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February 14, 2025

VIA ELECTRONIC FILING

Hon. David Jones, Chairman
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Tennessee Public Utility Commission
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RE: *Petition of Limestone Water Utility Operating Company, LLC to Increase Charges, Fees and Rates and for Approval of a General Rate Increase and Consolidated Rates, TPUC Docket No. 24-00044*

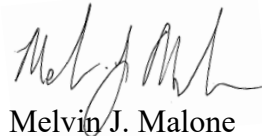
Dear Chairman Jones:

Attached for filing please find *Replacement Direct Testimony of Dylan W. D'Ascendis* in the above-captioned matter. This replacement version simply adds page numbers to the original version submitted on July 16, 2024. Page numbers were inadvertently omitted from the original version. Other than the addition of page numbers, there are no other changes in the replacement version we are filing today.

As required, copies will follow. Should you have any questions concerning this filing, or require additional information, please do not hesitate to contact me.

Very truly yours,

BUTLER SNOW LLP



Melvin J. Malone

Attachment

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**STATE OF TENNESSEE
BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION**

IN RE:

LIMESTONE WATER UTILITY OPERATING COMPANY

DIRECT TESTIMONY

OF

DYLAN W. D'ASCENDIS

ON

CAPITAL STRUCTURE; COST OF DEBT; RETURN ON EQUITY

SPONSORING PETITIONER'S EXHIBITS:

DWD-1 through DWD-9

FILED: July 16, 2024

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1 **I. INTRODUCTION**

2 **A. WITNESS IDENTIFICATION**

3 **Q. Please state your name and business address.**

4 A. My name is Dylan W. D’Ascendis. My business address is 3000 Atrium Way, Suite 200,
5 Mount Laurel, NJ 08054.

6 **Q. By whom are you employed and in what capacity?**

7 A. I am a Partner at ScottMadden, Inc., a management consulting firm focusing on energy
8 consulting and shared services.

9 **B. BACKGROUND AND QUALIFICATIONS**

10 **Q. Please summarize your professional experience and educational background.**

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

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

22 I am a member of the Society of Utility and Regulatory Financial Analysts
23 (“SURFA”). In 2011, I was awarded the professional designation "Certified Rate of Return

Analyst" by SURFA, which is based on education, experience, and the successful completion of a comprehensive written examination.

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

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

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

Q. Have you previously submitted testimony before the Tennessee Public Utility Commission?

A. Yes. I have submitted testimony on behalf of Piedmont Gas Company in docket number 20-00086.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your Direct Testimony in this proceeding?

A. The purpose of my Direct Testimony is to present evidence on behalf of Limestone Water Utility Operating Company, LLC ("Limestone Water" or the "Company") about the appropriate capital structure and corresponding cost rates the Company should be given the opportunity to earn on its jurisdictional rate base. I also explain the basis of my upward adjustment based on Limestone Water's relative size and extraordinary business risks given its acquisition, operation, and rehabilitation of troubled systems.

1 **Q. Have you prepared exhibits in support of your recommendation?**

2 A. Yes, I have. Petitioner's Exhibits DWD-1 through DWD-9, which have been prepared by
3 me or under my direct supervision.

4 **Q. What is your recommended cost of capital for Limestone Water?**

5 A. I recommend the Tennessee Public Utility Commission (the "Commission") authorize the
6 Company the opportunity to earn a weighted average cost of capital of 9.64% based on a
7 hypothetical capital structure consisting of 43.00% long-term debt at an embedded cost
8 rate of 6.64%, and 57.00% common equity at my recommended common equity cost rate
9 of 11.90%, which includes an upward adjustment of 1.50% for extraordinary Company-
10 specific risks. The overall rate of return is summarized on page 1 of Petitioner's Exhibit
11 DWD-1 and in Table 1 below:

12 **Table 1: Summary of Overall Rate of Return**

<u>Type of Capital</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	43.00%	6.64%	2.86%
Common Equity	<u>57.00%</u>	11.90%	<u>6.78%</u>
Total	<u>100.00%</u>		<u>9.64%</u>

13 **III. SUMMARY**

14 **Q. Please summarize your recommended common equity cost rate.**

15 A. My recommended common equity cost rate ("ROE") of 11.90% is summarized on page 2
16 of Petitioner's Exhibit DWD-1. I have assessed the market-based common equity cost
17 rates of companies of relatively similar, but not necessarily identical, risk to Limestone
18 Water. Using companies of relatively comparable risk as proxies is consistent with the
19 principles of fair rate of return established in the *Hope*¹ and *Bluefield*² decisions. No proxy

¹ *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*").

² *Bluefield Water Works Improvement Co. v. Public Serv. Comm'n*, 262 U.S. 679 (1922) ("*Bluefield*").

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

4 My recommendation results from applying several cost of common equity models,
5 specifically the Discounted Cash Flow ("DCF") model, the Risk Premium Model
6 ("RPM"), and the Capital Asset Pricing Model ("CAPM"), to the market data of: (1) a
7 proxy group of five water companies ("Utility Proxy Group"); and (2) a proxy group of
8 nine water companies ("U.S. Water Universe") (collectively, the "Proxy Groups"); both of
9 whose selection criteria will be discussed below. In addition, I applied the DCF model,
10 RPM, and CAPM to a proxy group of 39 domestic, non-price regulated companies
11 comparable in total risk to the Utility Proxy Group, and to a proxy group of 42 domestic,
12 non-price regulated companies comparable in total risk to the U.S. Water Universe.³ The
13 results derived from each of the analyses are as follows:

³ The development of the non-price regulated proxy groups is explained in more detail in Section VII, part D.

1

Table 2: Summary of Common Equity Cost Rate

	Utility Proxy Group	U.S. Water Universe
Discounted Cash Flow Model	9.97%	9.26%
Risk Premium Model	10.78%	10.85%
Capital Asset Pricing Model	11.03%	11.05%
Cost of Equity Models Applied to Comparable Risk, Non-Price Regulated Companies	11.42%	11.54%
Indicated Range of Common Equity Cost Rates Before Adjustments for Company-Specific Risk	9.26% - 11.54%	
Business Risk Adjustment	<u>1.50%</u>	
Indicated Range of Common Equity Cost Rates after Adjustment	<u>10.76% - 13.04%</u>	
Recommended Cost of Common Equity	<u>11.90%</u>	

2 The indicated range of common equity cost rates applicable to the Utility Proxy
3 Group and the U.S. Water Universe are between 9.26% and 11.54%, before any Company-
4 specific adjustments.

5 The indicated range of common equity cost rates were then adjusted upward by
6 1.50% to reflect Limestone Water's greater business risk, discussed below, as compared to
7 the Proxy Groups, which results in a Company-specific range of common equity cost rates
8 between 10.76% and 13.04%. From these ranges of results, I recommend the Commission
9 use a common equity cost rate of 11.90% in setting rates for the Company.

10 **Q. How is the remainder of your Direct Testimony organized?**

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

- 12 • Section IV – Provides a summary of financial theory and regulatory principles pertinent
13 to the development of the cost of common equity;

- Section V – Explains my selection of the Proxy Groups used to develop my analytical results;
- Section VI – Discusses my recommended capital structure and cost of long-term debt;
- Section VII – Describes the analyses on which my recommendation is based;
- Section VIII – Summarizes my common equity cost rates before adjustments to reflect Company-specific factors;
- Section IX – Explains my adjustments to my common equity cost rate to reflect Company-specific factors; and
- Section X – Presents my conclusions.

IV. GENERAL PRINCIPLES

Q. What general principles have you considered in arriving at your recommended common equity cost rate of 11.90%?

A. In unregulated industries, marketplace competition is the principal determinant of the price of products or services. For regulated public utilities, regulation must act as a substitute for marketplace competition. Assuring that the utility can fulfill its obligation to the public to provide safe and reliable service requires a level of earnings sufficient to maintain the integrity of presently invested capital. Sufficient earnings also permit the attraction of needed new capital at a reasonable cost, for which the utility must compete with other firms of comparable risk, consistent with the fair rate of return standards established by the U.S. Supreme Court in the previously cited *Hope* and *Bluefield* cases.

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

The rate-making process under the Act, *i.e.*, the fixing of ‘just and reasonable’ rates, involves a balancing of the investor and the consumer interests. Thus we stated in the Natural Gas Pipeline Co. case that

1 'regulation does not insure that the business shall produce net revenues.'
2 315 U.S. at page 590, 62 S.Ct. at page 745. But such considerations aside,
3 the investor interest has a legitimate concern with the financial integrity of
4 the company whose rates are being regulated. From the investor or
5 company point of view it is important that there be enough revenue not only
6 for operating expenses but also for the capital costs of the business. These
7 include service on the debt and dividends on the stock. Cf. Chicago &
8 Grand Trunk R. Co. v. Wellman, 143 U.S. 339, 345, 346 12 S.Ct. 400,402.
9 By that standard the return to the equity owner should be commensurate
10 with returns on investments in other enterprises having corresponding risks.
11 That return, moreover, should be sufficient to assure confidence in the
12 financial integrity of the enterprise, so as to maintain its credit and to attract
13 capital.⁴

14 In summary, the U.S. Supreme Court has found that a return should be adequate to
15 attract capital at reasonable terms and enable the utility to provide service while
16 maintaining its financial integrity. As discussed above, and in keeping with established
17 regulatory standards, that return should be commensurate with the returns expected
18 elsewhere for investments of equivalent risk. The Commission's decision in this
19 proceeding, therefore, should provide the Company with the opportunity to earn a return
20 that is: (1) adequate to attract capital at reasonable cost and terms; (2) sufficient to ensure
21 its financial integrity; and (3) commensurate with returns on investments in enterprises
22 having corresponding risks.

23 Lastly, the required return for a regulated public utility is established on a stand-
24 alone basis for the utility operating company at issue in a rate case. Parent entities, like
25 other investors, have capital constraints and must look at the attractiveness of the expected
26 risk-adjusted return of each investment alternative in their capital budgeting process. That
27 is, utility holding companies that own multiple utility operating companies have choices as
28 to where they will invest their capital within the holding company family. Therefore, the

⁴ *Hope*, 320 U.S. 591, 603 (1944).

1 opportunity cost concept applies regardless of whether the funding source is public or
2 corporate.

3 When funding is provided by a parent entity, the return still must be sufficient to
4 provide an incentive to allocate equity capital to the subsidiary or business unit rather than
5 other internal or external investment opportunities. That is, the regulated subsidiary must
6 compete for capital with all the parent company's affiliates, and with other similar risk
7 companies, which may include non-utilities. In that regard, investors value corporate
8 entities on a sum-of-the-parts basis and expect each division within the parent company to
9 provide an appropriate risk-adjusted return.

10 Therefore, it is important that the authorized ROE for the Company reflects the
11 risks and prospects of its operations and supports its financial integrity from a stand-alone
12 perspective. Consequently, the ROE authorized in this proceeding should be sufficient to
13 support the operation (i.e., business risk) and financing (i.e., financial risk) of the
14 Company's utility operations on a stand-alone basis.

15 Marketplace data must be relied on in assessing a common equity cost rate
16 appropriate for ratemaking purposes. Just as the use of the market data for the proxy group
17 adds reliability to the informed expert's judgment used in arriving at a recommended
18 common equity cost rate, the use of multiple, generally accepted common equity cost rate
19 models also adds reliability and accuracy when arriving at a recommended common equity
20 cost rate.

21 **Q. Within that broad framework, how is the cost of capital estimated in regulatory**
22 **proceedings?**

23 A. Regulated utilities primarily use common stock and long-term debt to finance their
24 permanent property, plant, and equipment (i.e., rate base). The fair rate of return for a

1 regulated utility is based on its weighted average cost of capital, in which, as noted earlier,
2 the costs of the individual sources of capital are weighted by their respective book values.

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

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

13 The cost of debt is contractually defined and can be directly observed as the interest
14 rate or yield on debt securities. However, the cost of equity is not directly observable and
15 must be estimated based on market data and various financial models. Because the cost of
16 equity is premised on opportunity costs, the models used to determine it are typically
17 applied to a group of “comparable” or “proxy” companies.

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

1 A. **BUSINESS RISK**

2 **Q. Please define business risk and explain why it is important to the determination of a**
3 **fair rate of return.**

4 A. The investor required return on common equity reflects investors' assessment of the total
5 investment risk of the subject firm. Total investment risk is often discussed in the context
6 of business and financial risk.

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

12 Examples of business risks generally faced by utilities include, but are not limited
13 to, the regulatory environment, mandatory environmental compliance requirements,
14 customer mix and concentration of customers, service territory economic growth, market
15 demand, operations, capital intensity, size, the degree of operating leverage, the vagaries
16 of weather, and other variables that have a direct bearing on earnings.

17 Although analysts, including rating agencies, may categorize business risks
18 individually, as a practical matter, such risks are interrelated and not wholly distinct from
19 one another. When determining an appropriate return on common equity, the relevant issue
20 is where investors see the subject company in relation to other similarly situated utility
21 companies (i.e., the Proxy Groups). To the extent investors view a company as being
22 exposed to higher risk, the return required to attract any given investor's capital will
23 increase, and vice versa.

1 For regulated utilities, business risks are both long-term and near-term in nature.
2 Whereas near-term business risks are reflected in year-to-year variability in earnings and
3 cash flow brought about by economic or regulatory factors, long-term business risks reflect
4 the prospect of an impaired ability of investors to obtain both a fair rate of return on, and
5 return of, their capital. Moreover, because utilities accept the obligation to provide safe,
6 adequate, and reliable service (in exchange for a reasonable opportunity to earn a fair return
7 on their investment), they generally do not have the option to delay, defer, or reject capital
8 investments. Because those investments are capital-intensive, utilities generally do not
9 have the option to avoid raising external funds. The obligation to serve and the
10 corresponding need to access capital is even more acute during periods of capital market
11 distress.

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

20 **Q. What business risks does the water and wastewater utility industry in general face**
21 **today?**

22 A. Water and wastewater utilities have an ever-increasing responsibility to be stewards of the
23 environment from which water supplies are drawn in order to preserve and protect essential
24 natural resources of the United States. This increased environmental stewardship is a direct

1 result of compliance with the Safe Drinking Water Act, as well as a response to continuous
2 monitoring by the Environmental Protection Agency and state and local governments of
3 the water supply for potential contaminants and their resultant regulations and the treatment
4 of wastewater service. Likewise, wastewater services face continuous compliance
5 challenges with the Clean Water Act, and, in Tennessee, with the Tennessee Water Quality
6 Control Act. Of significant concern is the presence of per- and polyfluoroalkyl substances
7 (“PFAS”). This, plus aging infrastructure, necessitate additional capital investment in the
8 distribution and treatment of water and treatment of wastewater, exacerbating the pressure
9 on free cash flows arising from increased capital expenditures for infrastructure repair and
10 replacement. The significant amount of capital investment and, hence, high capital
11 intensity, is a major risk factor for the water and wastewater utility industry.

12 *Value Line Investment Survey* (“*Value Line*”) observes the following about the
13 water utility industry:

14 As we previously mentioned, the Industry is in the midst of a long-term
15 building program that is aimed at modernizing pipelines and wastewater
16 facilities. According to some estimates, the average pipeline in this country
17 is between 60 and 70 years old. Thus, the construction to replace old pipes
18 and valves ought to continue for the next several decades.⁵

19 The water and wastewater industry also experiences low depreciation rates. Depreciation
20 rates are one of the principal sources of internal cash flows for all utilities (through a
21 utility’s depreciation expense) and are vital for a company to fund ongoing replacements
22 and repairs of water and wastewater systems. Water/wastewater utility assets have long
23 service lives, and therefore have long capital recovery periods. As such, they face greater
24 risk due to inflation, which results in a higher replacement cost per dollar of net plant.

⁵ *Value Line Investment Survey*, April 5, 2024.

1 Simply put, capital that is retiring today will need to be replaced with capital which is
2 significantly more expensive.

3 Substantial capital expenditures, as noted by *Value Line*, will require significant
4 financing. The three sources of financing typically used are debt, equity (common and
5 preferred), and cash flow. All three are intricately linked to the opportunity to earn a
6 sufficient rate of return as well as the ability to achieve that return. Consistent with *Hope*
7 and *Bluefield*, the return must be sufficient to maintain credit quality as well as enable the
8 attraction of necessary new capital, be it debt or equity capital. If unable to raise debt or
9 equity capital, the utility must turn to either retained earnings or free cash flow,⁶ both of
10 which are directly linked to earning a sufficient rate of return. The level of free cash flow
11 represents a utility's ability to meet the needs of its debt and equity holders. If either
12 retained earnings or free cash flow is inadequate, it will be nearly impossible for the utility
13 to attract the capital needed for new infrastructure investment necessary to ensure quality
14 service to its customers. An insufficient rate of return can be financially devastating for
15 utilities as well as a public safety issue for their customers.

16 The water and wastewater utility industry's high degree of capital intensity and low
17 depreciation rates, coupled with the need for substantial infrastructure capital spending,
18 require regulatory support in the form of adequate and timely rate relief, and in particular,
19 a sufficient authorized return on common equity, so that the industry can successfully meet
20 the challenges it faces.

⁶ Free Cash Flow = Operating Cash Flow (Funds From Operations) minus Capital Expenditures.

1 **B. FINANCIAL RISK**

2 **Q. Please define financial risk and explain why it is important to the determination of a**
3 **fair rate of return.**

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

10 **Q. Can bond and credit ratings be a proxy for the combined business and financial risk**
11 **(i.e., investment risk) of an enterprise?**

12 A. Yes, similar bond ratings/issuer credit ratings reflect, and are representative of, similar
13 combined business and financial risks (i.e., total risk) faced by bond investors.⁷ Although
14 specific business or financial risks may differ between companies, the same bond/credit
15 rating indicates that the combined risks are roughly similar from a debtholder perspective.
16 The caveat is that these debtholder risk measures do not translate directly to risks for
17 common equity.

18 **V. LIMESTONE WATER AND THE PROXY GROUPS**

19 **Q. Are you familiar with the operations of Limestone Water?**

20 A. Yes. Limestone Water provides service to 2 water and 8 sewer service areas, representing
21 1,914 wastewater connections and 573 water connections, respectively.

⁷ Risk distinctions within S&P's bond rating categories are recognized by a plus or minus, i.e., within the A category, an S&P rating can be at A+, A, or A-. Similarly, risk distinctions for Moody's ratings are distinguished by numerical rating gradations, i.e., within the A category, a Moody's rating can be A1, A2 and A3.

1 **Q. Why is it necessary to develop a proxy group when estimating the ROE for the**
2 **Company?**

3 A. Because the Company does not have publicly traded equity securities, it is necessary to
4 develop groups of publicly traded, comparable companies to serve as “proxies” for the
5 Company. In addition to the analytical necessity of doing so, the use of proxy companies
6 is consistent with the *Hope* and *Bluefield* comparable risk standards, as discussed above. I
7 have selected two proxy groups that, in my view, are fundamentally risk-comparable to the
8 Company: the Utility Proxy Group, based on five publicly-traded water utilities, and the
9 U.S. Water Universe, based on nine publicly-traded water utilities.

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

21 My analyses are based on the Proxy Groups, containing U.S. water utilities. As
22 discussed earlier, utilities must compete for capital with other companies with
23 commensurate risk (including non-utilities) and, to do so, must be provided the opportunity
24 to earn a comparable return to these companies having a commensurate risk.

1 Consequently, it is appropriate to consider the Proxy Groups' market data in determining
2 the Company's ROE.

3 **Q. Please explain how you chose the Utility Proxy Group of five water utilities.**

4 A. The basis of selection for the Utility Proxy Group of five water utilities was to select those
5 companies which meet the following criteria:

- 6 (i) They are included in the Water Utility Group of *Value Line's Standard Edition*
7 (April 5, 2024);
- 8 (ii) They have 60% or greater of 2023 total operating income or 60% or greater of 2023
9 total assets attributable to regulated water operations;
- 10 (iii) At the time of preparation of this testimony, they had not publicly announced that
11 they were involved in any major merger or acquisition activity (i.e., one publicly-
12 traded utility merging with or acquiring another);
- 13 (iv) They have not cut or omitted their common dividends during the five years ending
14 2023 or through the time of the preparation of this testimony;
- 15 (v) They have *Value Line* and Bloomberg Professional Services ("Bloomberg")
16 adjusted beta coefficients ("beta");
- 17 (vi) They have a positive *Value Line* five-year dividends per share ("DPS") growth rate
18 projection; and
- 19 (vii) They have *Value Line*, Zacks, S&P Capital IQ or Yahoo! Finance consensus five-
20 year earnings per share ("EPS") growth rate projections.

21 The following five companies met these criteria: American States Water Company,
22 American Water Works Company, Inc., California Water Service Group, Middlesex Water
23 Company, and SJW Group.

1 **Q. Please describe Petitioner's Exhibit DWD-2, page 1.**

2 A. Page 1 of Petitioner's Exhibit DWD-2 contains comparative capitalization and financial
3 statistics for the Utility Proxy Group identified above for the years 2019 to 2023. During
4 the five-year period ending 2023, the historically achieved average earnings rate on book
5 common equity for the group averaged 10.21%. The average common equity ratio based
6 on total permanent capital (excluding short-term debt) was 50.79%, and the average
7 dividend payout ratio was 60.59%.

8 Total debt to earnings before interest, taxes, depreciation, and amortization for the
9 years 2019 to 2023 ranges between 4.76x and 5.66x, with an average of 5.22x. Funds from
10 operations to total debt range from 10.41% to 15.36%, with an average of 12.85%.

11 **Q. Please explain how you chose the U.S. Water Universe of nine water utilities.**

12 A. The basis of selection for the U.S. Water Universe of nine water utilities was to select those
13 companies which meet the following criteria:

- 14 (i) They are included in the Water Utility Group of *Value Line's Standard and Small*
15 *& Mid-Cap Edition* (April 5, 2024);
- 16 (ii) They are based in the United States;
- 17 (iii) They have 50% or greater of 2023 total operating income or 50% or greater of 2023
18 total assets attributable to regulated water operations;
- 19 (iv) At the time of preparation of this testimony, they had not publicly announced that
20 they were involved in any major merger or acquisition activity (i.e., one publicly-
21 traded utility merging with or acquiring another);
- 22 (v) They have not cut or omitted their common dividends during the five years ending
23 2023 or through the time of the preparation of this testimony;
- 24 (vi) They have *Value Line* and Bloomberg adjusted betas; and

(vii) They have *Value Line*, Zacks, S&P Capital IQ or Yahoo! Finance consensus five-year EPS growth rate projections.

The following nine companies are included in this group: American States Water Company, American Water Works Company, Inc., Artesian Resources Corporation, California Water Service Group, Essential Utilities, Inc., Global Water Resources, Inc., Middlesex Water Company, SJW Group, and The York Water Company.

Q. Please describe Petitioner's Exhibit DWD-2, page 3.

A. Page 3 of Petitioner's Exhibit DWD-2 contains comparative capitalization and financial statistics for the U.S. Water Universe identified above for the years 2019 to 2023. During the five-year period ending 2023, the historically achieved average earnings rate on book common equity for the group averaged 10.12%. The average common equity ratio based on total permanent capital (excluding short-term debt) was 48.38%, and the average dividend payout ratio was 82.51%.

Total debt to earnings before interest, taxes, depreciation, and amortization for the years 2019 to 2023 ranges between 4.94x and 5.52x, with an average of 5.22x. Funds from operations to total debt range from 11.90% to 13.54%, with an average of 13.04%.

Q. Please explain why you also included the U.S. Water Universe of nine water utilities.

A. While the five companies noted above passed my selection criteria, and therefore are comparable in risk to Limestone Water, five companies represent a limited sample size. Given a limited sample size increases the chance for outlier values to skew indicated results, it may be appropriate to review a larger set of water utilities to corroborate those results. As the U.S. Water Universe generally passed the screening criteria noted above,⁸

⁸ The exceptions include the inclusion in *Value Line's Standard Edition* and the presence of projected DPS growth rates for Artesian Resources Corporation and Global Water Resources, Inc.

1 they should also be considered generally comparable in risk to Limestone Water, and
2 therefore their inclusion increases the accuracy and reliability of the results and my
3 recommendation.

4 **VI. CAPITAL STRUCTURE AND COST OF LONG-TERM DEBT**

5 **Q. What capital structure ratio do you recommend be employed in developing an overall**
6 **fair rate of return appropriate for the Company in this proceeding?**

7 A. I recommend the Commission authorize a hypothetical capital structure consisting of
8 43.00% long-term debt and 57.00% common equity.

9 **Q. Why are you recommending a hypothetical capital structure for the Company in this**
10 **proceeding?**

11 A. The Company's actual capital structure at the end of the test year consists of 0.00% long-
12 term debt and 100.00% common equity. Although this capital structure finances the
13 Company's rate base, a common equity ratio of 100.00% is inappropriate for ratemaking
14 purposes because it results in, all else equal, a higher revenue cost of capital which must
15 be paid by customers.

16 **Q. How does the hypothetical common equity ratio of 57.00% for Limestone Water**
17 **compare with the common equity ratios maintained by the Proxy Groups?**

18 A. My proposed ratemaking common equity ratio of 57.00% for Limestone Water is generally
19 consistent with the top of the range of common equity ratios maintained by the Proxy
20 Groups on which I base my recommended common equity cost rate. As shown on
21 Petitioner's Exhibit DWD-2, page 2, the range of common equity ratios maintained by the
22 Utility Proxy Group is between 43.91% and 57.59% in 2023. Petitioner's Exhibit DWD-
23 2, page 4 presents the range of common equity ratios maintained by the U.S. Water
24 Universe, which range from 31.60% to 57.59% in 2023. Regarding expected equity ratios,

as shown on pages 2 through 7 on Petitioner’s Exhibit DWD-4, *Value Line* projects a range of equity ratios between 45.00% and 63.00% for the years 2027-2029. I chose a higher-than-average hypothetical capital structure for Limestone Water due to its extraordinary operating risks as detailed by Company Witness Michael Duncan.

Q. Is the Company’s requested capital structure consistent with its sister companies?

A. Yes, but the Company’s request is somewhat below its sister companies. Table 3 below presents the common equity ratios maintained by Limestone Water’s sister companies that have issued debt, which range from 79.94% to 84.51%.

Table 3: Central States Water Resources Operating Company Capital Structures

	Common Equity Ratio
Confluence Rivers Utility Operating Company, Inc. (Missouri)	84.51%
Bluegrass Water Utility Operating Company, LLC (Kentucky)	80.81%
Magnolia Water Utility Operating Company, LLC (Louisiana)	79.94%
Great River Utility Operating Company, LLC (Mississippi)	80.35%
Limestone Water Utility Operating Company, LLC	57.00% (Proposed)

Q. What is your recommended cost of long-term debt for Limestone Water?

A. It is 6.64%, which is based on the weighted debt-cost rate from recent debt issuances of Limestone Water’s sister companies as of May 31, 2024, as shown in Petitioner’s Exhibit DWD-3.

Q. Are Limestone Water’s sister companies an appropriate indicator of the appropriate capital structure and long-term cost of debt for the Company?

A. Yes, they are. Limestone Water’s sister companies obviously share the same parent company and engage in similar operations (i.e., the acquisition, operation, and rehabilitation of troubled water and wastewater systems) and, therefore, would have similar risk.

VII. COMMON EQUITY COST RATE MODELS

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

A. Yes. As discussed previously, regulated public utilities like the Company must compete for equity in capital markets along with all other companies with commensurate risk, including non-utilities. The cost of common equity is thus determined based on equity market expectations for the returns of those companies. If an individual investor is choosing to invest their capital among companies with comparable risk, they will choose the company providing a higher return over a company providing a lower return.

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

A. Yes. The DCF model is market-based in that market prices are used in developing the dividend yield component of the model. Regarding the RPM, the total market risk premium approach uses bond ratings and expected bond yields that reflect the market's assessment of bond/credit risk, and the Predictive Risk Premium Model ("PRPM") uses monthly market returns in addition to expectations of the risk-free rate. In addition, betas (" β "), which reflect the market/systematic risk component of equity risk premium, are derived from regression analyses of market prices. The CAPM is market based for many of the same reasons that the RPM is market based (i.e., the use of expected bond yields and betas). Selection criteria for the non-price regulated companies are based on regression analyses of market prices and reflect the market's assessment of total risk.

