

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2026 Cost of Capital
Application: A.25-03-XXX
Exhibit No.: SDG&E-03

PREPARED DIRECT TESTIMONY OF
JOSHUA C. NOWAK
RETURN ON EQUITY
ON BEHALF OF
SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



March 20, 2025

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**PREPARED DIRECT TESTIMONY OF
JOSHUA C. NOWAK
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**

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I. INTRODUCTION

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Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

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A. My name is Joshua C. Nowak. I am employed by Concentric Energy Advisors, Inc. (“Concentric”) as a Vice President. Concentric is a management consulting and economic advisory firm, focused on the North American energy and water industries. Based in Marlborough, Massachusetts, and Washington, D.C., Concentric specializes in regulatory and litigation support, financial advisory services, energy market strategies, market assessments, energy commodity contracting and procurement, economic feasibility studies, and capital market analyses. My business address is 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts 01752.

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Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

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A. I am submitting this testimony to the California Public Utilities Commission (“CPUC” or the “Commission”) on behalf of San Diego Gas & Electric Company (“SDG&E” or the “Company”), which is a wholly-owned subsidiary of Sempra.

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Q. PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND UTILITY INDUSTRIES AND YOUR EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS.

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A. I hold a Bachelor’s degree in Economics from Boston College, and have more than 15 years of experience in providing economic, financial, and strategic advisory services. As a consultant, I primarily advise clients in regulated utility industries and have provided testimony regarding financial matters before

1 multiple regulatory agencies. I have advised numerous energy and utility clients
2 on a wide range of financial and economic issues with primary concentrations in
3 valuation and utility rate matters. Many of these assignments have included the
4 determination of the cost of capital for valuation and ratemaking purposes. I have
5 provided testimony before the California Public Utilities Commission and Federal
6 Energy Regulatory Commission (“FERC”), as well as state and provincial
7 jurisdictions in the U.S. and Canada. Prior to joining Concentric in 2018, I was
8 employed by National Grid USA, where I was responsible for regulatory filings
9 related to the cost of capital across the company’s multiple U.S. operating
10 companies and service territories. A summary of my professional and educational
11 background is presented in Exhibit JCN-1.

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

13 A. The purpose of my direct testimony is to present evidence and provide a
14 recommendation for the return on equity (“ROE”) for SDG&E, including by
15 considering SDG&E’s risk profile relative to other utilities. My direct testimony
16 also discusses the Company’s capital structure in comparison to the proxy group
17 of companies supporting my analysis.

18 **Q. ARE YOU SPONSORING ANY EXHIBITS IN THIS PROCEEDING?**

19 A. Yes. My analyses and recommendations are supported by the data presented in
20 Exhibits JCN-2 through JCN-10, which have been prepared by me or under my
21 direction. I sponsor the following exhibits:

- 22 • JCN-2 – Comprehensive Summary of ROE Results
- 23 • JCN-3 – Proxy Group Screening Analysis
- 24 • JCN-4 – Constant Growth Discounted Cash Flow (“DCF”) Analysis

- 1 • JCN-5 – Market Risk Premium (“MRP”)
- 2 • JCN-6 – Capital Asset Pricing Model (“CAPM”) Analysis
- 3 • JCN-7 – Bond Yield Plus Risk Premium Analysis
- 4 • JCN-8 – Expected Earnings Analysis
- 5 • JCN-9 – Regulatory Framework Comparison
- 6 • JCN-10 – Capital Structure Analysis

7 **II. SUMMARY OF TESTIMONY**

8 **Q. WHAT IS YOUR CONCLUSION REGARDING THE APPROPRIATE**
9 **COST OF EQUITY AND CAPITAL STRUCTURE FOR SDG&E?**

10 A. I have estimated SDG&E’s ROE based on the results of the DCF model, the
11 CAPM, and the Bond Yield Plus Risk Premium (“Risk Premium”) model and the
12 general economic and capital market environment and the influence such
13 conditions exert over the results. In addition, to assess the reasonableness of the
14 DCF, CAPM, and Risk Premium results and evaluate the available returns for
15 alternative investments, I considered the Expected Earnings analysis; however, I
16 did not include the results from the Expected Earnings analysis to reach a
17 conclusion on a just and reasonable ROE range. In addition, I analyzed the
18 Company’s business and regulatory risk profile in determining where the
19 Company’s cost of equity falls within the range of analytical results. A summary
20 of the results of my analyses are shown below in Figure 1.

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FIGURE 1: SUMMARY OF RESULTS

	Low Mean	Mean	High Mean
<i>Primary Analyses</i>			
DCF Result	10.26%	10.30%	10.35%
CAPM Result	11.44%	12.15%	12.84%
Risk Premium	10.35%	10.47%	10.55%
Average		10.97%	
<i>Benchmark Analysis</i>			
Expected Earnings	11.27%		

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The DCF, CAPM, and Risk Premium analysis produce a range of estimates of the Company's cost of equity of 10.26 percent to 12.84 percent. Based on these analyses, I consider an ROE range of 10.50 percent to 11.50 percent to be reasonable. From within that range, and considering the Company's risk profile, I recommend an ROE of 11.25 percent, which is above the midpoint of the range of reasonableness. As to the capital structure, SDG&E's requested capital structure of 54.00 percent equity and 46.00 percent debt is reasonable relative to the range of capital structures for the operating companies held by the proxy group companies.

As a practical matter, the current yield on the 30-year Treasury is 4.73 percent, and not anticipated to fall below 4.30 percent over the next five years.¹

This is considerably higher than the prior decade when interest rates reached

¹ Blue Chip Financial Forecasts, Vol. 43, No. 12, November 27, 2024, at 14.

1 historical lows. Interest rates were last in a similar range in 2010 (the average
2 yield on the 30-year Treasury was 4.25 percent in 2010) when SDG&E was
3 authorized an ROE of 11.10 percent.² At that time, the risks associated with
4 wildfire liabilities were not as prevalent to investors and SDG&E possessed a
5 higher credit rating. As such, my recommended ROE of 11.25 percent is
6 reasonably consistent with the Commission's authorized ROEs when the cost of
7 capital was last observed at similar levels.

8 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT**
9 **YOU CONDUCTED TO SUPPORT YOUR ROE RECOMMENDATION.**

10 A. As mentioned, my ROE recommendation is based on the range of results
11 produced from the above-identified modeling methodologies. Analysts and
12 academics understand that ROE models are tools to be used in the ROE
13 estimation process, and that strict adherence to any single approach, or the
14 specific results of any single approach, can lead to flawed conclusions. No model
15 can exactly pinpoint the correct cost of equity, but each is designed to provide a
16 unique estimate of the return required to attract equity investment. Therefore, my
17 analysis considers the range of results produced by these different models. The
18 DCF analysis estimates the cost of equity based on market data on dividend yields
19 and analysts' projected earnings per share growth rates from reputable third-party
20 sources. The CAPM analysis is based on both current and forecasted interest rates
21 and a forward-looking market risk premium. The Risk Premium approach
22 calculates the risk premium as the spread between authorized ROEs for electric

² Decision ("D.") 07-12-049.

1 utilities and Treasury bond yields. My ROE recommendation is ultimately based
2 on the range of results produced by these methodologies.

3 My recommendation also considers the general economic and capital
4 market environment, and the influence capital market conditions exert over the
5 results of the DCF, CAPM and Risk Premium models. In addition, I consider the
6 Company's business and regulatory risks in relation to a set of proxy companies
7 to assist in the determination of the appropriate ROE and capital structure from
8 within the range of my analytical results.

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

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

- 12 • Section III provides background on the regulatory principles that guide the
13 determination of ROE.
- 14 • Section IIV presents a review of current and prospective economic and capital
15 market conditions and the implications on the cost of capital for utilities.
- 16 • Section V describes the criteria and approach for the selection of a proxy group
17 of comparable companies.
- 18 • Section VI provides a description of the data and methodologies used to
19 estimate the cost of equity, as well as the results of the various ROE estimation
20 models and concludes with my recommendation and an assessment of its
21 reasonableness under the *Hope* test.
- 22 • Section VII discusses SDG&E's business and financial risks relative to the
23 proxy group.

- Section VIII reviews SDG&E’s capital structure in the context of the proxy group.
- Finally, Section IX summarizes my results, conclusions, and recommendation.

