quarters ending with the first calendar quarter of  
11 2026, and *Blue Chip's* long-term projections for 2026 to 2030  
12 and 2031 to 2035. As shown on line 1, page 1 of Document  
13 No. 4, the average expected yield on Moody's Aaa-rated  
14 corporate bonds is 5.18 percent.

15  
16 Because that 5.18 percent estimate represents a corporate  
17 bond yield and not a utility specific bond yield, I adjusted  
18 the expected Aaa-rated corporate bond yield to an equivalent  
19 A2-rated public utility bond yield, I made an upward  
20 adjustment of 0.42 percent, which represents a recent spread  
21 between Aaa-rated corporate bonds and A2-rated public  
22 utility bonds (as shown on line 2 and explained in note 2  
23 on page 1 of Document No. 4). Adding that recent 0.42  
24 percent spread to the expected Aaa-rated corporate bond  
25 yield of 5.18 percent results in an expected A2-rated public

1 utility bond yield of 5.60 percent.

2  
3 I then reviewed the average credit rating for the Utility  
4 Proxy Group from Moody's to determine if an adjustment to  
5 the estimated A2-rated public utility bond was necessary.  
6 Since the Utility Proxy Group's average Moody's long-term  
7 issuer rating is A3, another adjustment to the expected A2-  
8 rated public utility bond is needed to reflect this  
9 difference in bond ratings. An upward adjustment of 0.06  
10 percent, which represents one-third of a recent spread  
11 between A2-rated and A3-rated public utility bond yields,  
12 is necessary to make the A2 prospective bond yield  
13 applicable to an A3-rated public utility bond (as shown on  
14 line 4 and explained in note 3 on page 1 of Document No. 4).  
15 Adding the 0.06 percent to the 5.60 percent prospective A2-  
16 rated public utility bond yield results in a 5.66 percent  
17 expected bond yield applicable to the Utility Proxy Group  
18 as shown on page 1 of Document No. 4.

19  
20 To develop the total market approach RPM estimate of the  
21 appropriate return on equity, this prospective bond yield  
22 is then added to the average of the three different equity  
23 risk premiums, which I now discuss, in turn.

24  
25 Q. Please explain how the beta-derived equity risk premium is

1           determined.

2

3 **A.**    The components of the beta-derived risk premium model are:  
4           (1) an expected market equity risk premium over corporate  
5           bonds, and (2) the beta. The derivation of the beta-derived  
6           equity risk premium that I applied to the Utility Proxy Group  
7           is shown on lines 1 through 8, on page 6 of Document No. 4.  
8           The total beta-derived equity risk premium I applied is based  
9           on an average of three historical market data-based equity  
10          risk premiums, two *Value Line*-based equity risk premiums, and  
11          a Bloomberg-based equity risk premium. Each of these is  
12          described below.

13

14 **Q.**    How did you derive a market equity risk premium based on long-  
15          term historical data?

16

17 **A.**    To derive an historical market equity risk premium, I used  
18          the most recent holding period returns for the large company  
19          common stocks less the average historical yield on Moody's  
20          Aaa/Aa-rated corporate bonds for the period 1928 to 2023.  
21          The use of holding period returns over a very long period of  
22          time is appropriate because it is consistent with the long-  
23          term investment horizon presumed by investing in a going  
24          concern, *i.e.*, a company expected to operate in perpetuity.

25

1 The long-term arithmetic mean monthly total return rate on  
2 large company common stocks was 12.05 percent and the long-  
3 term arithmetic mean monthly yield on Moody's Aaa/Aa-rated  
4 corporate bonds was 5.95 percent. As shown on line 1, page  
5 6 of Document No. 4, subtracting the mean monthly bond yield  
6 from the total return on large company stocks results in a  
7 long-term historical equity risk premium of 6.10 percent.

8  
9 I used the arithmetic mean monthly total return rates for the  
10 large company stocks and yields (income returns) for the  
11 Moody's Aaa/Aa-rated corporate bonds, because they are  
12 appropriate for the purpose of estimating the cost of capital  
13 as noted in Kroll's Stocks, Bonds, Bills, and Inflation  
14 ("SBBI") Yearbook 2023 ("SBBI - 2023").<sup>11</sup> The use of the  
15 arithmetic mean return rates and yields is appropriate  
16 because historical total returns and equity risk premiums  
17 provide insight into the variance and standard deviation of  
18 returns needed by investors in estimating future risk when  
19 making a current investment. If investors relied on the  
20 geometric mean of historical equity risk premiums, they would  
21 have no insight into the potential variance of future returns;  
22 the geometric mean relates the change over many periods to a  
23 constant rate of change, thereby obviating the year-to-year  
24 fluctuations, or variance, which is critical to risk  
25 analysis.

1 Q. Please explain the derivation of the regression-based market  
2 equity risk premium.

3

4 A. To derive the regression-based market equity risk premium of  
5 7.03 percent shown on line 2, page 6 of Document No. 4, I  
6 used the same monthly annualized total returns on large  
7 company common stocks relative to the monthly annualized  
8 yields on Moody's Aaa/Aa-rated corporate bonds as mentioned  
9 above. I modeled the relationship between interest rates and  
10 the market equity risk premium using the observed monthly  
11 market equity risk premium as the dependent variable, and the  
12 monthly yield on Moody's Aaa/Aa-rated corporate bonds as the  
13 independent variable. I then used a linear Ordinary Least  
14 Squares ("OLS") regression, in which the market equity risk  
15 premium is expressed as a function of the Moody's Aaa/Aa-  
16 rated corporate bond yield:

$$17 \quad RP = \alpha + \beta (R_{Aaa/Aa})$$

18 Where:

19 RP = the market equity risk premium;

20  $\alpha$  = the regression intercept coefficient;

21  $\beta$  = the regression slope coefficient; and

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

24

25 Q. Please explain the derivation of the PRPM equity risk premium.

1 **A.** The PRPM, published in the *Journal of Regulatory Economics*,<sup>12</sup>  
2 was developed from the work of Robert F. Engle, who shared  
3 the Nobel Prize in Economics in 2003 “for methods of analyzing  
4 economic time series with time-varying volatility” or  
5 autoregressive conditional heteroskedasticity (“ARCH”).<sup>13</sup>  
6 Engle found that volatility changes over time and is related  
7 from one period to the next, especially in financial markets.  
8 Engle discovered that volatility of prices and returns  
9 clusters over time and is, therefore, highly predictable and  
10 can be used to predict future levels of risk and risk  
11 premiums.

12  
13 The PRPM estimates the risk-return relationship directly, as  
14 the predicted equity risk premium is generated by predicting  
15 volatility or risk. The PRPM is not based on an estimate of  
16 investor behavior, but rather on an evaluation of the results  
17 of that behavior (i.e., the variance of historical equity  
18 risk premiums).

19  
20 The inputs to the model are the historical returns on large  
21 company stocks minus the historical monthly yield on Moody’s  
22 Aaa/Aa-rated corporate bonds from January 1928 through  
23 December 2024. Using a generalized form of ARCH, known as  
24 generalized autoregressive conditional heteroskedasticity  
25 (“GARCH”), I calculated each of the projected equity risk

1 premium using Eviews© statistical software. When the GARCH  
2 model is applied to the historical return data, it produces  
3 a predicted GARCH variance series and a GARCH coefficient.  
4 Multiplying the predicted monthly variance by the GARCH  
5 coefficient and then annualizing it produces the predicted  
6 annual equity risk premium. The resulting PRPM predicted a  
7 market equity risk premium of 7.56%.<sup>14</sup>

8  
9 **Q.** Please explain the derivation of projected equity risk  
10 premiums based on the *Value Line* Summary & Index for your RPM  
11 analysis.

12  
13 **A.** As noted above, because both ratemaking and the cost of  
14 capital are prospective, a prospective market equity risk  
15 premium is needed. The derivation of the forecasted or  
16 prospective market equity risk premium can be found in note  
17 4, page 6 of Document No. 4. Consistent with my calculation  
18 of the dividend yield component in my DCF analysis, this  
19 prospective market equity risk premium is derived from an  
20 average of the three- to five-year median market price  
21 appreciation potential by *Value Line* for the 13 weeks ended  
22 January 17, 2025, plus an average of the median estimated  
23 dividend yield for the common stocks of the 1,700 firms  
24 covered in *Value Line* (Standard Edition) (as explained in  
25 detail in note 1, page 2 of Document No. 5).

1 The average median expected price appreciation is 40 percent,  
2 which translates to a 8.78 percent annual appreciation, and  
3 when added to the average of *Value Line's* median expected  
4 dividend yields of 2.01 percent, equates to a forecasted  
5 annual total return rate on the market of 10.79 percent. The  
6 forecasted Moody's Aaa-rated corporate bond yield of 5.18  
7 percent is deducted from the total market return of 10.79  
8 percent, resulting in an equity risk premium of 5.61 percent,  
9 as shown on line 4, page 6 of Document No. 4.

10  
11 **Q.** Please explain the derivation of an equity risk premium based  
12 on the S&P 500 companies.

13  
14 **A.** Using data from *Value Line*, Bloomberg, and S&P Capital IQ, I  
15 calculated an expected total return on the S&P 500 companies  
16 using expected dividend yields and long-term growth estimates  
17 as a proxy for capital appreciation. The expected total  
18 return for the S&P 500 is 16.33 percent. Subtracting the  
19 prospective yield on Moody's Aaa-rated corporate bonds of  
20 5.18 percent results in a 11.15 percent projected equity risk  
21 premium.

22  
23 **Q.** What is your conclusion of a beta-derived equity risk premium  
24 for use in your RPM analysis?

25

1 **A.** I gave equal weight to all five equity risk premiums based on  
2 each source (historical, *Value Line* Summary & Index, and  
3 aggregate *Value Line*, Bloomberg, and S&P Capital IQ Market  
4 DCF) in arriving at a 7.49 percent equity risk premium, as  
5 shown on page 6 of Document No. 4.

6  
7 After calculating the average market equity risk premium of  
8 7.49 percent, I adjusted it by beta to account for the risk  
9 of the Utility Proxy Group. As discussed below, beta is a  
10 meaningful measure of prospective relative risk to the market  
11 as a whole, and is a logical way to allocate a company's, or  
12 proxy group's, share of the market's total equity risk premium  
13 relative to corporate bond yields. As shown on page 1 of  
14 Document No. 5, the average of the mean and median beta for  
15 the Utility Proxy Group is 0.79. Multiplying this beta by  
16 the market equity risk premium of 7.49 percent results in a  
17 beta-adjusted equity risk premium for the Utility Proxy Group  
18 of 5.92 percent.

19  
20 **Q.** How did you derive the equity risk premium based on the S&P  
21 Utility Index and Moody's A2-rated public utility bonds?

22  
23 **A.** I estimated three equity risk premiums based on S&P Utility  
24 Index holding period returns, and one equity risk premiums  
25 based on the expected returns of the S&P Utilities Index,

1 using *Value Line*, Bloomberg, and S&P Capital IQ data. Turning  
2 first to the S&P Utility Index holding period returns, I  
3 derived a long-term monthly arithmetic mean equity risk  
4 premium between the S&P Utility Index total returns of 10.59  
5 percent and monthly Moody's A2-rated public utility bond  
6 yields of 6.42 percent from 1928 to 2024, to arrive at an  
7 equity risk premium of 4.16 percent (as shown on line 1, page  
8 9 of Document No. 4). I then used the same historical data  
9 to derive an equity risk premium of 4.91 percent based on a  
10 regression of the monthly equity risk premiums. The final  
11 S&P Utility Index holding period equity risk premium involved  
12 applying the PRPM using the historical monthly equity risk  
13 premiums from January 1928 to December 2024 to arrive at a  
14 PRPM-derived equity risk premium of 4.72 percent for the S&P  
15 Utility Index.

16  
17 I then derived an expected total return on the S&P Utilities  
18 Index of 11.14 percent using data from *Value Line*, Bloomberg,  
19 and S&P Capital IQ and subtracted the prospective Moody's A2-  
20 rated public utility bond yield of 5.60 percent (derived on  
21 line 3, page 1 of Document No. 4). This resulted in equity  
22 risk premium of 5.54 percent. As with the market equity risk  
23 premiums, I averaged the four risk premiums to arrive at my  
24 utility-specific equity risk premium of 4.83 percent, as  
25 shown on page 9 of Document No. 4.

1 Q. How did you derive an equity risk premium of 4.79 percent  
2 based on authorized ROEs for gas utilities?

3

4 A. The equity risk premium of 4.79 percent shown on page 10 of  
5 Document No. 4 is the result of a regression analysis based  
6 on regulatory awarded ROEs related to the yields on Moody's  
7 A2-rated public utility bonds, and contains the graphical  
8 results of a regression analysis of 848 rate cases for  
9 distribution natural gas utilities, which were fully  
10 litigated during the period from January 1, 1980 through  
11 January 15, 2025. It shows the implicit equity risk premium  
12 relative to the yields on A2-rated public utility bonds  
13 immediately prior to the issuance of each regulatory  
14 decision. It is readily discernible that there is an inverse  
15 relationship between the yield on A2-rated public utility  
16 bonds and equity risk premiums. In other words, as interest  
17 rates decline, the equity risk premium rises and vice versa,  
18 a result consistent with financial literature on the  
19 subject.<sup>15</sup> I used the regression results to estimate the  
20 equity risk premium applicable to the projected yield on  
21 Moody's A2-rated public utility bonds. Given the expected  
22 A2-rated utility bond yield of 5.60 percent, it can be  
23 calculated that the indicated equity risk premium applicable  
24 to that bond yield is 4.79 percent.

25

1 Q. What is your conclusion of equity risk premium for use in  
2 your total market approach RPM for the Utility Proxy Group?

3

4 A. The equity risk premium I applied to the Utility Proxy Group  
5 is 5.18 percent, which is the average of the beta-adjusted  
6 equity risk premium for the Utility Proxy Group, the S&P  
7 Utilities Index, and the authorized return utility equity  
8 risk premiums of 5.92 percent, 4.83 percent, and 4.79 percent,  
9 respectively, as shown on page 5 of Document No. 4.

10

11 Q. What is the indicated RPM common equity cost rate based on  
12 the total market approach?

13

14 A. As shown on line 7, page 1 of Document No. 4, I calculated a  
15 common equity cost rate of 10.84 percent for the Utility Proxy  
16 Group based on the total market approach RPM, or 10.85 percent  
17 excluding the PRPM equity risk premium.

18

19 C. THE CAPITAL ASSET PRICING MODEL

20 Q. Please explain the theoretical basis of the CAPM.

21

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

1 greater variability than the market.

2  
3 The CAPM assumes that all non-market or unsystematic risk can  
4 be eliminated through diversification. The risk that cannot  
5 be eliminated through diversification is called market, or  
6 systematic, risk. In addition, the CAPM presumes that  
7 investors only require compensation for systematic risk,  
8 which is the result of macroeconomic and other events that  
9 affect the returns on all assets. The model is applied by  
10 adding a risk-free rate of return to a market risk premium,  
11 which is adjusted proportionately to reflect the systematic  
12 risk of the individual security relative to the total market  
13 as measured by the beta. The traditional CAPM model is  
14 expressed as:

$$15 \quad R_s = R_f + \beta (R_m - R_f)$$

16 Where:

17  $R_s$  = Return rate on the common stock;

18  $R_f$  = Risk-free rate of return;

19  $R_m$  = Return rate on the market as a whole; and

20  $\beta$  = Adjusted beta (volatility of the security  
21 relative to the market as a whole).

22  
23 Numerous tests of the CAPM have measured the extent to which  
24 security returns and beta are related as predicted by the  
25 CAPM, confirming its validity. The empirical CAPM ("ECAPM")

1 reflects the reality that while the results of these tests  
2 support the notion that the beta is related to security  
3 returns, the empirical Security Market Line ("SML") described  
4 by the CAPM formula is not as steeply sloped as the predicted  
5 SML.<sup>16</sup> The ECAPM reflects this empirical reality.

6  
7 The ECAPM is a well-established model that has been relied on  
8 in both academic and regulatory settings. Fama & French  
9 clearly state regarding the figure in Document No. 11, below,  
10 that "[t]he returns on the low beta portfolios are too high,  
11 and the returns on the high beta portfolios are too low."<sup>17</sup>

12  
13 In addition, Morin observes that while the results of these  
14 tests support the notion that beta is related to security  
15 returns, the empirical SML described by the CAPM formula is  
16 not as steeply sloped as the predicted SML. Morin states:

17 With few exceptions, the empirical studies agree  
18 that ... low-beta securities earn returns somewhat  
19 higher than the CAPM would predict, and high-beta  
20 securities earn less than predicted.<sup>18</sup>

21 \* \* \*

22 Therefore, the empirical evidence suggests that the  
23 expected return on a security is related to its  
24 risk by the following approximation:

25 
$$K = RF + x (RM - RF) + (1-x) \beta (RM - RF)$$

1           where x is a fraction to be determined empirically.  
2           The value of x that best explains the observed  
3           relationship [is]  $\text{Return} = 0.0829 + 0.0520 \beta$  is  
4           between 0.25 and 0.30. If  $x = 0.25$ , the equation  
5           becomes:

$$6 \quad K = \text{RF} + 0.25(\text{RM} - \text{RF}) + 0.75 \beta (\text{RM} - \text{RF})^{19}$$

7  
8           Fama & French provide similar support for the ECAPM when they  
9           state:

10           The early tests firmly reject the Sharpe-Lintner  
11           version of the CAPM. There is a positive relation  
12           between beta and average return, but it is too  
13           'flat.'... The regressions consistently find that the  
14           intercept is greater than the average risk-free  
15           rate... and the coefficient on beta is less than the  
16           average excess market return... This is true in the  
17           early tests... as well as in more recent cross-  
18           section regressions tests, like Fama and French  
19           (1992).<sup>20</sup>

20  
21           Finally, Fama & French further note:

22           Confirming earlier evidence, the relation between  
23           beta and average return `for the ten portfolios is  
24           much flatter than the Sharpe-Linter CAPM predicts.  
25           The returns on low beta portfolios are too high,

1 and the returns on the high beta portfolios are too  
2 low. For example, the predicted return on the  
3 portfolio with the lowest beta is 8.3 percent per  
4 year; the actual return as 11.1 percent. The  
5 predicted return on the portfolio with the t beta  
6 is 16.8 percent per year; the actual is 13.7  
7 percent.<sup>21</sup>

8  
9 Clearly, the justification from Morin and Fama & French, along  
10 with their reviews of other academic research on the CAPM,  
11 validate the use of the ECAPM. In view of theory and  
12 practical research, I have applied both the traditional CAPM  
13 and the ECAPM to the companies in the Utility Proxy Group and  
14 averaged the results.

15  
16 **Q.** What betas did you use in your CAPM analysis?

17  
18 **A.** With respect to beta, I considered two methods of calculation:  
19 (1) the average of the betas of the respective proxy group  
20 companies as reported by Bloomberg, and (2) the average of  
21 the betas of the respective proxy group companies as reported  
22 by *Value Line*. While both of those services adjust their  
23 calculated (or "raw") betas to reflect the tendency of beta  
24 to regress to the market mean of 1.00, *Value Line* calculates  
25 beta over a five-year period, while Bloomberg's calculation

1 is based on two years of data.

2

3 **Q.** Please describe your selection of a risk-free rate of return.

4

5 **A.** As discussed previously, the risk-free rate adopted for both  
6 applications of the CAPM is 4.44 percent. This risk-free  
7 rate is based on the average of the *Blue Chip* consensus  
8 forecast of the expected yields on 30-year U.S. Treasury bonds  
9 for the six quarters ending with the second calendar quarter  
10 of 2026, and long-term projections for the years 2026 to 2030  
11 and 2031 to 2035.

12

13 **Q.** Please explain the estimation of the expected risk premium  
14 for the market used in your CAPM analysis.

15

16 **A.** The basis of the market risk premium is explained in detail  
17 in note 1 on page 2 of Document No. 5. As discussed above,  
18 the market risk premium is derived from an average of three  
19 historical data-based market risk premiums, one *Value Line*  
20 data-based market risk premium, and one *Value line*,  
21 Bloomberg, and S&P Capital IQ data-based market risk premium.

22

23 The long-term income return on U.S. Government securities of  
24 4.99 percent was deducted from the monthly historical total  
25 market return of 12.29 percent, which results in an historical

1 market equity risk premium of 7.31 percent. I applied a  
2 linear OLS regression to the monthly annualized historical  
3 returns on the S&P 500 relative to historical yields on long-  
4 term U.S. Government securities. That regression analysis  
5 yielded a market equity risk premium of 8.06 percent. The  
6 PRPM market equity risk premium is 8.45 percent and is derived  
7 using the PRPM relative to the yields on long-term U.S.  
8 Treasury securities from January 1926 through December 2024,  
9 as shown on page 2 of Document No. 5.

10  
11 The *Value Line*-derived forecasted total market equity risk  
12 premium is derived by deducting the forecasted risk-free rate  
13 of 4.44 percent, discussed above, from the *Value Line*  
14 projected total annual market return of 10.79 percent,  
15 resulting in a forecasted total market equity risk premium of  
16 6.35 percent.

17  
18 The S&P 500 projected market equity risk premium using *Value*  
19 *Line*, Bloomberg, and S&P Capital IQ data is derived by  
20 subtracting the projected risk-free rate of 4.44 percent from  
21 the projected total return of the S&P 500 of 16.33 percent.  
22 The resulting market equity risk premium is 11.89 percent.

23  
24 These five market risk premium measures, when averaged,  
25 result in an average total market equity risk premium of 8.41

1 percent. Excluding the PRPM from the calculation of the  
2 market risk premium produces an 8.40 percent estimate.

3  
4 **Q.** What are the results of your application of the traditional  
5 and empirical CAPM to the Utility Proxy Group?

6  
7 **A.** As shown on page 1 of Document No. 5, the mean result of my  
8 CAPM/ECAPM applied to the Utility Proxy Group is 11.20  
9 percent, the median is 11.16 percent, and the average of the  
10 two is 11.18 percent. Excluding the PRPM from the calculation  
11 of the market risk premium, the mean result of my CAPM/ECAPM  
12 applied to the Utility Proxy Group is 11.19 percent, the  
13 median is 11.15 percent, and the average of the two is 11.17  
14 percent. Consistent with my reliance on the average of mean  
15 and median DCF results discussed above, the indicated common  
16 equity cost rate for each group using the CAPM/ECAPM is 11.18  
17 percent and 11.17 percent excluding the PRPM.

18  
19 **D.** COMMON EQUITY COST RATES FOR A PROXY GROUP OF DOMESTIC,  
20 NON-PRICE REGULATED COMPANIES BASED ON THE DCF, RPM, AND  
21 CAPM

22 **Q.** Why do you also consider a proxy group of domestic, non-price  
23 regulated companies?

24  
25 **A.** Although I am not an attorney, my interpretation of the *Hope*

1 and *Bluefield* cases is that they did not specify that  
2 comparable risk companies had to be utilities. Since the  
3 purpose of rate regulation is to be a substitute for  
4 marketplace competition, non-price regulated firms operating  
5 in the competitive marketplace make an excellent proxy if  
6 they are comparable in total risk to the Utility Proxy Group  
7 being used to estimate the cost of common equity. The  
8 selection of such domestic, non-price regulated competitive  
9 firms theoretically and empirically results in a proxy group  
10 which is comparable in total risk to the Utility Proxy Group,  
11 since all of these companies compete for capital in the exact  
12 same markets.

13  
14 **Q.** How did you select non-price regulated companies that are  
15 comparable in total risk to the Utility Proxy Group?

16  
17 **A.** In order to select a proxy group of domestic, non-price  
18 regulated companies similar in total risk to the Utility Proxy  
19 Group, I relied on betas and related statistics derived from  
20 *Value Line* regression analyses of weekly market prices over  
21 the most recent 260 weeks (*i.e.*, five years). As shown on  
22 Document No. 6, these selection criteria resulted in a proxy  
23 group of 49 domestic, non-price regulated firms comparable in  
24 total risk to the Utility Proxy Group. Total risk is the sum  
25 of non-diversifiable market risk and diversifiable company-

1 specific risks. The criteria used in selecting the domestic,  
2 non-price regulated firms were:

- 3 • They must be covered by *Value Line* (Standard Edition);
- 4 • They must be domestic, non-price regulated companies,  
5 *i.e.*, not utilities;
- 6 • Their unadjusted betas must lie within plus or minus two  
7 standard deviations of the average unadjusted beta of the  
8 Utility Proxy Group; and
- 9 • The residual standard errors of the *Value Line*  
10 regressions, which gave rise to the unadjusted betas, must  
11 lie within plus or minus two standard deviations of the  
12 average residual standard error of the Utility Proxy  
13 Group.

14  
15 Betas measure market, or systematic, risk, which is not  
16 diversifiable. The residual standard errors of the  
17 regressions measure each firm's company-specific,  
18 diversifiable risk. Companies that have similar betas and  
19 similar residual standard errors resulting from the same  
20 regression analyses have similar total investment risk.

21  
22 **Q.** Did you calculate the common equity cost rate using the DCF  
23 model, the RPM, and the CAPM for the Non-Price Regulated Proxy  
24 Group?  
25

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

6  
7 Page 2 of Document No. 7 derives the constant growth DCF model  
8 common equity cost rate. As shown, the indicated common  
9 equity cost rate, using the constant growth DCF for the Non-  
10 Price Regulated Proxy Group comparable in total risk to the  
11 Utility Proxy Group, is 11.37 percent.

12  
13 Pages 3 through 5 of Document No. 7 contain the data and  
14 calculations that support the 12.44 percent RPM common equity  
15 cost rates (12.42 percent excluding the PRPM). As shown on  
16 line 1, page 3 of Document No. 7, the consensus prospective  
17 yield on Moody's Baa2-rated corporate bonds for the six  
18 quarters ending in the second quarter of 2026, and for the  
19 years 2026 to 2030 and 2031 to 2035, is 6.01 percent.<sup>22</sup> Since  
20 the Non-Price Regulated Proxy Group has an average Moody's  
21 long-term issuer rating of Baal, a downward adjustment of  
22 0.09 percent to the projected Baa2-rated corporate bond yield  
23 is necessary to reflect a difference in ratings which results  
24 in a projected Baal-rated corporate bond yield of 5.92  
25 percent.

1 When beta-adjusted risk premiums of 6.52 percent and 6.50  
2 excluding the PRPM (as derived on page 5 of Document No. 7)  
3 relative to the Non-Price Regulated Proxy Group are added to  
4 the adjusted prospective Baal bond yield of 5.92 percent, the  
5 indicated RPM common equity cost rates are 12.44 percent and  
6 12.42 percent, respectively.

7  
8 Page 6 of Document No. 7 contains the inputs and calculations  
9 that support my indicated CAPM/ECAPM common equity cost rate  
10 of 11.86 percent. Page 7 of Document No. 7 contains the  
11 inputs and calculations that support my indicated CAPM/ECAPM  
12 common equity cost rate of 11.85 percent excluding the PRPM.

13  
14 **Q.** What is the cost rate of common equity based on the Non-Price  
15 Regulated Proxy Group comparable in total risk to the Utility  
16 Proxy Group?

17  
18 **A.** As shown on page 1 of Document No. 7, the results of the  
19 common equity models applied to the Non-Price Regulated Proxy  
20 Group - which group is comparable in total risk to the Utility  
21 Proxy Group - are as follows: 11.37 percent (DCF), 12.44  
22 percent (RPM), and 11.86 percent (CAPM). Excluding the PRPM  
23 the estimates are as follows: 11.37 percent (DCF), 12.42  
24 percent (RPM), and 11.85 percent (CAPM).

25

1 The average of the mean and median of these models is 11.88  
2 percent and 11.87 percent excluding the PRPM, which I used as  
3 the indicated common equity cost rates for the Non-Price  
4 Regulated Proxy Group. To be conservative, I do not consider  
5 the results of this analysis directly in my determination of  
6 the reasonable range of ROEs attributable to the Utility Proxy  
7 Group.

8  
9 **VII. RANGE OF COMMON EQUITY COST RATES BEFORE ADJUSTMENTS**

10 **Q.** What is the range of indicated common equity cost rates  
11 produced by your ROE models?

12  
13 **A.** By applying multiple cost of common equity models to the  
14 Utility Proxy Group and the Non-Price Regulated Proxy Group,  
15 the indicated range of common equity cost rates attributable  
16 to the Utility Proxy Group before any relative risk  
17 adjustments is between 10.50 percent and 11.18 percent, as  
18 shown on Document No. 1, page 2 (between 10.50 percent and  
19 11.17 percent excluding the PRPM). I used multiple cost of  
20 common equity models as primary tools in arriving at my  
21 recommended common equity cost rate, because no single model  
22 is so inherently precise that it can be relied on to the  
23 exclusion of other theoretically sound models. Using  
24 multiple models adds reliability to the estimated common  
25 equity cost rate, with the prudence of using multiple cost of

1 common equity models supported in both the financial  
2 literature and regulatory precedent.

3  
4 As will be discussed below, Peoples has greater risk than the  
5 Utility Proxy Group. Because of this, the indicated range of  
6 model results based on the Utility Proxy Group must be  
7 adjusted to reflect Peoples' greater relative risk.

8  
9 **VIII. ADJUSTMENTS TO THE COMMON EQUITY COST RATE**

10 **Q.** What company-specific business risks did you consider for  
11 your relative risk analysis?

12  
13 **A.** As detailed below, I have considered flotation costs. I also  
14 considered Peoples' smaller relative size.

15  
16 **A.** FLOTATION COSTS

17 **Q.** What are flotation costs?

18  
19 **A.** Flotation costs are those costs associated with the sale of  
20 new issuances of common stock. They include market pressure  
21 and the mandatory unavoidable costs of issuance (e.g.,  
22 underwriting fees and out-of-pocket costs for printing,  
23 legal, registration, etc.). For every dollar raised through  
24 debt or equity offerings, the company receives less than one  
25 full dollar in financing.