Q. What analytical approaches did you use to determine the Company's ROE?

A. As discussed earlier, I have relied on the DCF model, the RPM, and the CAPM, which I applied to the Proxy Groups described above. I also applied those same models to the non-price regulated companies described later in this section.

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

A. DISCOUNTED CASH FLOW MODEL

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

A. The theory underlying the DCF model is that the present value of an expected future stream of net cash flows during the investment holding period can be determined by discounting those cash flows at the cost of capital, or the investors' capitalization rate. DCF theory indicates that an investor buys a stock for an expected total return rate, which is derived from the cash flows received from dividends and market price appreciation. Mathematically, the dividend yield on market price plus a growth rate equals the capitalization rate, i.e., the total common equity return rate expected by investors, as shown in Equation [1] below:

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

where:

1 K_e = the required Return on Equity;

2 D_0 = the annualized Dividend Per Share;

3 P = the current stock price; and

4 g = the growth rate.

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

6 A. I used the single-stage constant growth DCF model.

7 **Q. Please describe the dividend yield you used in your application of the DCF model.**

8 A. The unadjusted dividend yields are based on the proxy companies' dividends as of April
9 30, 2024, divided by the average of closing market prices for the 60 trading days ending
10 April 30, 2024.⁹

11 **Q. Please explain your adjustment to the dividend yield.**

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

15 DCF theory calls for the use of the full growth rate, or D_1 , in calculating the
16 dividend yield component of the model. Since the companies in the Proxy Groups increase
17 their quarterly¹⁰ dividend at various times during the year, a reasonable assumption is to
18 reflect one-half the annual dividend growth rate in the dividend yield component, or $D_{1/2}$.
19 Because the dividend should be representative of the next 12-month period, my adjustment
20 is a conservative approach that does not overstate the dividend yield. Therefore, the actual
21 average dividend yields in column 1 on page 1 of Petitioner's Exhibit DWD-4 have been
22 adjusted upward to reflect one-half the average projected growth rate shown in column 6.

⁹ See, Petitioner's Exhibit DWD-4, page 1, column 1.

¹⁰ Global Water Resources, Inc. pays a monthly dividend.

1 **Q. Please explain the basis of the growth rates you applied to the Proxy Groups in your**
2 **DCF model.**

3 A. Investors with more limited resources than institutional investors are likely to rely on
4 widely available financial information services, such as *Value Line*, Zacks, S&P Capital
5 IQ, and Yahoo! Finance. Investors realize that analysts have significant insight into the
6 dynamics of the industries and individual companies they analyze as well as companies'
7 abilities to effectively manage the effects of changing economic, market, and regulatory
8 conditions. For these reasons, I used analysts' five-year forecasts of EPS growth in my
9 DCF analysis.

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

15 Further, although projected EPS growth rates are widely available, I am unaware
16 of any publication, other than *Value Line*, that reports projected DPS or book value per
17 share ("BVPS") growth rates. If investors singularly relied on projected DPS and BVPS
18 growth rates to estimate their required returns, it is likely that other sources of growth
19 estimates would report such information.

20 **Q. Please summarize your DCF model results.**

21 A. The results of applying the DCF model to the Proxy Groups are shown on page 1 of
22 Petitioner's Exhibit DWD-4 and in Table 4, below:

Table 4: DCF Model Results for the Proxy Groups

	Utility Proxy Group	U.S. Water Universe
Mean	9.82%	9.18%
Median	<u>10.11%</u>	<u>9.33%</u>
Average of Mean and Median	<u>9.97%</u>	<u>9.26%</u>

In arriving at a conclusion for the constant growth DCF-indicated common equity cost rate for the Proxy Groups, I relied on an average of the mean and the median results of the DCF, specifically 9.97% applicable to the Utility Proxy Group and 9.26% applicable to the U.S. Water Universe.

B. THE RISK PREMIUM MODEL

Q. Please describe the theoretical basis of the RPM.

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

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

1 **Q. Please explain the total market approach RPM.**

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

5 **Q. Please explain the basis of the expected bond yield applicable to the Proxy Groups.**

6 A. The first step in the total market approach RPM analysis is to determine the expected bond
7 yield. Because both ratemaking and the cost of capital, including common equity cost rate,
8 are prospective in nature, a prospective yield on similarly rated long-term debt is essential.
9 Because I am unaware of any publication that provides forecasted public utility bond
10 yields, I relied on a consensus forecast of about 50 economists of the expected yield on
11 Aaa-rated corporate bonds for the six calendar quarters ending with the third calendar
12 quarter of 2025, and *Blue Chip*'s long-term projections for 2025 to 2029, and 2030 to 2034.
13 As shown on line 1, page 1 of Petitioner's Exhibit DWD-5, the average expected yield on
14 Moody's Aaa-rated corporate bonds is 5.05%.

15 Because that 5.05% estimate represents a corporate bond yield and not a utility
16 specific bond yield, I adjusted the expected Aaa-rated corporate bond yield to an equivalent
17 A2-rated public utility bond yield. That resulted in an upward adjustment of 0.52%, which
18 represents a recent spread between Aaa-rated corporate bonds and A2-rated public utility
19 bonds.¹¹ Adding that recent 0.52% spread to the expected Aaa-rated corporate bond yield
20 of 5.05% results in an expected A2-rated public utility bond yield of 5.57%.

21 I then reviewed the average credit rating for the Proxy Groups from Moody's to
22 determine if an adjustment to the estimated A2-rated public utility bond was necessary.
23 Since the Utility Proxy Group's average Moody's long-term issuer rating is A2/A3, another

¹¹ As shown on line 2 and explained in note 2, page 1 of Petitioner's Exhibit DWD-5.

1 adjustment to the expected A2-rated public utility bond yield is needed to reflect the
2 difference in bond ratings. An upward adjustment of 0.04%, which represents one-sixth of
3 a recent spread between A2- and Baa2-rated public utility bond yields, is necessary to make
4 the A2-rated prospective bond yield applicable to an A2/A3-rated public utility bond.¹²
5 Adding the 0.04% to the 5.57% prospective A2-rated public utility bond yield results in a
6 5.61% expected bond yield for the Utility Proxy Group.

7 Alternatively, the U.S. Water Universe's average Moody's long-term issuer rating
8 is A3, so another adjustment to the expected A2-rated public utility bond yield is needed
9 to reflect the difference in bond ratings. An upward adjustment of 0.08%, which represents
10 one-third of a recent spread between A2- and Baa2-rated public utility bond yields, is
11 necessary to make the A2-rated prospective bond yield applicable to an A3-rated public
12 utility bond.¹³ Adding the 0.08% to the 5.57% prospective A2-rated public utility bond
13 yield results in a 5.65% expected bond yield for the U.S. Water Universe.

¹² As shown on line 4 and explained in note 3 on page 1 of Petitioner's Exhibit DWD-5.

¹³ As shown on line 4 and explained in note 4 on page 1 of Petitioner's Exhibit DWD-5.

Table 5: Summary of the Calculation of the Proxy Groups' Projected Bond Yield¹⁴

	Utility Proxy Group	U.S. Water Universe
Prospective Yield on Moody's Aaa-Rated Corporate Bonds (<i>Blue Chip</i>)	5.05%	5.05%
Adjustment to Reflect Yield Spread Between Moody's Aaa-Rated Corporate Bonds and Moody's A2-Rated Utility Bonds	0.52%	0.52%
Adjustment to Reflect the Utility Proxy Group's Average Moody's Bond Rating of A2/A3	<u>0.04%</u>	
Adjustment to Reflect the U.S. Water Universe's Average Moody's Bond Rating of A3		<u>0.08%</u>
Prospective Bond Yield Applicable to the Proxy Groups	<u>5.61%</u>	<u>5.65%</u>

To develop the indicated ROE using the total market approach RPM, this prospective bond yield is then added to the average of the two different equity risk premiums described below.

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

A. The components of the beta-derived risk premium model are: (1) an expected market equity risk premium over corporate bonds, and (2) the beta. The derivation of the beta-derived equity risk premium that I applied to the Proxy Groups is shown on lines 1 through 6 of page 6 of Petitioner's Exhibit DWD-5. The total beta-derived equity risk premium I applied is based on an average of three historical market data-based equity risk premiums, a *Value Line*-based equity risk premium, and combined *Value Line*, Bloomberg, and S&P Capital IQ-based equity risk premium. Each of these is described below.

¹⁴ As shown on page 1 of Petitioner's Exhibit DWD-5.

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

3 A. To derive a historical market equity risk premium, I used the most recent holding period
4 returns for the large company common stocks less the average historical yield on Moody's
5 Aaa/Aa-rated corporate bonds for the period 1928 to 2023.¹⁵ The use of holding period
6 returns over a very long period of time is appropriate because it is consistent with the long-
7 term investment horizon presumed by investing in a going concern, i.e., a company
8 expected to operate in perpetuity.

9 The long-term arithmetic mean monthly total return rate on large company common
10 stocks was 11.91% and the long-term arithmetic mean monthly yield on Moody's Aaa/Aa
11 rated corporate bonds was 5.95% from 1928 to 2023.¹⁶ As shown on line 1 of page 6 of
12 DWD-5, subtracting the mean monthly bond yield from the total return on large company
13 stocks results in a long-term historical equity risk premium of 5.96%.

14 I used the arithmetic mean monthly total return rates for the large company stocks
15 and yields (income returns) for the Moody's Aaa/Aa-rated corporate bonds, because they
16 are appropriate for the purpose of estimating the cost of capital as noted in SBBI - 2023.¹⁷
17 The use of the arithmetic mean return rates and yields is appropriate because historical total
18 returns and equity risk premiums provide insight into the variance and standard deviation
19 of returns needed by investors in estimating future risk when making a current investment.
20 If investors relied on the geometric mean of historical equity risk premiums, they would
21 have no insight into the potential variance of future returns because the geometric mean

¹⁵ Sources: Stocks, Bonds, Bills, and Inflation ("SBBI") Yearbook 2023 ("SBBI - 2023") Appendix A Tables:
Morningstar Stocks, Bonds, Bills, & Inflation 1926-2022 and Bloomberg Professional.

¹⁶ As explained in note 1 on page 6 of DWD-5.

¹⁷ SBBI - 2023, at 193-194.

relates the change over many periods to a constant rate of change, thereby obviating the year-to-year fluctuations, or variance, which is critical to risk analysis.

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

A. To derive the regression analysis-derived market equity risk premium of 7.03%, shown on line 2 of page 6 of Petitioner's Exhibit DWD-5, I used the same monthly annualized total returns on large company common stocks relative to the monthly annualized yields on Moody's Aaa/Aa-rated corporate bonds as mentioned above. The relationship between interest rates and the market equity risk premium was modeled using the observed monthly market equity risk premium as the dependent variable, and the monthly yield on Moody's Aaa/Aa-rated corporate bonds as the independent variable. I used a linear Ordinary Least Squares ("OLS") regression, in which the market equity risk premium is expressed as a function of the Moody's Aaa/Aa-rated corporate bond yield:

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

where:

RP = the market equity risk premium;

α = the regression intercept coefficient;

β = the regression slope coefficient; and

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

1 Using the equation generated by the regression, an expected equity risk premium
2 of 7.03% is calculated using the average forecast of Aaa corporate bond yields of 5.05%,
3 as discussed above.

4 **Q. Please explain the derivation of the PRPM equity risk premium.**

5 A. The PRPM, published in the *Journal of Regulatory Economics*,¹⁸ was developed from the
6 work of Robert F. Engle, who shared the Nobel Prize in Economics in 2003 “for methods
7 of analyzing economic time series with time-varying volatility (“ARCH”)”.¹⁹ Engle found
8 that volatility changes over time and is related from one period to the next, especially in
9 financial markets. Engle discovered that volatility of prices and returns clusters over time
10 and is therefore highly predictable and can be used to predict future levels of risk and risk
11 premiums.

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

16 The inputs to the model are the historical monthly returns on large company
17 common stocks minus the monthly yields on Moody’s Aaa/Aa-rated corporate bonds
18 during the period from January 1928 through April 2024.²⁰ Using a generalized form of
19 ARCH, known as GARCH, I calculated each Proxy Groups’ company’s projected equity
20 risk premium using Eviews® statistical software. When the GARCH model is applied to

¹⁸ Autoregressive conditional heteroscedasticity. See “A New Approach for Estimating the Equity Risk Premium for Public Utilities”, Pauline M. Ahern, Frank J. Hanley and Richard A. Michelfelder, Ph.D. *The Journal of Regulatory Economics* (December 2011), 40:261-278.

¹⁹ www.nobelprize.org.

²⁰ Data from January 1928 to December 2022 is from SBBI - 2023. Data from January 2023 to April 2024 is from Bloomberg.

1 the historical return data, it produces a predicted GARCH variance series and a GARCH
2 coefficient. Multiplying the predicted monthly variance by the GARCH coefficient and
3 then annualizing it²¹ produces the predicted annual equity risk premium. The resulting
4 PRPM predicted a market equity risk premium of 8.23%.²²

5 **Q. Please explain the derivation of a projected equity risk premium based on *Value Line***
6 **data for your RPM analysis.**

7 A. As noted previously, because both ratemaking and the cost of capital are prospective, a
8 prospective market equity risk premium is needed. The derivation of the forecasted or
9 prospective market equity risk premium can be found in note 4 on page 6 of Petitioner's
10 Exhibit DWD-5. Consistent with my calculation of the dividend yield component in my
11 DCF analysis, this prospective market equity risk premium is derived from an average of
12 the three- to five-year median market price appreciation potential by *Value Line* for the 13
13 weeks ending May 3, 2024, plus an average of the median estimated dividend yield for the
14 common stocks of the 1,700 firms covered in *Value Line*'s Standard Edition.²³

15 The average median expected price appreciation is 47%, which translates to a
16 10.11% annual appreciation, and when added to the average of *Value Line*'s median
17 expected dividend yields of 2.16%, equates to a forecasted annual total return rate on the
18 market of 12.27%. The forecasted Aaa-rated bond yield of 5.05% is deducted from the
19 total market return of 12.27%, resulting in an equity risk premium of 7.22%, shown on
20 page 6, line 4 of Petitioner's Exhibit DWD-5.

²¹ Annualized Return = (1 + Monthly Return) ^12 - 1.

²² Shown on line 3, page 6 of Petitioner's Exhibit DWD-5.

²³ As explained in detail in page 2, note 1 of Petitioner's Exhibit DWD-6.

1 **Q. Please explain the derivation of an equity risk premium based on the S&P 500**
2 **companies.**

3 A. Using data from *Value Line*, Bloomberg, and S&P Capital IQ, I calculated an expected
4 total return on the S&P 500 using expected dividend yields and long-term growth estimates
5 as a proxy for capital appreciation. The expected total return for the S&P 500 is 14.86%.
6 Subtracting the prospective yield on Aaa-rated corporate bonds of 5.05% results in a 9.81%
7 projected equity risk premium as shown on page 6, line 5 of Petitioner's Exhibit DWD-5.

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

10 A. I gave equal weight to the five equity risk premiums in arriving at my conclusion of
11 7.65%.²⁴

12 **Table 6: Summary of the Calculation of the Equity Risk Premium Using Total**
13 **Market Returns**²⁵

Historical Spread Between Total Returns of Large Stocks and Aaa and Aa2-Rated Corporate Bond Yields (1928 – 2023)	5.96%
Regression Analysis on Historical Data	7.03%
PRPM Analysis on Historical Data	8.23%
Prospective Equity Risk Premium using Total Market Returns from <i>Value Line</i> Summary & Index less Projected Aaa Corporate Bond Yields	7.22%
Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns for the S&P 500 less Projected Aaa Corporate Bond Yields	<u>9.81%</u>
Average	<u>7.65%</u>

14 After calculating the average market equity risk premium of 7.65%, I adjusted it by
15
16 beta to account for the risk of the individual Proxy Groups. As discussed below, the beta
17 is a meaningful measure of prospective relative risk to the market as a whole and is a logical

²⁴ See, line 6 on page 6 of Petitioner's Exhibit DWD-5.

²⁵ As shown on page 6 of Petitioner's Exhibit DWD-5.

means by which to allocate a company's, or proxy group's, share of the market's total equity risk premium relative to corporate bond yields. As shown on page 1 of Petitioner's Exhibit DWD-6, the average of the mean and median beta for the Utility Proxy Group and U.S. Water Universe are 0.75 and 0.76, respectively. Multiplying the betas of the Proxy Groups by the market equity risk premium of 7.65% results in a beta-adjusted equity risk premium of 5.74% and 5.81% for the Utility Proxy Group and the U.S. Water Universe, respectively.

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

A. I estimated three equity risk premiums based on S&P Utility Index holding returns and one equity risk premium based on the expected returns of the S&P Utilities Index using data from *Value Line*, Bloomberg, and S&P Capital IQ. Turning first to the S&P Utility Index holding period returns, I derived a long-term monthly arithmetic mean equity risk premium between the S&P Utility Index total returns of 10.45% and monthly A-rated public utility bond yields of 6.43% from 1928 to 2023, to arrive at an equity risk premium of 4.02%.²⁶ I then used the same historical data to derive an equity risk premium of 4.87% based on a regression of the monthly equity risk premiums. The final S&P Utility Index holding period equity risk premium involved applying the PRPM using the historical monthly equity risk premiums from January 1928 to April 2024 to arrive at a PRPM-derived equity risk premium of 4.52% for the S&P Utility Index.

I then derived expected total returns on the S&P Utilities Index of 10.53% using data from *Value Line*, Bloomberg, and S&P Capital IQ and subtracted the prospective A2-

²⁶ As shown on line 1 on page 9 of Petitioner's Exhibit DWD-5.

rated public utility bond yield (5.57%²⁷), which resulted in a risk premium of 4.96%. As with the market equity risk premiums, I averaged each risk premium to arrive at my utility-specific equity risk premium of 4.59%.

Table 7: Summary of the Calculation of the Equity Risk Premium Using S&P Utility Index Holding Returns²⁸

Historical Spread Between Total Returns of the S&P Utilities Index and A2-Rated Utility Bond Yields (1928 – 2023)	4.02%
Regression Analysis on Historical Data	4.87%
PRPM Analysis on Historical Data	4.52%
Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns for the S&P Utilities Index less Projected A2 Utility Bond Yields	<u>4.96%</u>
Average	<u>4.59%</u>

Q. What is your conclusion of an equity risk premium for use in your total market approach RPM analysis?

A. The equity risk premiums I applied to the Utility Proxy Group and the U.S. Water Universe are 5.17% and 5.20%, respectively, which is the average of the beta-derived and the S&P utility equity risk premiums of 5.74% and 5.81%, and 4.59%, respectively.²⁹

Q. What is the indicated RPM common equity cost rate for the Proxy Groups?

A. As shown on line 7 of Petitioner’s Exhibit DWD-5, page 1, I calculated a common equity cost rate of 10.78% and 10.85% for the Utility Proxy Group and the U.S. Water Universe, respectively, based on the RPM.

²⁷ Derived on line 3 of page 1 of Petitioner’s Exhibit DWD-5.

²⁸ As shown on page 9 of Petitioner’s Exhibit DWD-5.

²⁹ As shown on page 5 of Petitioner’s Exhibit DWD-5.

Table 8: Summary of the Risk Premium Model³⁰

	Utility Proxy Group	U.S. Water Universe
Prospective Moody's Utility Bond Yield Applicable to the Respective Proxy Group	5.61%	5.65%
Prospective Equity Risk Premium	<u>5.17%</u>	<u>5.20%</u>
Indicated Cost of Common Equity	<u>10.78%</u>	<u>10.85%</u>

C. THE CAPITAL ASSET PRICING MODEL

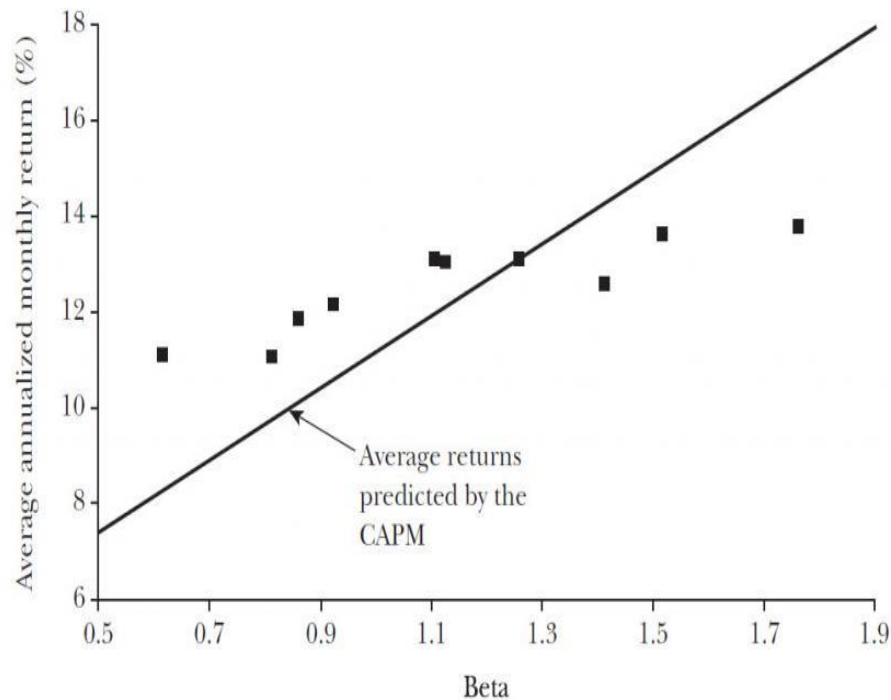
Q. Please explain the theoretical basis of the CAPM.

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

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

³⁰ As shown on page 1 of Petitioner's Exhibit DWD-5.

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



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

With few exceptions, the empirical studies agree that ... low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.³³

Later in that same chapter, Morin concludes:

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

$$K = R_F + x (R_M - R_F) + (1-x) \beta(R_M - R_F)$$

³³ Morin, at 207.

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

$$K = R_F + 0.25(R_M - R_F) + 0.75 \beta(R_M - R_F)^{34}$$

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

The early tests firmly reject the Sharpe-Lintner version of the CAPM. There is a positive relation between beta and average return, but it is too 'flat'... The regressions consistently find that the intercept is greater than the average risk-free rate... and the coefficient on beta is less than the average excess market return... This is true in the early tests... as well as in more recent cross-section regressions tests, like Fama and French (1992).³⁵

Finally, Fama and French further note:

Confirming earlier evidence, the relation between beta and average return for the ten portfolios is much flatter than the Sharpe-Linter CAPM predicts. The returns on low beta portfolios are too high, and the returns on the high beta portfolios are too low. For example, the predicted return on the portfolio with the lowest beta is 8.3 percent per year; the actual return is 11.1 percent. The predicted return on the portfolio with the highest beta is 16.8 percent per year; the actual is 13.7 percent.³⁶

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

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

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

³⁴ Morin, at 221.

³⁵ Fama & French, at 32.

³⁶ *Ibid.*, at 33.

1 regress to the market mean of 1.00, *Value Line* calculates beta over a five-year period,
2 while Bloomberg's calculation is based on two years of data.

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

4 A. As shown in column 5 on page 1 of Petitioner's Exhibit DWD-6, the risk-free rate adopted
5 for both applications of the CAPM is 4.31%. This risk-free rate of 4.31% is based on the
6 average of the *Blue Chip* consensus forecast of the expected yields on 30-year U.S.
7 Treasury bonds for the six quarters ending with the third calendar quarter of 2025 and long-
8 term projections for the years 2025 to 2029 and 2030 to 2034.

9 **Q. Why is the yield on long-term U.S. Treasury bonds appropriate for use as the risk-
10 free rate?**

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

17 **Q. Please explain the estimation of the expected risk premium for the market used in
18 your CAPM analyses.**

19 A. The basis of the market risk premium is explained in detail in note 1 on Petitioner's Exhibit
20 DWD-6. As discussed above, the market risk premium is derived from an average of two
21 historical data-based market risk premiums, one *Value Line* data-based market risk
22 premium, and one Bloomberg, *Value Line*, and S&P Capital IQ data-based market risk
23 premium.

1 The long-term income return on U.S. Government Securities of 4.99% was
2 deducted from the monthly historical total market return of 12.16%, which results in an
3 historical market equity risk premium of 7.17%.³⁷ I applied a linear OLS regression to the
4 monthly annualized historical returns on the S&P 500 relative to historical yields on long-
5 term U.S. Government Securities. That regression analysis yielded a market equity risk
6 premium of 8.04%. The PRPM market equity risk premium is 9.19% and is derived using
7 the PRPM relative to the yields on long-term U.S. Treasury securities from January 1926
8 through April 2024.

9 The *Value Line*-derived forecasted total market equity risk premium is derived by
10 deducting the forecasted risk-free rate of 4.31%, discussed above, from the *Value Line*
11 projected total annual market return of 12.27%, resulting in a forecasted total market equity
12 risk premium of 7.96%.

13 The S&P 500 projected market equity risk premium using *Value Line*, Bloomberg,
14 and S&P Capital IQ data is derived by subtracting the projected risk-free rate of 4.31%
15 from the projected total return of the S&P 500 of 14.86%. The resulting market equity risk
16 premium is 10.55%.

17 These five market risk premiums, when averaged, result in an average total market
18 equity risk premium of 8.58%.

³⁷ SBBI - 2023, at Appendix A-1 (1) through A-1 (3) and Appendix A-7 (19) through A-7 (21); Bloomberg Professional.

Table 9: Summary of the Calculation of the Market Risk Premium for Use in the CAPM³⁸

Historical Spread Between Total Returns of Large Stocks and Long-Term Government Bond Yields (1926 – 2023)	7.17%
Regression Analysis on Historical Data	8.04%
PRPM Analysis on Historical Data	9.19%
Prospective Equity Risk Premium using Total Market Returns from <i>Value Line</i> Summary & Index less Projected 30-Year Treasury Bond Yields	7.96%
Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns for the S&P 500 less Projected 30-Year Treasury Bond Yields	<u>10.55%</u>
Average	<u>8.58%</u>

Q. What are the results of your application of the traditional and empirical CAPM to the Proxy Groups?

A. As shown on page 1 of Petitioner’s Exhibit DWD-6, the mean result of my CAPM/ECAPM applied to the Utility Proxy Group is 11.19%, the median is 10.86%, and the average of the two is 11.03%. Relative to the U.S. Water Universe, the mean CAPM/ECAPM result is 11.24%, the median is 10.86%, and the average of the two is 11.05%. Consistent with my reliance on the average of mean and median DCF results discussed above, the indicated common equity cost rate using the CAPM/ECAPM is 11.19% (Utility Proxy Group) and 11.05% (U.S. Water Universe).

D. COMMON EQUITY COST RATES FOR PROXY GROUPS OF DOMESTIC, NON-PRICE REGULATED COMPANIES BASED ON THE DCF, RPM, AND CAPM

Q. Why do you also consider proxy groups of domestic, non-price regulated companies?

A. Although I am not an attorney, my interpretation of the *Hope* and *Bluefield* cases is that they did not specify that comparable risk companies had to be utilities. Since the purpose of rate regulation is to be a substitute for marketplace competition, non-price regulated

³⁸ As shown on page 2 of Petitioner’s Exhibit DWD-6.

1 firms operating in the competitive marketplace make an excellent proxy if they are
2 comparable in total risk to the Proxy Groups being used to estimate the cost of common
3 equity. The selection of such domestic, non-price regulated competitive firms theoretically
4 and empirically results in a proxy group which is comparable in total risk to the Proxy
5 Groups, since all of these companies compete for capital in the exact same markets.

6 **Q. How did you select non-price regulated companies that are comparable in total risk**
7 **to the Proxy Groups?**

8 A. In order to select proxy groups of domestic, non-price regulated companies similar in total
9 risk to the Proxy Groups, I relied on the betas and related statistics derived from *Value Line*
10 regression analyses of weekly market prices over the most recent 260 weeks (i.e., five
11 years). These selection criteria resulted in a proxy group of 39 domestic, non-price
12 regulated firms comparable in total risk to the Utility Proxy Group and a proxy group of
13 42 domestic, non-price regulated firms comparable in total risk to the U.S. Water Universe.
14 Total risk is the sum of non-diversifiable market risk and diversifiable company-specific
15 risks. The criteria used in selecting the domestic, non-price regulated firms was:

- 16 (i) They must be covered by *Value Line Investment Survey* (Standard Edition);
- 17 (ii) They must be domestic, non-price regulated companies, i.e., not utilities;
- 18 (iii) Their betas must lie within plus or minus two standard deviations of the
19 average unadjusted betas of the respective proxy groups; and
- 20 (iv) The residual standard errors of the *Value Line* regressions which gave rise
21 to the unadjusted betas must lie within plus or minus two standard
22 deviations of the average residual standard error of the respective proxy
23 groups.