III. REGULATORY PRINCIPLES

Q. PLEASE DESCRIBE THE GUIDING PRINCIPLES USED IN ESTABLISHING THE COST OF CAPITAL FOR A REGULATED UTILITY.

A. The foundations of public utility regulation require that utilities receive a fair rate of return sufficient to attract needed capital to maintain important infrastructure for customers at reasonable rates. The basic tenets of this regulatory doctrine originate from several bellwether decisions by the United States Supreme Court, notably *Bluefield Waterworks and Improvement Company v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923) (*Bluefield*), and *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1944) (*Hope*).

In *Bluefield*, the Court stated:

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

The return should be reasonably sufficient to assure investor confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

Later, in *Hope*, the Court established a standard for the ROE that remains the guiding principle for ratemaking in regulatory proceedings to this day:

[T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding

1 risks. That return, moreover, should be sufficient to assure
2 confidence in the financial integrity of the enterprise, so as to
3 maintain its credit and to attract capital.

4 **Q. HAS THE COMMISSION PROVIDED SIMILAR GUIDANCE?**

5 A. Yes, the Commission applies these same legal standards in setting the cost of
6 capital for utilities under its jurisdiction. In doing so, the Commission
7 summarizes:

8 We attempt to set the ROE at a level of return commensurate with
9 market returns on investments having corresponding risks, and
10 adequate to enable a utility to attract investors to finance the
11 replacement and expansion of a utility's facilities to fulfill its
12 public utility service obligation. To accomplish this objective, we
13 have consistently evaluated analytical financial models as a
14 starting point to arrive at a fair ROE.³

15 The Commission recently added that the “legal standard for setting the fair rate of
16 return has been established by the United States Supreme Court in the *Bluefield*
17 and *Hope* cases.”⁴ The “issue of affordability as it relates to the cost of capital is
18 subsumed under the *Hope* and *Bluefield* standards.”⁵ And “[c]onsiderations of
19 affordability beyond the *Hope* and *Bluefield* standards risk undermining them.”⁶

20 **Q. PLEASE EXPLAIN HOW THESE PRINCIPLES APPLY IN THE**
21 **CONTEXT OF THE REGULATED RATE OF RETURN.**

22 A. Regulated utilities rely primarily on common stock and long-term debt to finance
23 property, plant, and equipment. The allowed rate of return for a regulated utility is
24 based on its weighted average cost of capital, where the costs of the individual

³ D.22-12-031 at 15; D.19-12-056 at 16; *see generally* D.18-03-035 at 6.

⁴ D.24-10-008 at 30 (citations omitted).

⁵ *Id.*

⁶ *Id.*

1 sources of capital (*i.e.*, debt and equity) are weighted by their respective book
2 values. The ROE represents the cost of raising and retaining equity capital and is
3 estimated by using one or more analytical techniques that use market data to
4 quantify investor requirements for equity returns. However, the ROE cannot be
5 derived through quantitative metrics and models alone. To properly estimate the
6 ROE, the financial, regulatory, and economic context must also be considered.

7 The DCF, CAPM, and Risk Premium approaches, while fundamental to
8 the ROE determination, are still only models. The results of these models cannot
9 be mechanistically applied without also using informed judgment to consider
10 economic and capital market conditions and the relative risk of SDG&E
11 compared to the proxy group companies.

12 Based on these widely recognized standards, the Commission's order in
13 this case should provide SDG&E with the opportunity to earn a return on equity
14 that is:

- 15 • Adequate to allow the Company to attract the capital that is necessary to
16 provide safe and reliable service (the "capital attraction standard");
- 17 • Sufficient to ensure the Company's ability to maintain its financial
18 integrity (the "financial integrity standard"); and
- 19 • At a level that is comparable to returns required on investments of similar
20 risk (the "comparability standard").

21 Importantly, a fair return must satisfy all three of these standards. The
22 allowed ROE should enable the Company to finance capital expenditures on
23 reasonable terms and provide it with the ability to raise capital under a full range
24 of capital market circumstances to serve its customers.

1 **Q. IS SDG&E'S ABILITY TO ATTRACT EQUITY CAPITAL AFFECTED**
2 **BY ROES THAT ARE AUTHORIZED FOR OTHER UTILITIES?**

3 A. Yes, it is. SDG&E competes with other investments of similar risk for equity
4 capital from the market. In addition, SDG&E competes with other investments
5 within Sempra for equity capital from its parent company. Therefore, the ROE
6 awarded to a utility sends an important signal to investors regarding whether there
7 is regulatory support for financial integrity, dividends, growth, and fair
8 compensation for business and financial risk. A company's cost of equity is
9 defined by, and equal to, the opportunity cost of investing in that company. In
10 other words, if higher returns are available from other investments of comparable
11 risk, investors have an incentive to direct their capital to those investments. This
12 means that an authorized ROE for SDG&E that is below ROEs authorized for
13 other utilities could inhibit its ability to attract capital on reasonable terms for
14 investments to be made on behalf of customers in California.

15 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING REGULATORY**
16 **PRINCIPLES?**

17 A. The ratemaking process is premised on the principle that, in order for investors
18 and companies to commit the capital needed to provide safe and reliable utility
19 services, the utility must have the opportunity to recover invested capital and the
20 market-required return on that capital. Because utility operations are capital
21 intensive, regulatory decisions should enable the utility to attract capital on
22 favorable terms. The financial community carefully monitors the current and
23 expected financial condition of utility companies as well as the regulatory
24 environment in which they operate. In that respect, the regulatory environment is
25 one of the most important factors considered by both debt and equity investors in

1 their assessments of risk. It is therefore essential that the ROE authorized in this
2 proceeding take into consideration the current and expected capital market
3 conditions that SDG&E faces, as well as investors' expectations and requirements
4 regarding both risks and returns. A reasonable ROE is required both for continued
5 capital investment by the Company and to maintain confidence in California's
6 regulatory environment among credit rating agencies and investors.

7 **IV. ECONOMIC AND CAPITAL MARKET CONDITIONS**

8 **Q. WHY IS IT IMPORTANT TO CONSIDER THE EFFECTS OF CURRENT**
9 **AND EXPECTED ECONOMIC AND FINANCIAL MARKET**
10 **CONDITIONS WHEN SETTING THE APPROPRIATE ROE?**

11 A. It is important to consider current and expected conditions in the general economy
12 and financial markets because the authorized ROE for a public utility should
13 allow the utility to attract investor capital at a reasonable cost under current and
14 foreseeable economic and financial conditions as underscored by the *Hope* and
15 *Bluefield* decisions. The standard ROE estimation tools, such as the DCF, CAPM,
16 and Risk Premium approaches, each reflect the state of the general economy and
17 financial markets by incorporating specific economic and financial data. These
18 inputs are, however, only samples of the various economic and market forces that
19 determine a utility's required return. Consideration must also be given to whether
20 the assumptions relied on in the current or projected market data are appropriate.
21 If investors do not expect current market conditions to continue in the future, it is
22 possible that the ROE estimation models will not provide an accurate estimate of
23 investors' forward-looking required return. Therefore, an assessment of current
24 and projected market conditions is integral to any ROE recommendation.

1 **Q. WHAT ARE THE KEY FACTORS AFFECTING THE COST OF EQUITY**
2 **FOR REGULATED UTILITIES IN THE CURRENT AND PROSPECTIVE**
3 **CAPITAL MARKETS?**

4 A. The cost of equity for regulated utility companies is being affected by several key
5 factors in the current and prospective capital markets including the uncertainty
6 regarding the economy, the impacts of the Federal Reserve’s approach to interest
7 rates and inflation, concerns over the ongoing elevated interest rates, and the
8 resulting utility performance, which has lagged the broader market. In this
9 section, I discuss these factors and how they affect the models used to estimate
10 the cost of equity for regulated utilities.

11 **Q. HOW DO THE NATION’S MONETARY POLICY ACTIONS IMPACT**
12 **CAPITAL MARKETS AND THE U.S. ECONOMY?**

13 A. The Federal Reserve is responsible for “[c]onducting the nation’s monetary policy
14 by influencing money and credit conditions in the economy in pursuit of full
15 employment and stable prices.”⁷ The Federal Reserve implements monetary
16 policy through raising or lowering the federal funds overnight rate, which impacts
17 other interest rates and, in turn, the demand for goods and services. This, in turn,
18 impacts employment and inflation. Monetary policy has shifted dramatically over
19 the past several years in response first to COVID-19, and then to record high
20 inflation. The capital markets are significantly affected by the Federal Reserve’s
21 policy. While the primary monetary policy tool used by the Federal Reserve is the
22 short-term interest rate for overnight interbank loans, it has far-reaching
23 consequences for capital markets and significantly influences long-term interest

⁷ Federal Reserve, “The Fed - What is the purpose of the Federal Reserve System?”
(November 3, 2016) available at https://www.federalreserve.gov/faqs/about_12594.htm.