1 Q. Has the Commission supported the use of flotation cost  
2 adjustments in past rate proceedings?

3

4 A. Yes. In Peoples' recent 2023 rate proceeding the Commission  
5 noted:

6 In PGS's last rate case in 2008, we did not make a  
7 specific adjustment for flotation costs, but in our  
8 order we stated that we have traditionally recognized  
9 a reasonable adjustment for flotation costs in the  
10 determination of the investor required return...We find  
11 witness D'Ascendis's method to determine the flotation  
12 cost is credible and provided persuasive evidence for  
13 his recommendation to include a flotation cost of 9  
14 basis points.<sup>23</sup>

15

16 Q. Why is it important to recognize flotation costs in the  
17 allowed common equity cost rate?

18

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

24

25

The costs of issuing these securities are just as  
real as operating and maintenance expenses or costs

1           incurred to build utility plants, and fair  
2           regulatory treatment must permit the recovery of  
3           these costs...

4           The simple fact of the matter is that common equity  
5           capital is not free...[Flotation costs] must be  
6           recovered through a rate of return adjustment.<sup>24</sup>

7  
8   **Q.**   Should flotation costs be recognized whether or not there is  
9           a stock issuance of additional shares during the test year?

10  
11   **A.**   Yes. As noted above, there is no mechanism to recapture such  
12           costs in the ratemaking paradigm other than an adjustment to  
13           the allowed common equity cost rate. Flotation costs are  
14           charged to capital accounts and are not expensed on a  
15           utility's income statement. As such, flotation costs are  
16           analogous to capital investments, albeit negative, reflected  
17           on the balance sheet. Recovery of capital investments relates  
18           to the expected useful lives of the investment. Since common  
19           equity has a very long and indefinite life (assumed to be  
20           infinity in the standard regulatory DCF model), flotation  
21           costs should be recovered through an adjustment to common  
22           equity cost rate, even when there has not been an issuance  
23           during the test year, or in the absence of an expected  
24           imminent issuance of additional shares of common stock.

25

1 Historical flotation costs are a permanent loss of investment  
2 to the utility and should be accounted for. When any company,  
3 including a utility, issues common stock, flotation costs are  
4 incurred for legal, accounting, printing fees and the like.  
5 For each dollar of issuing market price, a small percentage  
6 is expensed and is permanently unavailable for investment in  
7 utility rate base. Since these expenses are charged to  
8 capital accounts and not expensed on the income statement,  
9 the only way to restore the full value of that dollar of  
10 issuing price with an assumed investor required return of  
11 10.00 percent is for the net investment, \$0.95, to earn more  
12 than 10.00 percent to net back to the investor a fair return  
13 on that dollar. In other words, if a company issues stock at  
14 \$1.00 with 5.00 percent in flotation costs, it will net \$0.95  
15 in investment. Assuming the investor in that stock requires  
16 a 10.00 percent return on his or her invested \$1.00 (*i.e.*, a  
17 return of \$0.10), the company needs to earn approximately  
18 10.5 percent on its invested \$0.95 to receive a \$0.10 return.

19  
20 **Q.** Do the common equity cost rate models you have used already  
21 reflect investors' anticipation of flotation costs?

22  
23 **A.** No. All of these models assume no transaction costs. The  
24 literature is quite clear that these costs are not reflected  
25 in the market prices paid for common stocks. For example,

1 Brigham and Daves confirm this and provide the methodology  
2 utilized to calculate the flotation adjustment.<sup>25</sup> In  
3 addition, Morin confirms the need for such an adjustment even  
4 when no new equity issuance is imminent.<sup>26</sup> Consequently, it  
5 is proper to include a flotation cost adjustment when using  
6 cost of common equity models to estimate the common equity  
7 cost rate.

8  
9 **Q.** How did you calculate the flotation cost allowance?

10  
11 **A.** I modified the DCF calculation to provide a dividend yield  
12 that would reimburse investors for issuance costs in  
13 accordance with the method cited in literature by Brigham and  
14 Daves, as well as by Morin. The flotation cost adjustment  
15 recognizes the actual costs of issuing equity that were  
16 incurred by Peoples' parent, Emera, in its equity issuances  
17 since 2016 when it acquired Peoples. Based on the issuance  
18 costs shown on Document No. 8, an adjustment of 0.08 percent  
19 is required to reflect the flotation costs applicable to the  
20 Utility Proxy Group.

21  
22 **B.** SIZE ADJUSTMENT

23 **Q.** Does Peoples' smaller size relative to the Utility Proxy Group  
24 companies increase its business risk?

1 **A.** Yes. Peoples' smaller size relative to the Utility Proxy  
2 Group companies indicates greater relative business risk for  
3 the company because, all else being equal, size has a material  
4 bearing on risk.

5  
6 Size affects business risk because smaller companies  
7 generally are less able to cope with significant events that  
8 affect sales, revenues, and earnings. For example, smaller  
9 companies face more risk exposure to business cycles and  
10 economic conditions, both nationally and locally.  
11 Additionally, the loss of revenues from a few larger customers  
12 would have a greater effect on a small company than on a  
13 bigger company with a larger, more diverse, customer base.

14  
15 As further evidence that smaller firms are riskier, investors  
16 generally demand greater returns from smaller firms to  
17 compensate for less marketability and liquidity of their  
18 securities. Kroll's Cost of Capital Navigator: U.S. Cost of  
19 Capital Module ("Kroll") discusses the nature of the small-  
20 size phenomenon, providing an indication of the magnitude of  
21 the size premium based on several measures of size. In  
22 discussing "Size as a Predictor of Equity Returns," Kroll  
23 states:

24 The size effect is based on the empirical  
25 observation that companies of smaller size are

1 associated with greater risk and, therefore, have  
2 greater cost of capital [sic]. The "size" of a  
3 company is one of the most important risk elements  
4 to consider when developing cost of equity capital  
5 estimates for use in valuing a business simply  
6 because size has been shown to be a *predictor* of  
7 equity returns. In other words, there is a  
8 significant (negative) relationship between size  
9 and historical equity returns - as size *decreases*,  
10 returns tend to *increase*, and vice versa. [Footnote  
11 omitted] [Emphasis in original].<sup>27</sup>

12  
13 Furthermore, in *The Capital Asset Pricing Model: Theory and*  
14 *Evidence*, Fama & French note size is indeed a risk factor  
15 which must be reflected when estimating the cost of common  
16 equity. On page 38, they note:

17 . . . the higher average returns on small stocks  
18 and high book-to-market stocks reflect unidentified  
19 state variables that produce undiversifiable risks  
20 (covariances) in returns not captured in the market  
21 return and are priced separately from market  
22 betas.<sup>28</sup>

23  
24 Based on this evidence, Fama & French proposed their three-  
25 factor model which includes a size variable in recognition of

1 the effect size has on the cost of common equity.

2  
3 Also, it is a basic financial principle that the use of funds  
4 invested, and not the source of funds, is what gives rise to  
5 the risk of any investment.<sup>29</sup> Eugene Brigham, a well-known  
6 authority, states:

7 A number of researchers have observed that  
8 portfolios of small-firms (sic) have earned  
9 consistently higher average returns than those of  
10 large-firm stocks; this is called the "small-firm  
11 effect." On the surface, it would seem to be  
12 advantageous to the small firms to provide average  
13 returns in a stock market that are higher than those  
14 of larger firms. In reality, it is bad news for  
15 the small firm; **what the small-firm effect means is**  
16 **that the capital market demands higher returns on**  
17 **stocks of small firms than on otherwise similar**  
18 **stocks of the large firms.** [Emphasis added]<sup>30</sup>

19  
20 Consistent with the financial principle of risk and return  
21 discussed above, increased relative risk due to small size  
22 must be considered in the allowed rate of return on common  
23 equity. Therefore, the Commission's authorization of a cost  
24 rate of common equity in this proceeding must appropriately  
25 reflect the unique risks of Peoples, including its smaller

1 relative size, which is justified and supported above by  
2 evidence in the financial literature.

3  
4 **Q.** Is there a way to quantify a relative risk adjustment due to  
5 Peoples' smaller size relative to the Utility Proxy Group?  
6

7 **A.** Yes. Peoples has greater relative risk than the average  
8 utility in the Utility Proxy Group because of its smaller  
9 size compared with the utilities in those groups, as measured  
10 by an estimated market capitalization of common equity for  
11 the company.  
12

13 As shown in page 1 of Document No. 8, Peoples' estimated  
14 market capitalization is approximately \$2.693 billion,  
15 compared with the market capitalization of the average  
16 companies in the Utility Proxy Group of approximately \$8.011  
17 billion as of January 15, 2025. The average company in the  
18 Utility Proxy Group have a market capitalization of 3.0 times  
19 the size of Peoples' estimated market capitalization.  
20

21 As a result, it is necessary to upwardly adjust the indicated  
22 range of common equity cost rates attributable to the Utility  
23 Proxy Group to reflect the company's greater risk due to their  
24 smaller relative size. The determination is based on the  
25 size premiums for portfolios of New York Stock Exchange,

1 American Stock Exchange, and NASDAQ listed companies ranked  
2 by deciles for the 1926 to 2024 period. The average size  
3 premium for the Utility Proxy Group with a market  
4 capitalization of \$8,011.11 million falls in the 3rd decile,  
5 while the Company's estimated market capitalization of  
6 \$2,692.85 million places it in the 6th decile. The size  
7 premium spread between the 3rd decile and the 6th decile is  
8 0.60 percent. Even though a 0.60 percent upward size  
9 adjustment is indicated, I applied a size premium of 0.20  
10 percent to the company's indicated common equity cost rate in  
11 order to be conservative.

12  
13 **Q.** Since Peoples is an indirectly owned operating subsidiary of  
14 Emera, why is the size of the total company not more  
15 appropriate to use when determining a business risk  
16 adjustment?

17  
18 **A.** The return derived in this proceeding will not apply to  
19 Emera's operations as a whole, but only to Peoples. Emera is  
20 the sum of its constituent parts, including those constituent  
21 parts' ROEs. Potential investors in Emera are aware that it  
22 is a combination of operations in each state, and that each  
23 state's operations experience the operating risks specific to  
24 their jurisdiction. The market's expectation of Emera's  
25 return is commensurate with the realities of Emera's

1 composite operations in each of the states in which it  
2 operates.

3  
4 **Q.** What is your conclusion regarding an adjustment for the  
5 company's specific business risks?

6  
7 **A.** Based on my analysis, a business risk adjustment of 0.20  
8 percent is appropriate for Peoples to account for the  
9 company's smaller size. Even though my analysis of the  
10 company's smaller size relative to the Utility Proxy Group  
11 indicates an upward size adjustment of 0.60 percent, I  
12 conservatively applied an overall business risk adjustment of  
13 0.20 percent to the results as shown on page 2 of Document  
14 No. 1.

15  
16 **Q.** Please summarize your adjustments to the indicated ranges of  
17 ROEs applicable to the Utility Proxy Group.

18  
19 **A.** The summary of my adjustments for the company-specific  
20 business risks and flotation costs to the indicated ranges of  
21 ROEs applicable to the Utility Proxy Group are summarized in  
22 page 2 of Document No. 1. As shown, the range of ROEs  
23 applicable to the company is between 10.78 percent and 11.46  
24 percent, or 10.78 percent and 11.45 percent excluding the  
25 PRPM.

1 **IX. CONCLUSION**

2 **Q.** What is your recommended ROE for Peoples?

3

4 **A.** Given the indicated ROE range applicable to the company of  
5 10.78 percent to 11.46 percent (10.78 percent to 11.45 percent  
6 excluding the PRPM), I conclude that an appropriate ROE for  
7 the company is 11.10 percent.

8

9 **Q.** In your opinion, is your proposed ROE of 11.10 percent fair  
10 and reasonable to Peoples and its customers?

11

12 **A.** Yes, it is.

13

14 **Q.** In your opinion, is Peoples' proposed capital structure  
15 consisting of 41.69 percent long-term debt and 54.70 percent  
16 common equity fair and reasonable?

17

18 **A.** Yes, it is.

19

20 **Q.** Does this conclude your prepared direct testimony?

21

22 **A.** Yes.

23

24

25

DOCKET NO. 20250029-GU  
WITNESS: D'ASCENDIS

**EXHIBIT**

**OF**

**DYLAN D'ASCENDIS**

**ON BEHALF OF PEOPLES GAS SYSTEM, INC.**

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Peoples Gas System  
Recommended Capital Structure and Cost Rates  
for Ratemaking Purposes

| <u>Type of Capital</u> | <u>Ratios(1)</u> | <u>Cost Rate</u> |     | <u>Weighted<br/>Cost Rate</u> |
|------------------------|------------------|------------------|-----|-------------------------------|
| Long-Term Debt         | 41.69%           | 5.64%            | (1) | 2.35%                         |
| Short-Term Debt        | 3.61%            | 4.55%            | (1) | 0.16%                         |
| Common Equity          | 54.70%           | 11.10%           | (2) | 6.07%                         |
| Total                  | <u>100.00%</u>   |                  |     | <u>8.58%</u>                  |

Notes:

- (1) Per data included on Company MFR Schedule G-3, page 2.
- (2) From page 2 of this Document.

Peoples Gas System  
Brief Summary of Common Equity Cost Rate

| <u>Line No.</u> | <u>Principal Methods</u>  | <u>Proxy Group of Seven<br/>Natural Gas Companies</u> | <u>Proxy Group of Seven<br/>Natural Gas Companies<br/>(exc. PRPM)</u> |
|-----------------|---|---|---|
| 1.              | Discounted Cash Flow Model (DCF) (1)  | 10.50%  | 10.50%  |
| 2.              | Risk Premium Model (RPM) (2)  | 10.84%  | 10.85%  |
| 3.              | Capital Asset Pricing Model (CAPM) (3)                                      | 11.18%  | 11.17%  |
| 4.              | Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4) | <u>11.88%</u>   | <u>11.87%</u>   |
| 5.              | Indicated Common Equity Cost Rate before Adjustment for Unique Risk         | 10.50% - 11.18%                                       | 10.50% - 11.17%   |
| 6.              | Size Adjustment (5)   | 0.20%   | 0.20%   |
| 7.              | Credit Risk Adjustment (6)  | 0.00%   | 0.00%   |
| 8.              | Flotation Cost Adjustment (7)   | <u>0.08%</u>  | <u>0.08%</u>  |
| 9.              | Indicated Common Equity Cost Rate after Adjustment                          | <u>10.78% - 11.46%</u>                                | <u>10.78% - 11.45%</u>  |
| 10.             | Recommended Common Equity Cost Rate   | <u>11.10%</u>   | <u>11.10%</u>   |

- Notes:
- (1) From page 1 of Document No. 3.
  - (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 the accompanying 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 Document No. 9.

Proxy Group of Seven Natural Gas Companies  
CAPITALIZATION AND FINANCIAL STATISTICS (1)  
2019 - 2023, Inclusive

|   | 2023                  | 2022               | 2021               | 2020               | 2019               |                 |
|---|-----------------------|--------------------|--------------------|--------------------|--------------------|-----------------|
|   | (MILLIONS OF DOLLARS) |                    |                    |                    |                    |                 |
| <b>Capitalization Statistics</b>                |                       |                    |                    |                    |                    |                 |
| <b>Amount of Capital Employed</b>               |                       |                    |                    |                    |                    |                 |
| Total Permanent Capital                         | \$9,183.685           | \$8,210.117        | \$7,442.590        | \$6,654.657        | \$5,863.473        |                 |
| Short-Term Debt                                 | \$745.215             | \$823.046          | \$628.829          | \$300.871          | \$554.766          |                 |
| Total Capital Employed                          | <u>\$9,928.900</u>    | <u>\$9,033.163</u> | <u>\$8,071.419</u> | <u>\$6,955.528</u> | <u>\$6,418.239</u> |                 |
| <b>Indicated Average Capital Cost Rates (2)</b> |                       |                    |                    |                    |                    |                 |
| Total Debt                                      | 4.10 %                | 3.17 %             | 2.90 %             | 3.39 %             | 3.74 %             |                 |
| Preferred Stock                                 | 5.22 %                | 4.84 %             | 5.33 %             | 6.19 %             | 4.60 %             |                 |
| <b>Capital Structure Ratios</b>                 |                       |                    |                    |                    |                    |                 |
| Based on Total Permanent Capital:               |                       |                    |                    |                    |                    |                 |
| Long-Term Debt                                  | 52.23 %               | 51.17 %            | 51.57 %            | 50.16 %            | 46.87 %            | 50.40 %         |
| Preferred Stock                                 | 0.86                  | 1.84               | 1.98               | 1.53               | 1.65               | 1.57            |
| Common Equity                                   | 46.90                 | 46.99              | 46.45              | 48.31              | 51.48              | 48.03           |
| Total   | <u>100.00 %</u>       | <u>100.00 %</u>    | <u>100.00 %</u>    | <u>100.00 %</u>    | <u>100.00 %</u>    | <u>100.00 %</u> |
| Based on Total Capital:                         |                       |                    |                    |                    |                    |                 |
| Total Debt, Including Short-Term Debt           | 54.91 %               | 55.90 %            | 56.25 %            | 53.27 %            | 51.14 %            | 54.30 %         |
| Preferred Stock                                 | 0.75                  | 1.64               | 1.87               | 1.42               | 1.44               | 1.42            |
| Common Equity                                   | 44.34                 | 42.46              | 41.89              | 45.30              | 47.41              | 44.28           |
| Total   | <u>100.00 %</u>       | <u>100.00 %</u>    | <u>100.00 %</u>    | <u>100.00 %</u>    | <u>100.00 %</u>    | <u>100.00 %</u> |
| <b>Financial Statistics</b>                     |                       |                    |                    |                    |                    |                 |
| <b>Financial Ratios - Market Based</b>          |                       |                    |                    |                    |                    |                 |
| Earnings / Price Ratio                          | 5.42 %                | 4.18 %             | 5.24 %             | 3.85 %             | 3.97 %             | 4.53 %          |
| Market / Average Book Ratio                     | 156.78                | 180.83             | 170.62             | 184.68             | 219.63             | 182.51          |
| Dividend Yield                                  | 3.79                  | 3.29               | 3.46               | 3.14               | 2.60               | 3.26            |
| Dividend Payout Ratio                           | 70.31                 | 58.56              | 61.19              | 78.10              | 67.01              | 67.03           |
| Rate of Return on Average Book Common Equity    | 8.63 %                | 8.06 %             | 9.49 %             | 7.11 %             | 8.74 %             | 8.41 %          |
| Total Debt / EBITDA (3)                         | 5.18 x                | 5.39 x             | 5.59 x             | 5.72 x             | 4.81 x             | 5.34 x          |
| Funds from Operations / Total Debt (4)          | 27.32 %               | 11.51 %            | 9.24 %             | 14.20 %            | 15.23 %            | 15.50 %         |
| Total Debt / Total Capital                      | 54.91 %               | 55.90 %            | 56.25 %            | 53.27 %            | 51.14 %            | 54.29 %         |

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 Seven Natural Gas Companies  
2019 - 2023, Inclusive

|   | <u>2023</u>     | <u>2022</u>     | <u>2021</u>     | <u>2020</u>     | <u>2019</u>     | <u>5 YEAR<br/>AVERAGE</u> |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------------|
| <u>Atmos Energy Corporation</u>                   |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 37.62 %         | 37.96 %         | 39.35 %         | 40.02 %         | 38.03 %         | 38.60 %                   |
| Preferred Stock                                   | 0.00            | 0.00            | 0.00            | 0.00            | 0.00            | 0.00                      |
| Common Equity                                     | 62.38           | 62.04           | 60.65           | 59.98           | 61.97           | 61.40                     |
| Total Capital                                     | <u>100.00 %</u>           |
| <u>New Jersey Resources Corporation</u>           |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 59.16 %         | 58.49 %         | 57.81 %         | 55.35 %         | 50.11 %         | 56.18 %                   |
| Preferred Stock                                   | 0.00            | 0.00            | 0.00            | 0.00            | 0.00            | 0.00                      |
| Common Equity                                     | 40.84           | 41.51           | 42.19           | 44.65           | 49.89           | 43.82                     |
| Total Capital                                     | <u>100.00 %</u>           |
| <u>NiSource Inc.</u>                              |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 57.26 %         | 55.77 %         | 57.09 %         | 61.64 %         | 56.79 %         | 57.71 %                   |
| Preferred Stock                                   | 2.51            | 9.03            | 9.55            | 5.87            | 6.35            | 6.66                      |
| Common Equity                                     | 40.23           | 35.20           | 33.36           | 32.49           | 36.85           | 35.63                     |
| Total Capital                                     | <u>100.00 %</u>           |
| <u>Northwest Natural Holding Company</u>          |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 55.11 %         | 53.21 %         | 52.12 %         | 51.81 %         | 50.43 %         | 52.54 %                   |
| Preferred Stock                                   | 0.00            | 0.00            | 0.00            | 0.00            | 0.00            | 0.00                      |
| Common Equity                                     | 44.89           | 46.79           | 47.88           | 48.19           | 49.57           | 47.46                     |
| Total Capital                                     | <u>100.00 %</u>           |
| <u>ONE Gas, Inc.</u>                              |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 44.05 %         | 42.10 %         | 41.74 %         | 41.76 %         | 37.65 %         | 41.46 %                   |
| Preferred Stock                                   | 0.00            | 0.00            | 0.00            | 0.00            | 0.00            | 0.00                      |
| Common Equity                                     | 55.95           | 57.90           | 58.26           | 58.24           | 62.35           | 58.54                     |
| Total Capital                                     | <u>100.00 %</u>           |
| <u>Southwest Gas Holdings, Inc.</u>               |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 58.43 %         | 59.25 %         | 59.90 %         | 50.90 %         | 49.58 %         | 55.61 %                   |
| Preferred Stock                                   | 0.00            | 0.00            | 0.00            | 0.00            | 0.00            | 0.00                      |
| Common Equity                                     | 41.57           | 40.75           | 40.10           | 49.10           | 50.42           | 44.39                     |
| Total Capital                                     | <u>100.00 %</u>           |
| <u>Spire Inc.</u>                                 |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 54.01 %         | 51.42 %         | 52.98 %         | 49.62 %         | 45.49 %         | 50.70 %                   |
| Preferred Stock                                   | 3.52            | 3.84            | 4.28            | 4.83            | 5.19            | 4.33                      |
| Common Equity                                     | 42.46           | 44.74           | 42.74           | 45.55           | 49.32           | 44.96                     |
| Total Capital                                     | <u>100.00 %</u>           |
| <u>Proxy Group of Seven Natural Gas Companies</u> |                 |                 |                 |                 |                 |                           |
| Long-Term Debt                                    | 52.23 %         | 51.17 %         | 51.57 %         | 50.16 %         | 46.87 %         | 50.40 %                   |
| Preferred Stock                                   | 0.86            | 1.84            | 1.98            | 1.53            | 1.65            | 1.57                      |
| Common Equity                                     | 46.90           | 46.99           | 46.45           | 48.31           | 51.48           | 48.03                     |
| Total Capital                                     | <u>100.00 %</u>           |

Source of Information  
Annual Forms 10-K

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

| <u>Company Name</u>                     | <u>Parent Company Ticker</u> | <u>2023</u>          |                   |                      |
|---|------------------------------|----------------------|-------------------|----------------------|
|   |                              | <u>Common Equity</u> | <u>Total Debt</u> | <u>Total Capital</u> |
| Atmos Energy Corporation                | ATO                          | 60.41%               | 39.59%            | 100.00%              |
| New Jersey Natural Gas Company          | NJR                          | 37.70%               | 62.30%            | 100.00%              |
| Northern Indiana Public Service Company | NI                           | 59.26%               | 40.74%            | 100.00%              |
| Northwest Natural Gas Company           | NWN                          | 45.77%               | 54.23%            | 100.00%              |
| ONE Gas, Inc.                           | OGS                          | 47.40%               | 52.60%            | 100.00%              |
| Southwest Gas Corporation               | SWX                          | 47.62%               | 52.38%            | 100.00%              |
| Spire Alabama Inc.                      | SR                           | 50.89%               | 49.11%            | 100.00%              |
| Spire Missouri Inc.                     | SR                           | 44.21%               | 55.79%            | 100.00%              |
|   | Average                      | <u>49.16%</u>        | <u>50.84%</u>     |                      |
|   | Maximum                      | <u>60.41%</u>        | <u>62.30%</u>     |                      |
|   | Minimum                      | <u>37.70%</u>        | <u>39.59%</u>     |                      |

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 Seven Natural Gas Companies

|  | [1]                        | [2]  | [3]   | [4]  | [5]   | [6]                         | [7]                                   |
|--|----------------------------|--|---|--|---|-----------------------------|---------------------------------------|
| Proxy Group of Seven Natural Gas Companies | Average Dividend Yield (1) | Value Line Projected Five Year Growth in EPS (2) | Zack's Five Year Projected Growth Rate in EPS | S&P Capital IQ Projected Five Year Growth in EPS | Average Projected Five Year Growth in EPS (3) | Adjusted Dividend Yield (4) | Indicated Common Equity Cost Rate (5) |
| Atmos Energy Corporation                   | 2.45 %                     | 7.00 %   | 7.00 %  | 7.51 %   | 7.17 %  | 2.54 %                      | 9.71 %                                |
| New Jersey Resources Corporation           | 3.79                       | 5.00   | NA  | 5.60   | 5.30  | 3.89                        | 9.19                                  |
| NiSource Inc.                              | 2.92                       | 9.50   | 7.50  | 7.78   | 8.26  | 3.04                        | 11.30                                 |
| Northwest Natural Holding Company          | 4.81                       | 6.50   | NA  | 4.83   | 5.66  | 4.95                        | 10.61                                 |
| ONE Gas, Inc.                              | 3.64                       | 3.50   | 2.90  | 2.45   | 2.95  | 3.69                        | 6.64 (6)                              |
| Southwest Gas Holdings, Inc.               | 3.36                       | 10.00  | 6.50  | 8.21   | 8.24  | 3.50                        | 11.74                                 |
| Spire Inc.                                 | 4.66                       | 4.50   | 5.80  | 6.50   | 5.60  | 4.79                        | 10.39                                 |
|  |                            |  |   |  |   | Average                     | <u>10.49</u> %                        |
|  |                            |  |   |  |   | Median                      | <u>10.50</u> %                        |
|  |                            |  |   |  | Average of Mean and Median                    |                             | <u>10.50</u> %                        |

NA= Not Available

Notes:

- (1) Indicated dividend at 01/15/2025 divided by the average closing price of the last 60 trading days ending 01/15/2025 for each company.
- (2) From pages 2 through 8 of this Document No..
- (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,  $2.45\% \times (1 + (1/2 \times 7.17\%)) = 2.54\%$ .
- (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 01/15/2025  
S&P Capital IQ