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

5 **Q. Have you prepared an exhibit which shows the data from which you selected the**
6 **domestic, non-price regulated companies that are comparable in total risk to the**
7 **Proxy Groups?**

8 A. Yes, the basis of my selection and both proxy groups' regression statistics are shown in
9 Petitioner's Exhibit DWD-7.

10 **Q. Did you calculate common equity cost rates using the DCF model, the RPM, and the**
11 **CAPM for the non-price regulated proxy groups?**

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

16 Pages 2 and 3 of Petitioner's Exhibit DWD-8 shows the derivation of the constant
17 growth DCF model common equity cost rate. The indicated common equity cost rates using
18 the constant growth DCF for the non-price regulated proxy groups comparable in total risk
19 to the Proxy Groups are 11.22% (Utility Proxy Group) and 10.67% (U.S. Water Universe).

20 Pages 4 through 7 of Petitioner's Exhibit DWD-8 contain the data and calculations
21 that support the 11.99% (Utility Proxy Group) and 12.30% (U.S. Water Universe) RPM
22 common equity cost rates. As shown on line 1, page 4 of Petitioner's Exhibit DWD-8, the
23 consensus prospective yield on Moody's Baa2-rated corporate bonds for the six quarters
24 ending in the third quarter of 2024, and for the years 2025 to 2029 and 2030 to 2034, is

1 5.98%.³⁹ Since both non-price regulated proxy groups have an average Moody's long-term
2 issuer rating of Baa1, a downward adjustment of 0.11% to the projected Baa2-rated
3 corporate bond yield is necessary to reflect a difference in ratings which results in a
4 projected Baa1-rated corporate bond yield of 5.87% for the non-price regulated proxy
5 groups.

6 When beta-adjusted risk premiums of 6.12% (Utility Proxy Group) and 6.43%
7 (U.S. Water Universe)⁴⁰ relative to the non-price regulated proxy groups are added to the
8 prospective Baa2-rated corporate bond yield of 5.87%, the indicated RPM common equity
9 cost rates are 11.99% (Utility Proxy Group) and 12.30% (U.S. Water Universe).

10 Pages 8 and 9 of Petitioner's Exhibit DWD-8 contain the inputs and calculations
11 that support my indicated CAPM/ECAPM common equity cost rates of 11.33% (Utility
12 Proxy Group) and 11.57% (U.S. Water Universe).

13 **Q. What is the cost rate of common equity based on the non-price regulated proxy**
14 **groups comparable in total risk to the Proxy Groups?**

15 A. As shown on page 1 of Petitioner's Exhibit DWD-8, the results of the common equity
16 models applied to the non-price regulated proxy groups – which group is comparable in
17 total risk to the Proxy Groups – are as follows:

³⁹ *Blue Chip Financial Forecasts*, December 1, 2023 at 14, and May 1, 2024 at 2.

⁴⁰ Derived on page 7 of Petitioner's Exhibit DWD-8.

Table 10: Summary of Model Results Applied to the Non-Price Regulated Proxy Groups⁴¹

	Relative to the Utility Proxy Group	Relative to the U.S. Water Universe
Discounted Cash Flow Model	11.22%	10.67%
Risk Premium Model	11.99%	12.30%
Capital Asset Pricing Model	<u>11.33%</u>	<u>11.57%</u>
Mean	<u>11.51%</u>	<u>11.51%</u>
Median	<u>11.33%</u>	<u>11.57%</u>
Average of Mean and Median	<u>11.42%</u>	<u>11.54%</u>

The average of the mean and median of these models are 11.42% (Utility Proxy Group) and 11.54% (U.S. Water Universe), which I used as the indicated common equity cost rates for the non-price regulated proxy groups.

VIII. CONCLUSION OF COMMON EQUITY COST RATE BEFORE ADJUSTMENT

Q. What is the indicated range of common equity cost rates before adjustment?

A. Based on the results of the application of multiple cost of common equity models to the Proxy Groups, the indicated range of common equity cost rates are between 9.26% and 11.54% before Company-specific adjustments. I used multiple cost of common equity models as primary tools in arriving at my recommended common equity cost rate, because each of these models is theoretically sound and available to investors, and because no single model is so inherently precise that it can be relied on to the exclusion of other theoretically sound models. Using multiple models adds reliability to the estimated common equity cost rate, with the prudence of using multiple cost of common equity models supported in both the financial literature and regulatory precedent.

⁴¹ As shown on page 1 of Petitioner's Exhibit DWD-8.

1 Based on these common equity cost rate results, I conclude that a range of common
2 equity cost rates between 9.26% and 11.54% is reasonable and appropriate before any
3 adjustments for relative risk differences between the Company and the Proxy Groups are
4 made.

5 **IX. ADJUSTMENTS TO THE COMMON EQUITY COST RATE**

6 **A. BUSINESS RISK ADJUSTMENT**

7 **Q. Does Limestone Water have increased business risk compared to the Proxy Groups?**

8 A. Yes, it does. Limestone Water faces extraordinary operating risks because of its acquisition
9 of mainly troubled water and wastewater systems, which is only exacerbated by its small
10 size.

11 **Q. Please summarize the extraordinary business risk that Limestone Water faces.**

12 A. As described in detail in Mr. Duncan's direct testimony, the Company faces significant
13 risks due to its acquisition of troubled water and wastewater systems. These acquired
14 systems often have significant challenges in all phases of service to their existing
15 customers, and Limestone Water must invest significant capital to ensure safe and reliable
16 service. This is compounded by the fact that, as Mr. Duncan explains, many of the systems
17 acquired by Limestone Water have historically failed to seek rate relief sufficient to cover
18 operating costs.⁴² Consequently, the failure of existing rates to cover operating costs
19 resulted in the Company incurring \$2.6 million of operating losses since commencing
20 operations in the State in 2021.⁴³

21 While rehabilitating troubled systems is generally a small portion of the operations

⁴² See Duncan's Direct Testimony, at 4. Aqua Utilities Water and Wastewater system has not filed for a rate increase since 2006 and the Shiloh Falls system has not filed for a rate increase since 2007.

⁴³ Duncan's Direct Testimony, at 4.

1 of the companies that comprise my Proxy Groups, it is the majority of the operations of
2 Limestone Water. As such, the Company's increased business risk as compared to the
3 Proxy Groups should be reflected in its authorized ROE.

4 **Q. Does Limestone Water's smaller size compared with the Proxy Groups increase its**
5 **business risk?**

6 A. Yes. Limestone Water's smaller size relative to the companies in the Proxy Groups
7 indicates greater relative business risk for the Company because, all else being equal, size
8 has a material bearing on risk.

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

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

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

returns tend to *increase*, and vice versa. (footnote omitted) (emphasis in original)⁴⁴

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

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

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

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

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

Consistent with the financial principle of risk and return discussed above, increased relative risk due to small size must be considered in the allowed rate of return on common equity. Therefore, the Commission’s authorization of a cost rate of common equity in this proceeding must appropriately reflect the unique risks of Limestone Water, including its small size, which is justified and supported above by evidence in the financial literature.

⁴⁴ Kroll: Cost of Capital Navigator: U.S. Cost of Capital Module, “Size as a Predictor of Equity Returns,” at 1
⁴⁵ Fama & French, at 25-43.

⁴⁶ Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance (McGraw-Hill Book Company, 1996), at 204-205, 229.

⁴⁷ Eugene F. Brigham, Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989), at 623.

1 **Q. Is there a way to quantify a relative risk adjustment due to Limestone Water’s greater**
2 **business risk relative to the Proxy Groups?**

3 A. Yes. In the absence of other empirical methods, I compared Limestone Water’s and the
4 Proxy Groups’ relative sizes, as measured by an estimated market capitalization of
5 common equity for Limestone Water.

6 **Table 11: Size as Measured by Market Capitalization for Limestone Water and the**
7 **Proxy Groups**

	Market <u>Capitalization*</u>	Times Greater than the <u>Company</u>
	(\$ Millions)	
Limestone Water	\$3.986	
Utility Proxy Group Median	\$2,619.707	657.2x
Limestone Water	\$3.986	
U.S. Water Universe Median	\$1,743.653	437.4x
*From page 1 of Petitioner’s Exhibit DWD-9.		

8 Limestone Water’s estimated market capitalization based on the Utility Proxy Group was
9 \$3.986 million as of April 30, 2024,⁴⁸ compared with the market capitalization of the
10 median company in the Utility Proxy Group of \$2.62 billion as of April 30, 2024. The
11 median company in the Utility Proxy Group has a market capitalization 657.2 times the
12 size of Limestone Water’s estimated market capitalization.

13 Limestone Water’s estimated market capitalization based on the U.S. Water
14 Universe was \$3.986 million as of April 30, 2024,⁴⁹ compared with the market

⁴⁸ \$3.986M = \$3.27M (Limestone Water’s total requested rate base) * 57.00% (Limestone Water’s requested equity ratio) * 213.7% (market-to-book ratio of the Utility Proxy Group) as demonstrated on page 2 of Petitioner’s Exhibit DWD-9.

⁴⁹ \$3.986M = \$3.27M (Limestone Water’s total requested rate base) * 57.00% (Limestone Water’s requested equity ratio) * 213.7% (market-to-book ratio of the U.S. Water Universe) as demonstrated on page 2 of Petitioner’s Exhibit DWD-9.

1 capitalization of the median company in the U.S. Water Universe of \$1.74 billion as of
2 April 30, 2024. The median company in the U.S. Water Universe has a market
3 capitalization 437.4 times the size of Limestone Water's estimated market capitalization.

4 As a result, it is necessary to upwardly adjust the indicated range of common equity
5 cost rates applicable to the Proxy Groups of 9.26% and 11.54% to reflect Limestone
6 Water's greater risk due to its smaller relative size and extraordinary operational risks. The
7 determination is based on the size premiums for portfolios of New York Stock Exchange,
8 American Stock Exchange, and NASDAQ listed companies ranked by deciles for the 1926
9 to 2023 period as shown on the bottom half of page 1 of Petitioner's Exhibit DWD-9. The
10 average size premium for the Utility Proxy Group with a market capitalization of \$2.62
11 billion falls in the 6th decile, while the Company's estimated market capitalization of
12 \$3.986 million places it in the 10th decile. The size premium spread between the 6th decile
13 and the 10th decile is 3.49% as shown on the top of page 1 of Petitioner's Exhibit DWD-9.
14 The average size premium for the U.S. Water Universe with a market capitalization of
15 \$1.74 billion falls in the 7th decile, while the Company's estimated market capitalization of
16 \$3.986 million places it in the 10th decile. The size premium spread between the 7th decile
17 and the 10th decile is 3.31% as shown on the top of page 1 of Petitioner's Exhibit DWD-9.
18 In view of the Company's small size and extraordinary operational risks compared to the
19 Proxy Groups, and the indicated 3.49% and 3.31% respective indicated size adjustments, I
20 conservatively recommend a business risk adjustment of 1.50% be added to the Proxy
21 Groups-specific range of ROEs to reflect Limestone Water's unique risks.

1 **Q. What is the indicated range of common equity cost rates after your Company-specific**
2 **adjustments?**

3 A. Applying the 1.50% business risk adjustment to the indicated range of common equity cost
4 rates between 9.26% and 11.54%% results in a Company-specific range of common equity
5 rates between 10.76% and 13.04%. In consideration of the indicated range, I recommend
6 an ROE of 11.90% for Limestone Water in this proceeding.

7 **X. CONCLUSIONS**

8 **Q. What is your recommended ROE for the Company?**

9 A. Given the discussion above and the results from the analyses, I recommend that an ROE
10 of 11.90% is appropriate for the Company in this rate case.

11 **Q. In your opinion, is your proposed ROE of 11.90% fair and reasonable to Limestone**
12 **Water and its customers?**

13 A. Yes, it is.

14 **Q. Is the Company's requested capital structure, which consists of 43.00% long-term**
15 **debt and 57.00% common equity appropriate?**

16 A. Yes, it is.

17 **Q. Should the Company's 6.64% cost of long-term debt be approved by the**
18 **Commission?**

19 A. Yes, it should.

20 **Q. Does this conclude your Direct Testimony?**

21 A. Yes, it does.

Summary

Dylan is an experienced consultant and has been awarded the professional designations of Certified Rate of Return Analyst (CRRRA) 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 15 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

Sponsor	Date	Case/Applicant	Docket No.	Subject
Regulatory Commission of Alaska				
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
Alberta Utilities Commission				
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
Arizona Corporation Commission				
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
Arkansas Public Service Commission				
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
California Public Utilities Commission				
San Gabriel Valley Water Company	05/23	San Gabriel Valley Water Company	Docket No. A23-05-001	Return on Equity
Colorado Public Utilities Commission				
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
Commission of the Canada Energy Regulator				
Trans-Northern Pipelines Inc.	11/22	Trans-Northern Pipelines Inc.	Docket No. C-22197	Cost of Capital
Delaware Public Service Commission				
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

Sponsor	Date	Case/Applicant	Docket No.	Subject
Tidewater Utilities, Inc.	11/13	Tidewater Utilities, Inc.	Docket No. 13-466	Capital Structure
Public Service Commission of the District of Columbia				
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
Federal Energy Regulatory Commission				
LS Power Grid California, LLC	10/20	LS Power Grid California, LLC	Docket No. ER21-195-000	Rate of Return
Florida Public Service Commission				
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
Hawaii Public Utilities Commission				
Launiupoko Irrigation Company, Inc.	12/20	Launiupoko Irrigation Company, Inc.	Docket No. 2020-0217 / Transferred to 2020-0089	Capital Structure
Lanai Water Company, Inc.	12/19	Lanai Water Company, Inc.	Docket No. 2019-0386	Cost of Service / Rate Design
Manele Water Resources, LLC	08/19	Manele Water Resources, LLC	Docket No. 2019-0311	Cost of Service / 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 / Rate Design
Hawaii Resources, Inc.	09/16	Laie Water Company	Docket No. 2016-0229	Cost of Service / Rate Design
Illinois Commerce Commission				
Aqua Illinois, Inc.	01/24	Aqua Illinois, Inc.	Docket No. 24-0044	Rate of Return
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 23-0082 (Electric)	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a 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 Ameren Illinois	07/20	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 20-0308	Return on Equity
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
Indiana Utility Regulatory Commission				
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
Kansas Corporation Commission				
Atmos Energy Corporation	07/19	Atmos Energy Corporation	19-ATMG-525-RTS	Rate of Return
Kentucky Public Service Commission				
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

Sponsor	Date	Case/Applicant	Docket No.	Subject
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
Louisiana Public Service Commission				
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
Maine Public Utilities Commission				
Northern Utilities, Inc. d/b/a Unitil	05/23	Northern Utilities, Inc. d/b/a Unitil	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
Maryland Public Service Commission				
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
Massachusetts Department of Public Utilities				
Unitil Corporation	9/23	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 23-80	Rate of Return
Unitil Corporation	9/23	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
Minnesota Public Utilities Commission				
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
Mississippi Public Service Commission				
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
Missouri Public Service Commission				
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
Public Utilities Commission of Nevada				
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

Sponsor	Date	Case/Applicant	Docket No.	Subject
New Hampshire Public Utilities Commission				
Aquarion Water Company of New Hampshire, Inc.	12/20	Aquarion Water Company of New Hampshire, Inc.	Docket No. DW 20-184	Rate of Return
New Jersey Board of Public Utilities				
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. ER20120746	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
New Mexico Public Regulation Commission				
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
North Carolina Utilities Commission				
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
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
North Dakota Public Service Commission				
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
Public Utilities Commission of Ohio				
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
Pennsylvania Public Utility Commission				
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

Sponsor	Date	Case/Applicant	Docket No.	Subject
FirstEnergy	04/22	Pennsylvania Electric Company	Docket No. R-2024-3047068	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
Steelton Borough Authority	01/19	Steelton 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
South Carolina Public Service Commission				
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
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
South Dakota Public Service Commission				
Northern States Power Company	06/22	Northern States Power Company	Docket No. EL22-017	Rate of Return
Tennessee Public Utility Commission				
Piedmont Natural Gas Company	07/20	Piedmont Natural Gas Company	Docket No. 20-00086	Return on Equity
Public Utility Commission of Texas				
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
Texas Railroad Commission				
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
Virginia State Corporation Commission				
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

Sponsor	Date	Case/Applicant	Docket No.	Subject
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
Public Service Commission of West Virginia				
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

Limestone Water Utility Operating Company, LLC
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Limestone Water Utility Operating Company, LLC
Recommended Capital Structure and Cost Rates
for Ratemaking Purposes

<u>Type Of Capital</u>	<u>Ratios (1)</u>	<u>Cost Rate</u>		<u>Weighted Cost Rate</u>
Long-Term Debt	43.00%	6.64%	(2)	2.86%
Common Equity	<u>57.00%</u>	11.90%	(3)	<u>6.78%</u>
Total	<u>100.00%</u>			<u>9.64%</u>

Notes:

- (1) Hypothetical capital structure based on the high-end of the capital structures maintained by the Proxy Groups as shown on Exhibit DWD-2.
- (2) Hypothetical cost of long-term debt based on weighted average cost of long-term debt from recent issuances of Limestone's sister companies as shown on Exhibit DWD-3.
- (3) From page 2 of this Exhibit.

Limestone Water Utility Operating Company, LLC
Brief Summary of Common Equity Cost Rate

<u>Line No.</u>	<u>Principal Methods</u>	<u>Proxy Group of Five Water Companies</u>	<u>Proxy Group of Nine Water Companies</u>
1.	Discounted Cash Flow Model (DCF) (1)	9.97%	9.26%
2.	Risk Premium Model (RPM) (2)	10.78%	10.85%
3.	Capital Asset Pricing Model (CAPM) (3)	11.03%	11.05%
4.	Market Models Applied to Comparable Risk, Non- Price Regulated Companies (4)	<u>11.42%</u>	<u>11.54%</u>
5.	Indicated Common Equity Cost Rate before Adjustment for Unique Risk	9.26% - 11.54%	
6.	Business Risk Adjustment (5)	<u>1.50%</u>	
7.	Indicated Common Equity Cost Rate after Adjustment	<u><u>10.76% - 13.04%</u></u>	
8.	Recommended Common Equity Cost Rate	<u><u>11.90%</u></u>	

Notes: (1) From page 1 of Exhibit DWD-4.
(2) From page 1 of Exhibit DWD-5.
(3) From page 1 of Exhibit DWD-6.
(4) From page 1 of Exhibit DWD-8.
(5) Business risk adjustment to reflect the Company's unique risk compared to the Proxy Groups as detailed in the accompanying Direct Testimony.

Proxy Group of Five Water Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2019 - 2023, Inclusive

	2023	2022	2021	2020	2019	
	(MILLIONS OF DOLLARS)					
<u>Capitalization Statistics</u>						
<u>Amount of Capital Employed</u>						
Total Permanent Capital	\$5,885.162	\$5,151.007	\$4,858.217	\$4,363.144	\$4,000.362	
Short-Term Debt	\$181.350	\$347.516	\$173.899	\$392.659	\$259.662	
Total Capital Employed	<u>\$6,066.512</u>	<u>\$5,498.523</u>	<u>\$5,032.116</u>	<u>\$4,755.803</u>	<u>\$4,260.024</u>	
<u>Indicated Average Capital Cost Rates (2)</u>						
Total Debt	4.15 %	3.53 %	3.51 %	3.70 %	4.10 %	
Preferred Stock	5.76 %	5.76 %	5.76 %	5.76 %	5.84 %	
						5 YEAR AVERAGE
<u>Capital Structure Ratios</u>						
Based on Total Permanent Capital:						
Long-Term Debt	48.56 %	48.61 %	49.83 %	50.22 %	48.52 %	49.15 %
Preferred Stock	0.05	0.06	0.06	0.07	0.08	0.06
Common Equity	51.39	51.33	50.11	49.71	51.40	50.79
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	52.74 %	53.09 %	54.65 %	54.65 %	53.25 %	53.67 %
Preferred Stock	0.05	0.06	0.07	0.07	0.08	0.07
Common Equity	47.21	46.85	45.28	45.28	46.67	46.26
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>
<u>Financial Statistics</u>						
<u>Financial Ratios - Market Based</u>						
Earnings / Price Ratio	3.03 %	2.84 %	3.14 %	3.38 %	2.65 %	3.01 %
Market / Average Book Ratio	297.18	350.02	375.07	331.18	343.49	339.39
Dividend Yield	1.94	1.70	1.57	1.75	1.67	1.73
Dividend Payout Ratio	69.33	58.70	51.02	51.89	72.01	60.59
<u>Rate of Return on Average Book Common Equity</u>	9.26 %	9.55 %	11.72 %	10.96 %	9.54 %	10.21 %
<u>Total Debt / EBITDA (3)</u>	5.40 x	5.20 x	4.76 x	5.07 x	5.66 x	5.22 x
<u>Funds from Operations / Total Debt (4)</u>	10.41 %	13.69 %	11.85 %	12.92 %	15.36 %	12.85 %
<u>Total Debt / Total Capital</u>	52.74 %	53.09 %	54.65 %	54.65 %	53.25 %	53.67 %

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 Five Water Companies
2019 - 2023, Inclusive

	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>5 YEAR AVERAGE</u>
<u>American States Water Company</u>						
Long-Term Debt	42.60 %	38.65 %	37.56 %	40.72 %	31.87 %	38.28 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	57.40	61.35	62.44	59.28	68.13	61.72
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>American Water Works Company, Inc.</u>						
Long-Term Debt	55.44 %	59.29 %	58.75 %	59.93 %	58.59 %	58.40 %
Preferred Stock	0.01	0.01	0.02	0.02	0.03	0.02
Common Equity	44.55	40.70	41.23	40.05	41.38	41.58
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>California Water Service Group</u>						
Long-Term Debt	42.41 %	44.39 %	47.28 %	46.04 %	50.90 %	46.20 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	57.59	55.61	52.72	53.96	49.10	53.80
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Middlesex Water Company</u>						
Long-Term Debt	46.26 %	43.34 %	45.86 %	44.61 %	42.20 %	44.46 %
Preferred Stock	0.26	0.29	0.31	0.33	0.37	0.31
Common Equity	53.48	56.37	53.83	55.06	57.43	55.23
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>SIW Group</u>						
Long-Term Debt	56.09 %	57.39 %	59.69 %	59.79 %	59.05 %	58.40 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	43.91	42.61	40.31	40.21	40.95	41.60
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Proxy Group of Five Water Companies</u>						
Long-Term Debt	48.56 %	48.61 %	49.83 %	50.22 %	48.52 %	49.15 %
Preferred Stock	0.05	0.06	0.07	0.07	0.08	0.07
Common Equity	51.39	51.33	50.10	49.71	51.40	50.78
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>

Source of Information
Annual Forms 10-K

Proxy Group of Nine Water Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2019 - 2023, Inclusive

	2023	2022	2021	2020	2019	
	(MILLIONS OF DOLLARS)					
<u>Capitalization Statistics</u>						
<u>Amount of Capital Employed</u>						
Total Permanent Capital	\$4,797.940	\$4,285.356	\$4,016.054	\$3,646.547	\$3,071.208	
Short-Term Debt	\$118.541	\$220.695	\$106.800	\$229.812	\$147.948	
Total Capital Employed	<u>\$4,916.481</u>	<u>\$4,506.051</u>	<u>\$4,122.854</u>	<u>\$3,876.359</u>	<u>\$3,219.156</u>	
<u>Indicated Average Capital Cost Rates (2)</u>						
Total Debt	4.29 %	3.70 %	3.76 %	4.03 %	4.32 %	
Preferred Stock	5.76 %	5.76 %	5.76 %	5.76 %	5.84 %	
						5 YEAR AVERAGE
<u>Capital Structure Ratios</u>						
Based on Total Permanent Capital:						
Long-Term Debt	50.43 %	50.88 %	52.66 %	52.87 %	51.08 %	51.58 %
Preferred Stock	0.03	0.03	0.03	0.04	0.05	0.04
Common Equity	49.54	49.09	47.31	47.09	48.87	48.38
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	52.82 %	53.76 %	54.56 %	55.85 %	53.87 %	54.17 %
Preferred Stock	0.03	0.03	0.03	0.04	0.04	0.04
Common Equity	47.15	46.21	45.40	44.11	46.09	45.79
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>
<u>Financial Statistics</u>						
<u>Financial Ratios - Market Based</u>						
Earnings / Price Ratio	3.31 %	2.96 %	3.01 %	3.09 %	2.66 %	3.01 %
Market / Average Book Ratio	314.01	384.90	448.11	385.54	392.31	384.98
Dividend Yield	2.15	1.90	1.75	1.98	1.96	1.95
Dividend Payout Ratio	68.48	65.83	68.26	116.13	93.86	82.51
<u>Rate of Return on Average Book Common Equity</u>	10.15 %	10.23 %	11.12 %	9.72 %	9.38 %	10.12 %
<u>Total Debt / EBITDA (3)</u>	5.06 x	5.17 x	4.94 x	5.39 x	5.52 x	5.22 x
<u>Funds from Operations / Total Debt (4)</u>	13.54 %	12.93 %	13.46 %	11.90 %	13.38 %	13.04 %
<u>Total Debt / Total Capital</u>	52.82 %	53.76 %	54.56 %	55.85 %	53.87 %	54.17 %

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 Nine Water Companies
2019 - 2023, Inclusive

	2023	2022	2021	2020	2019	5 YEAR AVERAGE
<u>American States Water Company</u>						
Long-Term Debt	42.60 %	38.65 %	37.56 %	40.72 %	31.87 %	38.28 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	57.40	61.35	62.44	59.28	68.13	61.72
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>American Water Works Company, Inc.</u>						
Long-Term Debt	55.44 %	59.29 %	58.75 %	59.93 %	58.59 %	58.40 %
Preferred Stock	0.01	0.01	0.02	0.02	0.03	0.02
Common Equity	44.55	40.70	41.23	40.05	41.38	41.58
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Artesian Resources Corporation</u>						
Long-Term Debt	43.93 %	48.59 %	44.86 %	45.96 %	47.65 %	46.20 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	56.07	51.41	55.14	54.04	52.35	53.80
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>California Water Service Group</u>						
Long-Term Debt	42.41 %	44.39 %	47.28 %	46.04 %	50.90 %	46.20 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	57.59	55.61	52.72	53.96	49.10	53.80
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Essential Utilities Inc.</u>						
Long-Term Debt	53.90 %	54.99 %	53.28 %	54.42 %	44.23 %	52.16 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	46.10	45.01	46.72	45.58	55.77	47.84
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Global Water Resources, Inc.</u>						
Long-Term Debt	68.40 %	71.02 %	78.99 %	78.09 %	82.31 %	75.76 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	31.60	28.98	21.01	21.91	17.69	24.24
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Middlesex Water Company</u>						
Long-Term Debt	46.26 %	43.34 %	45.86 %	44.61 %	42.20 %	44.45 %
Preferred Stock	0.26	0.29	0.31	0.33	0.37	0.31
Common Equity	53.48	56.37	53.84	55.06	57.43	55.24
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>SIW Group</u>						
Long-Term Debt	56.09 %	57.39 %	59.69 %	59.79 %	59.05 %	58.40 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	43.91	42.61	40.31	40.21	40.95	41.60
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>The York Water Company</u>						
Long-Term Debt	44.87 %	40.23 %	47.64 %	46.31 %	42.95 %	44.40 %
Preferred Stock	0.00	0.00	0.00	0.00	0.00	0.00
Common Equity	55.13	59.77	52.36	53.69	57.05	55.60
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>
<u>Proxy Group of Nine Water Companies</u>						
Long-Term Debt	50.43 %	50.88 %	52.66 %	52.87 %	51.08 %	51.58 %
Preferred Stock	0.03	0.03	0.03	0.04	0.05	0.04
Common Equity	49.54	49.09	47.31	47.09	48.87	48.38
Total Capital	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>100.00 %</u>