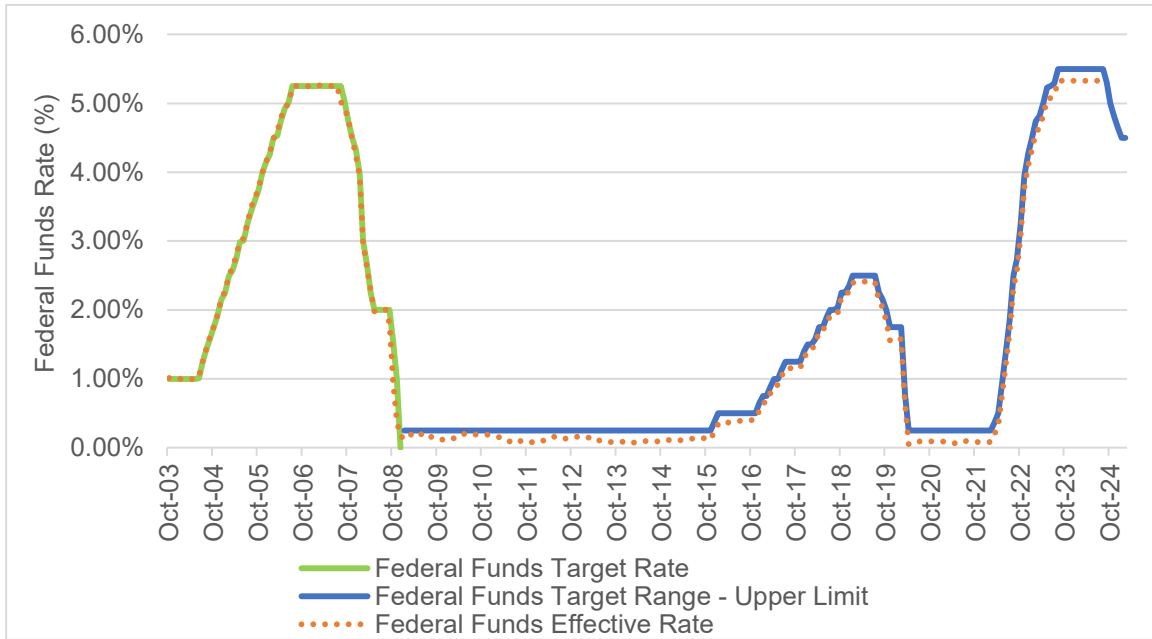
1 rates and the cost of equity. As discussed in more detail below, current Federal
2 Reserve policy continues to be focused on inflationary concerns. But it is
3 important to note, even if inflation moderates, the current monetary policy stance
4 is likely to have a long-lasting effect on capital market conditions.

5 **Q. WHAT STEPS DID THE FEDERAL RESERVE TAKE TO STABILIZE**
6 **FINANCIAL MARKETS AND SUPPORT THE ECONOMY IN**
7 **RESPONSE TO COVID-19?**

8 A. Beginning in 2022, inflation surged to levels not seen since the late-1970s and
9 early-1980s. The Federal Reserve had little choice but to aggressively battle
10 inflation through raising interest rates. Previously, in response to the economic
11 effects of COVID-19, the Federal Reserve decreased the federal funds rate in
12 March 2020 to a target range of 0.00 percent to 0.25 percent (which remained in
13 effect until March 2022) in addition to other stimulus measures that increased the
14 supply of money in the economy. The Federal Reserve began unwinding its
15 quantitative easing program in 2022 and increased the target rate 11 times,
16 achieving a target rate of 5.25 percent to 5.50 percent by July 2023. It remained at
17 that level through August 2024 (the highest level in the prior 20 years). As shown
18 in Figure 2 below, the Federal Reserve only began reducing the federal funds rate,
19 first by 50 basis points in September 2024, and then by 25 basis points at
20 subsequent meetings on November 7, 2024 and December 18, 2024. This resulted
21 in a current federal funds target rate (*i.e.*, the overnight lending rate set by the
22 Federal Open Market Committee (“FOMC”) at which commercial banks borrow
23 and lend their excess reserves to each other) of 4.25 percent to 4.50 percent.

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FIGURE 2: FOMC FEDERAL FUNDS RATES



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Despite the recent rate reduction, the Federal Reserve indicated that inflation

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remains a key consideration for the Committee:

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Recent indicators suggest that economic activity has continued to expand at a solid pace. The unemployment rate has stabilized at a low level in recent months, and labor market conditions remain solid. Inflation remains somewhat elevated.

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The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. The Committee judges that the risks to achieving its employment and inflation goals are roughly in balance. The economic outlook is uncertain, and the Committee is attentive to the risks to both sides of its dual mandate.

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In support of its goals, the Committee decided to maintain the target range for the federal funds rate at 4-1/4 to 4-1/2 percent. In considering the extent and timing of additional adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks. The Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities. The Committee is strongly committed to supporting maximum employment and returning inflation to its 2 percent objective.

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1 In assessing the appropriate stance of monetary policy, the
2 Committee will continue to monitor the implications of incoming
3 information for the economic outlook. The Committee would be
4 prepared to adjust the stance of monetary policy as appropriate if
5 risks emerge that could impede the attainment of the Committee's
6 goals. The Committee's assessments will take into account a wide
7 range of information, including readings on labor market
8 conditions, inflation pressures and inflation expectations, and
9 financial and international developments.⁸

10 Although year-over-year inflation rates have eased over the last several
11 months—increasing just 2.80 percent from February 2024 to February 2025,
12 down from the high of 9.10 percent in June 2022 as measured by the Consumer
13 Price Index (“CPI”)—the Federal Reserve also affirmed that inflation “remains
14 somewhat elevated.”⁹ And the Federal Reserve has chosen to leave the federal
15 funds rate at its current level so far in 2025.

16 **Q. HOW HAVE CAPITAL MARKETS RESPONDED?**

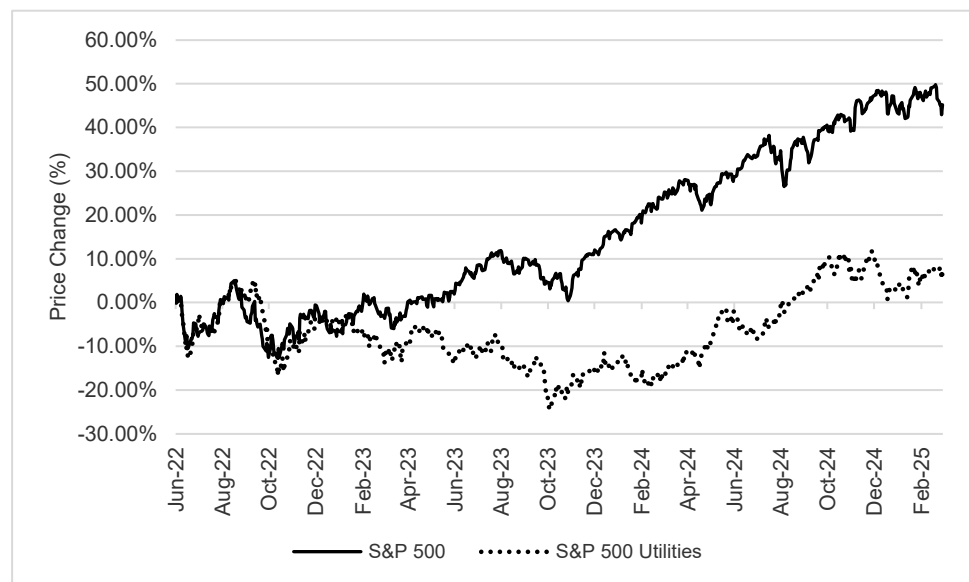
17 A. In response to monetary policy, record high inflation, and disappointing earnings
18 reports, capital markets over the past several years have been volatile. While the
19 S&P 500 closed at record highs on the first trading day of 2022, by mid-June, the
20 S&P 500 was down more than 21 percent. The S&P 500 has steadily gained
21 ground since that time, gaining 24 percent in 2023. However, the utility sector has
22 fared far worse. Since June 2022 at the peak of inflation, while the S&P 500
23 Index increased more than 45 percent through February 2025, the S&P Utilities

⁸ FOMC Press Release (January 29, 2025). Available here:
<https://www.federalreserve.gov/monetarypolicy/files/monetary20250129a1.pdf>.