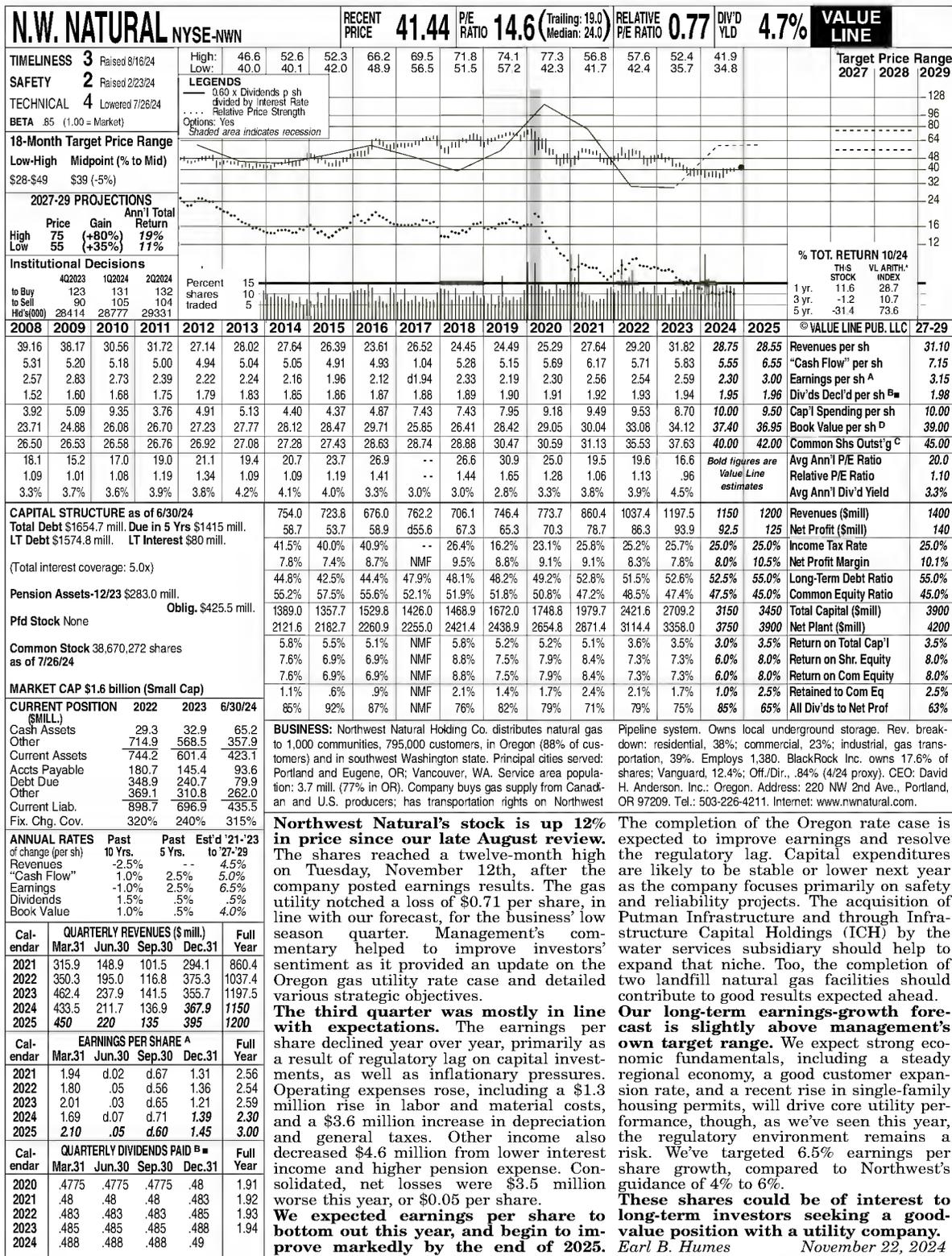
| ATMOS ENERGY CORP. NYSE-ATO  |  | RECENT PRICE  | P/E RATIO  | (Trailing: 21.5<br>Median: 20.0) | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE   |                                      |
|--|--|---|--|----------------------------------|--------------------|-----------|--|--------------------------------------|
| <b>TIMELINESS</b> 4 Lowered 2/16/24<br><b>SAFETY</b> 1 Raised 6/6/14<br><b>TECHNICAL</b> 3 Raised 10/25/24<br><b>BETA</b> .90 (1.00 = Market)  |  | 146.11  | 20.4   |                                  | 1.08               | 2.4%      |  |                                      |
| <b>18-Month Target Price Range</b><br>Low-High Midpoint (% to Mid)<br>\$109-\$165 \$137 (-5%)  |  | High: 47.4 58.2 64.8 82.0 93.6 100.8 115.2 121.1 105.3<br>Low: 34.9 44.2 50.8 60.0 72.5 89.2 97.7 101.0 110.5   | <b>LEGENDS</b><br>--- 36.50 x Dividends p sh<br>. . . . . Relative Price Strength<br>Options: Yes<br>Shaded area indicates recession |                                  |                    |           |  | Target Price Range<br>2027 2028 2029 |
| <b>2027-29 PROJECTIONS</b><br>High Price Gain Ann'l Total Return<br>Low 165 (+15%) 6%<br>135 (-10%) 7%   |  |   |  |                                  |                    |           | % TOT. RETURN 10/24<br>TH'S STOCK VL ARITH' INDEX<br>1 yr. 32.9 28.7<br>3 yr. 63.3 10.7<br>5 yr. 39.6 73.6   |                                      |
| <b>Institutional Decisions</b><br>to Buy 4Q2023 1Q2024 2Q2024<br>358 367 342<br>to Sell 295 292 311<br>Hd's(000) 137/294 137/412 144/146<br>Percent 24<br>shares 16<br>traded 8  |  |   |  |                                  |                    |           |  |                                      |
| <b>CAPITAL STRUCTURE as of 6/30/24</b><br>Total Debt \$7876.1 mill. Due in 5 Yrs \$915.0 mill.<br>LT Debt \$7866.5 mill. LT Interest \$135.0 mill.<br>(LT interest earned: 8.3x; total interest coverage: 8.3x)<br><b>Leases, Uncapitalized</b> Annual rentals \$41.3 mill.  |  | 4940.9 4142.1 3349.9 2759.7 3115.5 2901.8 2821.1 3407.5 4201.7 4275.4 4115 4350<br>289.8 315.1 350.1 382.7 444.3 511.4 580.5 665.6 774.4 885.9 1043.0 1145<br>39.2% 38.3% 36.4% 36.6% 27.0% 21.4% 19.5% 18.8% 9.1% 11.4% 15.6% 19.0%<br>5.9% 7.6% 10.5% 13.9% 14.3% 17.6% 20.6% 19.5% 18.4% 20.7% 25.3% 26.3%<br>44.3% 43.5% 38.7% 44.0% 34.3% 38.0% 40.0% 38.4% 37.9% 39.0% 40.0%<br>55.7% 56.5% 61.3% 56.0% 65.7% 62.0% 60.0% 61.6% 62.1% 62.1% 61.0% 60.0%<br>6.4% 6.6% 7.2% 6.4% 6.9% 6.1% 5.5% 5.5% 5.4% 5.5% 6.5% 6.5%<br>9.4% 9.9% 10.1% 9.8% 9.3% 8.9% 8.5% 8.4% 8.2% 8.1% 8.5% 9.0%<br>9.4% 9.9% 10.1% 9.8% 9.3% 8.9% 8.5% 8.4% 8.2% 8.1% 8.5% 9.0%<br>4.7% 4.9% 5.1% 4.9% 4.8% 4.6% 4.4% 4.3% 4.2% 4.2% 4.5% 4.5%<br>50% 51% 50% 50% 48% 48% 49% 49% 49% 49% 48% 48%  |  |                                  |                    |           | Revenues per sh A 35.70<br>"Cash Flow" per sh 13.65<br>Earnings per sh AB 8.35<br>Div'ds Decl'd per sh C 4.25<br>Cap'l Spending per sh 21.75<br>Book Value per sh 89.15<br>Common Shs Outst'g D 175.00<br>Avg Ann'l P/E Ratio 18.0<br>Relative P/E Ratio 1.00<br>Avg Ann'l Div'd Yield 2.8%<br>Revenues (\$mill) A 6250<br>Net Profit (\$mill) 1475<br>Income Tax Rate 25.0%<br>Net Profit Margin 23.6%<br>Long-Term Debt Ratio 40.0%<br>Common Equity Ratio 60.0%<br>Total Capital (\$mill) 26000<br>Net Plant (\$mill) 28000<br>Return on Total Cap'l 7.0%<br>Return on Shr. Equity 9.5%<br>Return on Com Equity 9.5%<br>Retained to Com Eq 4.5%<br>All Div'ds to Net Prof 50% |                                      |
| <b>Pfd Stock</b> None<br><b>Pension Assets-9/23</b> \$502.4 mill.<br><b>Oblig.</b> \$431.6 mill.<br><b>Common Stock</b> 155,232,827 shs.<br>as of 8/2/24<br><b>MARKET CAP:</b> \$22.7 billion (Large Cap)  |  | <b>BUSINESS:</b> Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to over three 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 2023: 66.5%, residential; 28.0%, commercial; 3.8%, industrial; and 1.7% other. The company sold Atmos Energy Marketing, 1/17. Officers and directors own approximately .5% of common stock (12/23 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.   |  |                                  |                    |           |  |                                      |
| <b>CURRENT POSITION</b> 2022 2023 6/30/24 (\$MILL)<br>Cash Assets 51.6 15.4 674.6<br>Other 2996.1 870.4 1034.0<br>Current Assets 3047.7 885.8 1708.6<br>Accts Payable 496.0 336.1 319.4<br>Debt Due 2386.4 253.4 9.6<br>Other 720.2 763.1 655.9<br>Current Liab. 3602.6 1352.6 984.9<br>Fix. Chg. Cov. 1238% 1059% 1075% |  | <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to 27-29<br>Revenues -4.0% -5.5% 4.0%<br>"Cash Flow" 6.5% 7.0% 6.5%<br>Earnings 9.5% 9.0% 7.0%<br>Dividends 7.0% 8.5% 7.5%<br>Book Value 9.5% 12.0% 5.0%   |  |                                  |                    |           |  |                                      |
| <b>QUARTERLY REVENUES (\$ mill.) A</b> Full Fiscal Year<br>Dec.31 Mar.31 Jun.30 Sep.30<br>2021 914.5 1319.1 605.6 568.3 3407.5<br>2022 1012.8 1649.8 816.4 722.7 4201.7<br>2023 1484.0 1541.0 662.7 587.7 4275.4<br>2024 1158.5 1647.2 701.5 607.8 4115<br>2025 1250 1725 750 625 4350                                   |  | <b>QUARTERLY DIVIDENDS PAID C</b> Full Fiscal Year<br>Mar.31 Jun.30 Sep.30 Dec.31<br>2020 .575 .575 .575 .625 2.35<br>2021 .625 .625 .625 .68 2.56<br>2022 .68 .68 .68 .74 2.78<br>2023 .74 .74 .74 .805 3.03<br>2024 .805 .805 .805 .87  |  |                                  |                    |           |  |                                      |
| <b>QUARTERLY EARNINGS PER SHARE A B E</b> Full Fiscal Year<br>Dec.31 Mar.31 Jun.30 Sep.30<br>2021 1.71 2.30 .78 .37 5.12<br>2022 1.86 2.37 .92 .51 5.60<br>2023 1.91 2.48 .94 .80 6.10<br>2024 2.08 2.85 1.08 .86 6.83<br>2025 2.23 2.92 1.15 .90 7.20   |  | <b>AMTOS ENERGY CORPORATION OUGHT TO EXHIBIT BOTTOM-LINE IMPROVEMENT, ONCE AGAIN, IN FISCAL 2025 (WHICH STARTED ON OCTOBER 1ST).</b> We believe that will be brought about partially by the distribution division, supported to a large extent by benefits of higher rates plus an expanded customer base. The pipeline and storage unit stands to have a better performance, too. Even though the company's effective income tax rate may well climb, we look for earnings per share to be in the neighborhood of \$7.20. That would show a 5% increase from fiscal 2024's \$6.83 tally. Concerning the following fiscal year, profits might advance at a similar percentage rate, to \$7.55 a share, as operating margins widen further. <b>Capital spending for fiscal 2025 is expected to be roughly \$3.7 billion.</b> That is some 26% higher than the prior-year level of around \$2.9 billion. Similar to fiscal 2024, a considerable portion of the resources are being utilized to enhance the safety and reliability of Atmos Energy's natural gas distribution and transmission systems. Leadership adds that it projects total capital expenditures from fiscal 2025 through fiscal 2029 to be roughly \$24 billion. A meaningful amount of the investments will continue to be deployed to where they are presently. Assuming that the balance sheet remains healthy, the company ought to have little trouble achieving those goals. <b>The quarterly common stock dividend was raised around 8%, to \$0.87 per share.</b> What's more, we anticipate additional steady hikes in the distribution out to 2027-2029. The payout ratio over that span should be manageable, in the vicinity of 50%. <b>These top-quality shares have reached fresh highs since our last full-page report in August.</b> It appears that price movement stems partially from investor optimism regarding the energy firm's near-term prospects. But 3- to 5-year capital appreciation potential is minimal, even after raising our Target Price Range. Too, the dividend yield is not exciting versus <i>Value Line's</i> Natural Gas Utility Industry average. Meanwhile, the stock possesses a 4 (Below Average) rank for Timeliness. <i>Frederick L. Harris, III November 22, 2024</i> |  |                                  |                    |           |  |                                      |
| <b>Company's Financial Strength</b> A<br><b>Stock's Price Stability</b> 95<br><b>Price Growth Persistence</b> 60<br><b>Earnings Predictability</b> 100   |  | '17, 13c. Next earnings report due early Feb. (D) Qtrs may not add due to change in shrs outstanding.<br>(C) Dividends historically paid in early March, June, Sept., and Dec. = Div. reinvestment plan. Direct stock purchase plan avail.  |  |                                  |                    |           |  |                                      |

| NEW JERSEY RES. NYSE-NJR   |   | RECENT PRICE   | P/E RATIO | (Trailing: 20.2 Median: 17.0) | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |
|--|---|--|-----------|-------------------------------|--------------------|-----------|------------|
| <b>TIMELINESS</b> 4 Raised 3/23/24<br><b>SAFETY</b> 2 Lowered 4/17/20<br><b>TECHNICAL</b> 2 Raised 10/25/24<br><b>BETA</b> 1.00 (1.00 = Market)<br><b>18-Month Target Price Range</b><br>Low-High Midpoint (% to Mid)<br>\$40-\$60 \$50 (5%)<br><b>2027-29 PROJECTIONS</b><br>High Price 70 Gain (+45%) Ann'l Total Return 13%<br>Low Price 50 Gain (+5%) Ann'l Total Return 5%<br><b>Institutional Decisions</b><br>4Q2023 1Q2024 2Q2024<br>to Buy 161 167 167<br>to Sell 143 140 139<br>Held (000) 70304 70181 71950<br>Percent 30<br>shares 20<br>traded 10   | High: 23.8 32.1 34.1 38.9 45.4 51.8 51.2 44.7 44.4 51.4 55.8 48.7<br>Low: 19.5 21.9 26.8 30.5 33.7 35.6 40.3 21.1 33.3 37.8 38.9 39.4<br><b>LEGENDS</b><br>- - - - Dividends p sh divided by Interest Rate<br>. . . . Relative Price Strength<br>2-for-1 split 3/15<br>Options: Yes<br>Shaded area indicates recession<br>% TOT. RETURN 10/24<br>TH'S STOCK 17.6 28.7<br>VL ARITH' INDEX 35.1 10.7<br>1 yr. 17.6 28.7<br>3 yr. 35.1 10.7<br>5 yr. 20.4 73.6   | <b>2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025</b><br>45.37 31.17 32.05 36.30 27.08 38.36 44.40 32.09 21.90 26.28 33.24 29.01 20.39 22.71 30.38 20.12 19.00 21.00<br>1.81 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 3.86 4.22 4.50 4.50<br>1.35 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 2.90 2.90 2.90<br>.56 .62 .68 .72 .77 .81 .86 .93 .98 1.04 1.11 1.19 1.27 1.36 1.45 1.56 1.71 1.76<br>.86 .90 1.05 1.13 1.26 1.33 1.52 3.76 4.15 3.60 4.39 5.83 4.65 5.42 6.50 5.13 5.00 5.50<br>8.64 6.29 6.81 9.36 9.60 10.65 11.48 12.99 13.58 14.33 16.18 17.37 19.26 17.18 19.00 20.40 22.30 23.65<br>84.12 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 95.64 97.57 100.00 100.00<br>12.3 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 17.7 18.0 18.0<br>.74 .99 .95 1.05 1.07 .90 .62 .84 1.12 1.13 84 1.29 .91 .94 9.8 1.02 9.8<br>3.3% 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% 3.3% 3.3%<br><b>VALUE LINE PUB. LLC 27-29</b><br>Revenues per sh <sup>A</sup> 25.00<br>"Cash Flow" per sh 5.25<br>Earnings per sh <sup>B</sup> 3.50<br>Div'ds Decl'd per sh <sup>C</sup> 1.95<br>Cap'l Spending per sh 6.25<br>Book Value per sh <sup>D</sup> 28.35<br>Common Shs Outs't'g <sup>E</sup> 100.00<br>Avg Ann'l P/E Ratio 17.0<br>Relative P/E Ratio .95<br>Avg Ann'l Div'd Yield 4.0%   |           |                               |                    |           |            |
| <b>CAPITAL STRUCTURE as of 6/30/24</b><br>Total Debt \$3246.0 mill. Due in 5 Yrs \$580 mill.<br>LT Debt \$2793.7 mill. LT Interest \$125 mill.<br>Incl. \$9.3 mill. capitalized leases.<br>(Interest coverage: 4.85x)<br>Pension Assets-9/23 \$405.0 mill.<br>Pfd Stock None<br>Common Stock 99,167,564 shs.<br>as of 8/2/24<br><b>MARKET CAP: \$4.7 billion (Mid Cap)</b><br><b>CURRENT POSITION (SMILL)</b><br>2022 2023 6/30/24<br>Cash Assets 1.1 1.0 22.4<br>Other 755.0 531.1 512.0<br>Current Assets 756.1 532.1 534.4<br>Accts Payable 156.6 151.8 144.6<br>Debt Due 499.1 368.3 452.3<br>Other 448.5 286.5 297.4<br>Current Liab. 1104.2 806.6 894.3<br>Fix. Chg. Cov. 545% 520% 310% | 3738.1 2734.0 1880.9 2268.6 2915.1 2592.0 1953.7 2156.6 2906.0 1963.0 1900 2100<br>176.9 153.7 138.1 149.4 240.5 175.0 196.2 207.7 240.3 261.8 290 290<br>30.2% 26.3% 15.5% 17.2% -- -- NMF 10.3% 21.4% 15.8% 21.5% 22.0%<br>4.7% 5.6% 7.3% 6.6% 8.2% 6.7% 10.0% 9.6% 8.3% 13.3% 15.3% 13.8%<br>38.2% 43.2% 47.7% 44.6% 45.4% 49.8% 55.1% 57.0% 57.8% 58.2% 57.5% 57.0%<br>61.8% 56.8% 52.3% 55.4% 54.6% 50.2% 44.9% 43.0% 42.2% 41.6% 42.5% 43.0%<br>1564.4 1950.6 2230.1 2233.7 2599.6 3068.9 4104.2 3793.0 4302.6 4758.8 5250 5500<br>1884.1 2128.3 2407.7 2609.7 2651.0 3041.2 3983.0 4213.5 4649.9 5022.1 5400 5750<br>12.1% 8.6% 6.9% 7.7% 10.1% 6.4% 5.6% 6.5% 5.6% 5.5% 5.5% 5.5%<br>18.3% 13.9% 11.8% 12.1% 16.9% 11.3% 10.6% 12.7% 13.2% 13.2% 13.0% 12.5%<br>18.3% 13.9% 11.8% 12.1% 16.9% 11.3% 10.6% 12.7% 13.2% 13.2% 13.0% 12.5%<br>11.0% 7.0% 4.8% 5.0% 10.2% 4.6% 4.3% 5.6% 6.2% 5.6% 5.5% 5.0%<br>40% 50% 60% 59% 40% 59% 60% 56% 53% 58% 58% 61% | <b>BUSINESS:</b> New Jersey Resources Corp. is a holding company providing retail/wholesale natural gas and related energy svcs. 2023 dep. rate: 2.8%. Has 1,350 empl. Off/dir. own less than 1% of common; BlackRock, 15.9%; Vanguard, 11.4% (12/23 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.<br><b>New Jersey Resources likely ended fiscal 2024 on a good note.</b> (Fiscal year ended September 30th.) The company reported earnings per share of \$2.06 over the first nine months, down from \$2.40 in the year before. The broader energy markets have been volatile over the past two-plus years, but New Jersey Resources' diverse business mix has helped to smooth out some turbulence. Still, the negative overall comparison factors in multiple benefits unique to 2023, including a winter storm event and a tax valuation allowance. As such, operating results have generally expanded at a steady pace. Similarly, we expect a good operating result was reached in the fiscal-fourth quarter. However, our target of \$0.84 per share is bolstered by the likely recognition of significant revenue from asset management agreements within the Energy Services segment. This should bring the year-end tally to \$2.90 per share.<br><b>Looking ahead, earnings growth may stall somewhat in the absence of similar beneficial items.</b> The bottom-line comparison may be more challenging next year without specific financial items |           |                               |                    |           |            |
| <b>ANNUAL RATES</b> Past 10 Yrs. Past 5 Yrs. Est'd '21-'23 to '27-'29<br>Revenues -3.0% -6.0% 2.5%<br>"Cash Flow" 7.0% 4.5% 5.0%<br>Earnings 5.0% 2.5% 5.0%<br>Dividends 6.5% 6.5% 5.0%<br>Book Value 7.5% 7.0% 4.5%   | <b>QUARTERLY REVENUES (\$ mill.)<sup>A</sup></b><br>Fiscal Year Ends Dec.31 Mar.31 Jun.30 Sep.30 Full Fiscal Year<br>2021 454.3 802.2 367.6 532.5 2156.6<br>2022 675.8 912.3 552.3 765.5 2906.0<br>2023 723.6 644.0 264.1 331.3 1963.0<br>2024 467.2 657.9 275.6 499.3 1900<br>2025 715 625 305 455 2100  | <b>EARNINGS PER SHARE<sup>A B</sup></b><br>Fiscal Year Ends Dec.31 Mar.31 Jun.30 Sep.30 Full Fiscal Year<br>2021 .46 1.77 d.15 .07 2.16<br>2022 .69 1.36 d.04 .50 2.50<br>2023 1.14 1.16 .10 .30 2.70<br>2024 .74 1.41 d.09 .84 2.90<br>2025 .75 1.40 .Nil .75 2.90  |           |                               |                    |           |            |
| <b>QUARTERLY DIVIDENDS PAID<sup>C</sup></b><br>Calendar Mar.31 Jun.30 Sep.30 Dec.31 Full Year<br>2020 .3125 .3125 .3125 .3325 1.27<br>2021 .3325 .3325 .3325 .3625 1.36<br>2022 .3625 .3625 .3625 .3625 1.45<br>2023 .39 .39 .39 .39 1.56<br>2024 .42 .42 .42 .45  | <b>report due November 25th.</b><br><b>(C) Dividends historically paid in early Jan., April, July, and October. ■ Dividend reinvestment plan available.</b>   | <b>(D) Includes regulatory assets in 2023: \$585 million, \$6.00/share.</b><br><b>(E) In millions, adjusted for 3/15 split.</b>  |           |                               |                    |           |            |

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| NISOURCE INC. NYSE:NI   |     |                 |  |  |      |      |      |      |      | RECENT PRICE | P/E RATIO | (Trailing: 20.2) | RELATIVE P/E RATIO | DIV'D YLD | VALUE LINE |              |       |      |    |    |    |    |    |    |    |     |
|---|-----|-----------------|--|--|------|------|------|------|------|--------------|-----------|------------------|--------------------|-----------|------------|--------------|-------|------|----|----|----|----|----|----|----|-----|
|   |     |                 |  |  |      |      |      |      |      | 36.22        | 20.1      | (Median: 21.0)   | 1.07               | 3.1%      |            |              |       |      |    |    |    |    |    |    |    |     |
| TIMELINESS  | 4   | Lowered 9/6/24  |  | High: 33.5   | 44.9 | 49.2 | 26.9 | 27.8 | 28.1 | 30.7         | 30.5      | 27.8             | 32.6               | 29.0      | 36.4       | Target Price | Range |      |    |    |    |    |    |    |    |     |
| SAFETY  | 2   | Raised 2/23/24  |  | Low: 24.8  | 32.1 | 16.0 | 19.0 | 21.7 | 22.4 | 24.7         | 19.6      | 21.1             | 23.8               | 22.9      | 24.8       | 2027         | 2028  | 2029 |    |    |    |    |    |    |    |     |
| TECHNICAL   | 2   | Raised 11/22/24 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              | 80    | 60   | 50 | 40 | 30 | 25 | 20 | 15 | 10 | 7.5 |
| BETA  | .95 | (1.00 = Market) |  | <b>LEGENDS</b><br>--- 350 x Dividends p sh divided by Interest Rate<br>.... Relative Price Strength<br>Options: Yes<br>Shaded area indicates recession |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>18-Month Target Price Range</b><br>Low-High Midpoint (% to Mid)<br>\$25-\$42 \$34 (-10%)   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>2027-29 PROJECTIONS</b><br>High Price Gain Ann'l Total<br>Low 35 45 (+25%) 9% Return<br>35 (-5%) 3%  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>Institutional Decisions</b><br>4Q2023 1Q2024 2Q2024<br>to Buy 313 331 328<br>to Sell 253 236 249<br>Hd's(000) 413866 425705 439719<br>Percent 30<br>shares 20<br>traded 10   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025</b>  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>VALUE LINE PUB. LLC 27-29</b><br>Revenues per sh 15.15<br>"Cash Flow" per sh 4.45<br>Earnings per sh A 2.15<br>Div'ds Decl'd per sh B 1.20<br>Cap'l Spending per sh 7.00<br>Book Value per sh C 26.05<br>Common Shs Outs't'g D 475.00<br>Avg Ann'l P/E Ratio 19.0<br>Relative P/E Ratio 1.05<br>Avg Ann'l Div'd Yield 3.0%   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>CAPITAL STRUCTURE as of 9/30/24</b><br>Total Debt \$13614.5 mill. Due in 5 Yrs \$4536 mill.<br>LT Debt \$12086.3 mill. LT Interest \$505 mill.<br>(Interest cov. earned: 5.5x) (54% of Cap'l)  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>Leases, Uncapitalized Annual rentals \$9.6 mill.</b><br><b>Pension Assets-12/23 \$1.4 bill. Oblig. \$1.4 bill.</b>   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>Common Stock 466,778,943 shs. as of 10/22/24</b>   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>MARKET CAP: \$16.9 billion (Large Cap)</b>   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>CURRENT POSITION 2022 2023 9/30/24 (\$MILL)</b><br>Cash Assets 40.8 2245.4 126.2<br>Other 2543.5 2254.0 1489.8<br>Current Assets 2584.3 4499.4 1616.0<br>Accts Payable 899.5 749.4 614.6<br>Debt Due 1791.9 3072.4 1528.2<br>Other 1969.1 1443.3 1342.7<br>Current Liab. 4660.5 5265.1 3485.5<br>Fix. Chg. Cov. 255% 225% 445%   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>ANNUAL RATES Past Past Est'd '21-'23 of change (per sh) 10 Yrs. 5 Yrs. to '27-'29</b><br>Revenues -5.0% -3.5% 5.5%<br>"Cash Flow" .5% 6.5% 5.5%<br>Earnings 1.5% 15.0% 9.5%<br>Dividends -.5% 3.5% 4.5%<br>Book Value -3.0% .5% 5.0%   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>QUARTERLY REVENUES (\$mill.) Full Year</b><br>Cal- Mar.31 Jun.30 Sep.30 Dec.31<br>2021 1545.6 986.0 959.4 1408.6 4899.6<br>2022 1873.3 1183.2 1089.5 1704.6 5850.6<br>2023 1966.0 1090.0 1027.4 1422.0 5505.4<br>2024 1706.3 1084.7 1076.3 1982.7 5850<br>2025 1840 1175 1160 2125 6300  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>EARNINGS PER SHARE A Full Year</b><br>Cal- Mar.31 Jun.30 Sep.30 Dec.31<br>2021 .77 .13 .11 .39 1.37<br>2022 .75 .12 .10 .50 1.47<br>2023 .77 .11 .19 .53 1.60<br>2024 .85 .21 .20 .49 1.75<br>2025 .85 .20 .20 .55 1.80  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>QUARTERLY DIVIDENDS PAID B Full Year</b><br>Cal- Mar.31 Jun.30 Sep.30 Dec.31<br>2020 .21 .21 .21 .21 .84<br>2021 .22 .22 .22 .22 .88<br>2022 .235 .235 .235 .235 .94<br>2023 .25 .25 .25 .25 1.00<br>2024 .265 .265 .265 .265  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>BUSINESS:</b> 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: 488,833 electric in Indiana, 3,200,000 gas in Indiana, Ohio, Pennsylvania, Kentucky, Virginia, Maryland, through its Columbia subsidiaries. Revenue breakdown, 2023: electrical, 32%; gas, 67%; other, less than 1%. Generating capacity, coal, 69.4%; purchased & other, 30.6%. 2023 reported depreciation rates: 3.5% electric, 2.4% gas. Has 7,364 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.   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>NiSource posted a better third-quarter profit than we expected.</b> The earnings figure was steady versus both the year before and the prior quarter. We had thought the bottom line would dip to \$0.13 per share during the gas utility's low season. Instead, higher rate base investments brought in an additional \$61 million in revenues, and financing benefits added \$26 million to the bottom line. Taking a closer look, the company's performance has been bolstered by lower energy costs, providing a significant boost to margins. However, depreciation expense is also rising rapidly, as the company is currently investing heavily in new capital projects aimed at infrastructure hardening and expanding upon clean-energy programs. Interest expense is up, too, as a result. On balance, the bottom-line has expanded nicely over the first nine months. <b>The good recent operating performance may come up against headwinds in the near term.</b> As noted, the company has benefited from energy prices, due to a cost-pass-through mechanism that typically lags twelve months. Otherwise, the company has had to contend with some cost inflation. We think its probable that the lower energy costs will soon subside, leaving higher operating costs that will pressure earnings growth. To wit, management appears to agree, as our full-year 2024 bottom-line target of \$1.75 is at the top of their guidance range. We've cut our full-year 2025 target by \$0.05 as well, to \$1.80, reflecting the recent share-count expansion of roughly 4%, per the end of the most recent quarter. <b>NiSource's current capital investment cycle is a key driver for future performance.</b> Leadership updated its five-year capital plan to \$19.3 billion, an increase of \$2.9 billion from prior expectations. This focuses further on investments in power generation, gas compliance, infrastructure hardening, and modernization of technology systems. The plan aims to drive an 8% to 10% rate base growth. <b>The shares have gained over 45% in price these past twelve months, and currently trade within the bounds of our 3- to 5-year projections.</b> Other investment opportunities show greater upside potential at this juncture. <i>Earl B. Humes November 22, 2024</i> |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>(A) Dil. EPS. Excl. gains (losses) on disc. ops.: '08, (1.14); '15, (3.0c); '18, (\$1.48). Next egs. report due late February. Qly egs. may not sum to total due to rounding.</b>  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>(B) Div'ds historically paid in mid-Feb., May, Aug., Nov. ■ Div'd reinv. avail.</b>  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>(C) Incl. int'pay in '23: \$1485.9 million, \$3.33/sh.</b>   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>(D) In mill.</b>   |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>(E) Spun off Columbia Pipeline Group (7/15)</b>  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>Company's Financial Strength A 95</b><br><b>Stock's Price Stability 25</b><br><b>Price Growth Persistence 70</b><br><b>Earnings Predictability 70</b>  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |
| <b>To subscribe call 1-800-VALUELINE</b>  |     |                 |  |  |      |      |      |      |      |              |           |                  |                    |           |            |              |       |      |    |    |    |    |    |    |    |     |



(A) Dilted earnings per share. Excludes non-recurring items: '08, (\$0.03); '09, \$0.06; May not sum due to rounding. Next earnings report due in late February.

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

(C) In millions.

(D) Includes intangibles. In 2023: \$163 million, \$43.3/share.