Source of Information
Annual Forms 10-K

Limestone Water Utility Operating Company, LLC
Determination of Cost of Long-Term Debt Based on Limestone's Sister Companies Recent Debt Issuances

Utility Operating Company	Long Term Debt	Issuance Date	Debt Proportion	Interest Rate	Weighted Cost
Magnolia Water Utility Operating Company, LLC	\$ 18,424,548	October 2023	23.99%	7.07%	1.70%
Magnolia Water Utility Operating Company, LLC	\$ 29,030,384	December 2022	37.80%	6.35%	2.40%
Bluegrass Water Utility Operating Company, LLC	\$ 2,784,081	November 2022	3.62%	6.70%	0.24%
Confluence Rivers Utility Operating Company, Inc.	\$ 6,717,069	December 2022	8.75%	6.60%	0.58%
Great River Utility Operating Company, LLC	<u>\$ 19,849,000</u>	May 2024	25.84%	6.68%	<u>1.73%</u>
	<u><u>\$ 76,805,081</u></u>				<u><u>6.64%</u></u>

Source: Company Provided, as of May 31, 2024

Limestone Water Utility Operating Company, LLC
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
Proxy Groups

	[1]		[2]		[3]		[4]		[5]		[6]		[7]		[8]
							Yahoo! Finance Projected Five Year Growth 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)
Proxy Group of Five Water Companies	Average Dividend Yield (1)		Value Line Projected Five Year Growth in EPS (2)		Zack's Five Year Projected Growth Rate in EPS										
American States Water Company	2.40 %		6.50 %		6.30 %		4.40 %		14.00 %		7.80 %		2.49 %		10.29 %
American Water Works Company, Inc.	2.37		3.00		8.00		7.50		7.75		6.56		2.45		9.01
California Water Service Group	2.42		10.00		NA		10.80		9.00		9.93		2.54		12.47
Middlesex Water Company	2.54		6.50		NA		2.70		NA		4.60		2.60		7.20
SJW Group	2.84		6.50		7.50		7.50		NA		7.17		2.94		10.11
													Average		9.82 %
													Median		10.11 %
													Average of Mean and Median		9.97 %
	[1]		[2]		[3]		[4]		[5]		[6]		[7]		[8]
							Yahoo! Finance Projected Five Year Growth 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)
Proxy Group of Nine Water Companies	Average Dividend Yield (1)		Value Line Projected Five Year Growth in EPS (2)		Zack's Five Year Projected Growth Rate in EPS										
American States Water Company	2.40 %		6.50 %		6.30 %		4.40 %		14.00 %		7.80 %		2.49 %		10.29 %
American Water Works Company, Inc.	2.37		3.00		8.00		7.50		7.75		6.56		2.45		9.01
Artesian Resources Corporation	3.27		NA		NA		4.00		NA		4.00		3.34		7.34
California Water Service Group	2.42		10.00		NA		10.80		9.00		9.93		2.54		12.47
Essential Utilities Inc.	3.44		7.00		5.80		5.20		6.40		6.10		3.54		9.64
Global Water Resources, Inc.	2.40		15.00		15.00		15.00		15.00		15.00		2.58		17.58 (6)
Middlesex Water Company	2.54		6.50		NA		2.70		NA		4.60		2.60		7.20
SJW Group	2.84		6.50		7.50		7.50		NA		7.17		2.94		10.11
The York Water Company	2.38		NA		NA		4.90		NA		4.90		2.44		7.34
													Average		9.18 %
													Median		9.33 %
													Average of Mean and Median		9.26 %

NA= Not Available

Notes:

- (1) Indicated dividend at 04/30/2024 divided by the average closing price of the last 60 trading days ending 04/30/2024 for each company.
- (2) From pages 2 through 10 of this Exhibit.
- (3) Average of columns 2 through 5 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 American States Water Company, $2.40\% \times (1 + (1/2 \times 7.80\%)) = 2.49\%$.
- (5) Column 6 + Column 7.
- (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 04/30/2024
www.yahoo.com Downloaded on 04/30/2024
S&P Capital IQ

AMER. STATES WATER NYSE-AWR										RECENT PRICE	70.45	P/E RATIO	25.2 (Trailing: 21.0 Median: 30.0)	RELATIVE P/E RATIO	1.38	DIV'D YLD	2.6%	VALUE LINE	Target Price Range										
TIMELINESS	3	Lowered 12/1/23	High: 33.1	38.7	44.1	47.2	58.4	69.6	96.0	96.6	103.8	103.4	99.2	81.3					2027	2028	2029								
SAFETY	1	Raised 4/5/24	Low: 24.0	27.0	35.8	37.3	41.1	50.1	63.3	65.1	70.1	71.2	75.2	70.2															
TECHNICAL	3	Raised 3/29/24	LEGENDS 18.0 x "Cash Flow" p sh Relative Price Strength 2-for-1 split 9/13 Options: Yes Shaded area indicates recession																										
BETA	.70	(1.00 = Market)																											
18-Month Target Price Range																													
Low-High Midpoint (% to Mid)																													
\$63-\$127 \$95 (35%)																													
2027-29 PROJECTIONS																													
High Price 115			Ann'l Total Return 15%																										
Low Price 95			Gain (+65%) 10%																										
Institutional Decisions																													
202023 3Q2023 4Q2023			Percent shares traded 24 16 8																										
to Buy 141 158 152																													
to Sell 138 133 140																													
Hld's(000) 27816 28119 28792																													
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025			© VALUE LINE PUB. LLC 27-29																										
9.21 9.74 10.71 11.12 12.12 12.19 12.17 12.56 11.92 12.01 11.88 12.86 13.24 13.51 13.30 16.11 15.10 15.45			Revenues per sh 18.65																										
1.69 1.70 2.11 2.13 2.48 2.65 2.67 2.81 2.70 2.96 2.84 3.26 3.34 3.64 3.25 4.55 4.20 4.50			"Cash Flow" per sh 5.30																										
.78 .81 1.11 1.12 1.41 1.61 1.57 1.61 1.62 1.88 1.72 2.28 2.33 2.55 2.11 3.37 3.00 3.25			Earnings per sh A 3.90																										
.50 .51 .52 .55 .64 .76 .83 .87 .91 .99 1.06 1.16 1.28 1.40 1.53 1.66 1.80 1.95			Div'd Decl'd per sh B 2.50																										
2.23 2.09 2.12 2.13 1.77 2.52 1.89 2.39 3.55 3.08 3.44 4.12 3.54 3.91 4.50 5.10 5.00 5.05			Cap'l Spending per sh 4.75																										
8.97 9.70 10.13 10.84 11.80 12.72 13.24 12.77 13.52 14.45 15.19 16.33 17.39 18.57 19.20 20.99 22.25 23.65			Book Value per sh D 31.75																										
34.60 37.06 37.26 37.70 38.53 38.72 38.29 36.50 36.57 36.68 36.76 36.85 36.89 36.94 36.96 36.98 37.10 37.20			Common Shs Outst'g C 37.50																										
22.6 21.2 15.7 15.4 14.3 17.2 20.1 24.6 25.6 25.7 34.0 34.4 34.3 33.2 41.0 25.7 25.0 25.0			Avg Ann'l P/E Ratio 27.0																										
1.36 1.41 1.00 .97 .91 .97 1.06 1.24 1.34 1.29 1.84 1.83 1.76 1.79 2.37 1.44 1.44 1.44			Relative P/E Ratio 1.50																										
2.9% 2.9% 3.0% 3.2% 3.1% 2.7% 2.6% 2.2% 2.2% 2.0% 1.8% 1.5% 1.6% 1.7% 1.8% 1.9% 1.9% 1.9%			Avg Ann'l Div'd Yield 2.4%																										
CAPITAL STRUCTURE as of 12/31/23			Revenues (\$mill) 700																										
Total Debt \$909.5 mill. Due in 5 Yrs \$106.7 mill.			LT Profit (\$mill) 145																										
LT Debt \$867.1 mill. LT Interest \$40.0 mill. (43% of Cap'l)			Income Tax Rate 25.0%																										
Leases, Uncapitalized: Annual rentals \$2.2 mill.			AFUDC % to Net Profit Nil																										
Pension Assets-12/23 \$203.0 mill. Oblig. \$205.3 mill.			Long-Term Debt Ratio 52.5%																										
Pfd Stock None			Common Equity Ratio 47.5%																										
Common Stock 36,988,764 shs. as of 2/10/24			Total Capital (\$mill) 2510																										
MARKET CAP: \$2.6 billion (Mid Cap)			Net Plant (\$mill) 2525																										
CURRENT POSITION (SMILL.)			Return on Total Cap'l 7.5%																										
Cash Assets 5.0 6.0 14.1			Return on Shr. Equity 12.0%																										
Accts Receivable 34.4 26.2 34.3			Return on Com Equity 12.0%																										
Other 98.7 119.1 157.6			Retained to Com Eq 4.5%																										
Current Assets 138.1 151.3 206.0			All Div'ds to Net Prof 64%																										
Accts Payable 65.9 84.9 68.7																													
Debt Due 31.4 255.9 42.4																													
Other 58.3 55.7 55.5																													
Current Liab. 155.6 396.5 166.6																													
ANNUAL RATES of change (per sh)			BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Co., it supplies water to 264,093 customers in 10 California counties. Service areas include the metropolitan areas of Los Angeles and Orange Counties. The company also provides electricity to 24,777 customers in Big Bear Lake and San Bernardino Cnty. Provides water & wastewater services to U.S. military bases through its ASUS subsidiary. Sold Chaparral City Wtr. of AZ. (6/11). Employs 815. BlackRock, Inc. owns 18.6% of out. shares; State St., 16.6%; off. & dir., 0.8% (4/23 Proxy). Chair: Anne M. Holloway. Pres. & CEO: Robert Sprowls. Inc. CA. Address: 630 East Foothill Blvd., San Dimas, CA 91773. Tel.: 909-394-3600. Int.: www.aswater.com.																										
Past 10 Yrs. Past 5 Yrs. Est'd '21-'23 to '27-'29			Shares of American States Water have performed poorly of late. Since our early January report, the price of the equity has fallen 15% in value. By comparison, the S&P 500 Index has increased by around 10%. The negative sentiment may be the result California's regulators being viewed negatively by investors (another water utility in the state, SJW Group, has also seen its stock decline). We think these concerns may be overblown, however. California's regulatory procedures can lead to uneven earnings. Utilities in the state are required to petition for rates relief triennially. Despite filing three years in advance, final decisions can be delayed, as was the case last time for AWR's Golden State subsidiary. When the implementation of increased rates are deferred, the utility has to absorb expenses caused by inflation. The good news is that once a decision is rendered, the new rates are applied retroactively. This is why American States posted poor earnings in 2022 followed by a nearly 60% spike last year. Despite possible regulatory headwinds, AWR's bottom line ought to be respectable this year and improve in 2025. The company's share earnings will likely fall in 2024 due to the difficult comparison. Assuming inflation remains near its current 3% level, earnings per share could recover to \$3.25 next year. Helping to boost profits will be the company's ASUS nonregulated subsidiary. This business has been successful in procuring 50-year contracts to help the United States military privatize the water systems on its operating bases. Returns on investments here are not capped, as is the case with utilities. This out-of-favor, neutrally ranked equity may appeal to long-term conservative investors. Over the next 18 months, the stock has very attractive appreciation potential. Looking further out to 2027-2029, AWR's total return prospects are bright as well, especially on a risk-adjusted basis. The company has solid finances, a very low Beta, and a 1 (Highest) Safety rank. AWR has the top score (100) for Price Stability and its dividend growth is expected to be in the range of 8% to 9% annually, too.																										
Revenues 2.0% 3.5% 4.5%			James A. Flood																										
"Cash Flow" 4.5% 6.0% 5.5%			April 5, 2024																										
Earnings 7.0% 9.0% 6.5%																													
Dividends 9.0% 9.0% 8.5%																													
Book Value 5.0% 6.5% 11.5%																													
Cal-endar			QUARTERLY REVENUES (\$ mill.) Full Year																										
Mar.31 Jun.30 Sep.30 Dec.31																													
2021 117.1 128.4 136.8 116.6 498.9																													
2022 108.6 122.5 135.0 125.4 491.5																													
2023 161.4 157.4 151.7 125.2 595.7																													
2024 120 138 162 140 560																													
2025 123 142 165 145 575																													
Cal-endar			EARNINGS PER SHARE A Full Year																										
Mar.31 Jun.30 Sep.30 Dec.31																													
2021 .52 .72 .76 .55 2.55																													
2022 .38 .54 .69 .50 2.11																													
2023 .93 1.04 .85 .55 3.37																													
2024 .60 .80 .85 .75 3.00																													
2025 .65 .88 .92 .80 3.25																													
Cal-endar			QUARTERLY DIVIDENDS PAID B Full Year																										
Mar.31 Jun.30 Sep.30 Dec.31																													
2020 .305 .305 .335 .335 1.28																													
2021 .335 .335 .365 .365 1.40																													
2022 .365 .365 .3975 .3975 1.53																													
2023 .3975 .3975 .43 .43 1.66																													
2024 .43																													

April 5, 2024

James A. Flood

AMERICAN WATER

NYSE-AWK

RECENT PRICE

117.14

P/E RATIO

22.6

(Trailing: 23.9)

MEDIAN: 29.0

RELATIVE P/E RATIO

1.23

DIV YLD

2.6%

VALUE LINE

TIMELINESS

3

Raised 3/15/24

SAFETY

3

New 7/25/08

TECHNICAL

3

Raised 2/2/24

BETA

.95

(1.00 = Market)

18-Month Target Price Range

Low-High

Midpoint (% to Mid)

\$100-\$198

\$149 (25%)

2027-29 PROJECTIONS

Price

220

Gain

(+90%)

Ann'l Total

Return

19%

8%

High

Low

145

(+25%)

Institutional Decisions

2Q2023

3Q2023

4Q2023

to Buy

436

441

491

to Sell

418

460

468

Hld's(000)

166259

177196

175761

Percent shares traded

21

14

7

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

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27-29

14.61

13.98

15.49

15.18

16.25

16.28

16.78

17.72

18.54

18.81

19.04

19.97

20.83

21.58

20.85

21.74

22.90

24.40

Revenues per sh

27.50

2.87

2.89

3.56

3.73

4.27

4.36

4.75

5.13

5.26

5.14

6.15

6.65

7.24

10.46

8.08

8.46

9.10

9.70

"Cash Flow" per sh

12.00

1.10

1.25

1.53

1.72

2.11

2.06

2.39

2.64

2.62

3.15

3.43

3.91

6.95

4.51

4.90

5.25

5.65

Earnings per sh ^A

7.00

.40

.82

.86

.90

1.21

.84

1.21

1.33

1.47

1.62

1.78

1.96

2.15

2.36

2.57

2.78

2.99

3.20

Div'd Decl'd per sh ^B

4.10

6.31

4.50

4.38

5.27

5.25

5.50

5.33

6.51

7.36

8.04

8.78

9.15

10.05

9.71

12.63

13.22

15.25

15.30

Cap'l Spending per sh

15.25

25.64

22.91

23.59

24.11

25.11

26.52

27.39

28.25

29.24

30.13

32.42

33.83

35.58

40.18

42.30

50.31

52.95

55.60

Book Value per sh ^D

62.75

160.00

174.63

175.00

175.66

176.99

178.25

179.46

178.28

178.10

178.44

180.68

180.81

181.30

181.61

181.86

194.73

195.50

196.00

Common Shs Outst'g ^C

202.00

18.9

15.6

14.6

16.8

16.7

19.9

20.0

20.5

27.7

33.8

27.3

32.9

35.3

23.6

33.6

28.6

Bold figures are Value Line estimates

Avg Ann'l P/E Ratio

26.0

1.14

1.04

.93

1.05

1.06

1.12

1.05

1.03

1.45

1.70

1.47

1.75

1.81

1.28

1.94

1.60

Bold figures are Value Line estimates

Relative P/E Ratio

1.45

1.9%

4.2%

3.8%

3.1%

2.0%

2.5%

2.5%

2.0%

2.0%

2.1%

1.7%

1.6%

1.4%

1.7%

2.0%

Bold figures are Value Line estimates

Avg Ann'l Div'd Yield

2.2%

CAPITAL STRUCTURE as of 12/31/23

Total Debt \$12369 mil.

Due in 5 Yrs \$4140 mil.

LT Debt \$11715 mil.

LT Interest \$449 mil.

(54% of Cap'l)

3011.3

3159.0

3302.0

3357.0

3440.0

3610.0

3777.0

3920.0

3792.0

4234.0

4480

4780

Revenues (\$mill)

5550

429.8

476.0

468.0

426.0

567.0

621.0

709.0

1263.0

820.0

944.0

1025

1105

LT Profit (\$mill)

1415

39.4%

39.1%

39.2%

53.3%

28.2%

25.5%

23.3%

23.0%

18.7%

21.1%

21.5%

21.5%

21.5%

18.7%

21.1%

21.5%

21.5%

Income Tax Rate

22.0%

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5.1%

2.9%

3.5%

3.5%

3.5%

5.1%

2.9%

3.5%

3.5%

AFUDC % to Net Profit

4.0%

Leases, Uncapitalized:

Annual rentals \$10.0 mil.

52.4%

53.7%

52.4%

54.7%

56.3%

58.5%

59.1%

58.6%

58.7%

54.5%

56.0%

57.5%

58.7%

54.5%

56.0%

57.5%

Long-Term Debt Ratio

40.0%

Pension Assets 12/23

\$1622.0 mil

47.4%

46.2%

47.5%

45.3%

43.6%

41.4%

40.9%

41.4%

41.3%

45.5%

44.0%

42.5%

41.3%

45.5%

44.0%

42.5%

Common Equity Ratio

60.0%

Oblig.

\$1431.0 mil.

10364

10911

10967

11875

13433

14760

15787

17639

18619

21512

23675

25750

27500

29800

Total Capital (\$mill)

31700

Pfd Stock \$2.0 mil.

Pfd Div'd \$.1 mill

12900

13933

14992

16246

17409

18232

19710

21084

23223

25438

27500

29800

Net Plant (\$mill)

35800

Common Stock

194,755,320 shares as of 2/26/24

5.5%

5.7%

5.6%

4.9%

5.4%

5.4%

5.7%

8.2%

5.5%

5.4%

5.5%

5.5%

5.4%

5.5%

5.5%

5.5%

Return on Total Cap'l

6.5%

8.7%

9.4%

9.0%

7.9%

9.7%

10.1%

11.0%

17.3%

10.7%

9.6%

10.0%

10.0%

10.0%

10.0%

10.0%

10.0%

Return on Shr. Equity

11.0%

8.7%

9.4%

9.0%

7.9%

9.7%

10.1%

11.0%

17.3%

10.7%

9.6%

10.0%

10.0%

10.0%

10.0%

10.0%

10.0%

Return on Com Equity

11.0%

4.3%

4.7%

4.0%

2.5%

4.2%

4.4%

5.0%

11.4%

4.6%

4.2%

4.5%

4.5%

4.5%

4.6%

4.2%

4.5%

Retained to Com Eq

4.5%

50%

50%

56%

68%

56%

57%

55%

34%

57%

56%

57%

57%

57%

57%

57%

57%

All Div'ds to Net Prof

59%

CURRENT POSITION

2021

2022

12/31/23 (\$MILL.)

Cash Assets

136

117

364

Accts Receivable

271

334

339

Other

1147

799

686

Current Assets

1554

1250

1389

Accts Payable

235

254

294

Debt Due

641

1456

179

Other

1265

1101

1678

Current Liab.

2141

2811

2151

BUSINESS:

American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to approximately 14 million people in 24 states. Nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 93% of 2023 revenues. New Jersey and Pennsylvania are its larg-

American Water Works ought to raise its dividend by a healthy amount later this month.

Typically, the water utility announces its annual increase in the quarterly distribution in late April. We estimate that the hike will be 7.5%, to approximately \$0.76 a share. What's more, we look for a 7% increase next year.

Earnings prospects are bright for both this year and next.

Due mostly to the company's good cost-control program, acquisition strategy (more below), prudent capital spending, and overall constructive relationship with regulators, American Water has managed to post close to double-digit earnings and dividend gains over the past five- and 10-year periods. (See Annual Rates box in left hand side of the page.) While we think that this pace may slow to closer to 7% in the near term, share earnings of \$5.25 and \$5.65 are likely for 2024 and 2025, respectively.

The construction budget is massive, but manageable.

In a March presentation, leadership estimated that it would spend \$14.5 billion to \$15.0 billion from 2024-2028 on upgrading and modernizing its existing pipelines and wastewater

est markets accounting for 24.6% of regulated revenues; Missouri, 10.5%. Has 6,500 employees. Vanguard owns 11.7% of outstanding shares; BlackRock, 8.6%; State St., 5.4%; officers & directors, less than 1.0% (3/23 Proxy). President & Chief Executive Officer: M. Susan Hardwick. Address: 1 Water Street, Camden, NJ 08102. Telephone: 856-346-8200. Internet: www.amwater.com.

treatment centers. This is \$2 billion more than the previous projection. Currently, debt accounts for just 54% of total capital, but this ratio may increase to a still reasonable 60% by late decade.

Acquisitions ought to remain a catalyst to the company's bottom-line growth.

As the largest publicly traded domestic water utility, American Water will probably spend about \$400 million each year to buy small independently run municipal water districts. Through these mergers, the company is able to realize significant cost savings via synergies.

These neutrally ranked shares might interest long-term accounts looking for dividend growth.

Since our last report three months ago, the price of the stock has declined 10%, while the broader markets are up 10%. Thus, for the first time in years, AWK has worthwhile total return potential over the next three- to five-year period. The equity is also expected to perform well over the next 18-months. Risk-averse investors will also like the predictability of the cash flow generated by the company.

James A. Flood

April 5, 2024

(A) Diluted earnings. Excludes nonrecurring losses: '08, \$4.62; '09, \$2.63; '11, \$0.07. Disc. oper.: '06, \$(0.04); '11, \$0.03; '12, \$(0.10); '13, \$(0.01). GAAP used as of 2014. Includes \$2.70 sh. gain from sale of HOS sub.in Q4/'21. Next earnings report due late mid-May.

(B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available.

(C) In millions. **(D)** Includes intangibles. On 12/31/23: \$1,229 billion, \$6.31/share.

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Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	70
Earnings Predictability	60

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ARTESIAN RES. CORP. NDQ-ARTNA						RECENT PRICE	34.99	TRAILING P/E RATIO	21.0	RELATIVE P/E RATIO	1.23	DIV'D YLD	3.3%	VALUE LINE																																							
RANKS		29.16 20.00	35.00 25.17	43.22 29.37	41.92 32.00	40.97 33.14	40.26 30.00	47.99 35.90	60.36 43.02	63.00 38.76	41.73 33.84	High Low																																									
PERFORMANCE	4	<div>Below Average</div> <div>LEGENDS</div> <div>— 12 Mos Mov Avg</div> <div>... Rel Price Strength</div> <div>Shaded area indicates recession</div>																																																			
Technical	5	<div>Lowest</div>																																																			
SAFETY	2	<div>Above Average</div>																																																			
BETA	.75	<div>(1.00 = Market)</div>																																																			
Financial Strength	B+																																																				
Price Stability	95																																																				
Price Growth Persistence	65																																																				
Earnings Predictability	100																																																				
© VALUE LINE PUBLISHING LLC		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024/2025																																										
SALES PER SH		8.50	8.67	8.92	8.69	9.00	9.42	9.65	10.41	9.61	1.99 ^{A,B} /2.10 ^C																																										
"CASH FLOW" PER SH		2.22	2.43	2.55	2.66	2.77	2.99	3.05	3.22	2.92																																											
EARNINGS PER SH		1.26	1.41	1.51	1.54	1.60	1.79	1.79	1.90	1.67																																											
DIV'DS DECL'D PER SH		.87	.90	.93	.96	.98	1.01	1.05	1.09	1.14																																											
CAP'L SPENDING PER SH		2.28	3.10	4.46	5.30	4.38	3.66	4.34	5.10	6.04																																											
BOOK VALUE PER SH		14.61	15.23	15.91	16.57	17.25	18.11	18.91	19.78	22.39																																											
COMMON SHS OUTST'G (MILL)		9.06	9.13	9.22	9.25	9.29	9.36	9.41	9.50	10.29																																											
AVG ANN'L P/E RATIO		18.0	20.9	24.2	23.9	22.8	20.2	22.3	26.2	29.6	17.6/16.7																																										
RELATIVE P/E RATIO		.93	1.14	1.21	1.35	1.32	1.18	1.36	1.74	1.87																																											
AVG ANN'L DIV'D YIELD		3.8%	3.1%	2.5%	2.6%	2.7%	2.8%	2.6%	2.2%	2.3%																																											
SALES (\$MILL)		77.0	79.1	82.2	80.4	83.6	88.1	90.9	98.9	98.9	Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.																																										
OPERATING MARGIN		43.0%	44.4%	44.6%	46.1%	43.0%	47.8%	48.1%	49.8%	42.6%																																											
DEPRECIATION (\$MILL)		8.8	9.2	9.6	10.3	10.8	11.1	11.9	12.6	13.3																																											
NET PROFIT (\$MILL)		11.3	13.0	14.0	14.3	14.9	16.8	16.8	18.0	16.7																																											
INCOME TAX RATE		--	--	--	--	--	--	--	--	27.5%																																											
NET PROFIT MARGIN		14.7%	16.4%	17.0%	17.8%	17.9%	19.1%	18.5%	18.2%	16.9%																																											
WORKING CAP'L (\$MILL)		d8.8	d4.7	d9.5	d21.6	d11.4	d26.1	d28.5	d16.3	8.2																																											
LONG-TERM DEBT (\$MILL)		103.6	102.3	105.6	115.9	144.2	142.3	143.3	175.6	178.3																																											
SHR. EQUITY (\$MILL)		132.3	139.0	146.6	153.3	160.3	169.4	178.0	187.9	230.4																																											
RETURN ON TOTAL CAP'L		6.3%	6.7%	6.8%	6.5%	6.1%	6.6%	6.4%	6.1%	5.2%																																											
RETURN ON SHR. EQUITY		8.5%	9.3%	9.5%	9.3%	9.3%	9.9%	9.5%	9.6%	7.2%																																											
RETAINED TO COM EQ		2.6%	3.4%	3.7%	3.6%	3.6%	4.4%	3.9%	4.1%	2.4%																																											
ALL DIV'DS TO NET PROF		69%	63%	61%	62%	61%	56%	58%	57%	67%																																											
A No. of analysts changing earn. est. in last 25 days: 0 up, 1 down, consensus 5-year earnings growth not available. B Based upon one analyst's estimate. C Based upon one analyst's estimate.																																																					
ANNUAL RATES						ASSETS (\$mill.)						INDUSTRY: Water Utility																																									
of change (per share)						2021						2022						12/31/23																																			
5 Yrs.						.1						1.3						2.5																																			
1 Yr.						8.9						13.5						12.8																																			
Sales						1.9						4.7						6.0																																			
"Cash Flow"						8.3						8.3						9.3																																			
Earnings						19.2						27.8						30.6																																			
Dividends																																																					
Book Value																																																					
Fiscal Year	QUARTERLY SALES (\$mill.)				Full Year	Property, Plant & Equip, at cost						754.5						845.7						903.1																													
1Q	2Q	3Q	4Q		Accum Depreciation						160.3						173.9						185.1																														
12/31/21	20.7	22.6	25.0	22.6	90.9	Net Property						594.2						671.8						718.0																													
12/31/22	22.2	25.0	26.6	25.1	98.9	Other						11.8						20.2						18.2																													
12/31/23	22.5	25.3	26.6	24.5	98.9	Total Assets						625.2						719.8						766.8																													
12/31/24																																																					
Fiscal Year	EARNINGS PER SHARE				Full Year	LIABILITIES (\$mill.)						10.2						11.0						9.7																													
1Q	2Q	3Q	4Q		Accts Payable						28.3						22.2						2.2																														
12/31/20	.43	.49	.54	.33	1.79	Other						9.2						10.9						10.5																													
12/31/21	.45	.48	.54	.32	1.79	Current Liab						47.7						44.1						22.4																													
12/31/22	.48	.53	.65	.24	1.90																																																
12/31/23	.40	.44	.49	.34	1.67																																																
12/31/24	.42	.55	.65																																																		
Cal-endar	QUARTERLY DIVIDENDS PAID				Full Year	LONG-TERM DEBT AND EQUITY as of 12/31/23						Total Debt \$180.5 mill.						Due in 5 Yrs. \$35.9 mill.																																			
1Q	2Q	3Q	4Q		LT Debt \$178.3 mill.																																																
2021	.257	.261	.261	.268	1.05	Including Cap. Leases None																																															
2022	.268	.273	.273	.278	1.09	(44% of Cap'l)																																															
2023	.278	.284	.284	.29	1.14	Leases, Uncapitalized Annual rentals \$0 mill.																																															
2024	.29																																																				
INSTITUTIONAL DECISIONS						Pension Liability None in '23 vs. None in '22						TOTAL SHAREHOLDER RETURN						Dividends plus appreciation as of 2/29/2024																																			
2Q'23						3Q'23						4Q'23						3 Mos.						6 Mos.						1 Yr.						3 Yrs.						5 Yrs.											
to Buy						55						58						49						-17.36%						-24.21%						-37.19%						0.12%						-0.94%					
to Sell						44						37						48																																			
Hld's(000)						5488						6095						5897																																			