⁹ FOMC Press Release (January 29, 2025). Available here:
<https://www.federalreserve.gov/monetarypolicy/files/monetary20250129a1.pdf>; Bureau of
Labor Statistics, Graphics for Economic News Releases, available at
[https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category-line-
chart.htm](https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category-line-chart.htm).

1 Index has increased by less than 10 percent on a price change basis, as shown in
2 Figure 3. This suggests a more difficult environment for raising capital for
3 utilities as compared to the broader market, which indicates upward pressure in
4 the cost of equity capital for utilities. That is, a lower performing stock price
5 indicates investors require a higher relative return for an equity investment.

6 **FIGURE 3: S&P 500 AND S&P 500 UTILITIES INDICES PERFORMANCE**
7 **(6/1/2022 TO 2/28/2025)**

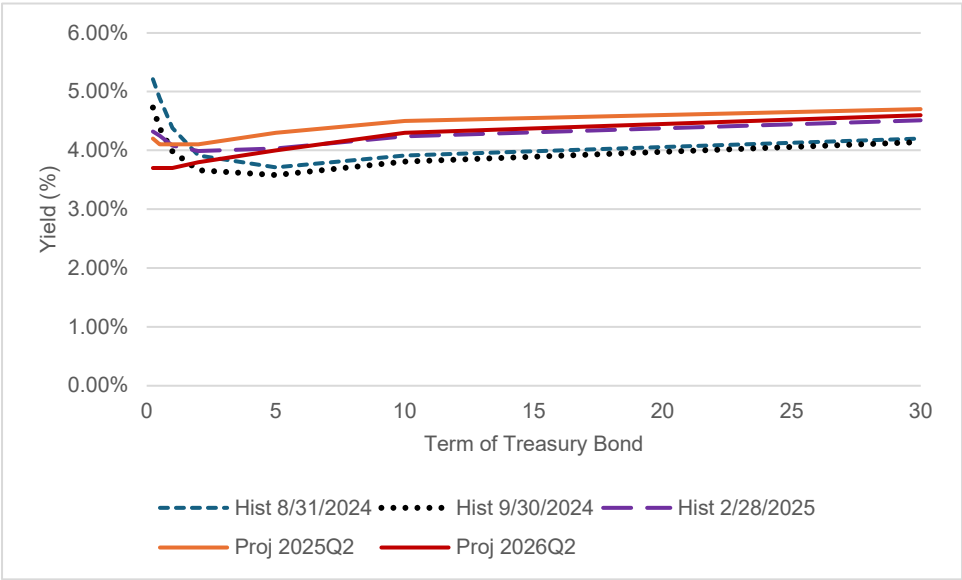


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9 **Q. WHAT ARE EXPECTATIONS FOR LONG-TERM INTEREST RATES?**

10 A. Despite the 100-basis-point reduction on the federal funds rate in recent months,
11 long-term interest rates are not expected to change much in the coming years.
12 That is, the change in the federal funds rate is primarily having an effect on short-
13 term interest rates. As shown in Figure 4 below, the yield curve is currently
14 inverted with short-term interest rates higher than long-term interest rates.
15 However, this is not expected to persist beyond 2025 as investors expect short-
16 term rates to continue to decline, while long-term rates remain at current levels.
17 Figure 4 below includes the yield as of August 31, 2024 (before the recent

1 reductions in the federal funds rate), September 30, 2024, and February 28, 2025
2 for 3-month, 6-month, 1-year, 2-year, 5-year, 10-year, and 30-year treasury
3 securities. In addition, projections from Blue Chip Financial Forecasts
4 demonstrate that the expectation for continued reductions in the federal funds rate
5 will cause near-term yields to decline over the next year while long-term rates are
6 expected to remain near current levels.

7 **FIGURE 4: CURRENT AND PROJECTED INTEREST RATES**



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9 **Q. PLEASE EXPLAIN WHY THESE ELEVATED INTEREST RATES ARE**
10 **IMPORTANT TO THE ROE ANALYSIS.**

11 A. Utility stocks generally compete more closely with returns on long-term bonds
12 rather than short-term bonds because stocks and long-term bonds, like equity
13 investments, are long-duration assets. In general, as interest rates on government
14 bonds increase, the cost of capital also must increase, as utilities—competing with
15 interest rates on government bonds—must offer higher dividend yields to attract
16 and retain investors. As dividend yields increase, however, the stock price
17 declines (and, therefore, the cost of equity increases). The reason for this is that

1 the stock price inherently reflects a company's future cash flows, thus, future
2 dividends are factored into the share price. After an ex-dividend date (i.e., the date
3 on which a dividend is paid), the share price often declines to reflect the dividend
4 paid (i.e., distributing a proportion of profits to shareholders). As interest rates
5 remain elevated, utilities must continue to pay high dividends to keep investors,
6 which suggests that the stock price of these companies would decline (and the
7 cost of equity increase) in response to interest rates. To reflect this correlation in
8 ROE models, all else being equal, higher dividend yields produce higher ROE
9 estimates in DCF models. Interest rates also are a direct input to both the CAPM
10 and the Risk Premium models.

11 **Q. HOW MIGHT THE RECENT CHANGE IN PRESIDENTIAL**
12 **ADMINISTRATION AFFECT INFLATION AND BOND YIELDS?**

13 A. On February 1, 2025, President Trump issued an executive order implementing a
14 25 percent additional tariff on imports from Canada and Mexico, and a 10 percent
15 additional tariff on imports from China. Further, on February 13, President Trump
16 signed a memorandum calling for a reciprocal tariff plan to match the rates that
17 other countries have imposed on US exports. While there were some preliminary
18 delays, several tariffs on Canada, Mexico, and China went into place on March 4,
19 and several additional tariffs have gone into effect, or have been proposed.

20 Although the effect of these tariffs on the economy is uncertain,
21 economists generally agree that higher tariffs increase inflation by increasing the
22 cost of consumer goods. Higher inflation could complicate the Federal Reserve's
23 unwinding of restrictive monetary policies, as well as increase long-term bond
24 yields like the 30-year Treasury yield. Longer-term bonds are more sensitive to

1 inflation expectations because their value is eroded more by inflation; thus, as the
2 value (price) of bonds declines due to higher inflation expectations, the yield
3 increases. Because utilities are capital intensive enterprises, higher inflation and
4 interest rates tend to have a negative effect on utility stocks. If realized, all these
5 factors would suggest that the cost of capital for utilities may increase in the
6 future.

7 **Q. HAVE YOU FACTORED THESE CIRCUMSTANCES INTO YOUR COST**
8 **OF EQUITY ESTIMATES FOR SDG&E, AND, IF SO, WHAT**
9 **CONCLUSIONS DO YOU DRAW?**

10 A. Yes. I have relied on the most recent market data and forecasts available to me in
11 my analysis and ROE recommendations. Long-term interest rates have increased
12 substantially since the historical lows of 2020 and are expected to remain elevated
13 as the Federal Reserve continues to focus on inflation and employment. As
14 interest rates increase, the cost of capital generally increases.

15 Interest rates are direct inputs to the CAPM and risk premium analyses
16 and indirectly affect the DCF models, as increasing interest rates influence
17 increases in dividend yields (and decreases in utility stock prices, which suggest
18 an increase in the cost of equity). As a practical matter, investors consider a range
19 of opportunities, which includes bonds. With the sustained elevated interest rates,
20 utilities are less attractive absent a corresponding increase in returns. In other
21 words, if investors can get a higher return from lower risk bonds due to higher
22 interest rates (since bondholder investments are protected in bankruptcy while
23 shareholder investments are not), then equity returns must also be
24 correspondingly higher, or investors will invest in bonds. With the Federal
25 Reserve's expectation for elevated interest rates for an extended period of time,

1 this will continue to put upward pressure on the cost of capital for utilities.