Company's Financial Strength A  
 Stock's Price Stability 85  
 Price Growth Persistence 20  
 Earnings Predictability 20

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| ONE GAS, INC. NYSE-OGS  |   |      | RECENT PRICE 75.02 |        | P/E RATIO 18.8 (Trailing: 19.5 Median: 21.0) |        | RELATIVE P/E RATIO 0.99 |        | DIV'D YLD 3.6% |        | VALUE LINE |                                   |       |       |       |       |       |       |       |
|---|---|------|--------------------|--------|--|--------|-------------------------|--------|----------------|--------|------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| TIMELINESS 4 Lowered 11/22/24   | High: 44.3  | 51.8 | 67.4               | 79.5   | 87.8   | 96.7   | 97.0                    | 81.9   | 92.3           | 84.3   | 75.4       | Target Price Range 2027 2028 2029 |       |       |       |       |       |       |       |
| SAFETY 2 New 6/17   | Low: 31.9   | 38.9 | 48.0               | 61.4   | 62.2   | 75.8   | 63.7                    | 62.5   | 68.9           | 55.5   | 57.7       | 200                               |       |       |       |       |       |       |       |
| TECHNICAL 2 Raised 11/8/24  | <b>LEGENDS</b><br>--- 35.00 x Dividends p sh<br>.... Relative Price Strength<br>Options: Yes<br>Shaded area indicates recession |      |                    |        |  |        |                         |        |                |        |            |                                   |       |       |       |       |       |       |       |
| BETA .85 (1.00 = Market)  | <b>18-Month Target Price Range</b><br>Low-High Midpoint (% to Mid)<br>\$47-\$87 \$67 (-10%)                                     |      |                    |        |  |        |                         |        |                |        |            |                                   |       |       |       |       |       |       |       |
| <b>2027-29 PROJECTIONS</b><br>High 105 Price Gain Ann'l Total<br>Low 75 75 (+40%) Return<br>12% 4%  |   |      |                    |        |  |        |                         |        |                |        |            |                                   |       |       |       |       |       |       |       |
| <b>Institutional Decisions</b><br>4Q2023 1Q2024 2Q2024<br>to Buy 159 170 143<br>to Sell 160 147 160<br>Hd's(000) 52932 51905 53086<br>Percent 21<br>shares 14<br>traded 7   |   |      |                    |        |  |        |                         |        |                |        |            |                                   |       |       |       |       |       |       |       |
| <b>% TOT. RETURN 10/24</b><br>THIS STOCK VL ARITH.<br>INDEX<br>1 yr. 24.0 28.7<br>3 yr. 18.6 10.7<br>5 yr. -9.6 73.6  |   |      |                    |        |  |        |                         |        |                |        |            |                                   |       |       |       |       |       |       |       |
| 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. |   |      | 2014               | 2015   | 2016   | 2017   | 2018                    | 2019   | 2020           | 2021   | 2022       | 2023                              | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  |       |
| <b>CAPITAL STRUCTURE as of 9/30/24</b><br>Total Debt \$3365.3 mill. Due in 5 Yrs \$890.0 mill.<br>LT Debt \$2384.9 mill. LT Interest \$120.0 mill.<br>(LT interest earned: 3.4x; total interest coverage: 3.4x)<br>Leases, Uncapitalized Annual rentals \$6.7 mill.<br>Pfd Stock None<br>Pension Assets-12/23 \$977.0 mill.<br>Oblig. \$962.1 mill.<br>Common Stock \$6,565,256 shs.<br>as of 10/28/24<br><b>MARKET CAP: \$4.3 billion (Mid Cap)</b>  |   |      | 34.92              | 29.62  | 27.30  | 29.43  | 31.08                   | 31.32  | 28.78          | 33.72  | 46.58      | 41.95                             | 36.65 | 38.95 | 38.95 | 38.95 | 38.95 | 38.95 | 38.95 |
| <b>CURRENT POSITION</b> 2022 2023 9/30/24 (\$MILL.)   |   |      | 1818.9             | 1547.7 | 1427.2                                       | 1539.6 | 1633.7                  | 1652.7 | 1530.3         | 1808.6 | 2578.0     | 2372.0                            | 2070  | 2200  | 230   | 200   | 200   |       |       |
| Cash Assets 9.7 18.8 18.8<br>Other 1207.9 746.4 671.7<br>Current Assets 1217.6 765.2 690.5<br>Accts Payable 360.5 278.1 146.8<br>Debt Due 572.7 888.9 980.4<br>Other 256.2 310.2 260.4<br>Current Liab. 1189.4 1477.2 1387.6<br>Fix. Chg. Cov. 540% 390% 405%   |   |      | 109.8              | 119.0  | 140.1  | 159.9  | 172.2                   | 186.7  | 196.4          | 206.4  | 221.7      | 231.2                             | 220   | 220   | 220   | 220   | 220   | 220   |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 38.4%              | 38.0%  | 37.8%  | 36.4%  | 23.7%                   | 18.7%  | 17.5%          | 16.3%  | 14.9%      | 16.5%                             | 16.5% | 16.5% | 16.5% | 16.5% | 16.5% | 16.5% |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 2995.3             | 3042.9 | 3080.7                                       | 3153.5 | 3328.1                  | 3415.5 | 3615.7         | 6032.9 | 5246.2     | 4926.3                            | 5415  | 5750  | 7000  | 7000  | 7000  |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 3293.7             | 3511.9 | 3731.6                                       | 4007.6 | 4283.7                  | 4565.2 | 4867.1         | 5190.8 | 5628.8     | 6135.2                            | 6650  | 7025  | 8200  | 8200  | 8200  |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | 4.4%               | 4.7%   | 5.2%   | 5.8%   | 5.9%                    | 6.4%   | 6.0%           | 3.9%   | 5.0%       | 5.9%                              | 5.5%  | 5.5%  | 5.5%  | 5.5%  | 5.5%  |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 6.1%               | 6.5%   | 7.4%   | 8.2%   | 8.4%                    | 8.6%   | 8.8%           | 8.8%   | 8.6%       | 8.4%                              | 7.5%  | 7.5%  | 7.5%  | 7.5%  | 7.5%  |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 3.7%               | 3.1%   | 3.5%   | 3.7%   | 3.7%                    | 3.8%   | 3.7%           | 3.5%   | 3.4%       | 3.2%                              | 2.5%  | 2.5%  | 2.5%  | 2.5%  | 2.5%  |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 40%                | 53%    | 52%  | 55%    | 56%                     | 56%    | 58%            | 60%    | 60%        | 62%                               | 68%   | 66%   | 66%   | 66%   | 66%   |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | 40%                | 53%    | 52%  | 55%    | 56%                     | 56%    | 58%            | 60%    | 60%        | 62%                               | 68%   | 66%   | 66%   | 66%   | 66%   |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |
| <b>ANNUAL RATES</b> Past Past Est'd '21-'23<br>of change (per sh) 10 Yrs. 5 Yrs. to '27-'29   |   |      | 2021               | 2022   | 2023   | 2024   | 2025                    | 2026   | 2027           | 2028   | 2029       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY REVENUES (\$ mill.)</b>  |   |      | 625.3              | 315.6  | 273.9  | 593.8  | 1808.6                  | 2578.0 | 2372.0         | 2070   | 2200       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY EARNINGS PER SHARE</b>   |   |      | 1.79               | .56    | .38  | 1.12   | 3.85                    | 4.08   | 4.14           | 3.85   | 4.05       |                                   |       |       |       |       |       |       |       |
| <b>QUARTERLY DIVIDENDS PAID</b>   |   |      | .54                | .54    | .54  | .54    | 2.16                    | 2.32   | 2.48           | 2.60   |            |                                   |       |       |       |       |       |       |       |

| SOUTHWEST GAS NYSE-SWX   |                              |        |        |        |           |       |       |       |       | RECENT PRICE   | P/E RATIO    | (Trailing: 31.0 Median: 21.0) | RELATIVE P/E RATIO | DIV'D YLD    | 3.2%         | VALUE LINE                            |              |                          |              |              |              |                                   |       |
|--|------------------------------|--------|--------|--------|-----------|-------|-------|-------|-------|--|--------------|-------------------------------|--------------------|--------------|--------------|---------------------------------------|--------------|--------------------------|--------------|--------------|--------------|-----------------------------------|-------|
| <b>TIMELINESS</b> E- Suspended 11/17/23<br><b>SAFETY</b> 2 Raised 2/23/24<br><b>TECHNICAL</b> E- Suspended 11/17/23<br><b>BETA</b> .95 (1.00 = Market)   |                              |        |        |        |           |       |       |       |       | High: 56.0<br>Low: 42.0  | 64.2<br>47.2 | 63.7<br>50.5                  | 79.6<br>53.5       | 86.9<br>72.3 | 86.0<br>62.5 | 92.9<br>73.3                          | 81.6<br>45.7 | 73.5<br>57.0             | 95.6<br>59.5 | 68.0<br>53.8 | 79.0<br>57.6 | Target Price 2027<br>2028<br>2029 |       |
| <b>18-Month Target Price Range</b><br>Low-High Midpoint (% to Mid)<br>\$51-\$91 \$71 (-10%)  |                              |        |        |        |           |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| <b>2027-29 PROJECTIONS</b><br>High Price 95 Gain (+25%) 70 Low 70 Ann'l Total Return 8% 7%   |                              |        |        |        |           |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| <b>Institutional Decisions</b><br>4Q2023 1Q2024 2Q2024<br>to Buy 130 122 141<br>to Sell 144 149 131<br>Hd's(000) 66489 65977 66812<br>Percent shares traded 15 10 5  |                              |        |        |        |           |       |       |       |       | % TOT. RETURN 10/24<br>TH'S STOCK 28.6<br>VL ARITH' 28.7<br>INDEX 15.9<br>3 yr. 10.7<br>5 yr. -2.7 |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2008   | 2009                         | 2010   | 2011   | 2012   | 2013      | 2014  | 2015  | 2016  | 2017  | 2018   | 2019         | 2020                          | 2021               | 2022         | 2023         | 2024                                  | 2025         | VALUE LINE PUB. LLC      | 27-29        |              |              |                                   |       |
| 48.53  | 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        | 76.22        | 71.55                                 | 73.95        | Revenues per sh          | 76.65        |              |              |                                   |       |
| 5.76   | 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               | 3.91         | 8.29         | 8.75                                  | 9.85         | "Cash Flow" per sh       | 10.90        |              |              |                                   |       |
| 1.39   | 1.94                         | 2.27   | 2.43   | 2.86   | 3.11      | 3.01  | 2.92  | 3.18  | 3.62  | 3.88   | 3.94         | 4.14                          | 3.39               | 43.10        | 2.13         | 2.80                                  | 3.60         | Earnings per sh A        | 4.50         |              |              |                                   |       |
| .90  | .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               | 2.48         | 2.48         | 2.52                                  | 2.52         | Div'ds Decl'd per sh E=† | 2.60         |              |              |                                   |       |
| 6.79   | 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              | 12.60        | 12.19        | 13.15                                 | 12.50        | Cap'l Spending per sh    | 14.00        |              |              |                                   |       |
| 23.49  | 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              | 47.95        | 47.72        | 51.70                                 | 54.25        | Book Value per sh        | 56.35        |              |              |                                   |       |
| 44.19  | 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        | 72.00                                 | 73.00        | Common Shs Outst'g C     | 75.00        |              |              |                                   |       |
| 20.3   | 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               | --           | 29.1         | Bold figures are Value Line estimates | 18.0         | Avg Ann'l P/E Ratio      | 18.0         |              |              |                                   |       |
| 1.22   | 81                           | 89     | 98     | 95     | 89        | 94    | 98    | 1.13  | 1.12  | 1.11   | 1.13         | .86                           | 1.06               | --           | 1.68         | --                                    | 1.68         | Relative P/E Ratio       | .90          |              |              |                                   |       |
| 3.2%   | 4.0%                         | 3.2%   | 2.8%   | 2.6%   | 2.7%      | 2.7%  | 2.9%  | 2.6%  | 2.5%  | 2.7%   | 2.6%         | 3.3%                          | 3.5%               | 3.2%         | 4.0%         | 4.0%                                  | 4.0%         | Avg Ann'l Div'd Yield    | 3.4%         |              |              |                                   |       |
| <b>CAPITAL STRUCTURE</b> as of 9/30/24<br>Total Debt \$5045.1 mill. Due in 5 Yrs \$1008 mill.<br>LT Debt \$4382.1 mill. LT Interest \$300 mill.<br>(Total interest coverage: 2.6x) (55% of Cap'l)  |                              |        |        |        |           |       |       |       |       | 2121.7   | 2463.6       | 2460.5                        | 2548.8             | 2680.0       | 3119.9       | 3298.9                                | 3680.5       | 4960.0                   | 5454.0       | 5150         | 5400         | Revenues (\$mill)                 | 5750  |
| <b>Leases, Uncapitalized</b> Annual rentals \$24.9 mill.<br><b>Pension Assets-12/23</b> \$1202.0 mill. Oblig. \$1352.2 mill.   |                              |        |        |        |           |       |       |       |       | 141.1  | 138.3        | 152.0                         | 173.8              | 182.3        | 213.9        | 232.3                                 | 200.8        | 203.3                    | 150.9        | 200          | 265          | Net Profit (\$mill)               | 335   |
| <b>Pfd Stock</b> None  |                              |        |        |        |           |       |       |       |       | 35.7%  | 36.4%        | 33.9%                         | 32.8%              | 25.3%        | 20.5%        | 21.6%                                 | 16.1%        | NMF                      | 21.2%        | 21.0%        | 21.0%        | Income Tax Rate                   | 21.0% |
| <b>Common Stock</b> 71,743,666 shs. as of 10/25/24   |                              |        |        |        |           |       |       |       |       | 6.7%   | 5.6%         | 6.2%                          | 6.8%               | 6.3%         | 6.9%         | 7.0%                                  | 5.5%         | NMF                      | 2.8%         | 3.9%         | 4.9%         | Net Profit Margin                 | 5.9%  |
| <b>MARKET CAP: \$5.5 billion (Mid Cap)</b>   |                              |        |        |        |           |       |       |       |       | 52.4%  | 49.3%        | 48.2%                         | 49.8%              | 48.3%        | 47.9%        | 50.5%                                 | 58.2%        | 57.8%                    | 57.4%        | 55.0%        | 55.0%        | Long-Term Debt Ratio              | 56.0% |
| <b>CURRENT POSITION</b> 2022 2023 9/30/24 (\$MILL.)  |                              |        |        |        |           |       |       |       |       | 47.6%  | 50.7%        | 51.8%                         | 50.2%              | 51.7%        | 52.1%        | 49.5%                                 | 41.8%        | 42.2%                    | 42.6%        | 45.0%        | 45.0%        | Common Equity Ratio               | 44.0% |
| Cash Assets 123.1 106.5 456.6<br>Other 3584.6 1774.6 998.8<br>Current Assets 3707.7 1881.1 1455.4<br>Accts Payable 662.1 346.9 227.0<br>Debt Due 1587.4 671.1 663.0<br>Other 1173.5 666.8 812.7<br>Current Liab. 1173.5 1684.8 1702.7<br>Fix. Chg. Cov. 265% 145% 225% |                              |        |        |        |           |       |       |       |       | 3123.9   | 3143.5       | 3213.5                        | 3613.3             | 4359.3       | 4806.4       | 5407.2                                | 7069.5       | 7621.4                   | 8024.5       | 8200         | 8800         | Total Capital (\$mill)            | 9600  |
| <b>ANNUAL RATES</b> Past 10 Yrs. Past 5 Yrs. Est'd '21-'23 of change (per sh)  |                              |        |        |        |           |       |       |       |       | 3658.4   | 3891.1       | 4132.0                        | 4523.7             | 5093.2       | 5685.2       | 6176.1                                | 7594.0       | 7024.5                   | 7518.2       | 8000         | 8500         | Net Plant (\$mill)                | 9250  |
| Revenues 3.5% 3.0% 6.0%<br>"Cash Flow" 4.0% 1.5% 8.5%<br>Earnings 5.5% 4.5% 10.0%<br>Dividends 8.5% 7.0% 5.5%<br>Book Value 6.5% 7.0% 7.5%   |                              |        |        |        |           |       |       |       |       | 5.7%   | 5.5%         | 5.8%                          | 5.8%               | 5.2%         | 5.4%         | 5.3%                                  | 3.5%         | NMF                      | 1.9%         | 2.5%         | 3.0%         | Return on Total Cap'l             | 3.5%  |
| Cal-endar  | QUARTERLY REVENUES (\$mill.) |        |        |        | Full Year |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
|  | Mar.31                       | Jun.30 | Sep.30 | Dec.31 |           |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2021   | 885.9                        | 821.4  | 888.7  | 1084.5 | 3680.5    |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2022   | 1267.4                       | 1146.1 | 1125.6 | 1420.9 | 4960.0    |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2023   | 1603.3                       | 1293.6 | 1169.5 | 1387.6 | 5454.0    |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2024   | 1581.0                       | 1182.2 | 1079.2 | 1307.6 | 5150      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2025   | 1660                         | 1240   | 1225   | 1275   | 5400      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| Cal-endar  | EARNINGS PER SHARE A D       |        |        |        | Full Year |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
|  | Mar.31                       | Jun.30 | Sep.30 | Dec.31 |           |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2021   | 2.03                         | .43    | d.19   | 1.15   | 3.39      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2022   | 1.58                         | d.10   | d.18   | d4.18  | d3.10     |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2023   | .67                          | .40    | .04    | 1.02   | 2.13      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2024   | 1.22                         | .25    | Nil    | 1.33   | 2.80      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2025   | 1.75                         | .65    | .15    | 1.05   | 3.60      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| Cal-endar  | QUARTERLY DIVIDENDS PAID E=† |        |        |        | Full Year |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
|  | Mar.31                       | Jun.30 | Sep.30 | Dec.31 |           |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 2020   | .545                         | .570   | .570   | .570   | 2.26      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |
| 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      |       |       |       |       |  |              |                               |                    |              |              |                                       |              |                          |              |              |              |                                   |       |

(A) Diluted earnings. Excl. nonrec. gains (losses); '22, '10c. Next egs. report due late February. (B) Dividends historically paid early March, June, September, and December. (C) In millions. (D) Totals may not sum due to rounding. (E) Rank suspended 11/17/2023 for spin-off of the Centuri Group.

Southwest Gas Holdings delivered another weaker-than-expected quarterly performance in the September period. Following the 2024 spin-off of the Centuri Group, the business has posted two quarters of year-over-year earnings declines. To be fair, the September and June periods both reflect the low season for gas usage, so Southwest's breakeven performance is not necessarily indicative of the utility's performance. In fact, Southwest Gas Corporation, the regulated utility business, achieved a significant expansion of operating profit compared to the previous year, as a result of rate relief from earlier investments made in Nevada and California, along with good customer growth trends. The poor comparison was actually a result of challenges at the Centuri Group, of which Southwest Holdings maintains an approximately 80% ownership interest. As such, Southwest's financial statements still present consolidated results. Centuri, the infrastructure services subsidiary, faced reduced work volumes and operational issues that led to higher costs and lower margins. Higher interest expense is also impacting earnings.

We've cut our near-term earnings forecasts to reflect recent headwinds. The utility should continue to perform well, but losses at Centuri are likely to subtract from results. We've lowered our profit target from \$240 million (which is what the utility business is likely to earn independently) to \$200 million. The recently refreshed rate structures and other key rate cases on the horizon exemplify the impetus for simplifying the company's operations away from auxiliary businesses. However, the separation of Centuri remains uncertain, contingent on market conditions that will influence the timing and structure of a sale. Until then, challenges at the Centuri group could create headwinds for Southwest's bottom line. We've cut our earnings-per-share targets from \$3.25 in 2024 and \$3.90 in 2025 to \$2.80 and \$3.60, respectively. The stock has risen 9% in price since our August review. Despite the struggle at Centuri, investors are likely impressed with the gas utility's operating strength. We think conservative accounts may enjoy the dividend and lower risk here.

Earl B. Humes November 22, 2024

Company's Financial Strength A  
 Stock's Price Stability 80  
 Price Growth Persistence 25  
 Earnings Predictability 5

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| SPIRE INC. NYSE:SR   |  |       |       |       |       |       |       |       |       | RECENT PRICE | P/E RATIO | (Trailing: 15.9 Median: 19.0) | RELATIVE P/E RATIO | DIV'D YLD | 4.8%  | VALUE LINE |       |                                   |       |
|--|--|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-----------|-------------------------------|--------------------|-----------|-------|------------|-------|-----------------------------------|-------|
| <b>TIMELINESS</b> 3 Raised 2/18/24   | High: 48.5   | 55.2  | 61.0  | 71.2  | 82.9  | 81.1  | 88.0  | 88.0  | 77.9  | 79.2         | 75.8      | 68.0                          |                    |           |       |            |       |                                   |       |
| <b>SAFETY</b> 2 Raised 6/20/03   | Low: 37.4  | 44.0  | 49.1  | 57.1  | 62.3  | 60.1  | 71.7  | 50.6  | 59.3  | 61.5         | 53.8      | 56.4                          |                    |           |       |            |       |                                   |       |
| <b>TECHNICAL</b> 2 Raised 11/15/24   | <b>LEGENDS</b><br>— 26.50 x Dividends p sh<br>- - - - Relative Price Strength<br>Options: Yes<br>Shaded area indicates recession |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>BETA</b> .90 (1.00 = Market)  | <b>18-Month Target Price Range</b><br>Low-High Midpoint (% to Mid)<br>\$47-\$76 \$62 (-5%)                                       |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>2027-29 PROJECTIONS</b><br>High 100 Price Gain Ann'l Total Return 15% 8%<br>Low 75 (+15%) 8%  |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>Institutional Decisions</b><br>4Q2023 1Q2024 2Q2024<br>to Buy 140 135 160<br>to Sell 123 134 108<br>Hld's(000) 48459 48507 49797<br>Percent 18<br>shares 12<br>traded 6   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025</b>   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| 100.44   | 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 | 45.15      | 45.25 | Revenues per sh <sup>A</sup>      | 57.25 |
| 4.22   | 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  | 8.90       | 9.25  | "Cash Flow" per sh                | 11.00 |
| 2.64   | 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  | 4.30       | 4.55  | Earnings per sh <sup>A,B</sup>    | 5.50  |
| 1.49   | 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       | 3.16  | Div'ds Decl'd per sh <sup>C</sup> | 3.60  |
| 2.57   | 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 | 14.30      | 11.25 | Cap'l Spending per sh             | 14.50 |
| 22.12  | 23.32  | 24.02 | 25.56 | 26.67 | 32.00 | 34.93 | 36.30 | 36.73 | 41.26 | 44.51        | 45.14     | 44.19                         | 46.74              | 49.08     | 50.29 | 52.75      | 55.50 | Book Value per sh <sup>D</sup>    | 66.05 |
| 21.99  | 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 | 58.00      | 60.00 | Common Shs Outs'tg <sup>E</sup>   | 62.00 |
| 14.3   | 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  | 14.2       |       | Avg Ann'l P/E Ratio               | 16.0  |
| .86  | .89  | .87   | .82   | .92   | 1.20  | 1.04  | .83   | 1.03  | 1.00  | .90          | 1.21      | 2.62                          | .73                | 1.01      | 1.00  | .79        |       | Relative P/E Ratio                | .90   |
| 3.9%   | 3.9%   | 4.7%  | 4.3%  | 4.1%  | 4.0%  | 3.8%  | 3.5%  | 3.1%  | 3.1%  | 3.1%         | 3.0%      | 3.4%                          | 3.6%               | 4.0%      | 4.3%  | 4.9%       |       | Avg Ann'l Div'd Yield             | 4.1%  |
| <b>CAPITAL STRUCTURE as of 6/30/24</b><br>Total Debt \$4500.3 mill. Due in 5 Yrs \$2310.0 mill.<br>LT Debt \$3422.3 mill. LT Interest \$140.0 mill.<br>(Total interest coverage: 2.4x)   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>Leases, Uncapitalized Annual rentals \$9.8 mill.</b><br><b>Pension Assets-9/23 \$630.3 mill.</b><br><b>Pfd Stock \$242.0 mill. Pfd Div'd \$14.8 mill.</b><br><b>Common Stock 57,750,474 shs. as of 7/28/24</b><br><b>Oblig. \$832.5 mill.</b>   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>MARKET CAP: \$3.8 billion (Mid Cap)</b>   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>CURRENT POSITION (Mid Cap)</b><br>2022 2023 6/30/24<br>Cash Assets 6.5 5.6 7.4<br>Other 1585.5 1071.3 818.4<br>Current Assets 1592.0 1076.9 825.8<br>Accts Payable 617.4 253.1 205.2<br>Debt Due 1318.7 1112.1 1078.0<br>Other 417.5 390.2 426.6<br>Current Liab. 2353.6 1755.4 1709.8<br>Fix. Chg. Cov. 393% 294% 310%   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>ANNUAL RATES</b> Past 10 Yrs Past 5 Yrs Est'd '21-'23 to '27-'29<br>of change (per sh)<br>Revenues -1.0% 4.5% 4.0%<br>"Cash Flow" 8.0% 5.0% 4.0%<br>Earnings 5.0% 3.0% 4.5%<br>Dividends 5.0% 5.5% 4.5%<br>Book Value 5.5% 3.5% 5.5%  |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>QUARTERLY REVENUES (\$ mill.)<sup>A</sup></b> Full Fiscal Year<br>Dec.31 Mar.31 Jun.30 Sep.30<br>2021 512.6 1104.9 327.8 290.2 2235.5<br>2022 553.4 880.9 448.0 314.2 2198.5<br>2023 814.0 1123.4 418.5 310.4 2666.3<br>2024 756.6 1128.5 414.1 320.8 2620<br>2025 795 1140 445 335 2715  |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>EARNINGS PER SHARE <sup>A,B,F</sup></b> Full Fiscal Year<br>Dec.31 Mar.31 Jun.30 Sep.30<br>2021 1.65 3.55 .03 d.26 4.96<br>2022 1.01 3.27 d.10 d.20 3.95<br>2023 1.66 3.33 d.48 d.66 3.85<br>2024 1.52 3.58 d.28 d.52 4.30<br>2025 1.50 3.45 d.16 d.24 4.55   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>QUARTERLY DIVIDENDS PAID <sup>C</sup></b> Full Fiscal Year<br>Cal-endar Mar.31 Jun.30 Sep.30 Dec.31<br>2020 .6225 .6225 .6225 .6225 2.49<br>2021 .65 .65 .65 .65 2.60<br>2022 .685 .685 .685 .685 2.74<br>2023 .72 .72 .72 .72 2.88<br>2024 .755 .755 .755 .755   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>BUSINESS:</b> 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 terms sold and transported in fiscal 2023: 3.2 bill. Revenue mix for regulated operations: residential, 67%; commercial and industrial, 25%; transportation, 5%; other, 3%. Officers and directors own 2.9% of common shares; American Century Companies, 15.4% (12/23 proxy). Chairman: Edward Glotzbach; CEO: Steve Lindsey, Inc.: Missouri. Address: 700 Market Street, St. Louis, Missouri 63101. Tel.: 314-342-0500. Internet: www.spireenergy.com. |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>It appears that Spire managed to post healthy bottom-line results in fiscal 2024, which concluded September 30th.</b> (Please be aware that fourth-quarter figures were not disclosed to the public when this report went to press.) Recall that during the first nine months, earnings per share increased 7%, to \$4.82, compared to the previous-year tally of \$4.51. That was brought about partly by the Gas Utility division, which benefited from new rates. The Midstream unit and Gas Marketing segment had improved performances for that period, as well. If there were no big setbacks in the fourth quarter, we think full-year profits rebounded about 12%, to \$4.30 a share, relative to fiscal 2023's \$3.85 total.   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>Concerning fiscal 2025, earnings per share stand to grow in the mid-single-digit percentage range, to \$4.55.</b> This is based, to a certain extent, on our assumption that the business climate is generally favorable. Improvements in operating efficiencies ought to provide further assistance.   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>Corporate finances are sufficient.</b> When the third quarter concluded, cash and equivalents were \$7.4 million. Too, there was \$1.3 billion available through a revolving credit facility maturing in July, 2027. Also, long-term debt resided at a manageable 50% of total capital, and short-term borrowings were not a major problem.   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>Prospects out to the end of the decade look decent.</b> The gas utilities currently serve about 1.7 million customers in Mississippi, Alabama, and Missouri. Moreover, the other operations, particularly pipelines, hold promise. Additional expansionary projects and technological enhancements in customer service and elsewhere should be beneficial to Spire, as well. Finally, future acquisitions are probable, supported, of course, by the sound balance sheet.   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>The good-quality stock might be of interest to income-focused investors.</b> Indeed, the dividend yield stacks up nicely relative to those of other equities in Value Line's Natural Gas Utility Industry. What's more, we anticipate further steady increases in the payout over the 2027-2029 span.   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| Frederick L. Harris, III November 22, 2024   |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>(A)</b> Fiscal year ends Sept. 30th. <b>(B)</b> Based on diluted shares outstanding. Excludes gain from discontinued operations: '08, 94c. Next earnings report due late Jan. <b>(C)</b> Dividends paid in early January, April, July, and October. <b>(D)</b> Dividend reinvestment plan available. <b>(E)</b> In millions. <b>(F)</b> Qly. egs. may not sum due to rounding or change in shares outstanding.  |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |
| <b>Company's Financial Strength</b> B++<br><b>Stock's Price Stability</b> 90<br><b>Price Growth Persistence</b> 25<br><b>Earnings Predictability</b> 50  |  |       |       |       |       |       |       |       |       |              |           |                               |                    |           |       |            |       |                                   |       |

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

| <u>Line No.</u> |  | <u>Proxy Group of<br/>Seven Natural Gas<br/>Companies</u> | <u>Proxy Group of<br/>Seven Natural Gas<br/>Companies (excl.<br/>PRPM)</u> |
|-----------------|--|---|--|
| 1.              | Prospective Yield on Aaa Rated Corporate Bonds (1)   | 5.18 %  | 5.18 %   |
| 2.              | Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A2 Rated Public Utility Bonds (2) | <u>0.42</u>   | <u>0.42</u>  |
| 3.              | Adjusted Prospective Yield on A2 Rated Public Utility Bonds  | 5.60 %  | 5.60 %   |
| 4.              | Adjustment to Reflect Bond Rating Difference of Proxy Group (3)  | <u>0.06</u>   | <u>0.06</u>  |
| 5.              | Adjusted Bond Yield  | 5.66 %  | 5.66 %   |
| 6.              | Equity Risk Premium (4)  | <u>5.18</u>   | <u>5.19</u>  |
| 7.              | Risk Premium Derived Common Equity Cost Rate   | <u>10.84 %</u>  | <u>10.85 %</u>   |