CALIFORNIA WATER NYSE-CWT					RECENT PRICE	45.70	P/E RATIO	19.7	(Trailing: 48.6 Median: 29.0)				RELATIVE P/E RATIO	1.08	DIV'D YLD	2.5%	VALUE LINE		
TIMELINESS	4	Raised 3/15/24	High: 23.4	26.4	26.0	36.8	46.2	49.1	57.5	57.4	72.1	72.0	63.9	52.3			Target Price Range	2027 2028 2029	
SAFETY	2	Raised 4/5/24	Low: 18.4	20.3	19.5	22.5	32.4	35.3	44.6	39.7	51.0	48.5	45.4	44.8					
TECHNICAL	3	Raised 4/5/24	LEGENDS 50.00 x Dividends p.sh divided by Interest Rate Relative Price Strength 2-for-1 split 6/11 Options: Yes Shaded area indicates recession																
BETA	.75	(1.00 = Market)																	
18-Month Target Price Range																			
Low-High		Midpoint (% to Mid)																	
\$39-\$78		\$59 (30%)																	
2027-29 PROJECTIONS																			
	Price	Gain	Ann'l	Total															
High	75	(+65%)	15%	7%															
Low	55	(+20%)																	
Institutional Decisions																			
202023		3Q2023		4Q2023															
to Buy		139		125		128													
to Sell		129		127		131													
Hld's(000)		46985		48886		49232													
		Percent		shares		traded													
		18		12		6													
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025																			
© VALUE LINE PUB. LLC 27-29																			
9.90	10.82	11.05	12.00	13.34	12.23	12.50	12.29	12.70	13.89	14.53	14.72	15.78	14.72	15.22	13.77	16.10	17.45	Revenues per sh	19.80
1.86	1.93	1.93	2.07	2.32	2.21	2.47	2.22	2.34	3.00	3.11	3.14	3.88	3.91	3.79	3.03	3.80	4.05	"Cash Flow" per sh	4.35
.95	.98	.91	.86	1.02	1.02	1.19	.94	1.01	1.40	1.36	1.31	1.97	1.96	1.77	.91	2.35	2.55	Earnings per sh ^A	2.75
.59	.59	.60	.62	.63	.64	.65	.67	.69	.72	.75	.79	.85	.92	1.00	1.04	1.12	1.20	Div'd Decl'd per sh ^B	1.40
2.41	2.66	2.97	2.83	3.04	2.58	2.76	3.69	4.77	5.40	5.65	5.64	5.93	5.46	5.90	6.65	6.15	6.25	Cap'l Spending per sh	6.45
9.72	10.13	10.45	10.76	11.28	12.54	13.11	13.41	13.75	14.44	15.19	16.07	18.30	21.92	23.70	24.72	27.00	28.30	Book Value per sh ^C	30.90
41.45	41.53	41.67	41.82	41.98	47.74	47.81	47.88	47.97	48.01	48.07	48.53	50.33	53.72	55.60	57.72	55.00	53.00	Common Shs Outst'g ^D	50.00
19.8	19.7	20.3	21.3	17.9	20.1	19.7	24.8	29.6	26.9	30.3	39.3	24.9	30.5	33.0	59.4	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	24.0
1.19	1.31	1.29	1.34	1.14	1.13	1.04	1.25	1.55	1.35	1.64	2.09	1.28	1.65	1.91	3.32			Relative P/E Ratio	1.30
3.1%	3.1%	3.2%	3.4%	3.5%	3.1%	2.8%	2.9%	2.3%	1.9%	1.8%	1.5%	1.7%	1.5%	1.7%	1.9%			Avg Ann'l Div'd Yield	2.1%
CAPITAL STRUCTURE as of 12/31/23						597.5	588.4	609.4	666.9	698.2	714.6	794.3	790.9	846.4	794.6	885	925	Revenues (\$mill) ^E	990
Total Debt \$1233.5 mill. Due in 5 Yrs \$357.0 mill.						56.7	45.0	48.7	67.2	65.6	63.1	96.8	101.1	96.0	51.9	129	135	Total Cap'l P/E Ratio	138
LT Debt \$1052.8 mill. LT Interest \$40.0 mill.						33.0%	36.0%	35.5%	30.1%	24.5%	19.1%	11.1%	20.1%	3.3%	3.3%	21.0%	21.0%	Income Tax Rate	21.0%
(Total interest coverage: 2.4x) (42% of Cap'l)						2.7%	4.3%	6.1%	3.5%	3.1%	5.8%	3.3%	1.7%	1.7%	1.7%	5.0%	5.0%	AFUDC % to Net Profit	5.0%
Pension Assets-12/23 \$716.3 mill.						40.1%	44.4%	44.6%	42.7%	49.3%	50.2%	45.9%	47.3%	44.4%	42.5%	39.5%	39.0%	Long-Term Debt Ratio	37.0%
Oblig. \$710.8 mill.						59.9%	55.6%	55.4%	57.3%	50.7%	49.8%	54.1%	52.7%	55.6%	57.5%	60.5%	61.0%	Common Equity Ratio	63.0%
Pfd Stock None						1045.9	1154.4	1191.2	1209.3	1440.2	1566.7	1702.4	2233.4	2370.1	2479.5	2460	2450	Total Capital (\$mill)	2445
Common Stock 57,724,000 shs.						1590.4	1701.8	1859.3	2048.0	2232.7	2406.4	2650.6	2846.9	3058.9	3773.3	3825	3900	Net Plant (\$mill)	4000
						6.3%	5.2%	5.5%	7.1%	5.9%	5.5%	7.0%	5.5%	5.0%	3.1%	6.0%	6.0%	Return on Total Cap'l	6.0%
						9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	8.6%	7.3%	3.6%	8.5%	9.0%	Return on Shr. Equity	9.0%
						9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	8.6%	7.3%	3.6%	8.5%	9.0%	Return on Com Equity	9.0%
MARKET CAP: \$2.6 billion (Mid Cap)						4.1%	2.0%	2.4%	4.7%	4.0%	3.2%	6.0%	4.6%	3.2%	NMF	4.5%	5.0%	Retained to Com Eq	4.5%
CURRENT POSITION (\$MILL.)						55%	71%	68%	51%	55%	60%	43%	47%	56%	114%	48%	47%	All Div'ds to Net Prof	51%
2021 2022 12/31/23																			
Cash Assets 78.4 62.1 39.6																			
Other 222.1 233.4 256.7																			
Current Assets 300.5 295.5 296.3																			
Accts Payable 144.4 141.0 157.3																			
Debt Due 40.2 73.3 180.7																			
Other 72.0 80.4 92.3																			
Current Liab. 256.6 294.7 430.3																			
ANNUAL RATES of change (per sh)						Past 10 Yrs.	Past 5 Yrs.	Est'd '21-'23 to '27-'29											
Revenues 1.5% 1.0% 5.0%																			
"Cash Flow" 5.0% 5.0% 3.5%																			
Earnings 5.0% 4.0% 10.0%																			
Dividends 4.5% 6.5% 6.0%																			
Book Value 7.5% 10.0% 4.5%																			
Cal-endar	QUARTERLY REVENUES (\$ mill.) ^E				Full Year														
	Mar.31	Jun.30	Sep.30	Dec.31															
2021	147.7	213.1	256.7	173.4	790.9														
2022	173.0	206.2	266.3	200.9	846.4														
2023	131.1	194.0	255.0	214.5	794.6														
2024	180	210	275	220	885														
2025	195	220	285	225	925														
Cal-endar	EARNINGS PER SHARE ^A				Full Year														
	Mar.31	Jun.30	Sep.30	Dec.31															
2021	d.06	.75	1.20	.07	1.96														
2022	.02	.36	1.03	.35	1.77														
2023	d.40	.17	.60	.52	.91														
2024	.20	.60	1.00	.55	2.35														
2025	.25	.65	1.05	.60	2.55														
Cal-endar	QUARTERLY DIVIDENDS PAID ^B				Full Year														
	Mar.31	Jun.30	Sep.30	Dec.31															
2020	.2125	.2125	.2125	.2125	.85														
2021	.230	.230	.230	.230	.92														
2022	.250	.250	.250	.250	1.00														
2023	.260	.260	.260	.260	1.04														
2024	.280																		
BUSINESS: California Water Service Group provides regulated and nonregulated water service to 497,700 customers in 100 communities in the state of California. Accounts for about 90% of total customers. Also operates in Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '23: residential, 67%; business, 20%; industrial, 3%; public authorities, 5%; other 5%. Off. and dir. own 1% of common stock (4/23 proxy). Has 1,184 employees. Pres. and CEO: Martin A. Kropelnicki, Inc.: DE. Addr.: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.																			
ly. Meanwhile, profitability should stabilize from here. Consumer water consumption, which has been somewhat soft of late, should improve, while burdensome income tax expenses and operating costs are poised to ease up a bit. On balance, we think a sharp bottom-line rebound is probable this year, followed by a notably more modest advance in 2025.																			
The board of directors recently raised the quarterly dividend payment 8%, to \$0.28 per share. The increase largely stemmed from a notably improved profit outlook and resilient business model. Historically, California Water has a strong track record of annual dividend hikes, which we believe ought to remain intact.																			
California Water stock is ranked to trail the broader market averages over the coming six to 12 months (Timeliness: 4). Capital appreciation potential over the 3- to 5-year time frame does not particularly stand out, either. That said, the current yield outpaces the Value Line median by nearly 40 basis points and, thus may intrigue conservative, income-oriented subscribers.																			
Nicholas Patrikis April 5, 2024																			

ESSENTIAL UTIL. NYSE-WTRG

RECENT PRICE36.35

P/E RATIO18.6 (Trailing: 19.5) (Median: 26.0)

RELATIVE P/E RATIO1.02

DIV YLD3.5%

VALUE LINE

TIMELINESS4

Lowered 12/22/23

SAFETY2

Raised 4/5/24

TECHNICAL3

Raised 2/9/24

BETA1.00

(1.00 = Market)

18-month Target Price Range

Low-High

Midpoint (% to Mid)

\$30-\$61 \$46 (25%)

2027-29 PROJECTIONS

Price

Gain

Ann'l Total

Return

23%

12%

High

Low

75

50

75

50

to Buy

to Sell

246

254

254

322

Hid's(000)

195095

204460

207792

Institutional Decisions

202023

302023

402023

Percent

shares

traded

15

10

5

to Buy

to Sell

246

254

254

322

Hid's(000)

195095

204460

207792

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

© VALUE LINE PUB. LLC

27-29

3.71

3.93

4.21

4.10

4.32

4.32

4.37

4.61

4.62

4.56

4.71

4.03

5.96

7.43

8.68

7.52

8.55

9.05

Revenues per sh

10.75

1.14

1.29

1.42

1.45

1.51

1.82

1.89

2.07

2.12

1.90

1.73

2.21

2.89

2.98

3.08

3.35

3.60

"Cash Flow" per sh

4.35

.58

.62

.72

.83

.87

1.16

1.20

1.14

1.32

1.35

1.08

1.04

1.12

1.67

1.77

1.86

2.00

2.15

Earnings per sh

2.65

.41

.44

.47

.50

.54

.58

.63

.69

.74

.79

.85

.91

.97

1.04

1.11

1.19

1.27

1.35

Div'd Decl'd per sh

1.75

1.58

1.66

1.89

1.90

1.98

1.73

1.84

2.07

2.16

2.69

2.78

2.49

3.41

4.04

4.03

4.39

5.10

5.10

Cap'l Spending per sh

5.00

6.26

6.50

6.81

7.21

7.90

8.63

9.27

9.78

10.43

11.02

11.28

17.58

19.09

20.50

20.39

21.57

22.90

23.55

Book Value per sh

27.25

169.21

170.61

172.46

173.60

175.43

177.93

178.59

176.54

177.39

177.71

178.09

220.76

245.39

252.87

263.74

273.30

276.00

279.00

Common Shs Outst'g

288.00

24.9

23.1

21.1

21.3

21.9

21.2

20.8

23.5

23.9

24.7

32.6

39.1

39.6

28.3

26.6

21.6

Bold figures are

Avg Ann'l P/E Ratio

24.0

1.50

1.54

1.34

1.34

1.39

1.19

1.09

1.18

1.25

1.24

1.76

2.08

2.03

1.53

1.54

1.21

Value Line

estimates

Relative P/E Ratio

1.35

2.8%

3.1%

3.1%

2.8%

2.8%

2.4%

2.5%

2.6%

2.3%

2.4%

2.4%

2.2%

2.2%

2.2%

2.4%

3.0%

Avg Ann'l Div'd Yield

2.8%

CAPITAL STRUCTURE as of 12/31/23

Total Debt \$7053.6 mill.

Due in 5 Yrs \$1201 mill.

LT Debt \$6826.1mill.

LT Interest \$263.0 mill.

(54% of Cap'l)

779.9

814.2

819.9

809.5

838.1

889.7

1462.7

1878.1

2288.0

2053.8

2360

2520

Revenues (\$mill)

3100

Pension Assets-12/23 \$312.3 mill.

Oblig. \$313.7 mill.

48.5%

50.3%

48.4%

50.6%

54.4%

43.1%

54.0%

52.7%

54.2%

53.7%

54.0%

54.5%

54.5%

54.5%

54.5%

54.5%

Income Tax Rate

20.0%

Pfd Stock None

Common Stock 273,298,409 shares

as of 2/23/24

3216.0

3469.5

3587.7

3965.4

4407.8

6824.2

10192

10964

11748

12722

13725

14475

Total Capital (\$mill)

17350

4402.0

4688.9

5001.6

5399.9

5930.3

6345.8

9512.9

10252

11131

12097

13000

14025

Net Plant (\$mill)

17100

7.8%

6.9%

7.6%

7.1%

5.5%

4.2%

3.7%

4.8%

5.0%

5.0%

5.0%

6.0%

6.0%

6.0%

6.0%

6.0%

Return on Total Cap'l

6.0%

12.9%

11.7%

12.7%

12.2%

9.6%

5.8%

6.1%

8.3%

8.7%

8.5%

8.5%

9.0%

9.0%

9.0%

9.0%

9.0%

Return on Shr. Equity

9.5%

12.9%

11.7%

12.7%

12.2%

9.6%

5.8%

6.1%

8.3%

8.7%

8.5%

8.5%

9.0%

9.0%

9.0%

9.0%

9.0%

Return on Com Equity

9.5%

6.1%

4.7%

5.6%

5.1%

2.1%

.9%

1.1%

3.3%

3.3%

3.1%

3.0%

3.5%

3.5%

3.5%

3.5%

3.5%

Retained to Com Eq

3.5%

52%

60%

56%

59%

79%

84%

82%

60%

62%

64%

64%

63%

63%

63%

63%

63%

All Div'ds to Net Prof

66%

BUSINESS:

Essential Utilities, Inc. became the new name for

Aqua America on Feb. 3, 2020, to reflect the acquisition of Peoples,

a natural gas utility, which occurred in 3/20. In 2023, Aqua Amer.

provided water and wastewater services in the states of PA, OH,

TX, IL, NC, NJ, IN, VA NS WS. Acquired AquaSource, 7/13; N.

Maine Util., 7/15; and others. Water respn. for 56% of revenues in

2023; residential, 31%; commercial, 9%; industrial, wastewater &

other, 16%. Gas 42%; other, 2.0%. Employs 3,258. Off. & dir. own

less than 1% of the common stock; BlackRock, 11.3%; Vanguard,

10.2%; Can. Pen. Plan 7.9% (3/24 proxy). Pres. & CEO:

Christopher Franklin, Inc.: PA Addr.: 762 W Lancaster Ave., Bryn

Mawr, PA 19010. Tel.: 610-525-1400. Int.: www.essential.co.

Essential Utilities wrapped up a solid

2023.

Fourth-quarter share earnings of

\$0.50 were slightly higher than expected

and the water and gas utility was able to

post a full-year gain of 5.1%. This was a

good showing considering that significant-

ly warmer weather during the winter

months dampened demand for natural gas

used to heat homes.

Bottom-line advances ought to remain

strong.

Continued benefits from the ongo-

ing implementation of cost-cutting

measures combined with rate relief in

several states ought to propel Essential's

earnings per share 7.5%, to \$2.00, in 2024.

Margins in the water segment should also

widen further due to the acquisition

program (more below), which will likely offset

rising interest costs. We are introducing

our 2025 share-earnings estimate of \$2.15,

representing another increase of 7.5%.

The company's Financial Strength

rating has been raised a notch to an

A.

Even though its capital expenditures

are projected to total \$7.2 billion over the

next five-year period, Essential's balance

sheet ought to remain more than sound.

As older bonds mature, however, refinanc-

ing them may well be more expensive.

The company also plans on using its contin-

uous at-the-market issuance of equity as a

major source of capital. (If shareholders

buy additional WTRG shares through the

dividend reinvestment program, they

qualify for a 5% discount.)

Consolidation in the water business

will be a positive for the company.

There are thousands of small, inefficient

municipal water districts in the United

States. Essential merged seven systems

into its rate base last year. The company

is able to achieve substantial savings and

increase margins when it integrates these

new assets into its operations.

These good-yielding shares are

ranked to underperform the broader

market averages in the coming year.

The stock's prospects are attractive for

both the next 18-month period and out to

the 2027-2029 time frame, though. Conser-

vative investors may note that the equity's

Safety rank has just been raised to a 2

(Above Average), making potential returns

appear much better on a risk-adjusted

basis.

James A. Flood

April 5, 2024

(A) Diluted earnings. Excludes nonrecurring

gains: '12, 18c. Excludes gain from discontin-

ued operations: '12, 7c; '13, 9c; '14, 11c. Next

earnings report mid-May.

(B) Dividends historically paid in early March,

June, Sept., & Dec. ■ Div'd. reinvestment plan

available (5% discount).

(C) In millions, adjusted for stock split.

(D) Includes intangibles: 12/31/23, \$2,341

bill./\$8.94 a share.

Company's Financial Strength

Stock's Price Stability

Price Growth Persistence

Earnings Predictability

A

90

60

65

To subscribe call 1-800-VALUELINE

GLOBAL WATER RES. NDQ--GWRS

RECENT PRICE12.70

TRAILING P/E RATIO38.5

RELATIVE P/E RATIO2.25

DIV'D YLD2.4%

VALUE LINE

RANKS

PERFORMANCE4

Technical4

SAFETY3

BETA.90

Financial StrengthB+

Price Stability80

Price Growth Persistence55

Earnings Predictability35

LEGENDS

12 Mos Mov Avg

Rel Price Strength

Shaded area indicates recession

9.296.23

10.007.90

11.618.40

14.999.00

16.208.50

21.2514.40

17.3510.61

14.959.34

13.4211.80

HighLow

18

13

8

5

4

3

2

750

VOL (thous.)

© VALUE LINE PUBLISHING LLC

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024/2025

REVENUES PER SH

"CASH FLOW" PER SH

EARNINGS PER SH

DIV'DS DECL'D PER SH

CAP'L SPENDING PER SH

BOOK VALUE PER SH

COMMON SHS OUTST'G (MILL)

AVG ANN'L P/E RATIO

RELATIVE P/E RATIO

AVG ANN'L DIV'D YIELD

REVENUES (\$MILL)

OPERATING MARGIN

DEPRECIATION (\$MILL)

NET PROFIT (\$MILL)

INCOME TAX RATE

NET PROFIT MARGIN

WORKING CAP'L (\$MILL)

LONG-TERM DEBT (\$MILL)

SHR. EQUITY (\$MILL)

RETURN ON TOTAL CAP'L

RETURN ON SHR. EQUITY

RETAINED TO COM EQ

ALL DIV'DS TO NET PROF

--

1.52

1.59

1.65

1.65

1.71

1.85

1.87

2.17

--

1.18

.58

.49

.45

.58

.65

.79

--

d.15

.23

.15

.10

.05

.16

.24

.33

--

.17

.28

.28

.29

.29

.30

.30

--

.44

1.06

.22

.52

.40

.81

1.42

.91

--

.78

.76

1.30

1.15

1.43

1.33

1.86

1.99

--

19.58

19.63

21.47

21.54

22.59

22.65

23.87

24.49

--

--

40.1

63.9

NMF

NMF

NMF

NMF

58.9

36.7

--

--

2.01

3.61

NMF

NMF

NMF

3.90

2.31

--

2.2%

3.0%

3.0%

2.6%

2.5%

1.7%

2.1%

2.5%

32.0

29.8

31.2

35.5

35.5

38.6

41.9

44.7

53.0

75.1%

38.8%

45.7%

47.1%

43.2%

42.4%

39.3%

40.0%

44.7%

8.2

6.3

6.9

7.5

8.4

9.0

9.5

10.1

11.4

21.4

d2.9

4.6

3.1

2.2

1.1

3.6

5.5

8.0

49.1%

--

--

36.5%

34.3%

41.1%

24.2%

14.5%

26.5%

66.9%

NMF

14.6%

8.7%

6.3%

2.9%

8.6%

12.3%

15.1%

8.0

13.8

.7

7.7

2.2

11.1

2.1

d2.1

d2.5

104.7

114.3

114.4

114.5

114.7

112.7

108.9

104.9

103.7

20.1

15.2

14.9

27.9

24.7

32.2

30.0

44.4

48.6

20.5%

2.4%

5.5%

4.0%

3.5%

2.6%

4.5%

5.0%

6.8%

106.5%

NMF

30.6%

11.1%

9.0%

3.4%

12.0%

12.4%

16.4%

106.5%

NMF

NMF

11.1%

NMF

NMF

12.0%

12.4%

1.6%

--

NMF

119%

--

NMF

NMF

--

--

90%

A

No. of analysts changing earn. est. in last 25 days: 0 up, 0 down, consensus 5-year earnings growth 15.0% per year.

B

Based upon 2 analysts' estimates.

C

Based upon 2 analysts' estimates.

ANNUAL RATES

of change (per share)

5 Yrs.

1 Yr.

Sales

"Cash Flow"

Earnings

Dividends

Book Value

13.0%

6.5%

ASSETS (\$mill.)

2021

2022

12/31/23

Cash Assets

Receivables

Inventory

Other

Current Assets

19.0

14.2

11.7

Property, Plant & Equip, at cost

Accum Depreciation

Net Property

Other

Total Assets

369.2

412.3

465.7

113.3

124.6

142.4

255.9

287.7

323.3

19.2

21.2

26.1

294.1

323.1

361.1

LIABILITIES (\$mill.)

2021

2022

12/31/23

Accts Payable

Debt Due

Other

Current Liab

2.1

2.2

1.0

4.0

3.8

3.9

16.9

16.2

14.2

LONG-TERM DEBT AND EQUITY

as of 12/31/23

Total Debt

LT Debt

Including Cap. Leases

Leases, Uncapitalized

Pension Liability

Pfd Stock

Common Stock

24,492,918 shares

Due in 5 Yrs.