2 Therefore, it is important that these factors are accounted for in the cost of equity
3 models.

4 **Q. WHAT IS YOUR CONCLUSION REGARDING HOW MARKET**
5 **CONDITIONS AFFECT THE COST OF EQUITY FOR UTILITIES SUCH**
6 **AS SDG&E?**

7 The current capital market conditions continue to be heavily influenced by
8 monetary policy aimed at mitigating inflationary pressures. This has caused both
9 short-term and long-term interest rates to remain high. As a practical matter,
10 investors consider a range of opportunities, which includes bonds. With the
11 sustained elevated interest rates, utilities are less attractive absent a corresponding
12 increase in returns. While consensus expectations are for long-term inflation to
13 continue to moderate and near-term interest rates to decline, long-term interest
14 rates are expected to remain at an elevated level, relative to rates seen in recent
15 years. As such, there is no indication that the cost of equity for utility companies
16 will decline as inflation moderates and near-term interest rates decline. Therefore,
17 it is important that these factors are accounted for in the cost of equity models.

18 These circumstances collectively reinforce the importance of using multiple
19 models, as I have with the CAPM, DCF, and Risk Premium approaches.

V. PROXY GROUP SELECTION

20 **Q. WHY IS IT NECESSARY TO SELECT A PROXY GROUP TO**
21 **ESTIMATE THE COST OF EQUITY FOR SDG&E?**

22 A. Since the ROE is a market-based concept and SDG&E is not publicly traded, it is
23 necessary to establish a group of companies that is both publicly traded and
24 comparable to SDG&E. Even if SDG&E were a publicly traded entity, it is

1 possible that transitory events could bias the Company's market value in one way
2 or another in a given period of time. A significant benefit of using a proxy group
3 is the ability to mitigate the effects of short-term events that may be associated
4 with any one company. The proxy companies used in my ROE analyses possess a
5 set of business and operating characteristics similar to SDG&E's electric and gas
6 utility operations, and thus provide a reasonable basis for estimating the
7 Company's ROE.

8 **Q. PLEASE PROVIDE A SUMMARY PROFILE OF SDG&E.**

9 A. SDG&E is a wholly owned subsidiary of Sempra, providing electric services to a
10 population of approximately 3.6 million and natural gas services to a population
11 of approximately 3.3 million. In addition, SDG&E owns and operates four natural
12 gas-fired power plants, three of which are in California and one of which is in
13 Nevada.¹⁰ SDG&E has long-term issuer ratings from S&P of BBB+ (Outlook:
14 Stable), Moody's Investors Service ("Moody's") of A3 (Outlook: Stable), and
15 FitchRatings ("Fitch") of BBB+ (Outlook: Stable).¹¹

16 **Q. PLEASE DESCRIBE THE SPECIFIC SCREENING CRITERIA YOU**
17 **HAVE UTILIZED TO SELECT A PROXY GROUP.**

18 A. I began with the 36 investor-owned domestic electric utilities covered by Value
19 Line and then screened companies according to the following criteria:

- 20 1. Consistently pays quarterly cash dividends;

¹⁰ Sempra, 2024 SEC Form 10-K (February 25, 2025) at 13-15, available at <https://investor.sempra.com/static-files/b0e6f794-b5d0-428f-aa4a-a56c912e6edd>.

¹¹ *Id.* at 84.

- 1 2. Maintains an investment grade long-term issuer rating (BBB- or higher)
- 2 from S&P;
- 3 3. Is covered by more than one equity analyst;
- 4 4. Has positive earnings growth rates published by at least two of the
- 5 following sources: Value Line, S&P Capital IQ, and Zacks Investment
- 6 Research (Zacks);
- 7 5. Regulated net operating income makes up more than 80 percent of the
- 8 consolidated company's net operating income (based on a 3-year average
- 9 from 2021-2023);
- 10 6. Is not involved in a merger or other transformative transaction.

11 **Q. DID YOU INCLUDE SEMPRA IN YOUR ANALYSIS?**

12 A. No, I did not. To avoid the circular logic that would otherwise occur, it is my
13 practice to exclude the subject company, or its parent holding company, from the
14 proxy group.

15 **Q. WHAT IS THE COMPOSITION OF YOUR RESULTING PROXY**
16 **GROUP?**

17 A. Based on the screening criteria discussed above, and financial information
18 through fiscal year 2023, I arrived at a proxy group consisting of the 26
19 companies shown in Figure 5. The results of my screening process are shown in
20 Exhibit JCN-3.

1

FIGURE 5: PROXY GROUP

Company	Ticker
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Avista Corporation	AVA
Black Hills Corporation	BKH
CMS Energy Corporation	CMS
Consolidated Edison, Inc.	ED
DTE Energy Company	DTE
Duke Energy Corporation	DUK
Edison International	EIX
Entergy Corporation	ETR
Exelon Corporation	EXC
Evergy, Inc.	EVRG
FirstEnergy Corporation	FE
IDACORP, Inc.	IDA
NextEra Energy, Inc.	NEE
NorthWestern Corporation	NWE
OGE Energy Corporation	OGE
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
PPL Corporation	PPL
Public Service Enterprise Group Inc.	PEG
Southern Company	SO
TXNM Energy, Inc.	TXNM
Wisconsin Energy Corporation	WEC
Xcel Energy Inc.	XEL

2

3

4

5

Q. DOES YOUR SCREENING CRITERIA RESULT IN A GROUP OF COMPANIES THAT INVESTORS WOULD VIEW AS COMPARABLE TO SDG&E?

6

A. Yes. While no proxy group will be identical in risk as the Company, I believe this group of electric and combination electric/gas utilities is reasonably comparable

7

1 to the financial and operational characteristics of SDG&E. The proxy group
2 screening criterion requiring an investment grade credit rating ensures that the
3 proxy group companies, like SDG&E, are in sound financial condition. Because
4 credit ratings take into account business and financial risks, the ratings provide a
5 broad measure of investment risk for investors. Additionally, I have screened on
6 the percent of net operating income from regulated operations to differentiate
7 between utilities that are protected by regulation and those with substantial
8 unregulated operations or market-related risks since this proceeding is limited to
9 determining the appropriate ROE for the stand-alone electric and natural gas
10 utility operations of SDG&E. These screens collectively reflect key risk factors
11 that investors consider in making investments in utilities. The results of each
12 screening criterion on each potential proxy company are presented in Exhibit
13 JCN-3.

14 **Q. WHAT IS YOUR CONCLUSION WITH REGARD TO THE PROXY**
15 **GROUP FOR SDG&E?**

16 A. I conclude that my group of 26 electric and combination utilities adequately
17 reflects the broad set of risks that investors consider when investing in a U.S.
18 regulated electric and natural gas utility such as SDG&E.

19 **VI. DETERMINATION OF THE APPROPRIATE COST OF EQUITY**

20 **Q. WHAT MODELS DID YOU USE IN YOUR ROE ANALYSES?**

21 A. I have considered the results of several ROE estimation models, including the
22 Constant Growth DCF model, the CAPM, the Bond Yield Plus Risk Premium
23 approach. When faced with the task of estimating the cost of equity, analysts are

1 inclined to gather and evaluate as much relevant data (both quantitative and
2 qualitative) as can be reasonably obtained.

3 **A. Constant Growth DCF Model**

4 **Q. PLEASE DESCRIBE THE DCF APPROACH.**

5 A. The DCF approach is based on the theory that a stock's current price represents
6 the present value of all expected future cash flows, which for purposes of the
7 model, are assumed to be equal to all expected future dividends. Thus, the return
8 required by investors is implied by the per share price of a company's common
9 stock. In its most general form, the DCF model is expressed as follows:

10
$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

11 Where P_0 represents the current stock price, $D_1 \dots D_\infty$ are all expected
12 future dividends, and k is the discount rate, or required ROE. Equation [1] is a
13 standard present value calculation, which can be simplified and rearranged, to the
14 Constant Growth form of the DCF model, expressed as the sum of the expected
15 dividend yield and long-term growth rate:

16
$$k = \frac{D(1+g)}{P_0} + g \quad [2]$$

17 Where "k" equals the required return, "D" is the current dividend, "g" is
18 the expected growth rate, and " P_0 " represents the current stock price. Stated in
19 this manner, the cost of common equity is equal to the expected dividend yield
20 plus the dividend growth rate.

1 **Q. WHAT ARE THE ASSUMPTIONS UNDERLYING THE CONSTANT**
2 **GROWTH DCF MODEL?**

3 A. The Constant Growth DCF model is based on the following assumptions: (1) a
4 constant average growth rate for earnings and dividends; (2) a stable dividend
5 payout ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate
6 greater than the expected growth rate.