- 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 0.42% 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 3 of this Document No.. 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]                                       |
|----------|-------------------------------------|---|---|
|          | <u>Aaa Rated<br/>Corporate Bond</u> | <u>A2 Rated Public<br/>Utility Bond</u> | <u>Baa2 Rated Public<br/>Utility Bond</u> |
| Dec-2024 | 5.20 %                              | 5.58 %                                  | 5.77 %                                    |
| Nov-2024 | 5.14                                | 5.56                                    | 5.76                                      |
| Oct-2024 | <u>4.95</u>                         | <u>5.41</u>                             | <u>5.61</u>                               |
| Average  | <u>5.10 %</u>                       | <u>5.52 %</u>                           | <u>5.71 %</u>                             |

Selected Bond Spreads

|   |                   |
|---|-------------------|
| A2 Rated Public Utility Bonds Over Aaa Rated Corporate Bonds:       | <u>0.42 % (1)</u> |
| Baa2 Rated Public Utility Bonds Over A2 Rated Public Utility Bonds: | <u>0.19 % (2)</u> |

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 Seven Natural Gas Companies

| <u>Proxy Group of Seven Natural Gas Companies</u> | <u>Moody's</u>                     |                                | <u>Standard &amp; Poor's</u>       |                                |
|---|------------------------------------|--------------------------------|------------------------------------|--------------------------------|
|   | <u>Long-Term Issuer Rating</u>     |                                | <u>Long-Term Issuer Rating</u>     |                                |
|   | <u>January 2025</u>                |                                | <u>January 2025</u>                |                                |
| <u>Proxy Group of Seven Natural Gas Companies</u> | <u>Long-Term Issuer Rating (1)</u> | <u>Numerical Weighting (2)</u> | <u>Long-Term Issuer Rating (1)</u> | <u>Numerical Weighting (2)</u> |
| Atmos Energy Corporation                          | A1                                 | 5.0                            | A-                                 | 7.0                            |
| 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   | <u>A3</u>                          | <u>6.6</u>                     | <u>A-</u>                          | <u>7.3</u>                     |

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

| <u>Moody's Bond Rating</u> | <u>Numerical Bond Weighting</u> | <u>Standard &amp; Poor's Bond Rating</u> |
|----------------------------|---------------------------------|--|
| 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 Seven Natural Gas Companies

| <u>Line No.</u> |  | <u>Proxy Group of Seven Natural Gas Companies</u> | <u>Proxy Group of Seven Natural Gas Companies (excl. PRPM)</u> |
|-----------------|--|---|--|
| 1.              | Calculated equity risk premium based on the total market using the beta approach (1)                                   | 5.92 %  | 5.90 %   |
| 2.              | Mean equity risk premium based on a study using the holding period returns of public utilities with A2 rated bonds (2) | 4.83  | 4.87   |
| 3.              | Predicted Equity Risk Premium Based on Regression Analysis of 848 Fully-Litigated Natural Gas Cases (3)                | <u>4.79</u>                                       | <u>4.79</u>  |
| 4.              | Average equity risk premium  | <u><u>5.18 %</u></u>                              | <u><u>5.19 %</u></u>   |

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 Seven Natural Gas Companies

| Line No. | Equity Risk Premium Measure  | Proxy Group of Seven<br>Natural Gas Companies | Proxy Group of Seven<br>Natural Gas Companies<br>(excl. PRPM) |
|----------|--|---|---|
| 1.       | Kroll Equity Risk Premium (1)  | 6.10 %  | 6.10 %  |
| 2.       | Regression on Kroll Risk Premium Data (2)  | 7.03  | 7.03  |
| 3.       | Kroll Equity Risk Premium based on PRPM (3)  | 7.56  | NA  |
| 4.       | Equity Risk Premium Based on Value Line Summary<br>and Index (4)   | 5.61  | 5.61  |
| 5.       | Equity Risk Premium Based on Bloomberg, Value Line,<br>and S&P Global Market Intelligence S&P 500<br>Companies (5) | 11.15   | 11.15   |
| 6.       | Conclusion of Equity Risk Premium  | 7.49 %  | 7.47 %  |
| 7.       | Adjusted Beta (6)  | 0.79  | 0.79  |
| 8.       | Forecasted Equity Risk Premium   | 5.92 %  | 5.90 %  |

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 5.18% (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 December 2024.
- (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 5.18% (from page 1 of this Document No.) from the projected 3-5 year total annual market return of 10.79% (described fully in note 1 on page 2 of Document No. 5).
- (5) Using data from the Bloomberg Professional Services, Value Line, and S&P Global Market Intelligence for the S&P 500, an expected total return of 16.33% 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 5.18% results in an expected equity risk premium of
- (6) Average of mean and median beta from 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, November 27, 2024 and December 30, 2024  
S&P Capital IQ  
Bloomberg Professional Services

2 ■ BLUE CHIP FINANCIAL FORECASTS ■ DECEMBER 30, 2024

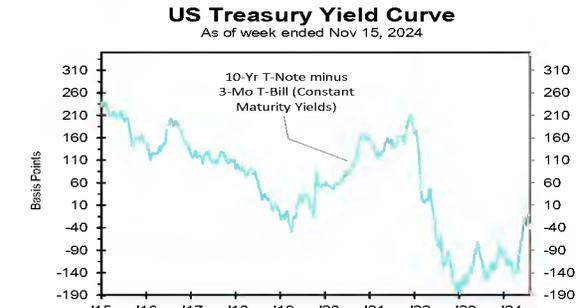
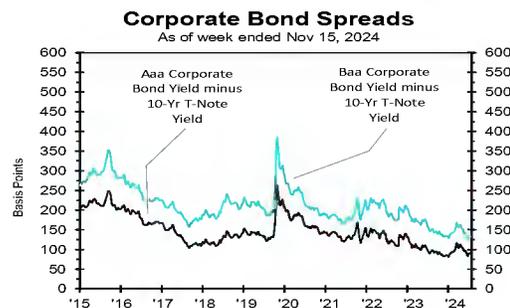
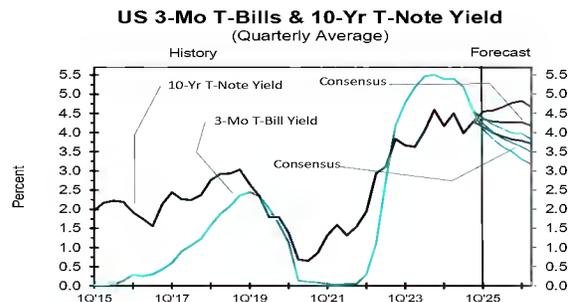
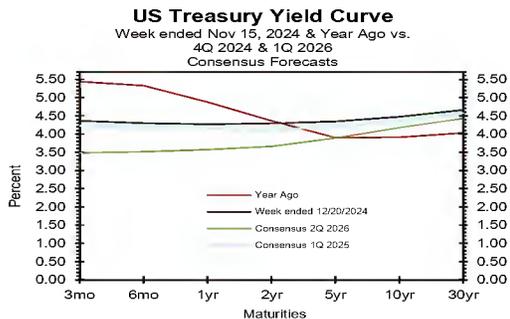
Consensus Forecasts of U.S. Interest Rates and Key Assumptions

| Interest Rates          | History                 |        |       |        |                   |      |      |          | Consensus Forecasts-Quarterly Avg. |      |      |      |      |      |    |
|-------------------------|-------------------------|--------|-------|--------|-------------------|------|------|----------|------------------------------------|------|------|------|------|------|----|
|                         | Average For Week Ending |        |       |        | Average For Month |      |      |          | Latest Qtr                         | 1Q   | 2Q   | 3Q   | 4Q   | 1Q   | 2Q |
|                         | Dec 20                  | Dec 13 | Dec 6 | Nov 29 | Nov               | Oct  | Sep  | 4Q 2024* | 2025                               | 2025 | 2025 | 2025 | 2026 | 2026 |    |
| Federal Funds Rate      | 4.48                    | 4.58   | 4.58  | 4.58   | 4.64              | 4.83 | 5.13 | 4.69     | 4.3                                | 4.1  | 3.9  | 3.8  | 3.7  | 3.5  |    |
| Prime Rate              | 7.75                    | 7.75   | 7.75  | 7.75   | 7.81              | 8.00 | 8.30 | 7.86     | 7.4                                | 7.2  | 7.0  | 6.9  | 6.8  | 6.7  |    |
| SOFR                    | 4.49                    | 4.62   | 4.61  | 4.58   | 4.64              | 4.85 | 5.15 | 4.70     | 4.3                                | 4.1  | 3.9  | 3.8  | 3.7  | 3.5  |    |
| Commercial Paper, 1-mo. | 4.40                    | 4.50   | 4.57  | 4.58   | 4.62              | 4.78 | 5.02 | 4.67     | 4.3                                | 4.1  | 3.9  | 3.8  | 3.7  | 3.5  |    |
| Treasury bill, 3-mo.    | 4.36                    | 4.38   | 4.47  | 4.60   | 4.62              | 4.72 | 4.92 | 4.59     | 4.2                                | 4.0  | 3.9  | 3.7  | 3.6  | 3.5  |    |
| Treasury bill, 6-mo.    | 4.30                    | 4.33   | 4.39  | 4.44   | 4.43              | 4.44 | 4.55 | 4.41     | 4.2                                | 4.0  | 3.8  | 3.7  | 3.6  | 3.5  |    |
| Treasury bill, 1 yr.    | 4.27                    | 4.22   | 4.24  | 4.35   | 4.33              | 4.20 | 4.03 | 4.26     | 4.2                                | 3.9  | 3.8  | 3.7  | 3.7  | 3.6  |    |
| Treasury note, 2 yr.    | 4.29                    | 4.17   | 4.14  | 4.19   | 4.26              | 3.97 | 3.62 | 4.14     | 4.1                                | 4.0  | 3.9  | 3.8  | 3.8  | 3.7  |    |
| Treasury note, 5 yr.    | 4.34                    | 4.14   | 4.07  | 4.13   | 4.23              | 3.91 | 3.50 | 4.10     | 4.2                                | 4.1  | 4.0  | 4.0  | 4.0  | 3.9  |    |
| Treasury note, 10 yr.   | 4.48                    | 4.28   | 4.19  | 4.25   | 4.36              | 4.10 | 3.72 | 4.25     | 4.3                                | 4.3  | 4.3  | 4.3  | 4.3  | 4.2  |    |
| Treasury note, 30 yr.   | 4.66                    | 4.49   | 4.36  | 4.43   | 4.54              | 4.38 | 4.04 | 4.47     | 4.6                                | 4.5  | 4.5  | 4.5  | 4.5  | 4.4  |    |
| Corporate Aaa bond      | 5.37                    | 5.19   | 5.09  | 5.15   | 5.23              | 5.07 | 4.81 | 5.17     | 5.2                                | 5.2  | 5.2  | 5.2  | 5.2  | 5.1  |    |
| Corporate Baa bond      | 5.78                    | 5.61   | 5.51  | 5.57   | 5.66              | 5.52 | 5.31 | 5.61     | 6.0                                | 6.0  | 6.0  | 6.1  | 6.1  | 6.0  |    |
| State & Local bonds     | 4.17                    | 4.03   | 3.98  | 4.01   | 4.08              | 4.05 | 3.99 | 4.07     | 4.3                                | 4.3  | 4.3  | 4.3  | 4.3  | 4.2  |    |
| Home mortgage rate      | 6.72                    | 6.60   | 6.69  | 6.81   | 6.81              | 6.43 | 6.18 | 6.61     | 6.7                                | 6.6  | 6.5  | 6.4  | 6.4  | 6.3  |    |

| Key Assumptions      | History |       |       |       |       |       |       |        | Consensus Forecasts-Quarterly |       |       |       |       |       |  |
|----------------------|---------|-------|-------|-------|-------|-------|-------|--------|-------------------------------|-------|-------|-------|-------|-------|--|
|                      | 1Q      | 2Q    | 3Q    | 4Q    | 1Q    | 2Q    | 3Q    | 4Q     | 1Q                            | 2Q    | 3Q    | 4Q    | 1Q    | 2Q    |  |
|                      | 2023    | 2023  | 2023  | 2023  | 2024  | 2024  | 2024  | 2024** | 2025                          | 2025  | 2025  | 2025  | 2026  | 2026  |  |
| Fed's AFE \$ Index   | 115.5   | 114.6 | 115.0 | 116.6 | 115.5 | 117.3 | 114.9 | 117.2  | 118.8                         | 118.9 | 118.2 | 117.6 | 117.2 | 117.3 |  |
| Real GDP             | 2.8     | 2.4   | 4.4   | 3.2   | 1.6   | 3.0   | 3.1   | 2.1    | 2.1                           | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |  |
| GDP Price Index      | 3.6     | 1.9   | 3.2   | 1.5   | 3.0   | 2.5   | 1.9   | 2.2    | 2.3                           | 2.4   | 2.4   | 2.5   | 2.6   | 2.1   |  |
| Consumer Price Index | 3.8     | 3.0   | 3.4   | 2.7   | 3.8   | 2.8   | 1.2   | 2.5    | 2.6                           | 2.6   | 2.5   | 2.6   | 2.7   | 2.5   |  |
| PCE Price Index      | 3.9     | 2.9   | 2.7   | 1.7   | 3.4   | 2.5   | 1.5   | 2.2    | 2.3                           | 2.4   | 2.4   | 2.5   | 2.5   | 2.3   |  |

Forecasts for interest rates and the Federal Reserve's Advanced Foreign Economies Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index, CPI and PCE Price Index are seasonally adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; SOFR from the New York Fed. \*Interest rate data for 4Q 2024 based on historical data through the week ended December 20. \*\*Data for 4Q 2024 for the Fed's AFE \$ Index based on data through the week ended December 20. Figures for 4Q 2024 Real GDP, GDP Chained Price Index, Consumer Price Index, and PCE Price Index are consensus forecasts from the December 2024 survey..



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**Long-Range Survey:**

The table below contains the results of our twice-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are consensus estimates for the years 2026 through 2030 and averages for the five-year periods 2026-2030 and 2031-2035. Apply these projections cautiously. Few if any economic, demographic and political forces can be evaluated accurately over such long time spans.

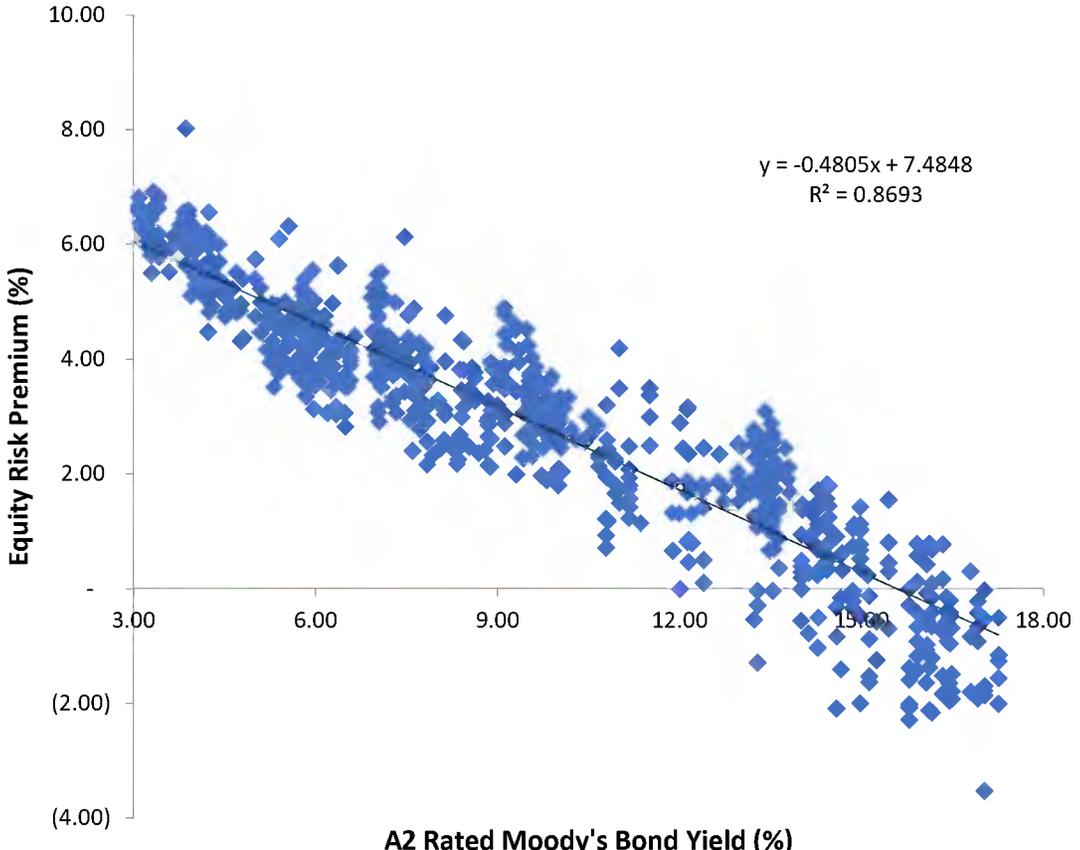
|                                |                   | Average For The Year     |       |       |       |       | Five-Year Averages |           |
|--------------------------------|-------------------|--------------------------|-------|-------|-------|-------|--------------------|-----------|
|                                |                   | 2026                     | 2027  | 2028  | 2029  | 2030  | 2026-2030          | 2031-2035 |
| 1. Federal Funds Rate          | CONSENSUS         | 3.4                      | 3.3   | 3.3   | 3.2   | 3.2   | 3.3                | 3.2       |
|                                | Top 10 Average    | 3.7                      | 3.7   | 3.6   | 3.7   | 3.7   | 3.7                | 3.6       |
|                                | Bottom 10 Average | 3.0                      | 2.9   | 2.9   | 2.9   | 2.8   | 2.9                | 2.9       |
| 2. Prime Rate                  | CONSENSUS         | 6.5                      | 6.4   | 6.4   | 6.4   | 6.3   | 6.4                | 6.3       |
|                                | Top 10 Average    | 6.8                      | 6.8   | 6.7   | 6.8   | 6.7   | 6.7                | 6.7       |
|                                | Bottom 10 Average | 6.2                      | 6.1   | 6.1   | 6.0   | 5.9   | 6.1                | 5.9       |
| 3. SOFR                        | CONSENSUS         | 3.3                      | 3.3   | 3.3   | 3.3   | 3.3   | 3.3                | 3.3       |
|                                | Top 10 Average    | 3.6                      | 3.6   | 3.6   | 3.6   | 3.6   | 3.6                | 3.6       |
|                                | Bottom 10 Average | 3.1                      | 3.0   | 3.0   | 2.9   | 2.9   | 3.0                | 2.9       |
| 4. Commercial Paper, 1-Mo      | CONSENSUS         | 3.4                      | 3.4   | 3.4   | 3.4   | 3.3   | 3.4                | 3.3       |
|                                | Top 10 Average    | 3.6                      | 3.6   | 3.6   | 3.6   | 3.6   | 3.6                | 3.6       |
|                                | Bottom 10 Average | 3.2                      | 3.1   | 3.1   | 3.0   | 3.0   | 3.1                | 3.0       |
| 5. Treasury Bill Yield, 3-Mo   | CONSENSUS         | 3.3                      | 3.3   | 3.2   | 3.2   | 3.2   | 3.3                | 3.2       |
|                                | Top 10 Average    | 3.6                      | 3.6   | 3.5   | 3.6   | 3.6   | 3.6                | 3.5       |
|                                | Bottom 10 Average | 3.1                      | 3.0   | 2.9   | 2.9   | 2.8   | 2.9                | 2.8       |
| 6. Treasury Bill Yield, 6-Mo   | CONSENSUS         | 3.4                      | 3.3   | 3.3   | 3.2   | 3.2   | 3.3                | 3.2       |
|                                | Top 10 Average    | 3.6                      | 3.6   | 3.6   | 3.6   | 3.6   | 3.6                | 3.6       |
|                                | Bottom 10 Average | 3.1                      | 3.0   | 3.0   | 2.9   | 2.8   | 3.0                | 2.9       |
| 7. Treasury Bill Yield, 1-Yr   | CONSENSUS         | 3.4                      | 3.4   | 3.3   | 3.3   | 3.3   | 3.3                | 3.3       |
|                                | Top 10 Average    | 3.7                      | 3.7   | 3.6   | 3.6   | 3.6   | 3.6                | 3.6       |
|                                | Bottom 10 Average | 3.2                      | 3.1   | 3.0   | 3.0   | 2.9   | 3.0                | 2.9       |
| 8. Treasury Note Yield, 2-Yr   | CONSENSUS         | 3.6                      | 3.6   | 3.5   | 3.5   | 3.5   | 3.5                | 3.5       |
|                                | Top 10 Average    | 3.9                      | 3.9   | 3.9   | 3.9   | 3.9   | 3.9                | 3.9       |
|                                | Bottom 10 Average | 3.3                      | 3.2   | 3.1   | 3.1   | 3.0   | 3.1                | 3.0       |
| 9. Treasury Note Yield, 5-Yr   | CONSENSUS         | 3.8                      | 3.8   | 3.8   | 3.8   | 3.7   | 3.8                | 3.8       |
|                                | Top 10 Average    | 4.2                      | 4.3   | 4.3   | 4.3   | 4.3   | 4.3                | 4.3       |
|                                | Bottom 10 Average | 3.4                      | 3.4   | 3.3   | 3.3   | 3.2   | 3.3                | 3.2       |
| 10. Treasury Note Yield, 10-Yr | CONSENSUS         | 4.0                      | 4.1   | 4.0   | 4.0   | 3.9   | 4.0                | 4.0       |
|                                | Top 10 Average    | 4.5                      | 4.6   | 4.5   | 4.5   | 4.5   | 4.5                | 4.5       |
|                                | Bottom 10 Average | 3.6                      | 3.5   | 3.4   | 3.4   | 3.3   | 3.5                | 3.4       |
| 11. Treasury Bond Yield, 30-Yr | CONSENSUS         | 4.3                      | 4.4   | 4.3   | 4.3   | 4.2   | 4.3                | 4.2       |
|                                | Top 10 Average    | 4.7                      | 4.8   | 4.8   | 4.8   | 4.8   | 4.8                | 4.7       |
|                                | Bottom 10 Average | 3.9                      | 3.9   | 3.8   | 3.8   | 3.7   | 3.8                | 3.8       |
| 12. Corporate Aaa Bond Yield   | CONSENSUS         | 5.1                      | 5.2   | 5.2   | 5.1   | 5.1   | 5.2                | 5.1       |
|                                | Top 10 Average    | 5.5                      | 5.7   | 5.6   | 5.6   | 5.6   | 5.6                | 5.5       |
|                                | Bottom 10 Average | 4.8                      | 4.8   | 4.7   | 4.7   | 4.6   | 4.7                | 4.6       |
| 13. Corporate Baa Bond Yield   | CONSENSUS         | 6.0                      | 6.1   | 6.0   | 6.0   | 6.0   | 6.0                | 5.9       |
|                                | Top 10 Average    | 6.4                      | 6.6   | 6.5   | 6.5   | 6.4   | 6.5                | 6.4       |
|                                | Bottom 10 Average | 5.7                      | 5.7   | 5.6   | 5.6   | 5.5   | 5.6                | 5.5       |
| 14. State & Local Bonds Yield  | CONSENSUS         | 4.1                      | 4.3   | 4.2   | 4.2   | 4.3   | 4.2                | 4.1       |
|                                | Top 10 Average    | 4.5                      | 4.6   | 4.6   | 4.6   | 4.6   | 4.6                | 4.6       |
|                                | Bottom 10 Average | 3.8                      | 3.9   | 3.9   | 3.9   | 3.9   | 3.9                | 3.6       |
| 15. Home Mortgage Rate         | CONSENSUS         | 6.2                      | 6.1   | 6.0   | 6.0   | 5.9   | 6.0                | 5.9       |
|                                | Top 10 Average    | 6.6                      | 6.6   | 6.5   | 6.4   | 6.4   | 6.5                | 6.4       |
|                                | Bottom 10 Average | 5.7                      | 5.7   | 5.6   | 5.5   | 5.4   | 5.6                | 5.4       |
| A. Fed's AFE Nominal \$ Index  | CONSENSUS         | 115.5                    | 115.0 | 114.5 | 113.9 | 113.2 | 114.4              | 112.6     |
|                                | Top 10 Average    | 117.0                    | 116.3 | 115.8 | 115.3 | 114.8 | 115.8              | 114.6     |
|                                | Bottom 10 Average | 113.9                    | 113.6 | 113.1 | 112.5 | 111.8 | 113.0              | 110.9     |
|                                |                   | Year-Over-Year, % Change |       |       |       |       | Five-Year Averages |           |
|                                |                   | 2026                     | 2027  | 2028  | 2029  | 2030  | 2026-2030          | 2031-2035 |
| B. Real GDP                    | CONSENSUS         | 1.9                      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0                | 1.9       |
|                                | Top 10 Average    | 2.2                      | 2.3   | 2.3   | 2.2   | 2.2   | 2.2                | 2.2       |
|                                | Bottom 10 Average | 1.7                      | 1.7   | 1.8   | 1.7   | 1.7   | 1.7                | 1.7       |
| C. GDP Chained Price Index     | CONSENSUS         | 2.2                      | 2.2   | 2.2   | 2.2   | 2.2   | 2.2                | 2.1       |
|                                | Top 10 Average    | 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       |
| D. Consumer Price Index        | CONSENSUS         | 2.4                      | 2.3   | 2.2   | 2.2   | 2.2   | 2.2                | 2.2       |
|                                | Top 10 Average    | 2.6                      | 2.5   | 2.4   | 2.5   | 2.4   | 2.5                | 2.4       |
|                                | Bottom 10 Average | 2.1                      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0                | 2.0       |
| E. PCE Price Index             | CONSENSUS         | 2.2                      | 2.2   | 2.1   | 2.1   | 2.1   | 2.2                | 2.1       |
|                                | Top 10 Average    | 2.5                      | 2.3   | 2.3   | 2.3   | 2.3   | 2.3                | 2.3       |
|                                | Bottom 10 Average | 2.0                      | 2.0   | 1.9   | 2.0   | 2.0   | 2.0                | 2.0       |

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

| <u>Line No.</u> |  | <u>Implied Equity Risk Premium</u> | <u>Implied Equity Risk Premium (excl. PRPM)</u> |
|-----------------|--|------------------------------------|---|
| 1.              | Historical Equity Risk Premium (1)   | 4.16 %                             | 4.16 %  |
| 2.              | Regression of Historical Equity Risk Premium (2)   | 4.91                               | 4.91  |
| 3.              | Forecasted Equity Risk Premium Based on PRPM (3)   | 4.72                               | 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) | <u>5.54</u>                        | <u>5.54</u>                                     |
| 5.              | Average Equity Risk Premium (5)  | <u>4.83 %</u>                      | <u>4.87 %</u>                                   |

- 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 5.60% (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 December 2024.
- (4) Using data from Bloomberg, Value Line, and S&P Capital IQ for the S&P Utilities Index, an expected return of 11.14% 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 5.60%, calculated on line 3 of page 1 of this Document results in an equity risk premium of 5.54%. (11.14% - 5.60% = 5.54%).
- (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



|                 |              |   |                                       |
|-----------------|--------------|---|---------------------------------------|
|                 |              | Prospective A2<br>Rated Utility Bond<br>(1) | Prospective<br>Equity Risk<br>Premium |
| <u>Constant</u> | <u>Slope</u> | <u>5.60 %</u>                               | <u>4.79 %</u>                         |
| 7.4848 %        | -0.4805      |   |                                       |

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 Seven Natural Gas Companies

|  | [1]                      | [2]                     | [3]          | [4]                     | [5]                | [6]                        | [7]             | [8]                                   |
|--|--------------------------|-------------------------|--------------|-------------------------|--------------------|----------------------------|-----------------|---------------------------------------|
| Proxy Group of Seven 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                   | 0.90                     | 0.60                    | 0.75         | 8.41 %                  | 4.44 %             | 10.75 %                    | 11.27 %         | 11.01 %                               |
| New Jersey Resources Corporation           | 1.00                     | 0.62                    | 0.81         | 8.41                    | 4.44               | 11.25                      | 11.65           | 11.45                                 |
| NiSource Inc.                              | 0.95                     | 0.56                    | 0.76         | 8.41                    | 4.44               | 10.83                      | 11.34           | 11.09                                 |
| Northwest Natural Holding Company          | 0.85                     | 0.73                    | 0.79         | 8.41                    | 4.44               | 11.09                      | 11.53           | 11.31                                 |
| ONE Gas, Inc.                              | 0.85                     | 0.66                    | 0.76         | 8.41                    | 4.44               | 10.83                      | 11.34           | 11.09                                 |
| Southwest Gas Holdings, Inc.               | 0.95                     | 0.80                    | 0.88         | 8.41                    | 4.44               | 11.84                      | 12.09           | 11.97 (4)                             |
| Spire Inc.                                 | 0.90                     | 0.66                    | 0.78         | 8.41                    | 4.44               | 11.00                      | 11.46           | 11.23                                 |
| Mean                                       |                          |                         | 0.79         |                         |                    | 11.09 %                    | 11.53 %         | 11.20 %                               |
| Median                                     |                          |                         | 0.78         |                         |                    | 11.00 %                    | 11.46 %         | 11.16 %                               |
| Average of Mean and Median                 |                          |                         | 0.79         |                         |                    | 11.05 %                    | 11.50 %         | 11.18 %                               |

Results Excluding PRPM MRP

|  | [1]                      | [2]                     | [3]          | [4]                     | [5]                | [6]                        | [7]             | [8]                                   |
|--|--------------------------|-------------------------|--------------|-------------------------|--------------------|----------------------------|-----------------|---------------------------------------|
| Proxy Group of Seven 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                   | 0.90                     | 0.60                    | 0.75         | 8.40 %                  | 4.44 %             | 10.74 %                    | 11.27 %         | 11.00 %                               |
| New Jersey Resources Corporation           | 1.00                     | 0.62                    | 0.81         | 8.40                    | 4.44               | 11.24                      | 11.64           | 11.44                                 |
| NiSource Inc.                              | 0.95                     | 0.56                    | 0.76         | 8.40                    | 4.44               | 10.82                      | 11.33           | 11.08                                 |
| Northwest Natural Holding Company          | 0.85                     | 0.73                    | 0.79         | 8.40                    | 4.44               | 11.08                      | 11.52           | 11.30                                 |
| ONE Gas, Inc.                              | 0.85                     | 0.66                    | 0.76         | 8.40                    | 4.44               | 10.82                      | 11.33           | 11.08                                 |
| Southwest Gas Holdings, Inc.               | 0.95                     | 0.80                    | 0.88         | 8.40                    | 4.44               | 11.83                      | 12.08           | 11.96 (4)                             |
| Spire Inc.                                 | 0.90                     | 0.66                    | 0.78         | 8.40                    | 4.44               | 10.99                      | 11.45           | 11.22                                 |
| Mean                                       |                          |                         | 0.79         |                         |                    | 11.08 %                    | 11.52 %         | 11.19 %                               |
| Median                                     |                          |                         | 0.78         |                         |                    | 10.99 %                    | 11.45 %         | 11.15 %                               |
| Average of Mean and Median                 |                          |                         | 0.79         |                         |                    | 11.04 %                    | 11.49 %         | 11.17 %                               |

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)**

8.06 %

**Measure 3: Application of the PRPM to Kroll Historical Data (January 1928 through December 2024)**

8.45 %

**Measure 4: Value Line Projected MRP (Thirteen weeks ending January 17, 2025)**

|  |         |
|--|---------|
| Total projected return on the market 3-5 years hence*:                 | 10.79 % |
| Risk-Free Rate (see note 2):   | 4.44    |
| MRP based on Value Line Summary & Index:                               | 6.35 %  |
| *Forecasted 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:            | 16.33 % |
| Risk-Free Rate (see note 2):                                | 4.44    |
| MRP based on Bloomberg, Value Line, and S&P Capital IQ data | 11.89 % |

Average of all MRP Measures: 8.41 %

Average MRP Excluding the PRPM MRP: 8.40 %

- (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 Document No. 4.) The projection of the risk-free rate is illustrated below:

|                     |        |
|---------------------|--------|
| First Quarter 2025  | 4.60 % |
| Second Quarter 2025 | 4.50   |
| Third Quarter 2025  | 4.50   |
| Fourth Quarter 2025 | 4.50   |
| First Quarter 2026  | 4.50   |
| Second Quarter 2026 | 4.40   |
| 2026-2030           | 4.30   |
| 2031-2035           | 4.20   |
|                     | 4.44 % |

- (3) Average of Column 6 and Column 7.