Annual rentals

None

None

None

None

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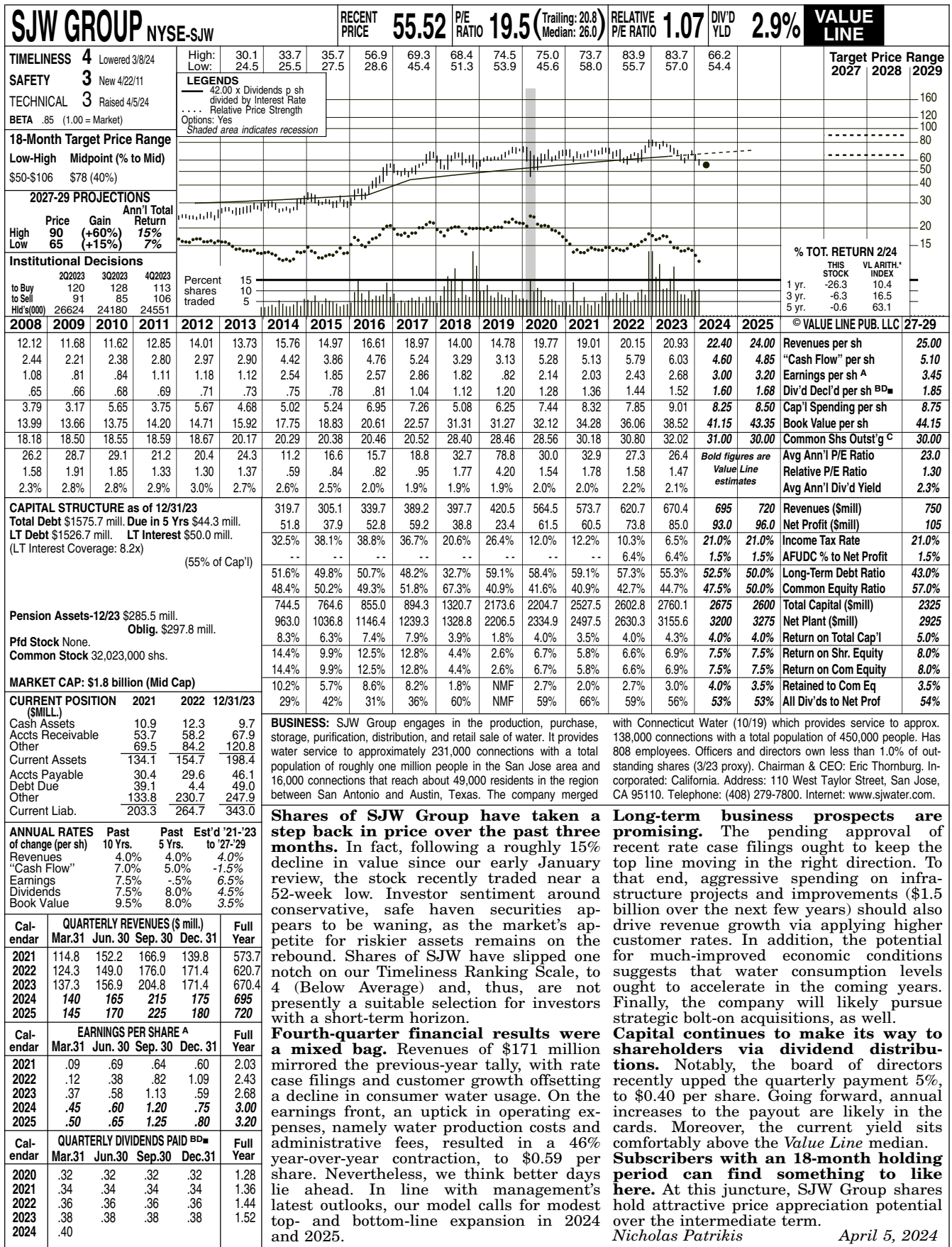
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MIDDLESEX WATER NDQ-MSEX										RECENT PRICE	50.47				P/E RATIO	24.4 (Trailing: 28.7 Median: 28.0)				RELATIVE P/E RATIO	1.33	DIV'D YLD	2.6%	VALUE LINE																																			
TIMELINESS	5	Lowered 11/24/23	High: 22.5 23.7 28.0 44.5 46.7 60.3 67.7 76.1 121.4	Low: 18.6 19.1 21.2 25.0 32.2 34.0 51.0 48.8 67.1	121.1 90.6 66.2	74.2 61.3 48.6	Target Price Range			2027	2028	2029																																															
SAFETY	2	New 10/21/11	LEGENDS										55.00 x Dividends p sh divided by Interest Rate			Relative Price Strength			Options: Yes			Shaded area indicates recession																																					
TECHNICAL	3	Raised 4/5/24	18-Month Target Price Range										Low-High Midpoint (% to Mid)			\$45-\$102 \$74 (45%)			2027-29 PROJECTIONS			High Low Price 95 70 Gain (+90%) 19% (+40%) 11%																																					
BETA	.75	(1.00 = Market)	Institutional Decisions										to Buy 2023 75 3Q2023 79 4Q2023 96			to Sell 99 86 76			Hld's(000) 12584 13355 13700			Percent shares traded 12 8 4																																					
										2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	© VALUE LINE PUB. LLC 27-29																															
										6.79	6.75	6.60	6.50	6.98	7.19	7.26	7.77	8.16	8.00	8.42	7.72	8.10	8.17	9.21	9.33	10.05	10.30	Revenues per sh 11.40																															
										1.53	1.40	1.55	1.46	1.56	1.72	1.84	1.97	2.17	2.24	2.89	2.90	3.25	3.28	3.70	3.41	3.40	3.60	"Cash Flow" per sh 4.10																															
										.89	.72	.96	.84	.90	1.03	1.13	1.22	1.38	1.38	1.96	2.01	2.18	2.07	2.39	1.76	2.35	2.50	Earnings per sh ^A 3.00																															
										.70	.71	.72	.73	.74	.75	.76	.78	.81	.86	.91	.98	1.04	1.11	1.18	1.26	1.32	1.40	Div'd Decl'd per sh ^B 1.60																															
										2.12	1.49	1.90	1.50	1.36	1.26	1.40	1.59	2.91	3.08	4.40	5.11	6.04	4.53	5.18	5.06	5.45	5.65	Cap'l Spending per sh 6.00																															
										10.03	10.33	11.13	11.27	11.48	11.82	12.24	12.74	13.40	14.02	15.17	18.57	19.81	20.99	22.65	23.74	23.60	23.70	Book Value per sh 23.70																															
										13.40	13.52	15.57	15.70	15.82	15.96	16.12	16.23	16.30	16.35	16.40	17.43	17.47	17.52	17.64	17.82	17.90	17.95	Common Shs Outst'g ^C 18.00																															
										19.8	21.0	17.8	21.7	20.8	19.7	18.5	19.1	25.6	28.4	22.2	29.7	30.1	44.3	38.6	42.8	Avg Ann'l P/E Ratio 28.0																																	
										1.19	1.40	1.13	1.36	1.32	1.11	.97	.96	1.34	1.43	1.20	1.58	1.55	2.39	2.23	2.39	Relative P/E Ratio 1.30																																	
										4.0%	4.7%	4.2%	4.0%	4.0%	3.7%	3.7%	3.3%	2.3%	2.2%	2.1%	1.6%	1.6%	1.2%	1.3%	1.7%	Avg Ann'l Div'd Yield 1.9%																																	
										CAPITAL STRUCTURE as of 12/31/23										117.1	126.0	132.9	130.8	138.1	134.6	141.6	143.1	162.4	166.3	180	185	Revenues (\$mill) 205																											
										Total Debt \$365.9 mill. Due in 5 Yrs \$43.7 mill.										18.4	20.0	22.7	22.8	32.5	33.9	38.4	36.5	42.4	41.5	42.0	45.0	Net Profit (\$mill) 54.0																											
										LT Debt \$358.2 mill. LT Interest \$7.5 mill.										35.0%	34.5%	34.0%	32.7%	2.8%	--	--	--	7.1%	3.2%	21.0%	21.0%	Income Tax Rate 21.0%																											
										(Total interest coverage: 8.3x) (46% of Cap'l)										1.7%	1.9%	2.7%	3.1%	1.4%	3.4%	3.9%	--	3.9%	3.9%	2.5%	2.5%	AFUDC % to Net Profit 2.5%																											
										Pension Assets-12/23 \$84.8 mill. Oblig. \$87.8 mill.										40.5%	39.4%	37.9%	37.5%	37.8%	41.5%	44.0%	45.3%	41.9%	45.7%	42.5%	41.0%	Long-Term Debt Ratio 40.5%																											
										Pfd Stock \$2.4 mill. Pfd Div'd: \$1 mill.										58.8%	59.8%	61.5%	61.8%	61.6%	58.2%	55.7%	54.4%	57.7%	54.0%	57.0%	58.5%	Common Equity Ratio 59.5%																											
										Common Stock 17,821,000 shs.										335.8	345.4	355.4	370.7	404.1	556.7	621.5	676.3	692.7	783.2	740	725	Total Capital (\$mill) 720																											
										MARKET CAP: \$900 million (Small Cap)										465.4	481.9	517.8	557.2	618.5	705.7	796.6	865.4	920.6	998.3	1000	1015	Net Plant (\$mill) 1035																											
										CURRENT POSITION 2021 2022 12/31/23 (\$MILL.)										6.3%	6.6%	7.1%	6.9%	8.9%	6.7%	6.8%	6.0%	6.8%	4.8%	6.0%	6.5%	Return on Total Cap'l 8.0%																											
										Cash Assets 3.5 3.8 2.4										9.2%	9.6%	10.3%	9.8%	12.9%	10.4%	11.0%	9.9%	10.5%	7.4%	10.0%	10.5%	Return on Shr. Equity 12.5%																											
										Other 30.9 33.5 106.1										9.3%	9.6%	10.3%	9.9%	13.0%	10.4%	11.1%	9.9%	10.6%	7.4%	10.0%	10.5%	Return on Com Equity 12.5%																											
										Current Assets 34.4 37.3 108.5										3.1%	3.5%	4.3%	3.8%	7.0%	5.4%	5.8%	4.6%	5.4%	2.1%	4.5%	4.5%	Retained to Com Eq 6.0%																											
										Accts Payable 21.1 24.8 27.6										67%	63%	58%	62%	46%	48%	48%	53%	49%	72%	56%	56%	All Div'ds to Net Prof 53%																											
										Debt Due 6.7 17.5 7.7										BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 61,000 retail customers, primarily in Middlesex County, New Jersey. In 2023, the Middlesex System accounted for 66% of operating revenues. At 12/31/23, the company had 355 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 1.9% of the com. stock; BlackRock Inst. Trust Co., 14.6% (4/23 proxy). Add.: 485 C Route 1 South, Suite 400, Iselin, NJ 08830. Tele.: 732-634-1500. Int.: www.middlesexwater.com.																																							
										Other 28.8 75.6 68.5																																																	
										Current Liab. 56.6 117.9 103.8																																																	
										ANNUAL RATES Past Past Est'd '21-'23 of change (per sh) 10 Yrs. 5 Yrs. to '27-'29																																																	



(A) Diluted earnings. Excludes nonrecurring losses: '08, \$1.22; '10, \$0.46. GAAP accounting as of 2013. Next earnings report due early May. Quarterly egs. may not add due to rounding.

(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.

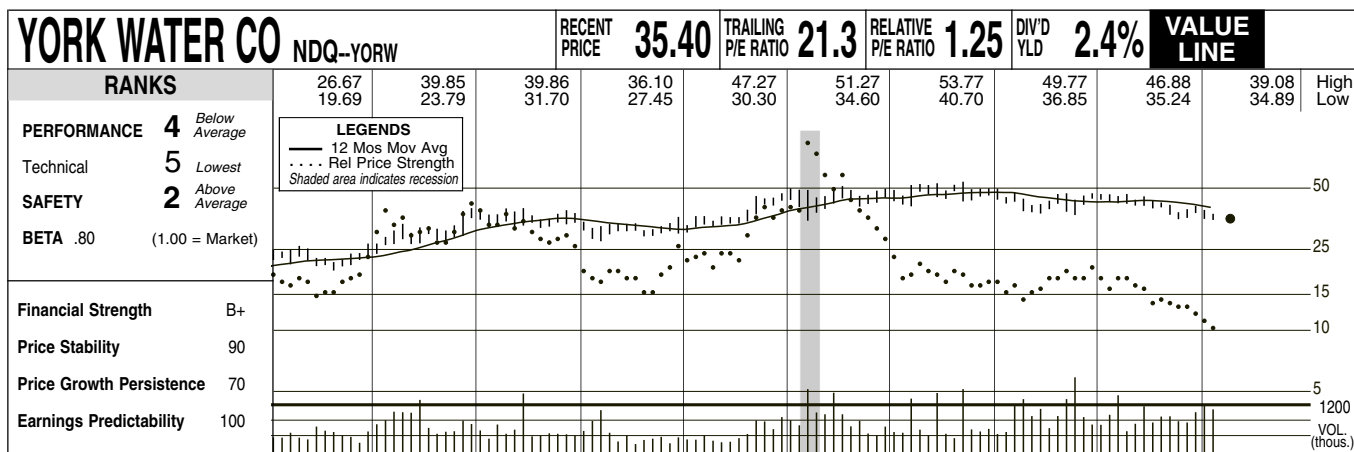
(C) In millions.

(D) Paid special dividend of \$0.17 per share on 11/17.

Company's Financial Strength B+
Stock's Price Stability 90
Price Growth Persistence 70
Earnings Predictability 50

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© VALUE LINE PUBLISHING LLC	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024/2025
REVENUES PER SH	3.68	3.70	3.77	3.74	3.96	4.12	4.20	4.20	4.96	
"CASH FLOW" PER SH	1.45	1.42	1.53	1.58	1.70	1.90	1.97	2.08	2.48	
EARNINGS PER SH	.97	.92	1.01	1.04	1.11	1.27	1.30	1.40	1.66	1.61 ^{A,B} /1.69 ^C
DIV'D DECL'D PER SH	.60	.63	.65	.67	.70	.73	.76	.79	.82	
CAP'L SPENDING PER SH	1.11	1.03	1.95	--	.16	.09	.91	.24	4.55	
BOOK VALUE PER SH	8.51	8.88	9.28	9.75	10.31	10.97	11.64	14.50	15.43	
COMMON SHS OUTST'G (MILL)	12.81	12.85	12.87	12.94	13.02	13.06	13.11	14.29	14.33	
AVG ANN'L P/E RATIO	23.5	32.8	34.6	30.3	33.8	35.7	36.7	30.7	25.1	22.0/20.9
RELATIVE P/E RATIO	1.21	1.79	1.73	1.71	1.96	2.09	2.24	2.03	1.58	
AVG ANN'L DIV'D YIELD	2.6%	2.1%	1.9%	2.1%	1.9%	1.6%	1.6%	1.8%	2.0%	
REVENUES (\$MILL)	47.1	47.6	48.6	48.4	51.6	53.9	55.1	60.1	71.0	Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.
NET PROFIT (\$MILL)	12.5	11.8	13.0	13.4	14.4	16.6	17.0	19.6	23.8	
INCOME TAX RATE	27.5%	31.3%	25.9%	15.7%	13.5%	10.8%	6.2%	.1%	5.1%	
AFUDC % TO NET PROFIT	1.6%	1.9%	6.7%	1.7%	2.5%	3.2%	7.2%	--	--	
LONG-TERM DEBT RATIO	44.4%	42.6%	43.0%	42.5%	41.3%	46.3%	47.6%	40.2%	44.9%	
COMMON EQUITY RATIO	55.6%	57.4%	57.0%	57.5%	58.7%	53.7%	52.4%	59.8%	55.1%	
TOTAL CAPITAL (\$MILL)	196.3	198.7	209.5	219.5	228.7	266.8	291.5	346.6	401.2	
NET PLANT (\$MILL)	261.4	270.9	288.8	299.2	313.2	343.6	382.9	431.2	493.7	
RETURN ON TOTAL CAP'L	7.6%	7.2%	7.5%	7.3%	7.4%	7.1%	6.7%	6.4%	6.8%	
RETURN ON SHR. EQUITY	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	11.1%	9.5%	10.7%	
RETURN ON COM EQUITY	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	11.1%	9.5%	10.7%	
RETAINED TO COM EQ	4.4%	3.4%	4.0%	3.8%	4.0%	5.0%	4.7%	4.3%	5.5%	
ALL DIV'DS TO NET PROF	62%	67%	63%	64%	62%	57%	58%	55%	49%	

^ANo. of analysts changing earn. est. in last 25 days: 0 up, 1 down, consensus 5-year earnings growth not available. ^BBased upon one analyst's estimate. ^CBased upon one analyst's estimate.

ANNUAL RATES						INDUSTRY: Water Utility					
of change (per share)		5 Yrs.	1 Yr.			ASSETS (\$mill.)		2021	2022	12/31/23	BUSINESS: The York Water Company is an investor-owned water utility. The company’s primary business is to impound, purify to meet or exceed safe drinking water standards and distribute water. It also owns and operates three wastewater collection systems and ten wastewater collection and treatment systems. York Water operates within its franchised water and wastewater territory, which covers portions of 56 municipalities within four counties in south-central Pennsylvania. Water service is supplied through the company’s own distribution system. It obtains the bulk of its water supply for its primary system for York and Adams Counties from both the South Branch and East Branch of the Codorus Creek, which together have an average daily flow of approximately 73 million gallons from a combined watershed area of about 117 square miles. At December 31, 2023, the company’s average daily availability was 41.0 million gallons, and average daily consumption was roughly 21.8 million gallons. Has 130 employees. C.E.O. & President: Joseph T. Hand Address: 130 East Market Street, York, PA 17401. Tel.: (717) 845-3601. Internet: www.yorkwater.com. <i>E.B.</i> <i>April 5, 2024</i>
Revenues		3.5%	18.0%			Cash Assets		.0	.0	.0	
“Cash Flow”		7.5%	19.0%			Receivables		4.6	6.7	7.2	
Earnings		8.0%	18.5%			Inventory		1.9	2.3	3.1	
Dividends		4.0%	4.0%			Other		4.8	5.2	5.3	
Book Value		8.5%	6.5%			Current Assets		11.3	14.2	15.6	
						Property, Plant & Equip, at cost		482.1	540.0	610.8	
						Accum Depreciation		99.2	108.8	117.1	
						Net Property		382.9	431.2	493.7	
						Other		64.7	65.2	78.9	
						Total Assets		458.9	510.6	588.2	
						LIABILITIES (\$mill.)					
						Accts Payable		6.7	10.8	10.9	
						Debt Due		7.5	.0	.0	
						Other		5.9	6.2	7.2	
						Current Liab		20.1	17.0	18.1	
						LONG-TERM DEBT AND EQUITY as of 12/31/23					
						Total Debt \$180.0 mill. Due in 5 Yrs. \$43.3 mill.					
						LT Debt \$180.0 mill.					
						Including Cap. Leases None (45% of Cap'l)					
						Leases, Uncapitalized Annual rentals None					
						Pension Liability None in '23 vs. None in '22					
						Pfd Stock None Pfd Div'd Paid None					
						Common Stock 14,332,000 shares (55% of Cap'l)					
INSTITUTIONAL DECISIONS											
		2Q'23	3Q'23	4Q'23							
to Buy		65	59	60							
to Sell		47	59	68							
Hld's(000)		7059	7062	7029							

Limestone Water Utility Operating Company, LLC
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 Five Water Companies</u>	<u>Proxy Group of Nine Water Companies</u>
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	5.05 %	5.05 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A2 Rated Public Utility Bonds (2)	<u>0.52</u>	<u>0.52</u>
3.	Adjusted Prospective Yield on A2 Rated Public Utility Bonds	5.57 %	5.57 %
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group	<u>0.04</u> (3)	<u>0.08</u> (4)
5.	Adjusted Bond Yield	5.61 %	5.65 %
6.	Equity Risk Premium (5)	<u>5.17</u>	<u>5.20</u>
7.	Risk Premium Derived Common Equity Cost Rate	<u><u>10.78</u></u> %	<u><u>10.85</u></u> %

- Notes: (1) Consensus forecast of Moody's Aaa Rated Corporate bonds from Blue Chip Financial Forecasts (see pages 7 and 8 of this Exhibit).
- (2) The average yield spread of A2 rated public utility bonds over Aaa rated corporate bonds of 0.52% from page 2 of this Exhibit.
- (3) Adjustment to reflect the A2/A3 Moody's LT issuer rating of the Utility Proxy Group as shown on page 3 of this Exhibit. The 0.04% upward adjustment is derived by taking 1/6 of the spread between A2 and Baa2 Public Utility Bonds ($1/6 * 0.23\% = 0.04\%$) as derived from page 2 of this Exhibit.
- (4) Adjustment to reflect the A3 Moody's LT issuer rating of the Utility Proxy Group as shown on page 3 of this Exhibit. The 0.08% upward adjustment is derived by taking 1/3 of the spread between A2 and Baa2 Public Utility Bonds ($1/3 * 0.23\% = 0.08\%$) as derived from page 2 of this Exhibit.
- (5) From page 5 of this Exhibit.

Limestone Water Utility Operating Company, LLC
Interest Rates and Bond Spreads for
Moody's Corporate and Public Utility Bonds

Selected Bond Yields

	[1]	[2]	[3]
	Aaa Rated Corporate Bond	A2 Rated Public Utility Bond	Baa2 Rated Public Utility Bond
Apr-2024	5.28 %	5.79 %	6.01 %
Mar-2024	5.01	5.55	5.79
Feb-2024	5.03	5.56	5.79
Average	5.11 %	5.63 %	5.86 %

Selected Bond Spreads

A2 Rated Public Utility Bonds Over Aaa Rated Corporate Bonds:
0.52 % (1)

Baa2 Rated Public Utility Bonds Over A2 Rated Public Utility Bonds:
0.23 % (2)

Notes:

(1) Column [2] - Column [1].

(2) Column [3] - Column [2].

Source of Information:

Bloomberg Professional Services

Limestone Water Utility Operating Company, LLC
Comparison of Long-Term Issuer Ratings for the
Proxy Groups

	Moody's		Standard & Poor's	
	Long-Term Issuer Rating		Long-Term Issuer Rating	
	April 2024		April 2024	
	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
<u>Proxy Group of Five Water Companies</u>				
American States Water Company (2)	A2	6.0	A+	5.0
American Water Works Company, Inc. (3)	A3	7.0	A	6.0
California Water Service Group (4)	NR	--	A+	5.0
Middlesex Water Company	NR	--	A	6.0
SJW Group (5)	NR	--	A-	7.0
Average	<u>A2/A3</u>	<u>6.5</u>	<u>A</u>	<u>5.8</u>
	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
<u>Proxy Group of Nine Water Companies</u>				
American States Water Company (2)	A2	6.0	A+	5.0
American Water Works Company, Inc. (3)	A3	7.0	A	6.0
Artesian Resources Corporation	NR	--	NR	--
California Water Service Group (4)	NR	--	A+	5.0
Essential Utilities Inc. (6)	Baa1	8.0	A-	7.0
Global Water Resources, Inc.	NR	--	NR	--
Middlesex Water Company	NR	--	A	6.0
SJW Group (5)	NR	--	A-	7.0
The York Water Company	NR	--	A-	7.0
Average	<u>A3</u>	<u>7.0</u>	<u>A</u>	<u>6.1</u>

Notes:

- (1) From page 4 of this Exhibit.
- (2) Ratings that of Golden State Water Company.
- (3) Ratings that of New Jersey American Water Co., and Pennsylvania American Water Co.
- (4) Ratings that of California Water Service Company.
- (5) Ratings are that of San Jose Water Company, Connecticut Water Inc., and Connecticut Water Service Inc.
- (6) Ratings that of PNG Companies and Aqua Pennsylvania, Inc. (S&P).

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

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

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

Limestone Water Utility Operating Company, LLC
Judgment of Equity Risk Premium for the
Proxy Groups

<u>Line No.</u>		<u>Proxy Group of Five Water Companies</u>	<u>Proxy Group of Nine Water Companies</u>
1.	Calculated equity risk premium based on the total market using the beta approach (1)	5.74 %	5.81 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A2 rated bonds (2)	<u>4.59</u>	<u>4.59</u>
3.	Average equity risk premium	<u><u>5.17</u></u> %	<u><u>5.20</u></u> %

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

Limestone Water Utility Operating Company, LLC
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the
Proxy Groups

<u>Line No.</u>	<u>Equity Risk Premium Measure</u>	<u>Proxy Group of Five Water Companies</u>	<u>Proxy Group of Nine Water Companies</u>
1.	Kroll Equity Risk Premium (1)	5.96 %	5.96 %
2.	Regression on Kroll Risk Premium Data (2)	7.03	7.03
3.	Kroll Equity Risk Premium based on PRPM (3)	8.23	8.23
4	Equity Risk Premium Based on Value Line Summary and Index (4)	7.22	7.22
5.	Equity Risk Premium Based on Bloomberg, Value Line, and S&P Global Market Intelligence S&P 500 Companies (5)	<u>9.81</u>	<u>9.81</u>
6.	Conclusion of Equity Risk Premium	7.65 %	7.65 %
7.	Adjusted Beta (6)	<u>0.75</u>	<u>0.76</u>
8.	Forecasted Equity Risk Premium	<u><u>5.74 %</u></u>	<u><u>5.81 %</u></u>

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 1928-2023.
- (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 1928-2023 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 5.05% (from page 1 of this Exhibit).
- (3) The Predictive Risk Premium Model (PRPM) is discussed in the accompanying direct testimony. The Ibbotson equity risk premium based on the PRPM is derived by applying the PRPM to the monthly risk premiums between Ibbotson large company common stock monthly returns and average Aaa and Aa corporate monthly bond yields, from January 1928 through April 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 5.05% (from page 1 of this Exhibit) from the projected 3-5 year total annual market return of 12.27% (described fully in note 1 on page 2 of Exhibit DWD-6).
- (5) Using data from the Bloomberg Professional Services, Value Line, and S&P Global Market Intelligence for the S&P 500 for the S&P 500, an expected total return of 14.86% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 5.05% results in an expected equity risk premium of 9.81%.
- (6) Average of mean and median beta from Exhibit DWD-6.

Sources of Information:

Kroll 2023 SBBI® Yearbook
Industrial Manual and Mergent Bond Record Monthly Update.
Value Line Summary and Index
Blue Chip Financial Forecasts, December 1, 2023 and May 1, 2024
S&P Capital IQ
Bloomberg Professional Services

2 ■ BLUE CHIP FINANCIAL FORECASTS ■ MAY 1, 2024

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

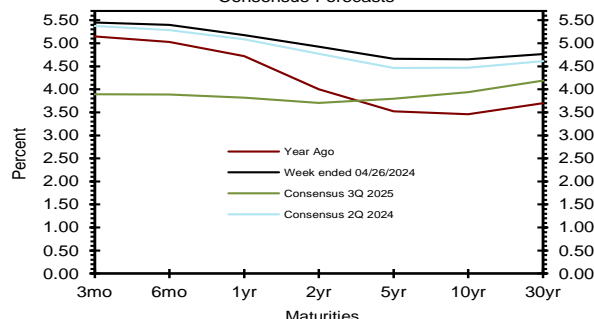
Interest Rates	History								Consensus Forecasts-Quarterly Avg.					
	-----Average For Week Ending-----				----Average For Month---				2Q	3Q	4Q	1Q	2Q	3Q
	Apr 26	Apr 19	Apr 12	Apr 5	Mar	Feb	Jan	1Q 2024	2024	2024	2024	2025	2025	2025
Federal Funds Rate	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.4	5.2	4.9	4.6	4.3	4.0
Prime Rate	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.5	8.4	8.1	7.8	7.4	7.1
SOFR	5.31	5.31	5.31	5.33	5.31	5.31	5.32	5.31	5.3	5.2	4.9	4.6	4.3	4.0
Commercial Paper, 1-mo.	5.30	5.33	5.31	5.31	5.32	5.31	5.32	5.32	5.3	5.2	4.9	4.6	4.2	3.9
Treasury bill, 3-mo.	5.45	5.45	5.44	5.42	5.47	5.44	5.45	5.45	5.4	5.2	4.9	4.5	4.2	3.9
Treasury bill, 6-mo.	5.40	5.39	5.37	5.34	5.36	5.28	5.21	5.28	5.3	5.1	4.8	4.5	4.2	3.9
Treasury bill, 1 yr.	5.18	5.17	5.12	5.04	4.99	4.92	4.79	4.90	5.1	4.9	4.6	4.4	4.1	3.8
Treasury note, 2 yr.	4.93	4.96	4.86	4.70	4.59	4.54	4.32	4.48	4.8	4.6	4.3	4.1	3.9	3.7
Treasury note, 5 yr.	4.66	4.66	4.51	4.34	4.20	4.19	3.98	4.12	4.5	4.3	4.1	4.0	3.9	3.8
Treasury note, 10 yr.	4.65	4.63	4.48	4.35	4.21	4.21	4.06	4.16	4.5	4.3	4.2	4.1	4.0	3.9
Treasury note, 30 yr.	4.77	4.74	4.59	4.50	4.36	4.38	4.26	4.33	4.6	4.5	4.4	4.3	4.2	4.2
Corporate Aaa bond	5.48	5.46	5.30	5.21	5.11	5.13	5.01	5.08	5.3	5.2	5.1	5.0	5.0	4.9
Corporate Baa bond	5.98	5.97	5.80	5.73	5.62	5.65	5.53	5.60	6.1	6.1	6.0	5.9	5.9	5.8
State & Local bonds	4.31	4.29	4.27	4.23	4.12	4.12	4.09	4.11	4.4	4.4	4.2	4.2	4.2	4.1
Home mortgage rate	7.17	7.10	6.88	6.82	6.82	6.78	6.64	6.75	7.0	6.8	6.6	6.5	6.3	6.2

Key Assumptions	History								Consensus Forecasts-Quarterly					
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q
	2022	2022	2022	2023	2023	2023	2023	2024	2024	2024	2024	2025	2025	2025
Fed's AFE \$ Index	113.5	118.8	119.8	115.5	114.6	115.0	116.6	115.5	117.2	117.5	116.6	115.8	115.0	114.8
Real GDP	-0.6	2.7	2.6	2.2	2.1	4.9	3.4	1.6	2.0	1.7	1.6	1.8	1.9	2.0
GDP Price Index	9.1	4.4	3.9	3.9	1.7	3.3	1.6	3.1	2.7	2.4	2.3	2.3	2.2	2.2
Consumer Price Index	10.0	5.3	4.0	3.8	3.0	3.4	2.7	3.8	3.4	2.6	2.4	2.4	2.4	2.4
PCE Price Index	7.2	4.7	4.1	4.2	2.5	2.6	1.8	3.4	2.9	2.3	2.2	2.3	2.2	2.1

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

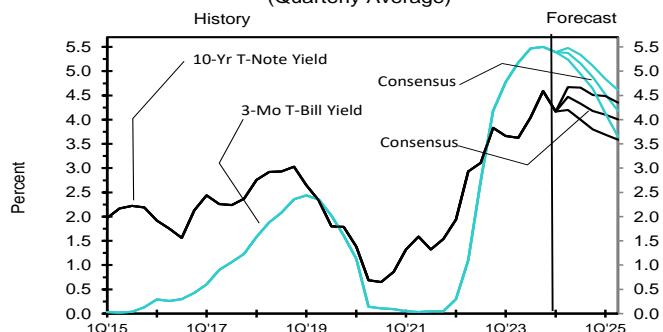
US Treasury Yield Curve

Week ended Apr 26, 2024 & Year Ago vs.
2Q 2024 & 3Q 2025
Consensus Forecasts



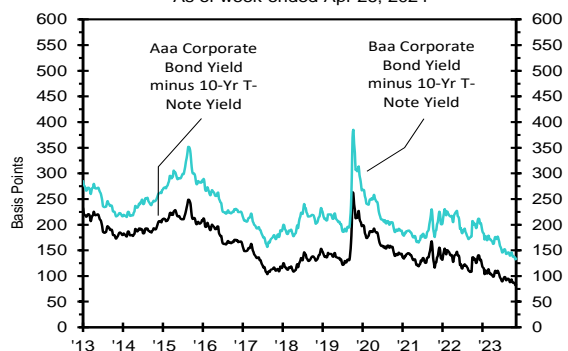
US 3-Mo T-Bills & 10-Yr T-Note Yield

(Quarterly Average)