7 **Q. PLEASE SUMMARIZE YOUR APPLICATION OF THE CONSTANT**
8 **GROWTH DCF MODEL.**

9 A. I calculated DCF results for each of the proxy group companies using the
10 following inputs:
11 • Average stock prices for the historical period, over 30, 90, and 180 trading
12 days through February 28, 2025;
13 • Annualized dividend per share as of February 28, 2025; and
14 • Company-specific earnings growth forecasts for the term g .

15 My application of the Constant Growth DCF model is provided in Exhibit
16 JCN-4.

17 **Q. WHY DID YOU USE AVERAGING PERIODS OF 30, 90, AND 180**
18 **TRADING DAYS?**

19 A. It is important to use an average of recent trading days to calculate the term P in
20 the DCF model to ensure that the calculated ROE is not skewed by anomalous
21 events that may affect stock prices on any given trading day. At the same time, it
22 is important to reflect the conditions that have defined the financial markets over
23 the recent past. In my view, consideration of those three averaging periods
24 reasonably balances these interests.

1 **Q. DID YOU ADJUST THE DIVIDEND YIELD TO ACCOUNT FOR**
2 **PERIODIC GROWTH IN DIVIDENDS?**

3 A. Yes, I did. Utility companies tend to increase their quarterly dividends at different
4 times throughout the year, so it is reasonable to assume that such increases will be
5 evenly distributed over calendar quarters. Given that assumption, it is reasonable
6 to apply one-half of the expected annual dividend growth rate for the purposes of
7 calculating this component of the DCF model. This adjustment ensures that the
8 expected dividend yield is representative of the coming 12-month period.
9 Accordingly, the DCF estimates reflect one-half of the expected growth in the
10 dividend yield.¹²

11 **Q. WHAT SOURCES OF GROWTH HAVE YOU USED IN YOUR DCF**
12 **ANALYSIS?**

13 A. I have used the consensus analyst five-year growth estimates in earnings per share
14 (EPS) from First Call and Zacks, as well as EPS growth rate estimates published
15 by Value Line.

16 **Q. WHY DID YOU FOCUS ON EPS GROWTH?**

17 A. The Constant Growth DCF model assumes that dividends grow at a constant rate
18 in perpetuity. Accordingly, in order to reduce the long-term growth rate to a
19 single measure, one must assume a constant payout ratio, and that earnings per
20 share, dividends per share, and book value per share all grow at the same constant
21 rate. Over the long term, however, dividend growth can only be sustained by
22 earnings growth. As noted by Brigham and Houston in their text, *Fundamentals of*
23 *Financial Management*: “Growth in dividends occurs primarily as a result of

¹² The expected dividend yield is calculated as $d_1 = d_0(1 + \frac{1}{2}g)$.

1 growth in *earnings per share* (EPS).”¹³ It is therefore important to focus on
2 measures of long-term earnings growth from credible sources as an appropriate
3 measure of long-term growth in the DCF model.

4 **Q. ARE OTHER SOURCES OF DIVIDEND GROWTH AVAILABLE TO**
5 **INVESTORS?**

6 A. Yes, although that does not mean that investors incorporate such estimates into
7 their investment decisions. Academic studies suggest that investors base their
8 investment decisions on analysts’ expectations of growth in earnings.¹⁴ I am not
9 aware of any similar findings regarding non-earnings-based growth estimates. In
10 addition, the only forward-looking growth rates that are available on a consensus
11 basis are analysts’ EPS growth rates. The fact that earnings growth projections are
12 the only widely accepted estimates of growth provides further support that
13 earnings growth is the most meaningful measure of growth among the investment
14 community.

15 **Q. WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF**
16 **ANALYSIS?**

17 A. The results of my Constant Growth DCF analysis are provided in Exhibit JCN-4
18 and summarized in Figure 6.

¹³ Eugene F. Brigham and Joel F. Houston, Fundamentals of Financial Management (Concise Fourth Edition, Thomson South-Western), at 317 (emphasis added).

¹⁴ See, e.g., Harris and Marston, *Estimating Shareholder Risk Premia Using Analysts Growth Forecasts*, Financial Management, Summer 1992, at 65; and Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988, at 81. Please note that while the original study was published in 1988, it was updated in 2004 under the direction of Dr. Vander Weide. The results of that updated study are consistent with Vander Weide and Carleton’s original conclusions.

1

FIGURE 6: CONSTANT GROWTH DCF RESULTS

	Mean Low	Mean	Mean High
30-day average	9.32%	10.29%	11.18%
90-day average	9.29%	10.26%	11.15%
180-day average	9.38%	10.35%	11.24%

2

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Q. HOW DID YOU CALCULATE THE MEAN HIGH, MEAN LOW, AND OVERALL MEAN DCF RESULTS?

5

6

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A. I calculated the Mean High DCF result using the maximum growth rate (i.e., the maximum of the First Call, Value Line, and Zacks EPS growth rates) in combination with the expected dividend yield for each of the proxy group companies. I used a similar method to calculate the Mean Low DCF results, using the minimum growth rate for each company. The Mean results reflect the average growth rate from each source for each company in combination with the expected dividend yield.

12

B. CAPM Analysis

13

14

Q. PLEASE BRIEFLY DESCRIBE THE GENERAL FORM OF THE CAPITAL ASSET PRICING MODEL.

15

16

17

18

19

A. The CAPM is a risk premium approach that estimates the cost of equity for a given security as a function of a risk-free return plus a risk premium (to compensate investors for the non-diversifiable or “systematic” risk of that security).¹⁵ As shown in Equation [3], the CAPM is defined by four components, each of which must theoretically be a forward-looking estimate:

¹⁵ Systematic risks are fundamental market risks that reflect aggregate economic measures and therefore cannot be mitigated through diversification. Unsystematic risks reflect company-

1
$$K_e = r_f + \beta(r_m - r_f) \quad [3]$$

2 Where:

3 K_e = the required ROE for a given security;

4 r_f = the risk-free rate of return;

5 β = the Beta of an individual security; and

6 r_m = the required return for the market as a whole.

7 The term $(r_m - r_f)$ represents the Market Risk Premium (MRP). According
8 to the theory underlying the CAPM, since unsystematic risk can be diversified
9 away, investors should be concerned only with systematic or non-diversifiable
10 risk. Non-diversifiable risk is measured by Beta, which is defined as:

11
$$\beta = \frac{\text{Covariance}(r_e, r_m)}{\text{Variance}(r_m)} \quad [4]$$

12 Where:

13 r_e = the rate of return for the individual security or portfolio.

14 The variance of the market return, noted in Equation [4], is a measure of
15 the uncertainty of the general market, and the covariance between the return on a
16 specific security and the market reflects the extent to which the return on that
17 security will respond to a given change in the market return. Thus, Beta represents
18 the risk that the selected security will not be effective in diversifying systematic
19 market risks.

specific risks that can be mitigated and ultimately eliminated through investments in a portfolio of companies and/or market sectors.

1 **Q. HAVE ECONOMIC AND FINANCIAL MARKET CONDITIONS ALSO**
2 **AFFECTED THE CAPM?**

3 A. Yes. As the Federal Reserve reduces federal funds rate, it is important to consider
4 both current and projected bond yields. Using the 5-year forecast of bond yields
5 helps alleviate short-term market factors affecting the risk-free rate, or “*r_f*” in the
6 CAPM formula. As discussed in Section IV, interest rates continue to remain
7 elevated. It is also important to recognize that SDG&E is financing long-lived
8 assets, and the cost of capital should be forward looking to reflect that
9 perspective.

10 **Q. WHAT RISK-FREE RATE DID YOU USE IN YOUR CAPM ANALYSIS?**

11 A. I considered three estimates of the expected risk-free rate: (1) the current 30-day
12 average yield on 30-year U.S. Treasury bonds (*i.e.*, 4.73 percent);¹⁶ (2) the
13 projected 30-year U.S. Treasury bond yield for Q2 2025 through Q2 2026 (*i.e.*,
14 4.64 percent);¹⁷ and (3) the projected 30-year U.S. Treasury bond yield for 2026
15 through 2030 (*i.e.*, 4.30 percent).¹⁸

16 **Q. WHAT MEASURES OF BETA DID YOU USE IN YOUR CAPM**
17 **ANALYSIS?**

18 A. As shown in Exhibit JCN-6, I utilized two measures of Beta for the proxy group
19 companies: (1) the reported Beta coefficients from Bloomberg (which are
20 calculated using ten years of weekly data against the S&P 500 Index); and (2) the

¹⁶ Bloomberg Professional, as of October 31, 2024.