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

Sources of Information:

Value Line Summary and Index  
Blue Chip Financial Forecasts, November 27, 2024 and December 30, 2024  
Kroll 2023 SBB1® 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 Seven 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 seven 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 0.64 - 0.92 and residual standard error of the regression range of 2.8409 - 3.3885 of the proxy group of seven 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 0.1369. 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

$$\text{Thus, } 0.1369 = \frac{3.1147}{\sqrt{518}} = \frac{3.1147}{22.7596}$$

Source of Information: Value Line Proprietary Database, December 2024.  
Value Line Investment Survey (Standard Edition).

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

|  | [1]                             | [2]                    | [3]  | [4]                               |
|--|---------------------------------|------------------------|--|-----------------------------------|
| <u>Proxy Group of Seven Natural Gas Companies</u>                        | <u>Value Line Adjusted Beta</u> | <u>Unadjusted Beta</u> | <u>Residual Standard Error of the Regression</u> | <u>Standard Deviation of Beta</u> |
| Atmos Energy Corporation   | 0.85                            | 0.75                   | 2.8989   | 0.0647                            |
| New Jersey Resources Corporation   | 0.95                            | 0.91                   | 3.0464   | 0.0680                            |
| NiSource Inc.  | 0.90                            | 0.83                   | 2.6470   | 0.0591                            |
| Northwest Natural Holding Company  | 0.85                            | 0.71                   | 3.3761   | 0.0754                            |
| ONE Gas, Inc.  | 0.85                            | 0.71                   | 3.2540   | 0.0726                            |
| Southwest Gas Holdings, Inc.   | 0.90                            | 0.80                   | 3.4852   | 0.0778                            |
| Spire Inc.   | 0.85                            | 0.74                   | 3.0953   | 0.0691                            |
| Average  | <u>0.88</u>                     | <u>0.78</u>            | <u>3.1147</u>                                    | <u>0.0695</u>                     |
| Beta Range (+/- 2 std. Devs. of Beta)<br>2 std. Devs. of Beta            | 0.64<br>0.14                    | 0.92                   |  |                                   |
| Residual Std. Err. Range (+/- 2 std.<br>Devs. of the Residual Std. Err.) | 2.8409                          | 3.3885                 |  |                                   |
| Std. dev. of the Res. Std. Err.  | 0.1369                          |                        |  |                                   |
| 2 std. devs. of the Res. Std. Err.                                       | 0.2738                          |                        |  |                                   |

Source of Information: Value Line Proprietary Database, December 2024.

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

|  | [1]                             | [2]                    | [3]  | [4]                               |
|--|---------------------------------|------------------------|--|-----------------------------------|
| <u>Proxy Group of Forty-Nine Non-Price Regulated Companies</u> | <u>Value Line Adjusted Beta</u> | <u>Unadjusted Beta</u> | <u>Residual Standard Error of the Regression</u> | <u>Standard Deviation of Beta</u> |
| Abbott Labs.   | 0.90                            | 0.79                   | 2.9573   | 0.0660                            |
| AbbVie Inc.  | 0.85                            | 0.70                   | 3.1365   | 0.0700                            |
| Air Products & Chem.   | 0.90                            | 0.83                   | 3.0324   | 0.0677                            |
| Alphabet Inc.  | 0.90                            | 0.81                   | 3.1907   | 0.0712                            |
| Altria Group   | 0.85                            | 0.76                   | 2.8948   | 0.0646                            |
| Apple Inc.   | 0.95                            | 0.91                   | 3.2127   | 0.0717                            |
| Assurant Inc.  | 0.90                            | 0.79                   | 3.0394   | 0.0679                            |
| AutoZone Inc.  | 0.95                            | 0.88                   | 3.2399   | 0.0723                            |
| Booz Allen Hamilton  | 0.85                            | 0.74                   | 3.2930   | 0.0735                            |
| Brady Corp.  | 0.95                            | 0.90                   | 2.8860   | 0.0644                            |
| BWX Technologies   | 0.80                            | 0.68                   | 3.2662   | 0.0729                            |
| CACI Int'l   | 0.90                            | 0.80                   | 3.0359   | 0.0678                            |
| Casey's Gen'l Stores   | 0.90                            | 0.79                   | 3.1661   | 0.0707                            |
| Cencora  | 0.80                            | 0.66                   | 2.9646   | 0.0662                            |
| CSW Industrials  | 0.90                            | 0.77                   | 3.2779   | 0.0732                            |
| CVS Health   | 0.90                            | 0.79                   | 3.3646   | 0.0751                            |
| Danaher Corp.  | 0.90                            | 0.81                   | 3.0286   | 0.0676                            |
| Dolby Labs.  | 0.95                            | 0.87                   | 2.9508   | 0.0659                            |
| Exponent, Inc.   | 0.95                            | 0.88                   | 3.3456   | 0.0747                            |
| Fastenal Co.   | 0.90                            | 0.80                   | 2.9253   | 0.0653                            |
| Franklin Electric  | 0.90                            | 0.82                   | 2.9333   | 0.0655                            |
| GATX Corp.   | 0.95                            | 0.90                   | 2.9875   | 0.0667                            |
| Henry (Jack) & Assoc   | 0.85                            | 0.74                   | 3.1928   | 0.0713                            |
| Hunt (J.B.)  | 0.95                            | 0.91                   | 3.2647   | 0.0729                            |
| Huntington Ingalls   | 0.95                            | 0.89                   | 3.3736   | 0.0753                            |
| L3Harris Technologie   | 0.90                            | 0.83                   | 3.1556   | 0.0711                            |
| Landstar System  | 0.80                            | 0.65                   | 2.8665   | 0.0640                            |
| Lockheed Martin  | 0.85                            | 0.75                   | 2.8741   | 0.0642                            |
| McKesson Corp.   | 0.85                            | 0.70                   | 3.1485   | 0.0703                            |
| Microsoft Corp.  | 0.90                            | 0.78                   | 2.8520   | 0.0637                            |
| MSC Industrial Direc   | 0.90                            | 0.84                   | 2.9545   | 0.0660                            |
| Oracle Corp.   | 0.85                            | 0.70                   | 3.0995   | 0.0692                            |
| O'Reilly Automotive  | 0.90                            | 0.84                   | 3.0259   | 0.0676                            |
| OSI Systems  | 0.90                            | 0.81                   | 3.2160   | 0.0718                            |
| Packaging Corp.  | 0.95                            | 0.85                   | 2.8607   | 0.0639                            |
| Pfizer, Inc.   | 0.80                            | 0.67                   | 3.1709   | 0.0708                            |
| Philip Morris Int'l  | 0.95                            | 0.87                   | 2.8750   | 0.0642                            |
| Prestige Consumer  | 0.85                            | 0.75                   | 3.3470   | 0.0747                            |
| Selective Ins. Group   | 0.85                            | 0.74                   | 2.9941   | 0.0668                            |
| Service Corp. Int'l  | 0.90                            | 0.84                   | 3.1842   | 0.0711                            |
| Sherwin-Williams   | 0.95                            | 0.90                   | 2.9254   | 0.0653                            |
| Smith (A.O.)   | 0.90                            | 0.79                   | 3.0828   | 0.0688                            |
| Thermo Fisher Sci.   | 0.85                            | 0.77                   | 2.8565   | 0.0638                            |
| UniFirst Corp.   | 0.90                            | 0.81                   | 3.0115   | 0.0672                            |
| UnitedHealth Group   | 0.95                            | 0.90                   | 3.1445   | 0.0702                            |
| Universal Corp.  | 0.80                            | 0.68                   | 3.2233   | 0.0720                            |
| VeriSign Inc.  | 0.90                            | 0.80                   | 2.8857   | 0.0644                            |
| Waters Corp.   | 0.95                            | 0.86                   | 3.2280   | 0.0721                            |
| Watsco, Inc.   | 0.85                            | 0.76                   | 3.1218   | 0.0697                            |
| Average  | <u>0.89</u>                     | <u>0.80</u>            | <u>3.0829</u>                                    | <u>0.0688</u>                     |
| Proxy Group of Seven Natural Gas Companies                     | <u>0.88</u>                     | <u>0.78</u>            | <u>3.1147</u>                                    | <u>0.0695</u>                     |

Source of Information:

Value Line Proprietary Database, December 2024.

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 Seven Natural Gas Companies

| <u>Principal Methods</u>               | <u>Proxy Group of Forty-Nine<br/>Non-Price Regulated<br/>Companies</u> | <u>Proxy Group of Forty-Nine<br/>Non-Price Regulated<br/>Companies (excl. PRPM)</u> |
|--|--|---|
| Discounted Cash Flow Model (DCF) (1)   | 11.37 %  | 11.37 %   |
| Risk Premium Model (RPM) (2)           | 12.44  | 12.42   |
| Capital Asset Pricing Model (CAPM) (3) | <u>11.86</u>   | <u>11.85</u>  |
| Mean                                   | <u>11.89</u> %   | <u>11.88</u> %  |
| Median                                 | <u>11.86</u> %   | <u>11.85</u> %  |
| Average of Mean and Median             | <u>11.88</u> %   | <u>11.87</u> %  |

Notes:

- (1) From page 2 of this Document.
- (2) From page 3 of this Document.
- (3) From page 6 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 Seven Natural Gas Companies

|   | [1]                    | [2]  | [3]   | [4]  | [5]  | [6]                        | [7]                                   |
|---|------------------------|--|---|--|--|----------------------------|---------------------------------------|
| Proxy Group of Forty-Nine Non-Price Regulated Companies | Average Dividend Yield | Value Line Projected Five Year Growth in EPS | Zack's Five Year Projected Growth Rate in EPS | S&P Capital IQ Projected Five Year Growth in EPS | Average Projected Five Year Growth Rate in EPS (1) | Adjusted Dividend Yield    | Indicated Common Equity Cost Rate (2) |
| Abbott Labs.  | 2.05 %                 | 4.00 %                                       | 9.10 %  | 8.58 %   | 7.23 %   | 2.12 %                     | 9.35 %                                |
| AbbVie Inc.   | 3.63                   | 4.00   | 8.30  | 8.03   | 6.78   | 3.75                       | 10.53                                 |
| Air Products & Chem.                                    | 2.27                   | 10.50  | 7.80  | 11.76  | 10.02  | 2.38                       | 12.40                                 |
| Alphabet Inc.   | 0.44                   | 13.50  | 17.80   | 16.40  | 15.90  | 0.47                       | 16.37                                 |
| Altria Group  | 7.59                   | 6.00   | 3.60  | 4.35   | 4.65   | 7.77                       | 12.42                                 |
| Apple Inc.  | 0.42                   | 9.00   | 13.70   | 9.52   | 10.74  | 0.44                       | 11.18                                 |
| Assurant Inc.   | 1.52                   | 9.50   | NA  | NA   | 9.50   | 1.59                       | 11.09                                 |
| AutoZone Inc.   | -                      | 11.50  | 11.80   | 12.73  | 12.01  | -                          | NA                                    |
| Booz Allen Hamilton                                     | 1.36                   | 10.00  | 13.30   | 13.15  | 12.15  | 1.44                       | 13.59                                 |
| Brady Corp.   | 1.30                   | 15.50  | NA  | 11.00  | 13.25  | 1.39                       | 14.64                                 |
| BWX Technologies  | 0.79                   | 9.00   | 9.30  | 10.55  | 9.62   | 0.83                       | 10.45                                 |
| CACI Int'l  | -                      | 4.50   | 13.80   | 13.77  | 10.69  | -                          | NA                                    |
| Casey's Gen'l Stores                                    | 0.49                   | 12.00  | 12.60   | 12.53  | 12.38  | 0.52                       | 12.90                                 |
| Cencora   | 0.93                   | 6.50   | 10.40   | 9.10   | 8.67   | 0.97                       | 9.64                                  |
| CSW Industrials   | 0.25                   | 13.50  | NA  | 15.00  | 14.25  | 0.27                       | 14.52                                 |
| CVS Health  | 5.02                   | 1.50   | 10.90   | 12.76  | 8.39   | 5.23                       | 13.62                                 |
| Danaher Corp.   | 0.45                   | 2.00   | 6.70  | 6.51   | 5.07   | 0.46                       | 5.53                                  |
| Dolby Labs.   | 1.72                   | 9.50   | NA  | NA   | 9.50   | 1.80                       | 11.30                                 |
| Exponent, Inc.  | 1.16                   | 7.00   | NA  | NA   | 7.00   | 1.20                       | 8.20                                  |
| Fastenal Co.  | 1.99                   | 9.00   | 8.30  | 7.90   | 8.40   | 2.07                       | 10.47                                 |
| Franklin Electric                                       | 0.97                   | 7.50   | 12.00   | 12.00  | 10.50  | 1.02                       | 11.52                                 |
| GATX Corp.  | 1.52                   | 10.50  | NA  | NA   | 10.50  | 1.60                       | 12.10                                 |
| Henry (Jack) & Assoc                                    | 1.24                   | 6.50   | 9.20  | 8.65   | 8.12   | 1.29                       | 9.41                                  |
| Hunt (J.B.)   | 0.95                   | 6.00   | 8.10  | 9.71   | 7.94   | 0.99                       | 8.93                                  |
| Huntington Ingalls                                      | 2.66                   | 10.00  | 7.40  | 7.36   | 8.25   | 2.77                       | 11.02                                 |
| L3Harris Technologie                                    | 1.98                   | 11.00  | 8.70  | 8.89   | 9.53   | 2.07                       | 11.60                                 |
| Landstar System   | 0.80                   | 5.00   | NA  | 11.00  | 8.00   | 0.83                       | 8.83                                  |
| Lockheed Martin   | 2.53                   | 9.50   | 4.40  | 3.10   | 5.67   | 2.60                       | 8.27                                  |
| McKesson Corp.  | 0.49                   | 10.00  | 14.10   | 13.77  | 12.62  | 0.52                       | 13.14                                 |
| Microsoft Corp.   | 0.78                   | 14.50  | 14.60   | 13.26  | 14.12  | 0.84                       | 14.96                                 |
| MSC Industrial Direc                                    | 4.15                   | 0.50   | NA  | NA   | 0.50   | 4.16                       | 4.66 (3)                              |
| Oracle Corp.  | 0.91                   | 10.00  | 10.20   | 11.16  | 10.45  | 0.96                       | 11.41                                 |
| O'Reilly Automotive                                     | -                      | 10.50  | 12.10   | 11.92  | 11.51  | -                          | NA                                    |
| OSI Systems   | -                      | 10.50  | 12.90   | 14.05  | 12.48  | -                          | NA                                    |
| Packaging Corp.   | 2.14                   | 9.00   | 9.00  | 13.53  | 10.51  | 2.25                       | 12.76                                 |
| Pfizer, Inc.  | 6.46                   | 2.50   | 14.20   | 8.22   | 8.31   | 6.73                       | 15.04                                 |
| Philip Morris Int'l                                     | 4.27                   | 5.00   | 8.60  | 10.39  | 8.00   | 4.44                       | 12.44                                 |
| Prestige Consumer                                       | -                      | 5.50   | 8.00  | 8.00   | 7.17   | -                          | NA                                    |
| Selective Ins. Group                                    | 1.59                   | 17.50  | NA  | 16.40  | 16.95  | 1.72                       | 18.67 (3)                             |
| Service Corp. Int'l                                     | 1.46                   | 4.50   | 9.70  | 9.75   | 7.98   | 1.52                       | 9.50                                  |
| Sherwin-Williams  | 0.78                   | 12.00  | 11.00   | 9.51   | 10.84  | 0.82                       | 11.66                                 |
| Smith (A.O.)  | 1.87                   | 9.00   | 10.00   | 11.00  | 10.00  | 1.96                       | 11.96                                 |
| Thermo Fisher Sci.                                      | 0.29                   | 6.00   | 6.50  | 8.30   | 6.93   | 0.30                       | 7.23                                  |
| UniFirst Corp.  | 0.73                   | 7.00   | NA  | NA   | 7.00   | 0.76                       | 7.76                                  |
| UnitedHealth Group                                      | 1.51                   | 12.00  | 12.30   | 14.98  | 13.09  | 1.61                       | 14.70                                 |
| Universal Corp.   | 6.02                   | 13.50  | NA  | NA   | 13.50  | 6.43                       | 19.93 (3)                             |
| VeriSign Inc.   | -                      | 12.00  | NA  | NA   | 12.00  | -                          | NA                                    |
| Waters Corp.  | -                      | 6.50   | 4.40  | 7.33   | 6.08   | -                          | NA                                    |
| Watsco, Inc.  | 2.14                   | 7.00   | NA  | NA   | 7.00   | 2.21                       | 9.21                                  |
|   |                        |  |   |  |  | Mean                       | 11.32 %                               |
|   |                        |  |   |  |  | Median                     | 11.41 %                               |
|   |                        |  |   |  |  | Average of Mean and Median | 11.37 %                               |

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 1/15/2025. 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 01/15/2025  
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

| <u>Line No.</u> |   | Proxy Group of<br>Forty-Nine Non-<br>Price Regulated<br>Companies | Proxy Group of<br>Forty-Nine Non-<br>Price Regulated<br>Companies (excl.<br>PRPM) |
|-----------------|---|---|---|
| 1.              | Prospective Yield on Baa2 Rated Corporate Bonds (1)                               | 6.01 %  | 6.01  |
| 2.              | Adjustment to Reflect Bond rating Difference of Non-Price Regulated Companies (2) | <u>(0.09)</u>   | <u>(0.09)</u>   |
| 3.              | Adjusted Bond Yield   | 5.92  | 5.92  |
| 4.              | Equity Risk Premium (3)   | <u>6.52</u>   | <u>6.50</u>   |
| 5.              | Risk Premium Derived Common Equity Cost Rate                                      | <u>12.44 %</u>  | <u>12.42</u>  |

Notes: (1) Average forecast of Baa corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated November 27, 2024 and December 30, 2024 (see pages 7 and 8 of Document No. 4). The estimates are detailed below.

|                     |               |
|---------------------|---------------|
| First Quarter 2025  | 6.00 %        |
| Second Quarter 2025 | 6.00          |
| Third Quarter 2025  | 6.00          |
| Fourth Quarter 2025 | 6.10          |
| First Quarter 2026  | 6.10          |
| Second Quarter 2026 | 6.00          |
| 2026-2030           | 6.00          |
| 2031-2035           | <u>5.90</u>   |
| Average             | <u>6.01 %</u> |

(2) The average yield spread of Baa2 rated corporate bonds over A2 corporate bonds for the three months ending December 2024. To reflect the Baa1 average rating of the Non-Price Regulated Proxy Group, the yield on the Baa corporate bond must be adjusted by 1/3 of the spread between A2 and Baa2 corporate bond yields as shown below:

|        | <u>A2 Corp. Bond Yield</u> | <u>Baa2 Corp. Bond Yield</u> | <u>Spread</u> |
|--------|----------------------------|------------------------------|---------------|
| Dec-24 | 5.53 %                     | 5.80 %                       | 0.27 %        |
| Nov-24 | 5.50                       | 5.78                         | 0.28          |
| Oct-24 | 5.33                       | 5.63                         | <u>0.30</u>   |
|        |                            | Average yield spread         | <u>0.28</u>   |
|        |                            | 1/3 of spread                | <u>0.09</u>   |

(3) From page 5 of this Document.

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

| Proxy Group of Forty-Nine Non-Price Regulated Companies | Moody's                 |                         | Standard & Poor's       |                         |
|---|-------------------------|-------------------------|-------------------------|-------------------------|
|   | Long-Term Issuer Rating |                         | Long-Term Issuer Rating |                         |
|   | January 2025            |                         | January 2025            |                         |
|   | Long-Term Issuer Rating | Numerical Weighting (1) | Long-Term Issuer Rating | Numerical Weighting (1) |
| Abbott Labs.  | Aa3                     | 4.0                     | AA-                     | 4.0                     |
| AbbVie Inc.   | Baa1                    | 8.0                     | BBB+                    | 8.0                     |
| Air Products & Chem.                                    | A2                      | 6.0                     | A                       | 6.0                     |
| Alphabet Inc.   | Aa2                     | 3.0                     | AA+                     | 2.0                     |
| Altria Group  | A3                      | 7.0                     | BBB                     | 9.0                     |
| Apple Inc.  | Baa1                    | 8.0                     | BBB+                    | 8.0                     |
| Assurant Inc.   | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| AutoZone Inc.   | A2                      | 6.0                     | A                       | 6.0                     |
| Booz Allen Hamilton                                     | NA                      | --                      | NA                      | --                      |
| Brady Corp.   | NA                      | --                      | NA                      | --                      |
| BWX Technologies  | NA                      | --                      | NA                      | --                      |
| CACI Int'l  | NA                      | --                      | BB+                     | 11.0                    |
| Casey's Gen'l Stores                                    | NA                      | --                      | NA                      | --                      |
| Cencora   | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| CSW Industrials   | NA                      | --                      | NA                      | --                      |
| CVS Health  | NA                      | --                      | NA                      | --                      |
| Danaher Corp.   | A3                      | 7.0                     | A-                      | 7.0                     |
| Dolby Labs.   | NA                      | --                      | NA                      | --                      |
| Exponent, Inc.  | NA                      | --                      | NA                      | --                      |
| Fastenal Co.  | NA                      | --                      | NA                      | --                      |
| Franklin Electric                                       | NA                      | --                      | NA                      | --                      |
| GATX Corp.  | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| Henry (Jack) & Assoc                                    | NA                      | --                      | NA                      | --                      |
| Hunt (J.B.)   | Baa1                    | 8.0                     | BBB                     | 9.0                     |
| Huntington Ingalls                                      | A2                      | 6.0                     | A                       | 6.0                     |
| L3Harris Technologie                                    | NA                      | --                      | NA                      | --                      |
| Landstar System   | NA                      | --                      | NA                      | --                      |
| Lockheed Martin   | A2                      | 6.0                     | A-                      | 7.0                     |
| McKesson Corp.  | A3                      | 7.0                     | BBB+                    | 8.0                     |
| Microsoft Corp.   | Aaa                     | 1.0                     | AAA                     | 1.0                     |
| MSC Industrial Direc                                    | NA                      | --                      | NA                      | --                      |
| Oracle Corp.  | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| O'Reilly Automotive                                     | Baa1                    | 8.0                     | BBB                     | 9.0                     |
| OSI Systems   | NA                      | --                      | NA                      | --                      |
| Packaging Corp.   | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| Pfizer, Inc.  | A2                      | 6.0                     | A                       | 6.0                     |
| Philip Morris Int'l                                     | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| Prestige Consumer                                       | NA                      | --                      | NA                      | --                      |
| Selective Ins. Group                                    | WR                      | --                      | A+                      | 5.0                     |
| Service Corp. Int'l                                     | Ba3                     | 13.0                    | BB+                     | 11.0                    |
| Sherwin-Williams  | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| Smith (A.O.)  | NA                      | --                      | NA                      | --                      |
| Thermo Fisher Sci.                                      | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| UniFirst Corp.  | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| UnitedHealth Group                                      | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| Universal Corp.   | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| VeriSign Inc.   | Baa2                    | 9.0                     | BBB                     | 9.0                     |
| Waters Corp.  | Baa3                    | 10.0                    | BBB-                    | 10.0                    |
| Watsco, Inc.  | Baa3                    | 10.0                    | BBB-                    | 10.0                    |
| Electric CEM Proxy Group Average                        | Baa1                    | 7.7                     | BBB+                    | 7.8                     |

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 Seven Natural Gas Companies

| <u>Line No.</u> | <u>Equity Risk Premium Measure</u>   | <u>Proxy Group of Forty-<br/>Nine Non-Price Regulated<br/>Companies</u> | <u>Proxy Group of Forty-<br/>Nine Non-Price Regulated<br/>Companies (excl. PRPM)</u> |
|-----------------|--|---|--|
| 1.              | Kroll Equity Risk Premium (1)  | 6.10 %  | 6.10 %   |
| 2.              | Regression on Kroll Risk Premium Data (2)  | 7.03  | 7.03   |
| 3.              | Kroll Equity Risk Premium based on PRPM (3)  | 7.56  | NA   |
| 4.              | Equity Risk Premium Based on Value Line Summary<br>and Index (4)   | 5.61  | 5.61   |
| 5.              | Equity Risk Premium Based on Bloomberg, Value Line,<br>and S&P Global Market Intelligence S&P 500 Companies<br>(5) | 11.15   | 11.15  |
| 6.              | Conclusion of Equity Risk Premium  | 7.49 %  | 7.47 %   |
| 7.              | Adjusted Beta (6)  | 0.87  | 0.87   |
| 8.              | Forecasted Equity Risk Premium   | 6.52 %  | 6.50 %   |

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 page 6 of this Document.