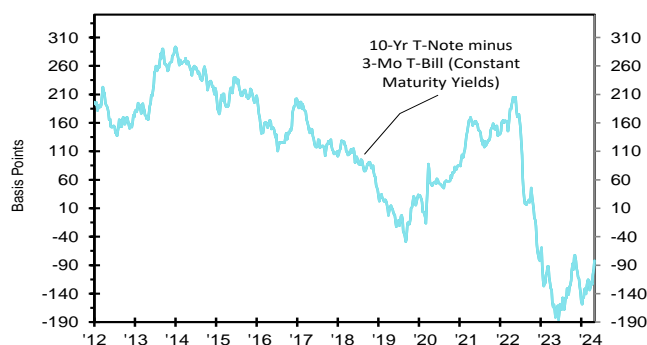
Corporate Bond Spreads

As of week ended Apr 26, 2024



US Treasury Yield Curve

As of week ended Apr 26, 2024



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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 2025 through 2029 and averages for the five-year periods 2025-2029 and 2030-2034. 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	
		2025	2026	2027	2028	2029	2025-2029	2030-2034
1. Federal Funds Rate	CONSENSUS	3.8	3.2	3.1	3.0	3.0	3.2	3.0
	Top 10 Average	4.3	3.6	3.6	3.5	3.5	3.7	3.5
	Bottom 10 Average	3.3	2.7	2.6	2.6	2.5	2.7	2.5
2. Prime Rate	CONSENSUS	6.9	6.3	6.2	6.2	6.2	6.3	6.1
	Top 10 Average	7.3	6.7	6.7	6.6	6.6	6.8	6.6
	Bottom 10 Average	6.5	5.9	5.7	5.7	5.7	5.9	5.6
3. SOFR	CONSENSUS	3.8	3.2	3.1	3.1	3.1	3.3	3.0
	Top 10 Average	4.1	3.6	3.5	3.5	3.4	3.6	3.4
	Bottom 10 Average	3.4	2.9	2.7	2.7	2.6	2.9	2.6
4. Commercial Paper, 1-Mo	CONSENSUS	3.7	3.2	3.2	3.2	3.1	3.3	3.1
	Top 10 Average	3.9	3.5	3.4	3.4	3.4	3.5	3.4
	Bottom 10 Average	3.5	2.9	2.8	2.8	2.8	3.0	2.7
5. Treasury Bill Yield, 3-Mo	CONSENSUS	3.7	3.2	3.1	3.0	3.0	3.2	3.0
	Top 10 Average	4.1	3.6	3.6	3.5	3.5	3.7	3.5
	Bottom 10 Average	3.2	2.7	2.6	2.5	2.5	2.7	2.4
6. Treasury Bill Yield, 6-Mo	CONSENSUS	3.7	3.3	3.2	3.2	3.1	3.3	3.1
	Top 10 Average	4.1	3.7	3.6	3.6	3.6	3.7	3.6
	Bottom 10 Average	3.4	2.9	2.8	2.7	2.7	2.9	2.7
7. Treasury Bill Yield, 1-Yr	CONSENSUS	3.7	3.4	3.3	3.3	3.2	3.4	3.2
	Top 10 Average	4.1	3.8	3.7	3.7	3.7	3.8	3.7
	Bottom 10 Average	3.3	3.0	2.9	2.8	2.8	3.0	2.8
8. Treasury Note Yield, 2-Yr	CONSENSUS	3.7	3.5	3.4	3.4	3.4	3.5	3.4
	Top 10 Average	4.1	3.9	3.9	3.9	3.9	3.9	3.9
	Bottom 10 Average	3.3	3.1	3.0	2.9	2.9	3.0	2.9
9. Treasury Note Yield, 5-Yr	CONSENSUS	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	Top 10 Average	4.1	4.1	4.2	4.2	4.3	4.2	4.3
	Bottom 10 Average	3.3	3.2	3.2	3.1	3.1	3.2	3.1
10. Treasury Note Yield, 10-Yr	CONSENSUS	3.9	3.9	3.9	3.9	3.9	3.9	3.9
	Top 10 Average	4.3	4.4	4.5	4.5	4.5	4.4	4.5
	Bottom 10 Average	3.5	3.3	3.3	3.3	3.3	3.3	3.3
11. Treasury Bond Yield, 30-Yr	CONSENSUS	4.1	4.1	4.1	4.2	4.2	4.1	4.2
	Top 10 Average	4.5	4.6	4.7	4.7	4.7	4.6	4.8
	Bottom 10 Average	3.8	3.6	3.6	3.6	3.6	3.7	3.6
12. Corporate Aaa Bond Yield	CONSENSUS	5.0	4.9	4.9	5.0	5.0	4.9	5.0
	Top 10 Average	5.3	5.3	5.4	5.5	5.5	5.4	5.5
	Bottom 10 Average	4.6	4.5	4.5	4.5	4.5	4.5	4.4
13. Corporate Baa Bond Yield	CONSENSUS	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	Top 10 Average	6.4	6.4	6.5	6.6	6.6	6.5	6.6
	Bottom 10 Average	5.7	5.5	5.5	5.6	5.6	5.6	5.6
14. State & Local Bonds Yield	CONSENSUS	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	Top 10 Average	4.6	4.7	4.7	4.8	4.8	4.7	4.9
	Bottom 10 Average	4.0	3.8	3.9	3.9	3.8	3.9	3.8
15. Home Mortgage Rate	CONSENSUS	6.2	5.9	5.9	5.9	5.9	5.9	5.8
	Top 10 Average	6.6	6.4	6.4	6.5	6.5	6.5	6.5
	Bottom 10 Average	5.7	5.5	5.4	5.3	5.2	5.4	5.2
A. Fed's AFE Nominal \$ Index	CONSENSUS	114.1	113.0	113.1	113.2	112.8	113.2	112.3
	Top 10 Average	116.0	115.5	115.9	116.5	116.2	116.0	115.7
	Bottom 10 Average	111.8	110.4	110.1	109.6	109.1	110.2	108.5
		Year-Over-Year, % Change					Five-Year Averages	
		2025	2026	2027	2028	2029	2025-2029	2030-2034
B. Real GDP	CONSENSUS	1.6	2.1	2.1	2.0	2.0	1.9	2.0
	Top 10 Average	2.1	2.4	2.4	2.3	2.3	2.3	2.3
	Bottom 10 Average	1.1	1.8	1.8	1.7	1.7	1.6	1.7
C. GDP Chained Price Index	CONSENSUS	2.2	2.2	2.1	2.1	2.2	2.2	2.2
	Top 10 Average	2.5	2.3	2.3	2.3	2.3	2.3	2.3
	Bottom 10 Average	2.0	2.0	2.0	2.0	2.0	2.0	2.0
D. Consumer Price Index	CONSENSUS	2.3	2.2	2.2	2.2	2.2	2.2	2.2
	Top 10 Average	2.5	2.4	2.4	2.4	2.4	2.4	2.4
	Bottom 10 Average	2.1	2.1	2.0	2.0	2.0	2.0	2.0
E. PCE Price Index	CONSENSUS	2.2	2.1	2.1	2.1	2.1	2.1	2.1
	Top 10 Average	2.3	2.3	2.2	2.2	2.2	2.2	2.3
	Bottom 10 Average	2.0	2.0	1.9	1.9	2.0	1.9	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>
1.	Historical Equity Risk Premium (1)	4.02 %
2.	Regression of Historical Equity Risk Premium (2)	4.87
3	Forecasted Equity Risk Premium Based on PRPM (3)	4.52
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>4.96</u>
5.	Average Equity Risk Premium (5)	<u><u>4.59 %</u></u>

- Notes: (1) Based on S&P Public Utility Index monthly total returns and Moody's Public Utility Bond average monthly yields from 1928-2023. 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 - 2023 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 5.57% (from line 3, page 1 of this Exhibit).
- (3) The Predictive Risk Premium Model (PRPM) is applied to the risk premium of the monthly total returns of the S&P Utility Index and the monthly yields on Moody's A2 rated public utility bonds from January 1928 - April 2024.
- (4) Using data from Bloomberg, Value Line, and S&P Capital IQ for the S&P Utilities Index, an expected return of 10.53% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 5.57%, calculated on line 3 of page 1 of this Exhibit results in an equity risk premium of 4.96%. (10.53% - 5.57% = 4.96%)
- (5) Average of lines 1 through 4.

Limestone Water Utility Operating Company, LLC
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 Five Water Companies Using Prospective Interest Rates

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Five Water 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)
American States Water Company	0.70	0.69	0.70	8.58 %	4.31 %	10.32 %	10.96 %	10.64 %
American Water Works Company, Inc.	0.95	0.97	0.96	8.58	4.31	12.55	12.63	12.59
California Water Service Group	0.75	0.71	0.73	8.58	4.31	10.57	11.15	10.86
Middlesex Water Company	0.75	0.71	0.73	8.58	4.31	10.57	11.15	10.86
SIW Group	0.85	0.65	0.75	8.58	4.31	10.75	11.28	11.01
Mean			0.77			10.95 %	11.44 %	11.19 %
Median			0.73			10.57 %	11.15 %	10.86 %
Average of Mean and Median			0.75			10.76 %	11.30 %	11.03 %

Proxy Group of Nine Water Companies Using Prospective Interest Rates

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Nine Water 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)
American States Water Company	0.70	0.69	0.70	8.58 %	4.31 %	10.32 %	10.96 %	10.64 %
American Water Works Company, Inc.	0.95	0.97	0.96	8.58	4.31	12.55	12.63	12.59
Artesian Resources Corporation	0.75	0.63	0.69	8.58	4.31	10.23	10.90	10.56
California Water Service Group	0.75	0.71	0.73	8.58	4.31	10.57	11.15	10.86
Essential Utilities Inc.	1.00	0.78	0.89	8.58	4.31	11.95	12.18	12.07
Global Water Resources, Inc.	0.90	0.85	0.87	8.58	4.31	11.78	12.06	11.92
Middlesex Water Company	0.75	0.71	0.73	8.58	4.31	10.57	11.15	10.86
SIW Group	0.85	0.65	0.75	8.58	4.31	10.75	11.28	11.01
The York Water Company	0.80	0.60	0.70	8.58	4.31	10.32	10.96	10.64
Mean			0.78			11.00 %	11.48 %	11.24 %
Median			0.73			10.57 %	11.15 %	10.86 %
Average of Mean and Median			0.76			10.79 %	11.32 %	11.05 %

Notes on page 2 of this Exhibit.

Limestone Water Utility Operating Company, LLC
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 (1926-2023)

Arithmetic Mean Monthly Returns for Large Stocks 1926-2023:	12.16 %
Arithmetic Mean Income Returns on Long-Term Government Bonds:	4.99
MRP based on Kroll Historical Data:	<u>7.17 %</u>

Measure 2: Application of a Regression Analysis to Kroll Historical Data (1926-2023)

8.04 %

Measure 3: Application of the PRPM to Kroll Historical Data (January 1926 - April 2024)

9.19 %

Measure 4: Value Line Projected MRP (Thirteen weeks ending May 3, 2024)

Total projected return on the market 3-5 years hence*:	12.27 %
Risk-Free Rate (see notes 2 and 3):	4.31
MRP based on Value Line Summary & Index:	<u>7.96 %</u>
*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:	14.86 %
Risk-Free Rate (see notes 2 and 3):	4.31
MRP based on Bloomberg, Value Line, and S&P Capital IQ data	<u>10.55 %</u>

Average of all MRP Measures: 8.58 %

- (2) For reasons explained in the Direct Testimony, the appropriate risk-free rate for cost of capital purposes is the average forecast of 30 year Treasury Bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts. (See pages 7 and 8 of Exhibit DWD-5.) The projection of the risk-free rate is illustrated below:

Second Quarter 2024	4.60 %
Third Quarter 2024	4.50
Fourth Quarter 2024	4.40
First Quarter 2025	4.30
Second Quarter 2025	4.20
Third Quarter 2025	4.20
2025-2029	4.10
2030-2034	4.20
	<u>4.31 %</u>

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

Sources of Information:

Value Line Summary and Index
Blue Chip Financial Forecasts, December 1, 2023 and May 1, 2024
Kroll 2023 SBBi® Yearbook
S&P Capital IQ
Bloomberg Professional Services

Limestone Water Utility Operating Company, LLC
Basis of Selection of the Group of Non-Price Regulated Companies
Comparable in Total Risk to the Proxy Group of Five Water Companies

The criteria for selection of the proxy group of non-price regulated companies comparable in total risk to the proxy group of five water 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 0.51 - 0.79 and residual standard error of the regression range of 2.9156 - 3.4772 of the proxy group of five water 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 0.1404. 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

$$\text{Thus, } 0.1404 = \frac{3.1964}{\sqrt{518}} = \frac{3.1964}{22.7596}$$

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

Limestone Water Utility Operating Company, LLC
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

	[1]	[2]	[3]	[4]
<u>Proxy Group of Five Water 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>
American States Water Company	0.70	0.51	2.6795	0.0600
American Water Works Company, Inc.	0.95	0.90	3.3981	0.0760
California Water Service Group	0.75	0.56	3.0835	0.0690
Middlesex Water Company	0.75	0.57	3.6336	0.0813
SJW Group	0.85	0.73	3.1874	0.0713
Average	0.80	0.65	3.1964	0.0715
Beta Range (+/- 2 std. Devs. of Beta)	0.51	0.79		
2 std. Devs. of Beta	0.14			
Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.)	2.9156	3.4772		
Std. dev. of the Res. Std. Err.	0.1404			
2 std. devs. of the Res. Std. Err.	0.2808			

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

Limestone Water Utility Operating Company, LLC
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Five Water Companies

	[1]	[2]	[3]	[4]
Proxy Group of Thirty-Nine Non-Price Regulated Companies	Value Line Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
AbbVie Inc.	0.85	0.71	2.9836	0.0668
Abbott Labs.	0.90	0.79	2.9435	0.0659
Assurant Inc.	0.90	0.79	3.0402	0.0680
Akamai Technologies	0.75	0.61	3.3098	0.0741
Smith (A.O.)	0.90	0.79	3.0917	0.0692
Booz Allen Hamilton	0.85	0.73	3.2604	0.0730
Baxter Int'l Inc.	0.70	0.53	3.2992	0.0738
Balchem Corp.	0.75	0.58	3.3842	0.0757
Becton, Dickinson	0.75	0.57	3.0517	0.0683
BWX Technologies	0.80	0.67	3.2423	0.0725
CACI Int'l	0.90	0.79	2.9988	0.0671
Casey's Gen'l Stores	0.90	0.79	3.1675	0.0709
Chemed Corp.	0.75	0.59	2.9312	0.0656
Check Point Software	0.75	0.60	3.0054	0.0672
C.H. Robinson	0.70	0.53	3.4399	0.0770
Cencora	0.80	0.65	2.9558	0.0661
CSG Systems Int'l	0.75	0.59	2.9444	0.0659
CSW Industrials	0.85	0.77	3.2757	0.0733
Casella Waste Sys.	0.85	0.73	3.3876	0.0758
Quest Diagnostics	0.75	0.61	3.3374	0.0747
Fastenal Co.	0.90	0.79	2.9654	0.0664
Heartland Express	0.75	0.54	3.0508	0.0683
J&J Snack Foods	0.90	0.79	3.4247	0.0766
Henry (Jack) & Assoc	0.85	0.74	3.1969	0.0715
McKesson Corp.	0.85	0.70	3.1414	0.0703
McCormick & Co.	0.80	0.63	3.1846	0.0713
NewMarket Corp.	0.75	0.59	2.9383	0.0657
Northrop Grumman	0.75	0.55	3.2656	0.0731
Oracle Corp.	0.85	0.70	3.1087	0.0696
Prestige Consumer	0.85	0.76	3.2454	0.0726
Pfizer, Inc.	0.80	0.67	3.1656	0.0708
Progressive Corp.	0.70	0.54	3.1340	0.0701
RLI Corp.	0.80	0.62	3.0345	0.0679
Stepan Company	0.80	0.64	3.4650	0.0775
Selective Ins. Group	0.85	0.74	2.9866	0.0668
United Parcel Serv.	0.80	0.69	3.4513	0.0772
Universal Corp.	0.80	0.68	3.2741	0.0733
Werner Enterprises	0.75	0.57	3.2085	0.0718
Watsco, Inc.	0.85	0.77	3.1365	0.0702
Average	0.81	0.67	3.1648	0.0708
Proxy Group of Five Water Companies	0.80	0.65	3.1964	0.0715

Source of Information:

Value Line Proprietary Database, March 2024.

Limestone Water Utility Operating Company, LLC
Basis of Selection of the Group of Non-Price Regulated Companies
Comparable in Total Risk to the Proxy Group of Nine Water Companies

The criteria for selection of the proxy group of non-price regulated companies comparable in total risk to the proxy group of nine water 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 0.56 - 0.84 and residual standard error of the regression range of 2.9265 - 3.4905 of the proxy group of nine water 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 0.1410. 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

$$\text{Thus, } 0.141 = \frac{3.2085}{\sqrt{518}} = \frac{3.2085}{22.7596}$$

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

Limestone Water Utility Operating Company, LLC
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

	[1]	[2]	[3]	[4]
Proxy Group of Nine Water Companies	Value Line Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
American States Water Company	0.70	0.51	2.6795	0.0600
American Water Works Company, Inc.	0.95	0.90	3.3981	0.0760
Artesian Resources Corporation	0.75	0.54	3.2962	0.0738
California Water Service Group	0.75	0.56	3.0835	0.0690
Essential Utilities Inc.	1.00	0.97	2.7918	0.0625
Global Water Resources, Inc.	0.90	0.79	3.6425	0.0815
Middlesex Water Company	0.75	0.57	3.6336	0.0813
SJW Group	0.85	0.73	3.1874	0.0713
The York Water Company	0.80	0.69	3.1640	0.0708
Average	0.83	0.70	3.2085	0.0718
Beta Range (+/- 2 std. Devs. of Beta)	0.56	0.84		
2 std. Devs. of Beta	0.14			
Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.)	2.9265	3.4905		
Std. dev. of the Res. Std. Err.	0.1410			
2 std. devs. of the Res. Std. Err.	0.2820			

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

Limestone Water Utility Operating Company, LLC
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Nine Water Companies

	[1]	[2]	[3]	[4]
Proxy Group of Forty-Two Non-Price Regulated Companies	Value Line Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta
AbbVie Inc.	0.85	0.71	2.9836	0.0668
Abbott Labs.	0.90	0.79	2.9435	0.0659
Assurant Inc.	0.90	0.79	3.0402	0.0680
Akamai Technologies	0.75	0.61	3.3098	0.0741
Smith (A.O.)	0.90	0.79	3.0917	0.0692
Booz Allen Hamilton	0.85	0.73	3.2604	0.0730
Balchem Corp.	0.75	0.58	3.3842	0.0757
Becton, Dickinson	0.75	0.57	3.0517	0.0683
BWX Technologies	0.80	0.67	3.2423	0.0725
CACI Int'l	0.90	0.79	2.9988	0.0671
Casey's Gen'l Stores	0.90	0.79	3.1675	0.0709
Chemed Corp.	0.75	0.59	2.9312	0.0656
Check Point Software	0.75	0.60	3.0054	0.0672
Cencora	0.80	0.65	2.9558	0.0661
CSG Systems Int'l	0.75	0.59	2.9444	0.0659
CSW Industrials	0.85	0.77	3.2757	0.0733
CVS Health	0.90	0.80	3.3424	0.0748
Casella Waste Sys.	0.85	0.73	3.3876	0.0758
Quest Diagnostics	0.75	0.61	3.3374	0.0747
Danaher Corp.	0.90	0.81	3.0396	0.0680
Fastenal Co.	0.90	0.79	2.9654	0.0664
Franklin Electric	0.90	0.82	2.9449	0.0659
Alphabet Inc.	0.90	0.80	3.1753	0.0710
J&J Snack Foods	0.90	0.79	3.4247	0.0766
Henry (Jack) & Assoc	0.85	0.74	3.1969	0.0715
L3Harris Technologie	0.90	0.83	3.1265	0.0704
McKesson Corp.	0.85	0.70	3.1414	0.0703
McCormick & Co.	0.80	0.63	3.1846	0.0713
NewMarket Corp.	0.75	0.59	2.9383	0.0657
Oracle Corp.	0.85	0.70	3.1087	0.0696
OSI Systems	0.90	0.81	3.0233	0.0676
Prestige Consumer	0.85	0.76	3.2454	0.0726
Pfizer, Inc.	0.80	0.67	3.1656	0.0708
RLI Corp.	0.80	0.62	3.0345	0.0679
Stepan Company	0.80	0.64	3.4650	0.0775
Selective Ins. Group	0.85	0.74	2.9866	0.0668
UniFirst Corp.	0.90	0.81	3.0645	0.0686
United Parcel Serv.	0.80	0.69	3.4513	0.0772
Universal Corp.	0.80	0.68	3.2741	0.0733
Werner Enterprises	0.75	0.57	3.2085	0.0718
Watsco, Inc.	0.85	0.77	3.1365	0.0702
Western Union	0.85	0.72	3.4876	0.0780
Average	0.84	0.71	3.1534	0.0706
Proxy Group of Nine Water Companies	0.83	0.70	3.2085	0.0718

Source of Information:

Value Line Proprietary Database, March 2024.

Limestone Water Utility Operating Company, LLC
Summary of Cost of Equity Models Applied to
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Groups

<u>Principal Methods</u>	<u>Proxy Group of Thirty- Nine Non-Price Regulated Companies</u>	<u>Proxy Group of Forty- Two Non-Price Regulated Companies</u>
Discounted Cash Flow Model (DCF) (1)	11.22 %	10.67 %
Risk Premium Model (RPM) (2)	11.99	12.30
Capital Asset Pricing Model (CAPM) (3)	<u>11.33</u>	<u>11.57</u>
Mean	<u><u>11.51</u></u> %	<u><u>11.51</u></u> %
Median	<u><u>11.33</u></u> %	<u><u>11.57</u></u> %
Average of Mean and Median	<u><u>11.42</u></u> %	<u><u>11.54</u></u> %

Notes:

- (1) From pages 2-3 of this Exhibit.
- (2) From page 4 of this Exhibit.
- (3) From pages 8-9 of this Exhibit.

Limestone Water Utility Operating Company, LLC
DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Five Water Companies and Proxy Group of Nine Water Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Thirty-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	Yahoo! Finance Projected Five Year Growth in EPS	S&P Capital IQ Projected Five Year Growth in EPS	Average Projected Five Year Growth Rate in EPS (1)	Adjusted Dividend Yield	Indicated Common Equity Cost Rate (2)
AbbVie Inc.	3.56 %	4.00 %	7.00 %	6.14 %	8.27 %	6.35 %	3.67 %	10.02 %
Abbott Labs.	1.94	4.00	9.00	8.10	6.50	6.90	2.01	8.91
Assurant Inc.	1.62	9.50	5.00	5.00	5.04	6.13	1.67	7.80
Akamai Technologies	-	5.50	7.30	6.60	9.66	7.27	-	NA
Smith (A.O.)	1.51	9.00	9.00	10.00	10.00	9.50	1.58	11.08
Booz Allen Hamilton	1.40	8.00	12.60	12.60	12.79	11.50	1.48	12.98
Baxter Int'l Inc.	2.80	4.00	6.40	4.07	2.73	4.30	2.86	7.16
Balchem Corp.	0.53	8.50	11.00	24.00	10.50	13.50	0.57	14.07
Becton, Dickinson	1.59	5.50	9.40	8.65	7.57	7.78	1.65	9.43
BWX Technologies	1.00	6.50	10.00	2.49	10.83	7.46	1.04	8.50
CACI Int'l	-	7.00	10.30	6.70	11.17	8.79	-	NA
Casey's Gen'l Stores	0.57	11.00	9.70	10.31	9.74	10.19	0.60	10.79
Chemed Corp.	0.26	7.50	11.30	11.25	11.27	10.33	0.27	10.60
Check Point Software	-	8.00	7.90	7.30	5.90	7.27	-	NA
C.H. Robinson	3.35	3.50	6.00	(1.33)	7.00	5.50	3.44	8.94
Cencora	0.86	8.00	9.80	9.11	8.85	8.94	0.90	9.84
CSG Systems Int'l	2.35	15.50	10.00	10.00	14.33	12.46	2.50	14.96
CSW Industrials	0.36	12.50	15.00	12.00	15.00	13.63	0.38	14.01
Casella Waste Sys.	-	4.50	19.90	14.90	20.14	14.86	-	NA
Quest Diagnostics	2.33	1.50	5.20	4.96	5.25	4.23	2.38	6.61
Fastenal Co.	2.15	9.00	9.00	6.33	NA	8.11	2.24	10.35
Heartland Express	0.68	2.00	NA	68.70	(14.00)	35.35	0.80	36.15 (3)
J&J Snack Foods	2.07	9.00	NA	73.10	NA	41.05	2.49	43.54 (3)
Henry (Jack) & Assoc	1.29	6.50	8.30	7.70	8.35	7.71	1.34	9.05
McKesson Corp.	0.47	8.00	12.10	9.84	10.16	10.03	0.49	10.52
McCormick & Co.	2.37	4.50	6.80	7.15	5.84	6.07	2.44	8.51
NewMarket Corp.	1.65	5.50	NA	7.70	NA	6.60	1.70	8.30
Northrop Grumman	1.62	8.00	9.90	29.69	22.51	17.53	1.76	19.29
Oracle Corp.	1.35	10.00	11.20	10.00	12.13	10.83	1.42	12.25
Prestige Consumer	-	6.00	8.00	8.00	8.50	7.63	-	NA
Pfizer, Inc.	6.23	2.50	9.90	(1.24)	9.74	7.38	6.46	13.84
Progressive Corp.	0.20	14.50	22.50	26.00	32.49	23.87	0.22	24.09
RLI Corp.	0.75	11.00	NA	9.80	NA	10.40	0.79	11.19
Stepan Company	1.71	7.50	NA	4.40	NA	5.95	1.76	7.71
Selective Ins. Group	1.36	12.00	17.70	17.70	19.74	16.79	1.47	18.26
United Parcel Serv.	4.38	2.50	10.60	10.22	13.36	9.17	4.58	13.75
Universal Corp.	6.32	18.50	NA	NA	NA	18.50	6.90	25.40
Werner Enterprises	1.46	2.00	17.10	9.85	13.56	10.63	1.54	12.17
Watsco, Inc.	2.63	9.00	NA	4.42	NA	6.71	2.72	9.43
NA= Not Available							Mean	11.87 %
							Median	10.56 %
							Average of Mean and Median	11.22 %

Notes on page 3 of this Exhibit.