¹⁷ Blue Chip Financial Forecasts, Vol. 44, No. 3, February 28, 2025, at 2.

¹⁸ Blue Chip Financial Forecasts, Vol. 43, No. 12, November 27, 2024, at 14.

1 reported Beta coefficients from Value Line (which are calculated using five years
2 of weekly data against the New York Stock Exchange Composite Index).

3 **Q. WHAT MARKET RISK PREMIUM DID YOU USE IN YOUR CAPM**
4 **ANALYSIS?**

5 A. Consistent with the approach adopted by FERC,¹⁹ I used the Constant Growth
6 DCF model to estimate the market capitalization-weighted total market return for
7 the S&P 500 Index, using projected earnings growth rates and dividend yields. As
8 shown in Exhibit JCN-5, to calculate the Constant Growth DCF estimate for each
9 company in the S&P 500, I relied on dividend yields as of February 28, as
10 reported by Bloomberg Professional, and projected EPS growth rates from Value
11 Line. In my initial analysis, I included all companies in the S&P 500. When
12 investors purchase the S&P 500 Index or a mutual fund or exchange traded fund
13 that mirrors the S&P Index, their total return is based on the returns for all 500
14 companies in the S&P Index. As such, this methodology provides the best
15 indication as to the expected return for the overall market using the S&P 500 as a
16 proxy. Applying this methodology suggests an expected market return of 15.16
17 percent. However, I applied FERC's more conservative convention to consider
18 only a subset of S&P 500 companies with growth rates that are between 0 percent
19 and 20 percent. This methodology suggests an expected market return of 11.54
20 percent.

¹⁹ See, e.g., *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569-A, 171 FERC ¶ 61,154 (2020) ("Opinion No. 569-A").

1 **Q. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSES?**

2 A. The results of my CAPM analysis are provided in Exhibit JCN-6 and summarized
3 in Figure 7.

4 **FIGURE 7: PROXY GROUP AVERAGE CAPM RESULTS**

	CAPM Result
<i>Value Line Beta Coefficients</i>	
Current Risk-Free Rate	12.84%
2025-26 Projected Risk-Free Rate	12.84%
2026-30 Projected Risk-Free Rate	12.82%
<i>Bloomberg Beta Coefficients</i>	
Current Risk-Free Rate	11.53%
2025-26 Projected Risk-Free Rate	11.52%
2026-30 Projected Risk-Free Rate	11.44%

5 **C. Risk Premium Analysis**

6 **Q. PLEASE DESCRIBE THE RISK PREMIUM APPROACH THAT YOU**
7 **USED.**

8 A. In general terms, this approach recognizes that equity is riskier than debt because
9 equity investors bear the residual risk associated with ownership. Equity
10 investors, therefore, require a greater return (*i.e.*, a premium) than would a
11 bondholder. The Risk Premium approach estimates the cost of equity as the sum
12 of the Equity Risk Premium and the yield on a particular class of bonds.

13
$$ROE = RP + Y \quad [5]$$

14 Where:

15 RP = Risk Premium (difference between allowed ROE and the 30-Year
16 Treasury Yield); and
17 Y = Applicable bond yield.

1 Since the equity risk premium is not directly observable, it is typically
2 estimated using a variety of approaches, some of which incorporate *ex-ante*, or
3 forward-looking, estimates of the cost of equity and others that consider
4 historical, or *ex-post*, estimates. For my Risk Premium analysis, I have relied on
5 authorized returns from a large sample of electric utility companies.

6 **Q. WHAT DID YOUR RISK PREMIUM ANALYSIS REVEAL?**

7 A. To estimate the relationship between risk premia and interest rates, I conducted a
8 regression analysis using the following equation:

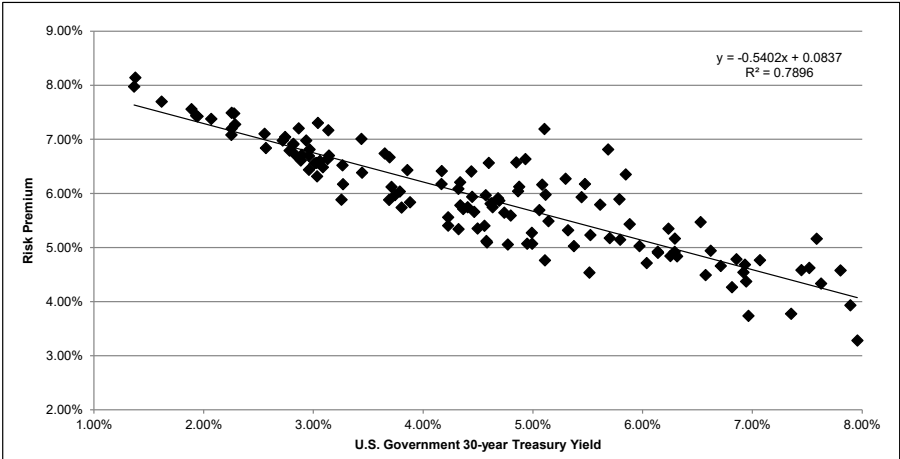
9 $RP = a + (b \times Y)$ [6]

10 where:

- 11 RP = Risk Premium (difference between allowed ROEs and the 30-Year Treasury Yield);
- 12 a = Intercept term;
- 13 b = Slope term; and
- 14 Y = 30-Year Treasury Yield.

15
16 Data regarding allowed ROEs were derived from electric utility company
17 rate cases from January 1, 1992, through February 28, 2025, as reported by
18 Regulatory Research Associates.

19 **FIGURE 8: RISK PREMIUM RESULTS**



As illustrated by Figure 8 (above), the risk premium varies with the level of bond yield, and generally increases as the bond yields decrease, and vice versa. In order to apply this relationship to current and expected bond yields, I consider three estimates of the 30-year Treasury yield, including the current 30-day average, a near-term Blue Chip consensus forecast for Q2 2025 – Q2 2026, and a Blue Chip consensus forecast for 2026–2030. Based on the regression coefficients in Exhibit JCN-7, which allow for the estimation of the risk premium at varying bond yields, the results of my Risk Premium analysis are shown in Figure 9 below.

FIGURE 9: RISK PREMIUM RESULTS USING 30-YEAR TREASURY YIELD

	30-Day Average Yield on 30-Year Treasury Bond	Q2 2025–Q2 2026 Forecast for Yield on 30-Year Treasury Bond²⁰	2026-2030 Forecast for Yield 30-Year Treasury Bond²¹
Yield	4.73%	4.64%	4.30%
Risk Premium	5.82%	5.86%	6.05%
Resulting ROE	10.55%	10.50%	10.35%

D. Expected Earning Analysis

Q. HAVE YOU CONDUCTED ANY OTHER ANALYSIS TO ESTIMATE THE COST OF EQUITY FOR SDG&E?

A. Yes. Although I did not rely upon the results to help inform a just and reasonable range, I have also conducted an Expected Earnings analysis to estimate the cost of equity for SDG&E based on the projected ROEs for the proxy group companies.

²⁰ Blue Chip Financial Forecasts, Vol. 44, No. 1, January 1, 2025, at 2.

²¹ Blue Chip Financial Forecasts, Vol. 43, No. 12, November 27, 2024, at 14.

1 **Q. WHAT IS AN EXPECTED EARNINGS ANALYSIS?**

2 A. The Expected Earnings methodology is a comparable earnings analysis that
3 calculates the earnings that an investor expects to receive on the book value of a
4 stock. The Expected Earnings analysis is a forward-looking estimate of investors'
5 expected returns. The use of an Expected Earnings approach based on the proxy
6 companies provides a range of the expected returns on a group of risk-comparable
7 companies to the subject company. This range is useful in helping to determine
8 the opportunity cost of investing in the subject company, which is relevant in
9 determining a company's ROE.

10 The Expected Earnings approach relying on expected returns for like-risk
11 companies is a core strength of the model and consistent with a basic tenet of
12 *Hope*: "the return to the equity owner should be commensurate with returns on
13 investments in other enterprises having corresponding risks."²² Since the
14 Expected Earnings model provides an accounting-based approach that relies on
15 investment analysts' projections of earnings on book equity, it affords the benefit
16 of analyst insights, knowledge, and expertise in interpreting a given company's
17 earnings prospects in the context of current market conditions.