Sources of Information:

Stocks, Bonds, Bills, and Inflation - 2023 SBBI Yearbook, Kroll.  
Value Line Summary and Index.  
Blue Chip Financial Forecasts, November 27, 2024 and December 30, 2024.  
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 Seven Natural Gas Companies

Proxy Group of Forty-Nine Non-Price Regulated Companies

|   | [1]                      | [2]            | [3]          | [4]                     | [5]                | [6]                        | [7]             | [8]                                   |
|---|--------------------------|----------------|--------------|-------------------------|--------------------|----------------------------|-----------------|---------------------------------------|
| Proxy Group of Forty-Nine Non-Price Regulated Companies | Value Line Adjusted Beta | Bloomberg Beta | Average Beta | Market Risk Premium [1] | Risk-Free Rate [2] | Traditional CAPM Cost Rate | ECAPM Cost Rate | Indicated Common Equity Cost Rate [3] |
| Abbott Labs.  | 0.90                     | 0.66           | 0.78         | 8.41 %                  | 4.44 %             | 11.00 %                    | 11.46 %         | 11.23 %                               |
| AbbVie Inc.   | 0.80                     | 1.02           | 0.91         | 8.41                    | 4.44               | 12.09                      | 12.28           | 12.19                                 |
| Air Products & Chem.                                    | 0.90                     | 0.81           | 0.86         | 8.41                    | 4.44               | 11.67                      | 11.97           | 11.82                                 |
| Alphabet Inc.   | 0.90                     | 1.04           | 0.97         | 8.41                    | 4.44               | 12.60                      | 12.66           | 12.63                                 |
| Altria Group  | 0.85                     | 0.47           | 0.66         | 8.41                    | 4.44               | 9.99                       | 10.71           | 10.35                                 |
| Apple Inc.  | 0.95                     | 1.02           | 0.99         | 8.41                    | 4.44               | 12.79                      | 12.79           | 12.78                                 |
| Assurant Inc.   | 0.90                     | 0.79           | 0.85         | 8.41                    | 4.44               | 11.59                      | 11.91           | 11.75                                 |
| AutoZone Inc.   | 0.90                     | 0.81           | 0.86         | 8.41                    | 4.44               | 11.67                      | 11.97           | 11.82                                 |
| Booz Allen Hamilton                                     | 0.85                     | 0.96           | 0.91         | 8.41                    | 4.44               | 12.09                      | 12.28           | 12.19                                 |
| Brady Corp.   | 0.95                     | 0.69           | 0.82         | 8.41                    | 4.44               | 11.34                      | 11.72           | 11.53                                 |
| BWX Technologies  | 0.85                     | 0.69           | 0.77         | 8.41                    | 4.44               | 10.92                      | 11.40           | 11.16                                 |
| CACI Int'l  | 0.90                     | 0.84           | 0.87         | 8.41                    | 4.44               | 11.76                      | 12.03           | 11.89                                 |
| Casey's Gen'l Stores                                    | 0.90                     | 0.63           | 0.77         | 8.41                    | 4.44               | 10.92                      | 11.40           | 11.16                                 |
| Cencora   | 0.80                     | 0.57           | 0.68         | 8.41                    | 4.44               | 10.16                      | 10.83           | 10.50                                 |
| CSW Industrials   | 0.90                     | 1.22           | 1.06         | 8.41                    | 4.44               | 13.36                      | 13.23           | 13.29                                 |
| CVS Health  | 0.90                     | 1.22           | 1.06         | 8.41                    | 4.44               | 13.36                      | 13.23           | 13.29                                 |
| Danaher Corp.   | 0.90                     | 0.88           | 0.89         | 8.41                    | 4.44               | 11.93                      | 12.16           | 12.04                                 |
| Dolby Labs.   | 0.95                     | 0.91           | 0.93         | 8.41                    | 4.44               | 12.26                      | 12.41           | 12.34                                 |
| Exponent, Inc.  | 0.95                     | 1.16           | 1.06         | 8.41                    | 4.44               | 13.36                      | 13.23           | 13.29                                 |
| Fastenal Co.  | 0.85                     | 0.96           | 0.91         | 8.41                    | 4.44               | 12.09                      | 12.28           | 12.19                                 |
| Franklin Electric                                       | 0.90                     | 1.04           | 0.97         | 8.41                    | 4.44               | 12.60                      | 12.66           | 12.63                                 |
| GATX Corp.  | 0.95                     | 1.04           | 0.99         | 8.41                    | 4.44               | 12.77                      | 12.79           | 12.78                                 |
| Henry (Jack) & Assoc                                    | 0.85                     | 0.74           | 0.80         | 8.41                    | 4.44               | 11.17                      | 11.59           | 11.38                                 |
| Hunt (J.B.)   | 0.95                     | 0.67           | 0.81         | 8.41                    | 4.44               | 11.25                      | 11.65           | 11.45                                 |
| Huntington Ingalls                                      | 0.95                     | 1.08           | 1.02         | 8.41                    | 4.44               | 13.02                      | 12.98           | 13.00                                 |
| L3Harris Technologie                                    | 0.95                     | 0.74           | 0.85         | 8.41                    | 4.44               | 11.59                      | 11.91           | 11.75                                 |
| Landstar System   | 0.80                     | 0.96           | 0.88         | 8.41                    | 4.44               | 11.84                      | 12.09           | 11.97                                 |
| Lockheed Martin   | 0.85                     | 0.44           | 0.64         | 8.41                    | 4.44               | 9.82                       | 10.58           | 10.20                                 |
| McKesson Corp.  | 0.85                     | 0.64           | 0.74         | 8.41                    | 4.44               | 10.66                      | 11.21           | 10.94                                 |
| Microsoft Corp.   | 0.90                     | 1.03           | 0.97         | 8.41                    | 4.44               | 12.60                      | 12.66           | 12.63                                 |
| MSC Industrial Direc                                    | 0.90                     | 0.91           | 0.91         | 8.41                    | 4.44               | 12.09                      | 12.28           | 12.19                                 |
| Oracle Corp.  | 0.85                     | 1.27           | 1.06         | 8.41                    | 4.44               | 13.36                      | 13.23           | 13.29                                 |
| O'Reilly Automotive                                     | 0.90                     | 0.59           | 0.74         | 8.41                    | 4.44               | 10.66                      | 11.21           | 10.94                                 |
| OSI Systems   | 0.90                     | 1.17           | 1.03         | 8.41                    | 4.44               | 13.10                      | 13.04           | 13.07                                 |
| Packaging Corp.   | 0.95                     | 0.78           | 0.86         | 8.41                    | 4.44               | 11.67                      | 11.97           | 11.82                                 |
| Pfizer, Inc.  | 0.80                     | 0.50           | 0.65         | 8.41                    | 4.44               | 9.91                       | 10.64           | 10.28                                 |
| Philip Morris Int'l                                     | 0.90                     | 0.78           | 0.84         | 8.41                    | 4.44               | 11.51                      | 11.84           | 11.67                                 |
| Prestige Consumer                                       | 0.90                     | 1.17           | 1.03         | 8.41                    | 4.44               | 13.10                      | 13.04           | 13.07                                 |
| Selective Ins. Group                                    | 0.90                     | 1.03           | 0.97         | 8.41                    | 4.44               | 12.60                      | 12.66           | 12.63                                 |
| Service Corp. Int'l                                     | 0.95                     | 0.94           | 0.94         | 8.41                    | 4.44               | 12.35                      | 12.47           | 12.41                                 |
| Sherwin-Williams  | 0.95                     | 1.12           | 1.04         | 8.41                    | 4.44               | 13.19                      | 13.10           | 13.15                                 |
| Smith (A.O.)  | 0.90                     | 1.00           | 0.95         | 8.41                    | 4.44               | 12.43                      | 12.54           | 12.48                                 |
| Thermo Fisher Sci.                                      | 0.85                     | 0.58           | 0.72         | 8.41                    | 4.44               | 10.50                      | 11.09           | 10.79                                 |
| UniFirst Corp.  | 0.90                     | 0.58           | 0.74         | 8.41                    | 4.44               | 10.66                      | 11.21           | 10.94                                 |
| UnitedHealth Group                                      | 0.95                     | 0.58           | 0.77         | 8.41                    | 4.44               | 10.92                      | 11.40           | 11.16                                 |
| Universal Corp.   | 0.85                     | 0.58           | 0.72         | 8.41                    | 4.44               | 10.50                      | 11.09           | 10.79                                 |
| VeriSign Inc.   | 0.90                     | 0.58           | 0.74         | 8.41                    | 4.44               | 10.66                      | 11.21           | 10.94                                 |
| Waters Corp.  | 0.95                     | 0.69           | 0.82         | 8.41                    | 4.44               | 11.34                      | 11.72           | 11.53                                 |
| Watsco, Inc.  | 0.90                     | 0.69           | 0.79         | 8.41                    | 4.44               | 11.09                      | 11.53           | 11.31                                 |
| Mean  |                          |                | <u>0.87</u>  |                         |                    | <u>11.75 %</u>             | <u>12.03 %</u>  | <u>11.89 %</u>                        |
| Median  |                          |                | <u>0.86</u>  |                         |                    | <u>11.67 %</u>             | <u>11.97 %</u>  | <u>11.82 %</u>                        |
| Average of Mean and Median                              |                          |                | <u>0.87</u>  |                         |                    | <u>11.71 %</u>             | <u>12.00 %</u>  | <u>11.86 %</u>                        |

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.

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

Proxy Group of Forty-Nine Non-Price Regulated Companies

|   | [1]                      | [2]            | [3]          | [4]                     | [5]                | [6]                        | [7]             | [8]                                   |
|---|--------------------------|----------------|--------------|-------------------------|--------------------|----------------------------|-----------------|---------------------------------------|
| Proxy Group of Forty-Nine Non-Price Regulated Companies | Value Line Adjusted Beta | Bloomberg Beta | Average Beta | Market Risk Premium (1) | Risk-Free Rate (2) | Traditional CAPM Cost Rate | ECAPM Cost Rate | Indicated Common Equity Cost Rate (3) |
| Abbott Labs.  | 0.90                     | 0.66           | 0.78         | 8.40 %                  | 4.44 %             | 10.99 %                    | 11.45 %         | 11.22 %                               |
| AbbVie Inc.   | 0.80                     | 1.02           | 0.91         | 8.40                    | 4.44               | 12.08                      | 12.27           | 12.18                                 |
| Air Products & Chem.                                    | 0.90                     | 0.81           | 0.86         | 8.40                    | 4.44               | 11.66                      | 11.96           | 11.81                                 |
| Alphabet Inc.   | 0.90                     | 1.04           | 0.97         | 8.40                    | 4.44               | 12.59                      | 12.65           | 12.62                                 |
| Altria Group  | 0.85                     | 0.47           | 0.66         | 8.40                    | 4.44               | 9.98                       | 10.70           | 10.34                                 |
| Apple Inc.  | 0.95                     | 1.02           | 0.99         | 8.40                    | 4.44               | 12.76                      | 12.78           | 12.77                                 |
| Assurant Inc.   | 0.90                     | 0.79           | 0.85         | 8.40                    | 4.44               | 11.58                      | 11.90           | 11.74                                 |
| AutoZone Inc.   | 0.90                     | 0.81           | 0.86         | 8.40                    | 4.44               | 11.66                      | 11.96           | 11.81                                 |
| Booz Allen Hamilton                                     | 0.85                     | 0.96           | 0.91         | 8.40                    | 4.44               | 12.08                      | 12.27           | 12.18                                 |
| Brady Corp.   | 0.95                     | 0.69           | 0.82         | 8.40                    | 4.44               | 11.33                      | 11.71           | 11.52                                 |
| BWX Technologies  | 0.85                     | 0.69           | 0.77         | 8.40                    | 4.44               | 10.91                      | 11.39           | 11.15                                 |
| CACI Int'l  | 0.90                     | 0.84           | 0.87         | 8.40                    | 4.44               | 11.75                      | 12.02           | 11.89                                 |
| Casey's Gen'l Stores                                    | 0.90                     | 0.63           | 0.77         | 8.40                    | 4.44               | 10.91                      | 11.39           | 11.15                                 |
| Cencora   | 0.80                     | 0.57           | 0.68         | 8.40                    | 4.44               | 10.15                      | 10.82           | 10.49                                 |
| CSW Industrials   | 0.90                     | 1.22           | 1.06         | 8.40                    | 4.44               | 13.34                      | 13.22           | 13.28                                 |
| CVS Health  | 0.90                     | 1.22           | 1.06         | 8.40                    | 4.44               | 13.34                      | 13.22           | 13.28                                 |
| Danaher Corp.   | 0.90                     | 0.88           | 0.89         | 8.40                    | 4.44               | 11.92                      | 12.15           | 12.03                                 |
| Dolby Labs.   | 0.95                     | 0.91           | 0.93         | 8.40                    | 4.44               | 12.25                      | 12.40           | 12.33                                 |
| Exponent, Inc.  | 0.95                     | 1.16           | 1.06         | 8.40                    | 4.44               | 13.34                      | 13.22           | 13.28                                 |
| Fastenal Co.  | 0.85                     | 0.96           | 0.91         | 8.40                    | 4.44               | 12.08                      | 12.27           | 12.18                                 |
| Franklin Electric                                       | 0.90                     | 1.04           | 0.97         | 8.40                    | 4.44               | 12.59                      | 12.65           | 12.62                                 |
| GATX Corp.  | 0.95                     | 1.04           | 0.99         | 8.40                    | 4.44               | 12.76                      | 12.78           | 12.77                                 |
| Henry (Jack) & Assoc                                    | 0.85                     | 0.74           | 0.80         | 8.40                    | 4.44               | 11.16                      | 11.58           | 11.37                                 |
| Hunt (J.B.)   | 0.95                     | 0.67           | 0.81         | 8.40                    | 4.44               | 11.24                      | 11.64           | 11.44                                 |
| Huntington Ingalls                                      | 0.95                     | 1.08           | 1.02         | 8.40                    | 4.44               | 13.01                      | 12.97           | 12.99                                 |
| L3Harris Technologie                                    | 0.95                     | 0.74           | 0.85         | 8.40                    | 4.44               | 11.58                      | 11.90           | 11.74                                 |
| Landstar System   | 0.80                     | 0.96           | 0.88         | 8.40                    | 4.44               | 11.83                      | 12.08           | 11.96                                 |
| Lockheed Martin   | 0.85                     | 0.44           | 0.64         | 8.40                    | 4.44               | 9.82                       | 10.57           | 10.19                                 |
| McKesson Corp.  | 0.85                     | 0.64           | 0.74         | 8.40                    | 4.44               | 10.66                      | 11.20           | 10.93                                 |
| Microsoft Corp.   | 0.90                     | 1.03           | 0.97         | 8.40                    | 4.44               | 12.59                      | 12.65           | 12.62                                 |
| MSC Industrial Direc                                    | 0.90                     | 0.91           | 0.91         | 8.40                    | 4.44               | 12.08                      | 12.27           | 12.18                                 |
| Oracle Corp.  | 0.85                     | 1.27           | 1.06         | 8.40                    | 4.44               | 13.34                      | 13.22           | 13.28                                 |
| O'Reilly Automotive                                     | 0.90                     | 0.59           | 0.74         | 8.40                    | 4.44               | 10.66                      | 11.20           | 10.93                                 |
| OSI Systems   | 0.90                     | 1.17           | 1.03         | 8.40                    | 4.44               | 13.09                      | 13.03           | 13.06                                 |
| Packaging Corp.   | 0.95                     | 0.78           | 0.86         | 8.40                    | 4.44               | 11.66                      | 11.96           | 11.81                                 |
| Pfizer, Inc.  | 0.80                     | 0.50           | 0.65         | 8.40                    | 4.44               | 9.90                       | 10.64           | 10.27                                 |
| Philip Morris Int'l                                     | 0.90                     | 0.78           | 0.84         | 8.40                    | 4.44               | 11.50                      | 11.83           | 11.66                                 |
| Prestige Consumer                                       | 0.90                     | 1.17           | 1.03         | 8.40                    | 4.44               | 13.09                      | 13.03           | 13.06                                 |
| Selective Ins. Group                                    | 0.90                     | 1.03           | 0.97         | 8.40                    | 4.44               | 12.59                      | 12.65           | 12.62                                 |
| Service Corp. Int'l                                     | 0.95                     | 0.94           | 0.94         | 8.40                    | 4.44               | 12.34                      | 12.46           | 12.40                                 |
| Sherwin-Williams  | 0.95                     | 1.12           | 1.04         | 8.40                    | 4.44               | 13.18                      | 13.09           | 13.13                                 |
| Smith (A.O.)  | 0.90                     | 1.00           | 0.95         | 8.40                    | 4.44               | 12.42                      | 12.53           | 12.47                                 |
| Thermo Fisher Sci.                                      | 0.85                     | 0.58           | 0.72         | 8.40                    | 4.44               | 10.49                      | 11.08           | 10.78                                 |
| UniFirst Corp.  | 0.90                     | 0.58           | 0.74         | 8.40                    | 4.44               | 10.66                      | 11.20           | 10.93                                 |
| UnitedHealth Group                                      | 0.95                     | 0.58           | 0.77         | 8.40                    | 4.44               | 10.91                      | 11.39           | 11.15                                 |
| Universal Corp.   | 0.85                     | 0.58           | 0.72         | 8.40                    | 4.44               | 10.49                      | 11.08           | 10.78                                 |
| VeriSign Inc.   | 0.90                     | 0.58           | 0.74         | 8.40                    | 4.44               | 10.66                      | 11.20           | 10.93                                 |
| Waters Corp.  | 0.95                     | 0.69           | 0.82         | 8.40                    | 4.44               | 11.33                      | 11.71           | 11.52                                 |
| Watsco, Inc.  | 0.90                     | 0.69           | 0.79         | 8.40                    | 4.44               | 11.08                      | 11.52           | 11.30                                 |
| Mean  |                          |                | <u>0.87</u>  |                         |                    | <u>11.74 %</u>             | <u>12.02 %</u>  | <u>11.88 %</u>                        |
| Median  |                          |                | <u>0.86</u>  |                         |                    | <u>11.66 %</u>             | <u>11.96 %</u>  | <u>11.81 %</u>                        |
| Average of Mean and Median                              |                          |                | <u>0.87</u>  |                         |                    | <u>11.70 %</u>             | <u>11.99 %</u>  | <u>11.85 %</u>                        |

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.

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]   |                | [2]  | [3]   | [4]                                      |
|----------|---|---|----------------|--|---|--|
|          |   | Market Capitalization on January 15, 2025 (1)<br>( millions ) | (times larger) | Applicable Decile of the NYSE/AMEX/NASDAQ (2)          | Applicable Size Premium (3)                           | Spread from Applicable Size Premium (4)  |
| 1.       | <u>Peoples Gas System</u>                         | \$ 2,692.848  |                | 6  | 1.21%   |  |
| 2.       | <u>Proxy Group of Seven Natural Gas Companies</u> | \$ 8,011.105  | 3.0 x          | 3  | 0.61%   | 0.60%                                    |
|          |   |   | [A]            | [B]  | [C]   | [D]                                      |
|          |   |   | Decile         | Market Capitalization of Smallest Company ( millions ) | Market Capitalization of Largest Company ( millions ) | Size Premium (Return in Excess of CAPM)* |
|          |   | Largest   | 1              | \$ 36,942.976  | \$ 2,662,326.048                                      | -0.06%                                   |
|          |   |   | 2              | 14,910.719   | 36,391.113  | 0.46%                                    |
|          |   |   | 3              | 7,493.607  | 14,820.048  | 0.61%                                    |
|          |   |   | 4              | 4,622.261  | 7,461.284   | 0.64%                                    |
|          |   |   | 5              | 3,011.224  | 4,621.785   | 0.95%                                    |
|          |   |   | 6              | 1,864.293  | 3,010.806   | 1.21%                                    |
|          |   |   | 7              | 1,050.083  | 1,862.491   | 1.39%                                    |
|          |   |   | 8              | 555.880  | 1,046.037   | 1.14%                                    |
|          |   |   | 9              | 213.039  | 554.523   | 1.99%                                    |
|          |   | Smallest  | 10             | 1.576  | 212.644   | 4.70%                                    |

\*From 2024 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 0.60% in Column [4], Line No. 2 is derived as follows 0.60% = 1.21% - 0.61%.

Peoples Gas System  
Market Capitalization of Peoples Gas System and the  
Proxy Group of Seven Natural Gas Companies

| Company   | Exchange | [1]<br>Common Stock Shares<br>Outstanding at Fiscal<br>Year End 2023<br>( millions ) | [2]<br>Book Value per<br>Share at Fiscal<br>Year End 2023<br>(1) | [3]<br>Total Common Equity<br>at Fiscal Year End<br>2023<br>( millions ) | [4]<br>Closing Stock<br>Market Price on<br>January 15,<br>2025 | [5]<br>Market-to-<br>Book Ratio on<br>January 15,<br>2025 (2) | [6]<br>Market<br>Capitalization on<br>January 15, 2025<br>(3)<br>( millions ) |
|---|----------|--|--|--|--|---|---|
| Peoples Gas System                                    |          | NA   | NA   | 1,615.386 (4)  | NA   |   |   |
| Based upon Proxy Group of Seven Natural Gas Companies |          |  |  |  |  | 166.7 (5)   | \$ 2,692.848 (6)  |
| Proxy Group of Seven Natural Gas Companies            |          |  |  |  |  |   |   |
| Atmos Energy Corporation                              | NYSE     | 148.493  | \$ 73.203  | \$ 10,870.06   | \$ 141.080   | 192.7 %   | \$ 20,949.362   |
| New Jersey Resources Corporation                      | NYSE     | 97.584   | \$ 20.400  | 1,990.74   | 46.470   | 227.8   | 4,534.750   |
| NiSource Inc.   | NYSE     | 447.382  | \$ 17.398  | 7,783.50   | 36.910   | 212.2   | 16,512.857  |
| Northwest Natural Holding Company                     | NYSE     | 37.631   | \$ 34.116  | 1,283.84   | 39.360   | 115.4   | 1,481.156   |
| ONE Gas, Inc.   | NYSE     | 56.546   | \$ 48.914  | 2,765.88   | 70.890   | 144.9   | 4,008.541   |
| Southwest Gas Holdings, Inc.                          | NYSE     | 71.564   | \$ 46.253  | 3,310.04   | 69.830   | 151.0   | 4,997.297   |
| Spire Inc.  | NYSE     | 53.170   | \$ 54.867  | 2,917.30   | 67.590   | 123.2   | 3,593.775   |
| Average   |          | 130.339  | \$ 42.164  | \$ 4,417.336   | \$ 67.447  | 166.7 %   | \$ 8,011.105  |

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 January 15, 2025 is assumed to be equal to the market-to-book ratio of Proxy Group of Seven Natural Gas Companies on January 15, 2025 as appropriate.  
(6) Column [3] multiplied by Column [5].

Source of Information: 2023 Annual Forms 10-K  
Bloomberg Professional

DOCKET NO. 20250029-GU  
EXHIBIT NO. DD-1  
WITNESS: D'ASCENDIS  
DOCUMENT NO. 8  
PAGE 2 OF 2  
FILED: 03/31/2025

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

Equity Issuances

| Date               | Issuing Company        | [1]<br>Shares Issued<br>(1) | [2]<br>Market Price<br>per Share (1) | [3]<br>Average<br>Offering Price<br>per Share (1) | [4]<br>Underwriting<br>Discount (1) | [5]<br>Total Offering<br>Expense per<br>Share (1) | [6]<br>Net Proceeds<br>per Share (2) | [7]<br>Total Flotation<br>Costs (3) | [8]<br>Gross Equity Issue<br>before Costs (4) | [9]<br>Net Proceeds (5) | [10]<br>Flotation Cost<br>Percentage (6) |
|--------------------|------------------------|-----------------------------|--------------------------------------|---|-------------------------------------|---|--------------------------------------|-------------------------------------|---|-------------------------|--|
| At-The-Market 2024 | Enera 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 | Enera 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 | Enera 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 | Enera 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 | Enera 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 | Enera 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         | Enera 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          | Enera 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) |
| 3.66 %                     | 6.17 %                                | 3.77 %                      | 9.94 %   | 10.02 %                                   | 0.08 %                         |

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 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].

**Referenced Endnotes**  
**for the**  
**Prepared Direct Testimony**  
**of**  
**Dylan W. D'Ascendis**

- 1 *Hope*, 320 U.S. 591 (1944), at 603.
- 2 As will be discussed later in this testimony, another definition of  
total risk is systematic risk plus unsystematic risk.
- 3 Risk distinctions within S&P's bond rating categories are recognized by  
a plus or minus, *e.g.*, an S&P rating can be an A+, A, or A-.  
Similarly, risk distinction for Moody's ratings are distinguished by  
numerical rating gradations, *e.g.*, a Moody's rating can be A1, A2 and  
A3.
- 4 Emera Incorporated, Investor Presentation, December 2024, at 33.
- 5 Emera Incorporated, U.S. SEC Form 40-F for the year ended December 31,  
2023, at 6.
- 6 The development of the Non-Price Regulated Proxy Group is explained in  
more detail in Section VI.
- 7 Eugene F. Brigham and Joel F. Houston, Fundamentals of Financial  
Management, Concise 4th Ed., Thomson South-Western, 2004, at 574.
- 8 Excluding securitized debt.
- 9 *In re: Petition for rate increase by Peoples*, Docket No. 080318-GU,  
Final Order Granting in Part and Denying in Part Petition for Rate  
Increase, at 12 (June 9, 2009).
- 10 *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 62-66, 71 (December 27,  
2023).

11 See, SBBI-2023, at 201.

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Applied Finance, Vol. 11, No. 1, 2001, at 11-12; Eugene F. Brigham,  
Dilip K. Shome, and Steve R. Vinson, The Risk Premium Approach to  
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21 Fama & French, at 33.

22 Blue Chip Financial Forecasts, December 30, 2024, at 2 and November 27,  
2024, at 14.

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25 Eugene F. Brigham and Phillip R. Daves, Intermediate Financial  
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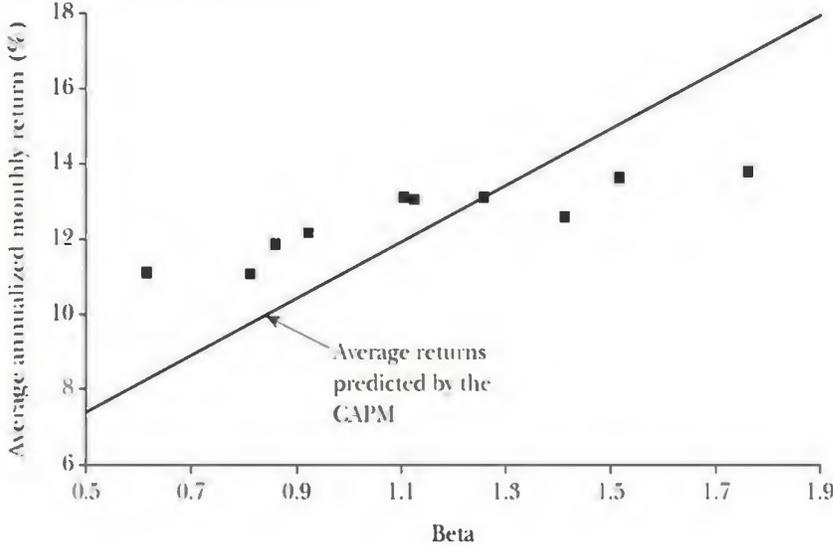
28 Fama & French, at 25-43.

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<sup>30</sup> Eugene F. Brigham, Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989), at 623.

Fama & French - Figure 2

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





Dylan W. D'Ascendis, CRRA, CVA  
Partner

#### *Summary*

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). Dylan joined ScottMadden in 2016 and is a leading expert witness with respect to cost of capital, capital structure, and valuation. He has served as a consultant for investor-owned and municipal utilities and authorities for 16 years. Dylan has testified as an expert witness on over 150 occasions regarding rate of return, cost of service, rate design, and valuation before more than 40 regulatory jurisdictions in the United States and Canada, an American Arbitration Association panel, and the Superior Court of Rhode Island. He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured. Dylan holds a B.A. in economic history from the University of Pennsylvania and an M.B.A. with concentrations in finance and international business from Rutgers University.