Limestone Water Utility Operating Company, LLC

DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Five Water Companies and Proxy Group of Nine Water Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Forty-Two Non-Price Regulated Companies	Average Dividend Yield	Value Line Projected Five Year Growth in EPS	Zack's Five Year Projected Growth Rate in EPS	Yahoo! Finance Projected Five Year Growth in EPS	S&P Capital IQ Projected Five Year Growth in EPS	Average Projected Five Year Growth Rate in EPS (1)	Adjusted Dividend Yield	Indicated Common Equity Cost Rate (2)
AbbVie Inc.	3.56 %	4.00 %	7.00 %	6.14 %	8.27 %	6.35 %	3.67 %	10.02 %
Abbott Labs.	1.94	4.00	9.00	8.10	6.50	6.90	2.01	8.91
Assurant Inc.	1.62	9.50	5.00	5.00	5.04	6.13	1.67	7.80
Akamai Technologies	-	5.50	7.30	6.60	9.66	7.27	-	NA
Smith (A.O.)	1.51	9.00	9.00	10.00	10.00	9.50	1.58	11.08
Booz Allen Hamilton	1.40	8.00	12.60	12.60	12.79	11.50	1.48	12.98
Balchem Corp.	0.53	8.50	11.00	24.00	10.50	13.50	0.57	14.07
Becton, Dickinson	1.59	5.50	9.40	8.65	7.57	7.78	1.65	9.43
BWX Technologies	1.00	6.50	10.00	2.49	10.83	7.46	1.04	8.50
CACI Int'l	-	7.00	10.30	6.70	11.17	8.79	-	NA
Casey's Gen'l Stores	0.57	11.00	9.70	10.31	9.74	10.19	0.60	10.79
Chemed Corp.	0.26	7.50	11.30	11.25	11.27	10.33	0.27	10.60
Check Point Software	-	8.00	7.90	7.30	5.90	7.27	-	NA
Cencora	0.86	8.00	9.80	9.11	8.85	8.94	0.90	9.84
CSG Systems Int'l	2.35	15.50	10.00	10.00	14.33	12.46	2.50	14.96
CSW Industrials	0.36	12.50	15.00	12.00	15.00	13.63	0.38	14.01
CVS Health	3.58	5.00	9.10	3.69	2.86	5.16	3.67	8.83
Casella Waste Sys.	-	4.50	19.90	14.90	20.14	14.86	-	NA
Quest Diagnostics	2.33	1.50	5.20	4.96	5.25	4.23	2.38	6.61
Danaher Corp.	0.43	7.00	8.50	7.03	5.08	6.90	0.44	7.34
Fastenal Co.	2.15	9.00	9.00	6.33	NA	8.11	2.24	10.35
Franklin Electric	0.99	7.00	12.00	13.40	12.00	11.10	1.04	12.14
Alphabet Inc.	0.54	12.00	17.20	18.40	18.91	16.63	0.58	17.21
J&J Snack Foods	2.07	9.00	NA	73.10	NA	41.05	2.49	43.54 (3)
Henry (Jack) & Assoc	1.29	6.50	8.30	7.70	8.35	7.71	1.34	9.05
L3Harris Technologie	2.21	10.50	8.50	8.77	8.17	8.99	2.31	11.30
McKesson Corp.	0.47	8.00	12.10	9.84	10.16	10.03	0.49	10.52
McCormick & Co.	2.37	4.50	6.80	7.15	5.84	6.07	2.44	8.51
NewMarket Corp.	1.65	5.50	NA	7.70	NA	6.60	1.70	8.30
Oracle Corp.	1.35	10.00	11.20	10.00	12.13	10.83	1.42	12.25
OSI Systems	-	10.50	11.00	8.00	11.50	10.25	-	NA
Prestige Consumer	-	6.00	8.00	8.00	8.50	7.63	-	NA
Pfizer, Inc.	6.23	2.50	9.90	(1.24)	9.74	7.38	6.46	13.84
RLI Corp.	0.75	11.00	NA	9.80	NA	10.40	0.79	11.19
Stapan Company	1.71	7.50	NA	4.40	NA	5.95	1.76	7.71
Selective Ins. Group	1.36	12.00	17.70	17.70	19.74	16.79	1.47	18.26
UniFirst Corp.	0.79	10.00	NA	7.80	NA	8.90	0.83	9.73
United Parcel Serv.	4.38	2.50	10.60	10.22	13.36	9.17	4.58	13.75
Universal Corp.	6.32	18.50	NA	NA	NA	18.50	6.90	25.40 (3)
Werner Enterprises	1.46	2.00	17.10	9.85	13.56	10.63	1.54	12.17
Watsco, Inc.	2.63	9.00	NA	4.42	NA	6.71	2.72	9.43
Western Union	7.07	(0.50)	1.60	1.62	1.74	1.65	7.13	8.78
NA= Not Available							Mean	10.89 %
							Median	10.44 %
							Average of Mean and Median	10.67 %

Notes:

- (1) Average of columns 2 through 5 excluding negative growth rates.
- (2) The application of the DCF model to the domestic, non-price regulated comparable risk companies is identical to the application of the DCF to the Utility Proxy Groups. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of 04/30/2024. 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, www.yahoo.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 04/30/2024
www.yahoo.com, Downloaded on 04/30/2024
S&P Capital IQ

Limestone Water Utility Operating Company, LLC
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 Thirty-Nine Non- Price Regulated Companies</u>	<u>Proxy Group of Forty-Two Non- Price Regulated Companies</u>
1.	Prospective Yield on Baa2 Rated Corporate Bonds (1)	5.98 %	5.98 %
2.	Adjustment to Reflect Bond rating Difference of Non-Price Regulated Companies (2)	<u>(0.11)</u>	<u>(0.11)</u>
3.	Adjusted Bond Yield	5.87	5.87
4.	Equity Risk Premium (3)	<u>6.12</u>	<u>6.43</u>
5.	Risk Premium Derived Common Equity Cost Rate	<u><u>11.99 %</u></u>	<u><u>12.30 %</u></u>

Notes: (1) Average forecast of Baa corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated December 1, 2023 and May 1, 2024 (see pages 7 and 8 of Exhibit DWD-5). The estimates are detailed below.

Second Quarter 2024	6.10 %
Third Quarter 2024	6.10
Fourth Quarter 2024	6.00
First Quarter 2025	5.90
Second Quarter 2025	5.90
Third Quarter 2025	5.80
2025-2029	6.00
2030-2034	<u>6.00</u>
Average	<u><u>5.98 %</u></u>

(2) The average yield spread of Baa2 rated corporate bonds over A2 corporate bonds for the three months ending April 2024. To reflect the Baa1 average rating of both Non-Price Regulated Proxy Groups, the yield on Baa corporate bonds 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>
Apr-24	5.67 %	6.00 %	0.33 %
Mar-24	5.42	5.75	0.33
Feb-24	5.43	5.77	<u>0.34</u>
		Average yield spread	<u>0.33</u>
		1/3 of spread	<u><u>0.11</u></u>

(3) From page 7 of this Exhibit.

Limestone Water Utility Operating Company, LLC
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Thirty-Nine Non-Price Regulated Companies and Proxy Group of Forty-Two Non-Price Regulated Companies

Proxy Group of Thirty-Nine Non-Price Regulated Companies	Moody's Long-Term Issuer Rating April 2024		Standard & Poor's Long-Term Issuer Rating April 2024	
	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
AbbVie Inc.	A3	7.0	A-	7.0
Abbott Labs.	Aa3	4.0	AA-	4.0
Assurant Inc.	Baa2	9.0	BBB	9.0
Akamai Technologies	N/A	--	BBB+	8.0
Smith (A.O.)	N/A	--	N/A	--
Booz Allen Hamilton	N/A	--	N/A	--
Baxter Int'l Inc.	Baa2	9.0	BBB	9.0
Balchem Corp.	N/A	--	N/A	--
Becton, Dickinson	Baa2	9.0	BBB	9.0
BWX Technologies	Ba3	13.0	BB	12.0
CACI Int'l	N/A	--	BB+	11.0
Casey's Gen'l Stores	N/A	--	N/A	--
Chemed Corp.	WR	--	NR	--
Check Point Software	N/A	--	N/A	--
C.H. Robinson	Baa2	9.0	BBB+	8.0
Cencora	Baa2	9.0	BBB+	8.0
CSG Systems Int'l	N/A	--	BB+	11.0
CSW Industrials	N/A	--	N/A	--
Casella Waste Sys.	N/A	--	BB	12.0
Quest Diagnostics	Baa2	9.0	BBB+	8.0
Fastenal Co.	N/A	--	N/A	--
Heartland Express	N/A	--	N/A	--
J&J Snack Foods	N/A	--	N/A	--
Henry (Jack) & Assoc	N/A	--	N/A	--
McKesson Corp.	A3	7.0	BBB+	8.0
McCormick & Co.	Baa2	9.0	BBB	9.0
NewMarket Corp.	Baa2	9.0	BBB+	8.0
Northrop Grumman	Baa1	8.0	BBB+	8.0
Oracle Corp.	Baa2	9.0	BBB	9.0
Prestige Consumer	N/A	--	BB	12.0
Pfizer, Inc.	A2	6.0	A	6.0
Progressive Corp.	A2	6.0	A	6.0
RLI Corp.	WR	--	BBB	9.0
Stepan Company	N/A	--	N/A	--
Selective Ins. Group	Baa2	9.0	BBB	9.0
United Parcel Serv.	A2	6.0	A	6.0
Universal Corp.	WR	--	BBB-	10.0
Werner Enterprises	N/A	--	N/A	--
Watsco, Inc.	N/A	--	N/A	--
Average	Baa1	8.2	BBB	8.6

Notes on page 6 of this Exhibit.

Limestone Water Utility Operating Company, LLC
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Thirty-Nine Non-Price Regulated Companies and Proxy Group of Forty-Two Non-Price Regulated Companies

Proxy Group of Forty-Two Non-Price Regulated Companies	Moody's Long-Term Issuer Rating April 2024		Standard & Poor's Long-Term Issuer Rating April 2024	
	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
AbbVie Inc.	A3	7.0	A-	7.0
Abbott Labs.	Aa3	4.0	AA-	4.0
Assurant Inc.	Baa2	9.0	BBB	9.0
Akamai Technologies	N/A	--	BBB+	8.0
Smith (A.O.)	N/A	--	N/A	--
Booz Allen Hamilton	N/A	--	N/A	--
Balchem Corp.	N/A	--	N/A	--
Becton, Dickinson	Baa2	9.0	BBB	9.0
BWX Technologies	Ba3	13.0	BB	12.0
CACI Int'l	N/A	--	BB+	11.0
Casey's Gen'l Stores	N/A	--	N/A	--
Chemed Corp.	WR	--	NR	--
Check Point Software	N/A	--	N/A	--
Cencora	Baa2	9.0	BBB+	8.0
CSG Systems Int'l	N/A	--	BB+	11.0
CSW Industrials	N/A	--	N/A	--
CVS Health	Baa2	9.0	BBB	9.0
Casella Waste Sys.	N/A	--	BB	12.0
Quest Diagnostics	Baa2	9.0	BBB+	8.0
Danaher Corp.	A3	7.0	A-	7.0
Fastenal Co.	N/A	--	N/A	--
Franklin Electric	N/A	--	N/A	--
Alphabet Inc.	Aa2	3.0	AA+	2.0
J&J Snack Foods	N/A	--	N/A	--
Henry (Jack) & Assoc	N/A	--	N/A	--
L3Harris Technologie	Baa2	9.0	BBB	9.0
McKesson Corp.	A3	7.0	BBB+	8.0
McCormick & Co.	Baa2	9.0	BBB	9.0
NewMarket Corp.	Baa2	9.0	BBB+	8.0
Oracle Corp.	Baa2	9.0	BBB	9.0
OSI Systems	N/A	--	N/A	--
Prestige Consumer	N/A	--	BB	12.0
Pfizer, Inc.	A2	6.0	A	6.0
RLI Corp.	WR	--	BBB	9.0
Stepan Company	N/A	--	N/A	--
Selective Ins. Group	Baa2	9.0	BBB	9.0
UniFirst Corp.	N/A	--	N/A	--
United Parcel Serv.	A2	6.0	A	6.0
Universal Corp.	WR	--	BBB-	10.0
Werner Enterprises	N/A	--	N/A	--
Watsco, Inc.	N/A	--	N/A	--
Western Union	Baa2	9.0	BBB	9.0
Average	<u>Baa1</u>	<u>8.0</u>	<u>BBB / BBB+</u>	<u>8.5</u>

Notes:

(1) From page 4 of Exhibit DWD-5.

Source of Information:

Bloomberg Professional Services.

Limestone Water Utility Operating Company, LLC
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
Two Groups of Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Five Water Companies and Proxy Group of Nine Water Companies

<u>Line No.</u>	<u>Equity Risk Premium Measure</u>	<u>Proxy Group of Thirty-Nine Non- Price Regulated Companies</u>	<u>Proxy Group of Forty-Two Non- Price Regulated Companies</u>
1.	Kroll Equity Risk Premium (1)	5.96 %	5.96 %
2.	Regression on Kroll Risk Premium Data (2)	7.03	7.03
3.	Kroll Equity Risk Premium based on PRPM (3)	8.23	8.23
4.	Equity Risk Premium Based on Value Line Summary and Index (4)	7.22	7.22
5.	Equity Risk Premium Based on Bloomberg, Value Line, and S&P Global Market Intelligence S&P 500 Companies (5)	<u>9.81</u>	<u>9.81</u>
6.	Conclusion of Equity Risk Premium	7.65 %	7.65 %
7.	Adjusted Beta (6)	<u>0.80</u>	<u>0.84</u>
8.	Forecasted Equity Risk Premium	<u><u>6.12</u></u> %	<u><u>6.43</u></u> %

Notes:

- (1) From note 1 of page 6 of Exhibit DWD-5.
- (2) From note 2 of page 6 of Exhibit DWD-5.
- (3) From note 3 of page 6 of Exhibit DWD-5.
- (4) From note 4 of page 6 of Exhibit DWD-5.
- (5) From note 5 of page 6 of Exhibit DWD-5.
- (6) Average of mean and median beta from pages 8 and 9 of this Exhibit.

Sources of Information:

Stocks, Bonds, Bills, and Inflation - 2023 SBBI Yearbook, Kroll.
Value Line Summary and Index.
Blue Chip Financial Forecasts, December 1, 2023 and May 1, 2024
Bloomberg Professional Services.

Limestone Water Utility Operating Company, LLC
Traditional CAPM and ECAPM Results for the Proxy Groups of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Five Water Companies and Proxy Group of Nine Water Companies

Proxy Group of Thirty-Nine Non-Price Regulated Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Thirty-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)
AbbVie Inc.	0.85	0.57	0.71	8.58 %	4.31 %	10.40 %	11.03 %	10.71 %
Abbott Labs.	0.90	0.79	0.85	8.58	4.31	11.60	11.93	11.77
Assurant Inc.	0.90	0.78	0.84	8.58	4.31	11.52	11.86	11.69
Akamai Technologies	0.75	1.05	0.90	8.58	4.31	12.03	12.25	12.14
Smith (A.O.)	0.90	1.03	0.97	8.58	4.31	12.63	12.70	12.67
Booz Allen Hamilton	0.85	0.88	0.86	8.58	4.31	11.69	11.99	11.84
Baxter Int'l Inc.	0.70	0.87	0.79	8.58	4.31	11.09	11.54	11.31
Balchem Corp.	0.75	0.99	0.87	8.58	4.31	11.78	12.06	11.92
Becton, Dickinson	0.75	0.77	0.76	8.58	4.31	10.83	11.35	11.09
BWX Technologies	0.80	0.82	0.81	8.58	4.31	11.26	11.67	11.47
CACI Int'l	0.90	0.83	0.87	8.58	4.31	11.78	12.06	11.92
Casey's Gen'l Stores	0.90	0.72	0.81	8.58	4.31	11.26	11.67	11.47
Chemed Corp.	0.75	0.54	0.65	8.58	4.31	9.89	10.64	10.26
Check Point Software	0.75	0.71	0.73	8.58	4.31	10.57	11.15	10.86
C.H. Robinson	0.70	0.81	0.76	8.58	4.31	10.83	11.35	11.09
Cencora	0.80	0.66	0.73	8.58	4.31	10.57	11.15	10.86
CSG Systems Int'l	0.75	0.91	0.83	8.58	4.31	11.43	11.80	11.62
CSW Industrials	0.85	0.84	0.85	8.58	4.31	11.60	11.93	11.77
Casella Waste Sys.	0.85	0.81	0.83	8.58	4.31	11.43	11.80	11.62
Quest Diagnostics	0.75	0.69	0.72	8.58	4.31	10.49	11.09	10.79
Fastenal Co.	0.90	0.98	0.94	8.58	4.31	12.38	12.51	12.44
Heartland Express	0.75	0.89	0.82	8.58	4.31	11.35	11.73	11.54
J&J Snack Foods	0.90	0.54	0.72	8.58	4.31	10.49	11.09	10.79
Henry (Jack) & Assoc	0.85	0.86	0.85	8.58	4.31	11.60	11.93	11.77
McKesson Corp.	0.85	0.55	0.70	8.58	4.31	10.32	10.96	10.64
McCormick & Co.	0.80	0.77	0.78	8.58	4.31	11.00	11.48	11.24
NewMarket Corp.	0.75	0.67	0.71	8.58	4.31	10.40	11.03	10.71
Northrop Grumman	0.75	0.62	0.68	8.58	4.31	10.15	10.83	10.49
Oracle Corp.	0.85	1.02	0.94	8.58	4.31	12.38	12.51	12.44
Prestige Consumer	0.85	0.68	0.76	8.58	4.31	10.83	11.35	11.09
Pfizer, Inc.	0.80	0.67	0.74	8.58	4.31	10.66	11.22	10.94
Progressive Corp.	0.70	0.64	0.67	8.58	4.31	10.06	10.77	10.41
RLI Corp.	0.80	0.67	0.74	8.58	4.31	10.66	11.22	10.94
Stapan Company	0.80	0.90	0.85	8.58	4.31	11.60	11.93	11.77
Selective Ins. Group	0.85	0.56	0.71	8.58	4.31	10.40	11.03	10.71
United Parcel Serv.	0.80	0.99	0.89	8.58	4.31	11.95	12.18	12.07
Universal Corp.	0.80	0.67	0.73	8.58	4.31	10.57	11.15	10.86
Werner Enterprises	0.75	0.83	0.79	8.58	4.31	11.09	11.54	11.31
Watsco, Inc.	0.85	1.17	1.01	8.58	4.31	12.98	12.96	12.97 (4)
Mean			0.80			11.17 %	11.60 %	11.34 %
Median			0.79			11.09 %	11.54 %	11.31 %
Average of Mean and Median			0.80			11.13 %	11.57 %	11.33 %

Notes on page 9 of this Exhibit.

Limestone Water Utility Operating Company, LLC
Traditional CAPM and ECAPM Results for the Proxy Groups of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Five Water Companies and Proxy Group of Nine Water Companies

Proxy Group of Forty-Two Non-Price Regulated Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Forty-Two 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 (4)
AbbVie Inc.	0.85	0.57	0.71	8.58 %	4.31 %	10.40 %	11.03 %	10.71 %
Abbott Labs.	0.90	0.79	0.85	8.58	4.31	11.60	11.93	11.77
Assurant Inc.	0.90	0.78	0.84	8.58	4.31	11.52	11.86	11.69
Akamai Technologies	0.75	1.05	0.90	8.58	4.31	12.03	12.25	12.14
Smith (A.O.)	0.90	1.03	0.97	8.58	4.31	12.63	12.70	12.67
Booz Allen Hamilton	0.85	0.88	0.86	8.58	4.31	11.69	11.99	11.84
Balchem Corp.	0.75	0.99	0.87	8.58	4.31	11.78	12.06	11.92
Becton, Dickinson	0.75	0.77	0.76	8.58	4.31	10.83	11.35	11.09
BWX Technologies	0.80	0.82	0.81	8.58	4.31	11.26	11.67	11.47
CACI Int'l	0.90	0.83	0.87	8.58	4.31	11.78	12.06	11.92
Casey's Gen'l Stores	0.90	0.72	0.81	8.58	4.31	11.26	11.67	11.47
Chemed Corp.	0.75	0.54	0.65	8.58	4.31	9.89	10.64	10.26
Check Point Software	0.75	0.71	0.73	8.58	4.31	10.57	11.15	10.86
Cencora	0.80	0.66	0.73	8.58	4.31	10.57	11.15	10.86
CSG Systems Int'l	0.75	0.91	0.83	8.58	4.31	11.43	11.80	11.62
CSW Industrials	0.85	0.84	0.85	8.58	4.31	11.60	11.93	11.77
CVS Health	0.90	0.64	0.77	8.58	4.31	10.92	11.41	11.16
Casella Waste Sys.	0.85	0.81	0.83	8.58	4.31	11.43	11.80	11.62
Quest Diagnostics	0.75	0.69	0.72	8.58	4.31	10.49	11.09	10.79
Danaher Corp.	0.90	1.01	0.96	8.58	4.31	12.55	12.63	12.59
Fastenal Co.	0.90	0.98	0.94	8.58	4.31	12.38	12.51	12.44
Franklin Electric	0.90	0.92	0.91	8.58	4.31	12.12	12.31	12.22
Alphabet Inc.	0.90	1.12	1.01	8.58	4.31	12.98	12.96	12.97 (4)
J&J Snack Foods	0.90	0.54	0.72	8.58	4.31	10.49	11.09	10.79
Henry (Jack) & Assoc	0.85	0.86	0.85	8.58	4.31	11.60	11.93	11.77
L3Harris Technologie	0.90	0.90	0.90	8.58	4.31	12.03	12.25	12.14
McKesson Corp.	0.85	0.55	0.70	8.58	4.31	10.32	10.96	10.64
McCormick & Co.	0.80	0.77	0.78	8.58	4.31	11.00	11.48	11.24
NewMarket Corp.	0.75	0.67	0.71	8.58	4.31	10.40	11.03	10.71
Oracle Corp.	0.85	1.02	0.94	8.58	4.31	12.38	12.51	12.44
OSI Systems	0.90	0.95	0.92	8.58	4.31	12.21	12.38	12.29
Prestige Consumer	0.85	0.68	0.76	8.58	4.31	10.83	11.35	11.09
Pfizer, Inc.	0.80	0.67	0.74	8.58	4.31	10.66	11.22	10.94
RLJ Corp.	0.80	0.67	0.74	8.58	4.31	10.66	11.22	10.94
Stepan Company	0.80	0.90	0.85	8.58	4.31	11.60	11.93	11.77
Selective Ins. Group	0.85	0.56	0.71	8.58	4.31	10.40	11.03	10.71
UniFirst Corp.	0.90	0.82	0.86	8.58	4.31	11.69	11.99	11.84
United Parcel Serv.	0.80	0.99	0.89	8.58	4.31	11.95	12.18	12.07
Universal Corp.	0.80	0.67	0.73	8.58	4.31	10.57	11.15	10.86
Werner Enterprises	0.75	0.83	0.79	8.58	4.31	11.09	11.54	11.31
Watsco, Inc.	0.85	1.17	1.01	8.58	4.31	12.98	12.96	12.97 (4)
Western Union	0.85	0.90	0.88	8.58	4.31	11.86	12.12	11.99
Mean			0.83			11.39 %	11.77 %	11.51 %
Median			0.84			11.48 %	11.83 %	11.62 %
Average of Mean and Median			0.84			11.44 %	11.80 %	11.57 %

Notes:

- (1) From note 1 of page 2 of Exhibit DWD-6.
- (2) From note 2 of page 2 of Exhibit DWD-6.
- (3) Average of CAPM and ECAPM cost rates.
- (4) Results were excluded from the final average and median as they were more than two standard deviations from the proxy group's mean.

Limestone Water Utility Operating Company, LLC
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 April 30, 2024 (1) (millions)		Applicable Decile of the NYSE/AMEX/NASDAQ (2)		Applicable Size Premium (3)		Spread from Applicable Size Premium (4)	
1.	Limestone Water Utility Operating Company, LLC		10		4.70%			
2.	Proxy Group of Five Water Companies		6		1.21%		3.49%	
3.	Limestone Water Utility Operating Company, LLC		10		4.70%			
4.	Proxy Group of Nine Water Companies		7		1.39%		3.31%	

	[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 pages 2 and 3 of this Exhibit.
- (2) Gleaned from Columns [B] and [C] on the bottom of this page. The appropriate decile (Column [A]) corresponds to the market capitalization of the proxy group, which is found in Column [1].
- (3) Corresponding risk premium to the decile is provided in Column [D] on the bottom of this page.
- (4) Line No. 1 Column [3] - Line No. 2 Column [3]. For example, the 3.49% in Column [4], Line No. 2 is derived as follows 3.49% = 4.7% - 1.21%.

Limestone Water Utility Operating Company, LLC
Market Capitalization of Limestone Water Utility Operating Company, LLC and the
Proxy Group of Five Water Companies and Proxy Group of Nine Water Companies

Company	Exchange	[1] Common Stock Shares Outstanding at Fiscal Year End 2023 (millions)	[2] Book Value per Share at Fiscal Year End 2023 (1)	[3] Total Common Equity at Fiscal Year End 2023 (millions)	[4] Closing Stock Market Price on April 30, 2024	[5] Market-to-Book Ratio on April 30, 2024 (2)	[6] Market Capitalization on April 30, 2024 (3) (millions)
Limestone Water Utility Operating Company, LLC		NA	NA	1,865 (4)	NA		
Based upon Proxy Group of Five Water Companies					213.7 (5)	\$	3,986 (6)
Proxy Group of Five Water Companies							
American States Water Company	NYSE	36,981	\$ 20,987	776,109	\$ 70,840	337.5 %	\$ 2,619,707
American Water Works Company, Inc.	NYSE	200,145	48,950	9,797,000	122,320	249.9	24,481,732
California Water Service Group	NYSE	57,724	24,778	1,430,312	49,120	198.2	2,835,403
Middlesex Water Company	NASDAQ	17,821	23,736	422,991	50,720	213.7	903,881
SJW Group	NYSE	32,023	38,516	1,233,397	54,450	141.4	1,743,653
Median		36,981	\$ 24,778	\$ 1,233,397	\$ 54,450	213.7 %	\$ 2,619,707

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 Limestone Water Utility Operating Company, LLC on April 30, 2024 is assumed to be equal to the market-to-book ratio of the Proxy Group of Five Water Companies on April 30, 2024 as appropriate.

(6) Column [3] multiplied by Column [5].

Source of Information: 2023 Annual Forms 10K
yahoo.finance.com
Bloomberg Professional

Limestone Water Utility Operating Company, LLC
Market Capitalization of Limestone Water Utility Operating Company, LLC and the
Proxy Group of Five Water Companies and Proxy Group of Nine Water Companies

Company	Exchange	[1] Common Stock Shares Outstanding at Fiscal Year End 2023 (millions)	[2] Book Value per Share at Fiscal Year End 2023 (1)	[3] Total Common Equity at Fiscal Year End 2023 (millions)	[4] Closing Stock Market Price on April 30, 2024	[5] Market-to-Book Ratio on April 30, 2024 (2)	[6] Market Capitalization on April 30, 2024 (3) (millions)
Limestone Water Utility Operating Company, LLC		NA	NA	1,865 (4)	NA		
Based upon Proxy Group of Nine Water Companies					213.7	(5)	\$ 3,986 (6)
<u>Proxy Group of Nine Water Companies</u>							
American States Water Company	NYSE	36,981	\$ 20,987	776,109	\$ 70,840	337.5 %	\$ 2,619,707
American Water Works Company, Inc.	NYSE	200,145	48,950	9,797,000	122,320	249.9	24,481,732
Artesian Resources Corporation	NASDAQ	10,022	22,989	230,397	34,980	152.2	350,570
California Water Service Group	NYSE	57,724	24,778	1,430,312	49,120	198.2	2,835,403
Essential Utilities Inc.	NYSE	276,595	21,317	5,896,183	36,580	171.6	10,117,853
Global Water Resources, Inc.	NASDAQ	24,493	1,985	48,620	12,240	616.6	299,793
Middlesex Water Company	NASDAQ	17,821	23,736	422,991	50,720	213.7	903,881
SIW Group	NYSE	32,023	38,516	1,233,397	54,450	141.4	1,743,653
The York Water Company	NASDAQ	14,332	15,432	221,178	35,510	230.1	508,938
Median		32,023	\$ 22,989	\$ 776,109	\$ 49,120	213.7 %	\$ 1,743,653

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.

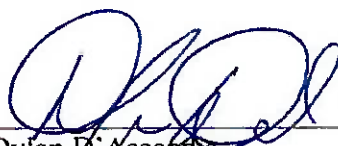
(5) The market-to-book ratio of Limestone Water Utility Operating Company, LLC on April 30, 2024 is assumed to be equal to the market-to-book ratio of the Proxy Group of Nine Water Companies on April 30, 2024 as appropriate.

(6) Column [3] multiplied by Column [5].

Source of Information: 2023 Annual Forms 10K
yahoo.finance.com
Bloomberg Professional

VERIFICATION

I, Dylan D'Ascendis, Partner with ScottMadden, Inc., verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that Direct Testimony is true and accurate to the best of my knowledge, information, and belief after a reasonable inquiry on this 9th day of July, 2024.

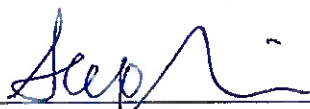


Dylan D'Ascendis
Partner - ScottMadden, Inc.

STATE OF NEW JERSEY)

COUNTY OF BURLINGTON)

SUBSCRIBED AND SWORN TO before me on this the 9th day of July, 2024.



Notary Public, State of

My Commission Expires 06/07/2027



CERTIFICATE OF SERVICE

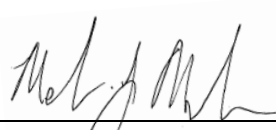
I hereby certify that a true and correct copy of the foregoing was served via U.S. Mail or electronic mail upon:

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This the 14th day of February 2025.



Melvin J. Malone