#### *Areas of Specialization*

- Expert Witness Testimony
- Rates and Regulation
- Return on Equity
- Valuation
- Utility Regulations
- Rate Case Planning, Management, and Support
- Utility Benchmarking

#### *Recent Articles and Speeches*

- "Decoupling, Risk Impacts, and the Cost of Capital." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal. March 2020
- "Decoupling Impact and Public Utility Conservation Investment." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal. 130 (2019), 311-319
- "Establishing Alternative Proxy Groups." Presentation before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum. April 4, 2019. New Orleans, LA
- "Past Is Prologue: Future Test Year." Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit. May 2, 2017. Savannah, GA
- "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley. The Electricity Journal. May 2013
- "Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks." Presentation before the Society of Utility and Regulatory Financial Analysts: 45th Financial Forum. April 17-18, 2013. Indianapolis, IN

#### *Recent Assignments*

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- Maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured
- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the city
- Co-authored a valuation report on behalf of a large investor-owned utility in response to a new state regulation which allowed the appraised value of acquired assets into rate base



Dylan W. D'Ascendis, CRRA, CVA  
Partner

| Sponsor   | Date  | Case/Applicant   | Docket No.   | Subject                                     |
|---|-------|--|--|---|
| <b>Regulatory Commission of Alaska</b>                      |       |  |  |   |
| Goat Lake Hydro, Inc.                                       | 12/24 | Goat Lake Hydro, Inc.  | Docket No. TA7-521                                 | Rate of Return                              |
| Alaska Power Company  | 08/23 | Alaska Power Company   | Docket No. TA 909-2 / U-23-054                     | Capital Structure                           |
| ENSTAR Natural Gas Company                                  | 08/22 | ENSTAR Natural Gas Company                                   | Docket No. TA334-4                                 | Rate of Return                              |
| Cook Inlet Natural Gas Storage Alaska, LLC                  | 07/21 | Cook Inlet Natural Gas Storage Alaska, LLC                   | Docket No. TA45-733                                | Capital Structure                           |
| Alaska Power Company  | 09/20 | Alaska Power Company; Goat Lake Hydro, Inc.; BBL Hydro, Inc. | Tariff Nos. TA886-2; TA6-521; TA4-573              | Capital Structure                           |
| Alaska Power Company  | 07/16 | Alaska Power Company   | Docket No. TA857-2                                 | Rate of Return                              |
| <b>Alberta Utilities Commission</b>                         |       |  |  |   |
| AltaLink, L.P., and EPCOR Distribution & Transmission, Inc. | 02/23 | AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.  | Proceeding ID. 27084                               | Determination of Cost-of-Capital Parameters |
| AltaLink, L.P., and EPCOR Distribution & Transmission, Inc. | 01/20 | AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.  | 2021 Generic Cost of Capital, Proceeding ID. 24110 | Rate of Return                              |
| <b>Arizona Corporation Commission</b>                       |       |  |  |   |
| EPCOR Water Arizona, Inc.                                   | 06/24 | EPCOR Water Arizona, Inc.                                    | Docket No. WS-01303A-24-0130                       | Rate of Return                              |
| Arizona Water Company                                       | 05/24 | Arizona Water Company – Northern Group                       | Docket No. W-01445A-24-0117                        | Rate of Return                              |
| Foothills Water & Sewer, LLC                                | 10/23 | Foothills Water & Sewer, LLC                                 | Docket No. WS-21182A-23-0292                       | Rate of Return and Fair Value Rate Base     |
| Arizona Water Company                                       | 12/22 | Arizona Water Company – Eastern Group                        | Docket No. W-01445A-22-0286                        | Rate of Return                              |
| EPCOR Water Arizona, Inc.                                   | 08/22 | EPCOR Water Arizona, Inc.                                    | Docket No. WS-01303A-22-0236                       | Rate of Return                              |
| EPCOR Water Arizona, Inc.                                   | 06/20 | EPCOR Water Arizona, Inc.                                    | Docket No. WS-01303A-20-0177                       | Rate of Return                              |
| Arizona Water Company                                       | 12/19 | Arizona Water Company – Western Group                        | Docket No. W-01445A-19-0278                        | Rate of Return                              |
| Arizona Water Company                                       | 08/18 | Arizona Water Company – Northern Group                       | Docket No. W-01445A-18-0164                        | Rate of Return                              |
| <b>Arkansas Public Service Commission</b>                   |       |  |  |   |
| Summit Utilities Arkansas, Inc.                             | 01/24 | Summit Utilities Arkansas, Inc.                              | Docket No. 23-079-U                                | Rate of Return                              |
| Southwestern Electric Power Co.                             | 07/21 | Southwestern Electric Power Co.                              | Docket No. 21-070-U                                | Return on Equity                            |
| CenterPoint Energy Resources Corp.                          | 05/21 | CenterPoint Arkansas Gas                                     | Docket No. 21-004-U                                | Return on Equity                            |
| <b>California Public Utilities Commission</b>               |       |  |  |   |
| Southwest Gas Corporation                                   | 07/24 | Southwest Gas Corporation                                    | Docket No. A24-09-001                              | Return on Equity                            |
| San Gabriel Valley Water Company                            | 05/23 | San Gabriel Valley Water Company                             | Docket No. A23-05-001                              | Return on Equity                            |
| <b>City of Edmonton Canada</b>                              |       |  |  |   |
| EPCOR Water Services Inc.                                   | 05/24 | EPCOR Water Services, Inc.                                   | Performance Based Regulation Application           | Cost of Capital                             |
| <b>Colorado Public Utilities Commission</b>                 |       |  |  |   |
| Atmos Energy Corporation                                    | 08/22 | Atmos Energy Corporation                                     | Docket No. 22AL-0348G                              | Rate of Return                              |
| Summit Utilities, Inc.                                      | 04/18 | Colorado Natural Gas Company                                 | Docket No. 18AL-0305G                              | Rate of Return                              |
| Atmos Energy Corporation                                    | 06/17 | Atmos Energy Corporation                                     | Docket No. 17AL-0429G                              | Rate of Return                              |



Dylan W. D'Ascendis, CRRA, CVA  
Partner

| Sponsor  | Date  | Case/Applicant                                   | Docket No.   | Subject                              |
|--|-------|--|--|--------------------------------------|
| <b>Commission of the Canada Energy Regulator</b>             |       |  |  |                                      |
| Trans-Northern Pipelines Inc                                 | 11/22 | Trans-Northern Pipelines Inc.                    | Docket No. C-22197                                 | Cost of Capital                      |
| <b>Delaware Public Service Commission</b>                    |       |  |  |                                      |
| Delmarva Power & Light Co                                    | 09/24 | Delmarva Power & Light Co.                       | Docket No. 24-1044 (Gas)                           | Return on Equity                     |
| Tidewater Utilities Inc                                      | 08/24 | Tidewater Utilities, Inc.                        | Docket No. 24-0991                                 | Rate of Return                       |
| Delmarva Power & Light Co.                                   | 07/24 | Delmarva Power & Light Co.                       | Docket No. 24-0868                                 | Alternative Forms of Rate Regulation |
| Artesian Water Company, Inc.                                 | 04/23 | Artesian Water Company, Inc.                     | Docket No. 23-0601                                 | Rate of Return                       |
| Delmarva Power & Light Co.                                   | 12/22 | Delmarva Power & Light Co.                       | Docket No. 22-0897 (Electric)                      | Return on Equity                     |
| Delmarva Power & Light Co.                                   | 01/22 | Delmarva Power & Light Co.                       | Docket No. 22-002 (Gas)                            | Return on Equity                     |
| Delmarva Power & Light Co.                                   | 11/20 | Delmarva Power & Light Co.                       | Docket No. 20-0149 (Electric)                      | Return on Equity                     |
| Delmarva Power & Light Co.                                   | 10/20 | Delmarva Power & Light Co.                       | Docket No. 20-0150 (Gas)                           | Return on Equity                     |
| Tidewater Utilities, Inc.                                    | 11/13 | Tidewater Utilities, Inc.                        | Docket No. 13-466                                  | Capital Structure                    |
| <b>Public Service Commission of the District of Columbia</b> |       |  |  |                                      |
| Washington Gas Light Company                                 | 08/24 | Washington Gas Light Company                     | Formal Case No. 1180                               | Rate of Return                       |
| Washington Gas Light Company                                 | 04/22 | Washington Gas Light Company                     | Formal Case No. 1169                               | Rate of Return                       |
| Washington Gas Light Company                                 | 09/20 | Washington Gas Light Company                     | Formal Case No. 1162                               | Rate of Return                       |
| <b>Federal Energy Regulatory Commission</b>                  |       |  |  |                                      |
| LS Power Grid California, LLC                                | 10/20 | LS Power Grid California, LLC                    | Docket No. ER21-195-000                            | Rate of Return                       |
| <b>Florida Public Service Commission</b>                     |       |  |  |                                      |
| Tampa Electric Company                                       | 04/24 | Tampa Electric Company                           | Docket No. 20240025-EI                             | Return on Equity                     |
| Peoples Gas System, Inc.                                     | 04/23 | Peoples Gas System, Inc.                         | Docket No. 20230023-GU                             | Rate of Return                       |
| Tampa Electric Company                                       | 04/21 | Tampa Electric Company                           | Docket No. 20210034-EI                             | Return on Equity                     |
| Peoples Gas System, Inc.                                     | 09/20 | Peoples Gas System, Inc.                         | Docket No. 20200051-GU                             | Rate of Return                       |
| Utilities, Inc. of Florida                                   | 06/20 | Utilities, Inc. of Florida                       | Docket No. 20200139-WS                             | Rate of Return                       |
| <b>Hawaii Public Utilities Commission</b>                    |       |  |  |                                      |
| Launiupoko Irrigation Company, Inc.                          | 12/20 | Launiupoko Irrigation Company, Inc.              | Docket No. 2020-0217 /<br>Transferred to 2020-0089 | Capital Structure                    |
| Lanai Water Company, Inc.                                    | 12/19 | Lanai Water Company, Inc.                        | Docket No. 2019-0386                               | Cost of Service /<br>Rate Design     |
| Manele Water Resources, LLC                                  | 08/19 | Manele Water Resources, LLC                      | Docket No. 2019-0311                               | Cost of Service /<br>Rate Design     |
| Kaupulehu Water Company                                      | 02/18 | Kaupulehu Water Company                          | Docket No. 2016-0363                               | Rate of Return                       |
| Aqua Engineers, LLC  | 05/17 | Puhi Sewer & Water Company                       | Docket No. 2017-0118                               | Cost of Service /<br>Rate Design     |
| Hawaii Resources, Inc.                                       | 09/16 | Laie Water Company                               | Docket No. 2016-0229                               | Cost of Service /<br>Rate Design     |
| <b>Illinois Commerce Commission</b>                          |       |  |  |                                      |
| Ameren Illinois Company d/b/a<br>Ameren Illinois             | 01/25 | Ameren Illinois Company d/b/a<br>Ameren Illinois | Docket No. 25-0084 (Gas)                           | Return on Equity                     |
| Aqua Illinois, Inc.  | 01/24 | Aqua Illinois, Inc.                              | Docket No. 24-0044                                 | Rate of Return                       |
| Ameren Illinois Company d/b/a<br>Ameren Illinois             | 01/23 | Ameren Illinois Company d/b/a<br>Ameren Illinois | Docket No. 23-0082 (Electric)                      | Return on Equity                     |
| Ameren Illinois Company d/b/a<br>Ameren Illinois             | 01/23 | Ameren Illinois Company d/b/a<br>Ameren Illinois | Docket No. 23-0067 (Gas)                           | Return on Equity                     |
| Utility Services of Illinois, Inc.                           | 02/21 | Utility Services of Illinois, Inc.               | Docket No. 21-0198                                 | Rate of Return                       |
| Ameren Illinois Company d/b/a<br>Ameren Illinois             | 07/20 | Ameren Illinois Company d/b/a<br>Ameren Illinois | Docket No. 20-0308                                 | Return on Equity                     |



Dylan W. D'Ascendis, CRRA, CVA  
Partner

| Sponsor   | Date  | Case/Applicant  | Docket No.                | Subject                       |
|---|-------|---|---------------------------|-------------------------------|
| Utility Services of Illinois, Inc.                  | 11/17 | Utility Services of Illinois, Inc.                      | Docket No. 17-1106        | Cost of Service / Rate Design |
| Aqua Illinois, Inc.                                 | 04/17 | Aqua Illinois, Inc.                                     | Docket No. 17-0259        | Rate of Return                |
| Utility Services of Illinois, Inc.                  | 04/15 | Utility Services of Illinois, Inc.                      | Docket No. 14-0741        | Rate of Return                |
| <b>Indiana Utility Regulatory Commission</b>        |       |   |                           |                               |
| Aqua Indiana, Inc.                                  | 03/16 | Aqua Indiana, Inc. Aboite Wastewater Division           | Docket No. 44752          | Rate of Return                |
| Twin Lakes Utilities Inc.                           | 08/13 | Twin Lakes, Utilities, Inc.                             | Docket No. 44388          | Rate of Return                |
| <b>Kansas Corporation Commission</b>                |       |   |                           |                               |
| Atmos Energy Corporation                            | 07/19 | Atmos Energy Corporation                                | 19-ATMG-525-RTS           | Rate of Return                |
| <b>Kentucky Public Service Commission</b>           |       |   |                           |                               |
| Atmos Energy Corporation                            | 09/24 | Atmos Energy Corporation                                | 2024-00276                | Rate of Return                |
| Bluegrass Water Utility Operating Company           | 02/23 | Bluegrass Water Utility Operating Company               | 2022-00432                | Return on Equity              |
| Atmos Energy Corporation                            | 07/22 | Atmos Energy Corporation                                | 2022-00222                | PRP Rider Rate                |
| Water Service Corporation of KY                     | 06/22 | Water Service Corporation of KY                         | 2022-00147                | Rate of Return                |
| Atmos Energy Corporation                            | 07/21 | Atmos Energy Corporation                                | 2021-00304                | PRP Rider Rate                |
| Atmos Energy Corporation                            | 06/21 | Atmos Energy Corporation                                | 2021-00214                | Rate of Return                |
| Duke Energy Kentucky, Inc.                          | 06/21 | Duke Energy Kentucky, Inc.                              | 2021-00190                | Return on Equity              |
| Bluegrass Water Utility Operating Company           | 10/20 | Bluegrass Water Utility Operating Company               | 2020-00290                | Return on Equity              |
| <b>Louisiana Public Service Commission</b>          |       |   |                           |                               |
| Utilities, Inc. of Louisiana                        | 05/21 | Utilities, Inc. of Louisiana                            | Docket No. U-36003        | Rate of Return                |
| Southwestern Electric Power Company                 | 12/20 | Southwestern Electric Power Company                     | Docket No. U-35441        | Return on Equity              |
| Atmos Energy Corporation                            | 04/20 | Atmos Energy Corporation                                | Docket No. U-35535        | Rate of Return                |
| Louisiana Water Service, Inc.                       | 06/13 | Louisiana Water Service, Inc.                           | Docket No. U-32848        | Rate of Return                |
| <b>Maine Public Utilities Commission</b>            |       |   |                           |                               |
| Northern Utilities Inc. d/b/a Until                 | 05/23 | Northern Utilities, Inc. d/b/a Until                    | Docket No. 2023-00051     | Return on Equity              |
| Summit Natural Gas of Maine, Inc.                   | 03/22 | Summit Natural Gas of Maine, Inc.                       | Docket No. 2022-00025     | Rate of Return                |
| The Maine Water Company                             | 09/21 | The Maine Water Company                                 | Docket No. 2021-00053     | Rate of Return                |
| <b>Maryland Public Service Commission</b>           |       |   |                           |                               |
| Washington Gas Light Company                        | 05/23 | Washington Gas Light Company                            | Case No. 9704             | Rate of Return                |
| FirstEnergy Service Company                         | 03/23 | Potomac Edison Company                                  | Case No. 9695             | Rate of Return                |
| Washington Gas Light Company                        | 08/20 | Washington Gas Light Company                            | Case No. 9651             | Rate of Return                |
| FirstEnergy Corporation                             | 08/18 | Potomac Edison Company                                  | Case No. 9490             | Rate of Return                |
| <b>Massachusetts Department of Public Utilities</b> |       |   |                           |                               |
| Unitil Corporation                                  | 09/23 | Fitchburg Gas & Electric Co. (Elec.)                    | D.P.U. 23-80              | Rate of Return                |
| Unitil Corporation                                  | 09/23 | Fitchburg Gas & Electric Co. (Gas)                      | D.P.U. 23-81              | Rate of Return                |
| Unitil Corporation                                  | 12/19 | Fitchburg Gas & Electric Co. (Elec.)                    | D.P.U. 19-130             | Rate of Return                |
| Unitil Corporation                                  | 12/19 | Fitchburg Gas & Electric Co. (Gas)                      | D.P.U. 19-131             | Rate of Return                |
| Liberty Utilities                                   | 07/15 | Liberty Utilities d/b/a New England Natural Gas Company | D.P.U. 15-75              | Rate of Return                |
| <b>Minnesota Public Utilities Commission</b>        |       |   |                           |                               |
| Northern States Power Company                       | 11/01 | Northern States Power Company                           | Docket No. G002/GR-21-678 | Return on Equity              |
| Northern States Power Company                       | 10/21 | Northern States Power Company                           | Docket No. E002/GR-21-630 | Return on Equity              |
| Northern States Power Company                       | 11/20 | Northern States Power Company                           | Docket No. E002/GR-20-723 | Return on Equity              |



Dylan W. D'Ascendis, CRRA, CVA  
Partner

| Sponsor   | Date  | Case/Applicant                                    | Docket No.                         | Subject                       |
|---|-------|---|------------------------------------|-------------------------------|
| <b>Mississippi Public Service Commission</b>      |       |   |                                    |                               |
| Great River Utility Operating Co.                 | 07/22 | Great River Utility Operating Co.                 | Docket No. 2022-UN-86              | Rate of Return                |
| Atmos Energy Corporation                          | 03/19 | Atmos Energy Corporation                          | Docket No. 2015-UN-049             | Capital Structure             |
| Atmos Energy Corporation                          | 07/18 | Atmos Energy Corporation                          | Docket No. 2015-UN-049             | Capital Structure             |
| <b>Missouri Public Service Commission</b>         |       |   |                                    |                               |
| Confluence Rivers Utility Operating Company, Inc. | 01/23 | Confluence Rivers Utility Operating Company, Inc. | Case No. WR-2023-0006/SR-2023-0007 | Rate of Return                |
| Spire Missouri, Inc.                              | 12/20 | Spire Missouri, Inc.                              | Case No. GR-2021-0108              | Return on Equity              |
| Indian Hills Utility Operating Company, Inc.      | 10/17 | Indian Hills Utility Operating Company, Inc.      | Case No. SR-2017-0259              | Rate of Return                |
| Raccoon Creek Utility Operating Company, Inc.     | 09/16 | Raccoon Creek Utility Operating Company, Inc.     | Case No. SR-2016-0202              | Rate of Return                |
| <b>Public Utilities Commission of Nevada</b>      |       |   |                                    |                               |
| Southwest Gas Corporation                         | 09/23 | Southwest Gas Corporation                         | Docket No. 23-09012                | Return on Equity              |
| Southwest Gas Corporation                         | 09/21 | Southwest Gas Corporation                         | Docket No. 21-09001                | Return on Equity              |
| Southwest Gas Corporation                         | 08/20 | Southwest Gas Corporation                         | Docket No. 20-02023                | Return on Equity              |
| <b>New Hampshire Public Utilities Commission</b>  |       |   |                                    |                               |
| Aquarion Water Company of New Hampshire, Inc.     | 12/20 | Aquarion Water Company of New Hampshire, Inc.     | Docket No. DW 20-184               | Rate of Return                |
| <b>New Jersey Board of Public Utilities</b>       |       |   |                                    |                               |
| Atlantic City Electric Company                    | 11/24 | Atlantic City Electric Company                    | Docket No. ER24110854              | Rate of Return                |
| New Jersey Natural Gas Company                    | 01/24 | New Jersey Natural Gas Company                    | Docket No. GR24010071              | Rate of Return                |
| Middlesex Water Company                           | 05/23 | Middlesex Water Company                           | Docket No. WR23050292              | Rate of Return                |
| FirstEnergy Service Company                       | 03/23 | Jersey Central Power & Light Co.                  | Docket No. ER23030144              | Rate of Return                |
| Atlantic City Electric Company                    | 02/23 | Atlantic City Electric Company                    | Docket No. ER23020091              | Return on Equity              |
| Middlesex Water Company                           | 05/21 | Middlesex Water Company                           | Docket No. WR21050813              | Rate of Return                |
| Atlantic City Electric Company                    | 12/20 | Atlantic City Electric Company                    | Docket No. ER20120746              | Return on Equity              |
| FirstEnergy Service Company                       | 02/20 | Jersey Central Power & Light Co.                  | Docket No. ER20020146              | Rate of Return                |
| Aqua New Jersey, Inc.                             | 12/18 | Aqua New Jersey, Inc.                             | Docket No. WR18121351              | Rate of Return                |
| Middlesex Water Company                           | 10/17 | Middlesex Water Company                           | Docket No. WR17101049              | Rate of Return                |
| Middlesex Water Company                           | 03/15 | Middlesex Water Company                           | Docket No. WR15030391              | Rate of Return                |
| The Atlantic City Sewerage Company                | 10/14 | The Atlantic City Sewerage Company                | Docket No. WR14101263              | Cost of Service / Rate Design |
| Middlesex Water Company                           | 11/13 | Middlesex Water Company                           | Docket No. WR1311059               | Capital Structure             |
| <b>New Mexico Public Regulation Commission</b>    |       |   |                                    |                               |
| New Mexico Gas Company                            | 09/23 | New Mexico Gas Company                            | Case No. 23-00255-UT               | Return on Equity              |
| Southwestern Public Service Co.                   | 11/22 | Southwestern Public Service Co.                   | Case No. 22-00286-UT               | Return on Equity              |
| Southwestern Public Service Co.                   | 01/21 | Southwestern Public Service Co.                   | Case No. 20-00238-UT               | Return on Equity              |
| <b>North Carolina Utilities Commission</b>        |       |   |                                    |                               |
| Pluris Hampstead, LLC                             | 09/24 | Pluris Hampstead, LLC                             | Docket No. W-1305, Sub 38          | Rate of Return                |
| Old North State Water Co., Inc.                   | 06/24 | Old North State Water Co., Inc.                   | Docket No. W-1300, Sub 100         | Rate of Return                |
| Carolina Water Service, Inc.                      | 07/22 | Carolina Water Service, Inc.                      | Docket No. W-354 Sub 400           | Rate of Return                |
| Aqua North Carolina, Inc.                         | 06/22 | Aqua North Carolina, Inc.                         | Docket No. W-218 Sub 573           | Rate of Return                |
| Carolina Water Service, Inc.                      | 07/21 | Carolina Water Service, Inc.                      | Docket No. W-354 Sub 384           | Rate of Return                |
| Piedmont Natural Gas Co., Inc.                    | 03/21 | Piedmont Natural Gas Co., Inc.                    | Docket No. G-9, Sub 781            | Return on Equity              |
| Duke Energy Carolinas, LLC                        | 07/20 | Duke Energy Carolinas, LLC                        | Docket No. E-7, Sub 1214           | Return on Equity              |
| Duke Energy Progress, LLC                         | 07/20 | Duke Energy Progress, LLC                         | Docket No. E-2, Sub 1219           | Return on Equity              |



Dylan W. D'Ascendis, CRRA, CVA  
Partner

| Sponsor  | Date  | Case/Applicant  | Docket No.                | Subject                                      |
|--|-------|---|---------------------------|--|
| Aqua North Carolina, Inc.                        | 12/19 | Aqua North Carolina, Inc.   | Docket No. W-218 Sub 526  | Rate of Return                               |
| Carolina Water Service, Inc.                     | 06/19 | Carolina Water Service, Inc.  | Docket No. W-354 Sub 364  | Rate of Return                               |
| Carolina Water Service Inc.                      | 09/18 | Carolina Water Service, Inc.  | Docket No. W-354 Sub 360  | Rate of Return                               |
| Aqua North Carolina, Inc.                        | 07/18 | Aqua North Carolina, Inc.   | Docket No. W-218 Sub 497  | Rate of Return                               |
| <b>North Dakota Public Service Commission</b>    |       |   |                           |  |
| Northern States Power Company                    | 09/21 | Northern States Power Company   | Case No. PU-21-381        | Rate of Return                               |
| Northern States Power Company                    | 11/20 | Northern States Power Company   | Case No. PU-20-441        | Rate of Return                               |
| <b>Public Utilities Commission of Ohio</b>       |       |   |                           |  |
| FirstEnergy                                      | 06/24 | Ohio Edison Co., Cleveland Electric Illuminating Co., Toledo Edison Co. | Case No. 24-0468-EL-AIR   | Rate of Return                               |
| Aqua Ohio, Inc.                                  | 11/22 | Aqua Ohio, Inc.   | Case No. 22-1094-WW-AIR   | Rate of Return                               |
| Duke Energy Ohio, Inc.                           | 10/21 | Duke Energy Ohio, Inc.  | Case No. 21-887-EL-AIR    | Return on Equity                             |
| Aqua Ohio, Inc.                                  | 07/21 | Aqua Ohio, Inc.   | Case No. 21-0595-WW-AIR   | Rate of Return                               |
| Aqua Ohio, Inc.                                  | 05/16 | Aqua Ohio, Inc.   | Case No. 16-0907-WW-AIR   | Rate of Return                               |
| <b>Pennsylvania Public Utility Commission</b>    |       |   |                           |  |
| FirstEnergy                                      | 04/24 | Pennsylvania Electric Company   | Docket No. R-2024-3047068 | Rate of Return                               |
| Columbia Water Company                           | 05/23 | Columbia Water Company  | Docket No. R-2023-3040258 | Rate of Return                               |
| Borough of Ambler                                | 06/22 | Borough of Ambler – Bureau of Water                                     | Docket No. R-2022-3031704 | Rate of Return                               |
| Citizens' Electric Company of Lewisburg          | 05/22 | C&T Enterprises   | Docket No. R-2022-3032369 | Rate of Return                               |
| Valley Energy Company                            | 05/22 | C&T Enterprises   | Docket No. R-2022-3032300 | Rate of Return                               |
| Community Utilities of Pennsylvania, Inc.        | 04/21 | Community Utilities of Pennsylvania, Inc.                               | Docket No. R-2021-3025207 | Rate of Return                               |
| Vicinity Energy Philadelphia, Inc.               | 04/21 | Vicinity Energy Philadelphia, Inc.                                      | Docket No. R-2021-3024060 | Rate of Return                               |
| Delaware County Regional Water Control Authority | 02/20 | Delaware County Regional Water Control Authority                        | Docket No. A-2019-3015173 | Valuation                                    |
| Valley Energy, Inc.                              | 07/19 | C&T Enterprises   | Docket No. R-2019-3008209 | Rate of Return                               |
| Wellsboro Electric Company                       | 07/19 | C&T Enterprises   | Docket No. R-2019-3008208 | Rate of Return                               |
| Citizens' Electric Company of Lewisburg          | 07/19 | C&T Enterprises   | Docket No. R-2019-3008212 | Rate of Return                               |
| Steeltown Borough Authority                      | 01/19 | Steeltown Borough Authority   | Docket No. A-2019-3006880 | Valuation                                    |
| Mahoning Township, PA                            | 08/18 | Mahoning Township, PA   | Docket No. A-2018-3003519 | Valuation                                    |
| SUEZ Water Pennsylvania Inc.                     | 04/18 | SUEZ Water Pennsylvania Inc.  | Docket No. R-2018-000834  | Rate of Return                               |
| Columbia Water Company                           | 09/17 | Columbia Water Company  | Docket No. R-2017-2598203 | Rate of Return                               |
| Veolia Energy Philadelphia, Inc.                 | 06/17 | Veolia Energy Philadelphia, Inc.  | Docket No. R-2017-2593142 | Rate of Return                               |
| Emporium Water Company                           | 07/14 | Emporium Water Company  | Docket No. R-2014-2402324 | Rate of Return                               |
| Columbia Water Company                           | 07/13 | Columbia Water Company  | Docket No. R-2013-2360798 | Rate of Return                               |
| Penn Estates Utilities, Inc.                     | 12/11 | Penn Estates, Utilities, Inc.   | Docket No. R-2011-2255159 | Capital Structure / Long-Term Debt Cost Rate |
| <b>South Carolina Public Service Commission</b>  |       |   |                           |  |
| Blue Granite Water Co.                           | 12/19 | Blue Granite Water Company  | Docket No. 2019-292-WS    | Rate of Return                               |
| Carolina Water Service, Inc.                     | 02/18 | Carolina Water Service, Inc.  | Docket No. 2017-292-WS    | Rate of Return                               |
| Carolina Water Service, Inc.                     | 06/15 | Carolina Water Service, Inc.  | Docket No. 2015-199-WS    | Rate of Return                               |
| Carolina Water Service, Inc.                     | 11/13 | Carolina Water Service, Inc.  | Docket No. 2013-275-WS    | Rate of Return                               |



Dylan W. D'Ascendis, CRRA, CVA  
Partner

| Sponsor  | Date  | Case/Applicant   | Docket No.                   | Subject   |
|--|-------|--|------------------------------|---|
| United Utility Companies, Inc.                                 | 09/13 | United Utility Companies, Inc.                                 | Docket No. 2013-199-WS       | Rate of Return                                    |
| Utility Services of South Carolina, Inc.                       | 09/13 | Utility Services of South Carolina, Inc.                       | Docket No. 2013-201-WS       | Rate of Return                                    |
| Tega Cay Water Services, Inc.                                  | 11/12 | Tega Cay Water Services, Inc.                                  | Docket No. 2012-177-WS       | Capital Structure                                 |
| <b>North Dakota Public Service Commission</b>                  |       |  |                              |   |
| Northern States Power Company                                  | 06/22 | Northern States Power Company                                  | Docket No. EL22-017          | Rate of Return                                    |
| <b>Tennessee Public Utility Commission</b>                     |       |  |                              |   |
| CSWR – Limestone Water Utility Operating Company               | 07/24 | CSWR – Limestone Water Utility Operating Company               | Docket No. 24-00044          | Capital Structure, Cost of Debt, Return on Equity |
| Piedmont Natural Gas Company                                   | 07/20 | Piedmont Natural Gas Company                                   | Docket No. 20-00086          | Return on Equity                                  |
| <b>Public Utility Commission of Texas</b>                      |       |  |                              |   |
| CSWR TX Utility Operating Co, LLC                              | 12/24 | CSWR TX Utility Operating Co, LLC                              | Docket No. 57386             | Rate of Return                                    |
| BVRT Utility Holding Co., LLC                                  | 07/24 | Texas Water Utilities, LP                                      | Docket No. 56664             | Rate of Return                                    |
| Texas Water Utilities, LP                                      | 06/24 | Texas Water Utilities, LP                                      | Docket No. 56665             | Rate of Return                                    |
| Southwestern Public Service Co.                                | 02/23 | Southwestern Public Service Co.                                | Docket No. 54634             | Return on Equity                                  |
| CSWR – Texas Utility Operating Company, LLC                    | 02/23 | CSWR – Texas Utility Operating Company, LLC                    | Docket No. 54565             | Rate of Return                                    |
| Oncor Electric Delivery Co. LLC                                | 05/22 | Oncor Electric Delivery Co. LLC                                | Docket No. 53601             | Return on Equity                                  |
| Southwestern Public Service Co.                                | 02/21 | Southwestern Public Service Co.                                | Docket No. 51802             | Return on Equity                                  |
| Southwestern Electric Power Co.                                | 10/20 | Southwestern Electric Power Co.                                | Docket No. 51415             | Rate of Return                                    |
| <b>Texas Railroad Commission</b>                               |       |  |                              |   |
| Atmos Energy Corporation – Mid-Texas Division                  | 11/24 | Atmos Energy Corporation – Mid-Texas Division                  | Docket No. OS-24-00019196    | Return on Equity                                  |
| Atmos Energy Corporation – West Texas Division                 | 10/24 | Atmos Energy Corporation – West Texas Division                 | Docket No. OS-24-00018879    | Return on Equity                                  |
| Atmos Pipeline – Texas, a Division of Atmos Energy Corporation | 05/23 | Atmos Pipeline – Texas, a Division of Atmos Energy Corporation | Docket No. OS-23-00013758    | Return on Equity                                  |
| <b>Virginia State Corporation Commission</b>                   |       |  |                              |   |
| Aqua Virginia, Inc.  | 07/23 | Aqua Virginia, Inc.  | PUR-2023-00073               | Rate of Return                                    |
| Washington Gas Light Company                                   | 06/22 | Washington Gas Light Company                                   | PUR-2022-00054               | Return on Equity                                  |
| Virginia Natural Gas, Inc.                                     | 04/21 | Virginia Natural Gas, Inc.                                     | PUR-2020-00095               | Return on Equity                                  |
| Massanutten Public Service Corporation                         | 12/20 | Massanutten Public Service Corporation                         | PUE-2020-00039               | Return on Equity                                  |
| Aqua Virginia, Inc.  | 07/20 | Aqua Virginia, Inc.  | PUR-2020-00106               | Rate of Return                                    |
| WGL Holdings, Inc.   | 07/18 | Washington Gas Light Company                                   | PUR-2018-00080               | Rate of Return                                    |
| Atmos Energy Corporation                                       | 05/18 | Atmos Energy Corporation                                       | PUR-2018-00014               | Rate of Return                                    |
| Aqua Virginia, Inc.  | 07/17 | Aqua Virginia, Inc.  | PUR-2017-00082               | Rate of Return                                    |
| Massanutten Public Service Corp.                               | 08/14 | Massanutten Public Service Corp.                               | PUE-2014-00035               | Rate of Return / Rate Design                      |
| <b>Public Service Commission of West Virginia</b>              |       |  |                              |   |
| FirstEnergy Service Company                                    | 05/23 | Monongahela Power Company and The Potomac Edison Company       | Case No. 23-0460-E-42T       | Return on Equity                                  |
| FirstEnergy Service Company                                    | 12/21 | Monongahela Power Company and The Potomac Edison Company       | Case No. 21-0857-E-CN (ELG)  | Return on Equity                                  |
| FirstEnergy Service Company                                    | 11/21 | Monongahela Power Company and The Potomac Edison Company       | Case No. 21-0813-E-P (Solar) | Return on Equity                                  |