18 **Q. HOW IS THE EXPECTED EARNINGS APPROACH CALCULATED?**

19 A. I relied on the projected ROE for the proxy companies as reported by Value Line
20 for the period from 2027-2029. I then adjusted those projected ROEs to account
21 for the fact that the ROEs reported by Value Line are calculated on the basis of
22 common shares outstanding at the end of the period, as opposed to average shares

²² *Hope*, 320 U.S. at 603.

1 outstanding over the entire period. As shown in Figure 10 below and Exhibit
2 JCN-8, the Expected Earnings analysis results in a mean of 11.27 percent and a
3 median of 10.51 percent.

4 **FIGURE 10: EXPECTED EARNINGS RESULTS**

	ROE
Proxy Group Average	11.27%
Proxy Group Median	10.51%

5
6 **Q. WHAT IS YOUR CONCLUSION REGARDING THE RESULTS OF THE**
7 **EXPECTED EARNINGS MODEL?**

8 A. The model captures investor expectations for ROEs for each company in the
9 proxy group as estimated by impartial analysts. This is a valuable tool given the
10 nature of the analysis here is designed to measure required returns for SDG&E. It
11 is reasonable to assume that investors would require returns from investment in
12 SDG&E similar to those they could earn in comparable investments, so these
13 results are informative. Nonetheless, as noted, I have not directly relied upon the
14 Expected Earnings analysis in determining my recommended range of
15 reasonableness.

16 **E. Evaluating Model Results**

17 **Q. PLEASE EXPLAIN HOW YOU CONSIDERED THE RESULTS OF THE**
18 **DCF, CAPM, RISK PREMIUM, AND EXPECTED EARNINGS ANALYSIS**
19 **TO ARRIVE AT YOUR ROE RECOMMENDATION.**

20 A. As shown in Figure 11, I have considered the results of the DCF, CAPM, and
21 Risk Premium in my primary analysis, while considering the Expected Earnings
22 as a benchmark analysis. For the DCF result, I included the average of the 30-day,
23 90-day, and 180-day analyses. For the CAPM result, I relied on the average of
24 current and projected Treasury yields, the average of Value Line and Bloomberg

1 Betas coefficients, and the MRP derived from a subset of the S&P 500
2 companies. For the Risk Premium analysis, I relied on the average of current and
3 projected Treasury yields.

4 **FIGURE 11: ROE RESULTS**

	Average	Median
<i>Primary Analyses</i>		
DCF Result	10.30%	10.22%
CAPM Result	12.15%	12.09%
Risk Premium	10.47%	10.47%
Average	10.97%	10.87%
<i>Benchmark Analyses</i>		
Expected Earnings	11.27%	10.51%

5 As discussed in the next Section of my testimony, these estimates serve as
6 a base prior to consideration of the relative business and financial risks of
7 SDG&E as compared to the proxy companies.

8 **VII. BUSINESS AND FINANCIAL RISKS**

9 **Q. ARE THERE FACTORS SPECIFIC TO SDG&E'S RISK PROFILE THAT**
10 **YOU ALSO CONSIDERED IN DEVELOPING YOUR ROE**
11 **RECOMMENDATION?**

12 A. Yes, there are several factors that have a direct bearing on SDG&E's risk profile
13 in relation to the proxy group. As discussed in the testimony of Valerie Bille as
14 well, those risk factors include: (1) the Company's exposure to Wildfire Risks; (2)
15 the Company's substantial capital expenditure program; (3) California's clean

1 energy mandates; and (4) regulatory risk relative to the proxy group companies.

2 In aggregate, those risk factors elevate SDG&E's risk profile relative to the proxy
3 group.

4 **A. California Wildfire Risks and Inverse Condemnation**

5 **Q. PLEASE DESCRIBE THE RISKS THAT THE CALIFORNIA UTILITIES**
6 **FACE DUE TO THE WILDFIRES.**

7 A. Wildfires present unique risks to the California investor-owned utilities for two
8 main reasons. First, wildfires have become more frequent and larger in magnitude
9 over time, creating more opportunities for a utility's equipment to be involved in
10 an ignition.²³ Second, each time a California utility's equipment is involved in the
11 ignition of a fire that creates economic damages, that utility may face enormous
12 uninsured, and potentially unrecoverable, liabilities.

13 Under California state law, a legal standard known as inverse
14 condemnation applies when utility equipment is a cause of a wildfire ignition.²⁴
15 This doctrine makes utilities strictly liable for liability damages caused by their
16 own facilities, regardless of negligence and other causes. These liabilities may
17 include homeowner insurance claims, uninsured property damage claims,
18 business interruptions, agricultural damages, emotional harm, personal injuries,
19 and other losses.

²³ See S&P, San Diego Gas & Electric Co. (Jun. 26, 2024) at 8 (“Environmental factors are a negative consideration in our credit rating analysis of SDG&E, reflecting above-average physical risk compared with peers because of wildfires in California, which may also experience drought-like conditions.”).

²⁴ S&P: Tear Sheet: San Diego Gas & Electric Co. Monitored Due to Risk of Material Draw on Wildfire Fund (Feb. 11, 2025) (“S&P Feb. 11, 2025”) at 1.

1 **Q. ARE THERE EXAMPLES OF SDG&E’S EXPOSURE TO WILDFIRE**
2 **DAMAGES?**

3 A. Yes, in 2007, the Witch, Guejito, and Rice fires were associated with SDG&E’s
4 equipment.²⁵ SDG&E settled \$2.4 billion of the \$4 billion in total damage claims.
5 While SDG&E was able to offset that liability with an insurance reimbursement
6 of \$1.1 billion, settlements with third parties of \$827 million, and FERC-
7 authorized recovery of \$80 million, the CPUC denied recovery of \$421 million of
8 wildfire costs incurred by SDG&E in the CPUC’s Final Decision issued
9 December 2017.²⁶ The alternative findings regarding cost recovery by FERC and
10 the CPUC over the same conduct by SDG&E has left investors with significant
11 uncertainty as to the ability for the Company to recover wildfire-related costs
12 regardless of conduct.²⁷ As noted, wildfires in California have only become more
13 destructive. As Moody’s recently stated regarding the wildfires in January 2025,
14 “the fires illustrate California’s increasing exposure to physical climate risks.”²⁸
15 S&P likewise finds that SDG&E faces “above-average physical risk compared
16 with peers because of wildfires in California.”²⁹ Placing SDG&E’s above-

²⁵ 146 FERC ¶ 63,017, at PP 21-22 (2014).

²⁶ See D.17-11-033. The total liability of SDG&E’s California-jurisdictional operations totaled \$421 million. After applying a voluntary Company contribution of 10%, or \$42 million, the net amount was \$379 million. None of these costs were deemed recoverable.

²⁷ See Moody’s Investor Services, San Diego Gas & Elec. Co. (Mar. 10, 2025) (“Moody’s March 10, 2025”) at 9 (noting that it is “important” that AB 1054 revised the state’s prudence standard for wildfire cost recovery to be in line with FERC’s because, “in the case of SDG&E’s 2007 wildfires, while the CPUC denied recovery, the FERC ruled that SDG&E acted prudently and allowed the recovery of the wildfire costs.”).

²⁸ Moody’s, LA wildfires pose biggest challenges for utilities, local governments and insurers (Jan. 17, 2025) (“Moody’s Jan. 17, 2025”) at 1.

²⁹ S&P: Feb. 11, 2025 at 4.


1 mentioned 2007 wildfire experience in perspective, according to Cal Fire data,
 2 seventeen of the State’s twenty most destructive wildfires in recorded history
 3 have occurred in the past ten years alone, including two of the top three in January
 4 2025.³⁰

5 **FIGURE 12: MOST DESTRUCTIVE CALIFORNIA WILDFIRES**

Top 20 Most Destructive California Wildfires

FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1 CAMP (Powerlines)	November 2018	Butte	153,336	18,804	85
2 EATON (Under Investigation)*	January 2025	Los Angeles	14,021	9,413	17
3 PALISADES (Under Investigation)*	January 2025	Los Angeles	23,707	6,833	12
4 TUBBS (Electrical)	October 2017	Napa & Sonoma	36,807	5,636	22
5 TUNNEL - Oakland Hills (Rekindle)	October 1991	Alameda	1,600	2,900	25
6 CEDAR (Human Related)	October 2003	San Diego	273,246	2,820	15
7 NORTH COMPLEX (Lightning)	August, 2020	Butte, Plumas, & Yuba	318,935	2,352	15
8 VALLEY (Electrical)	September 2015	Lake, Napa & Sonoma	76,067	1,955	4
9 WITCH (Powerlines)	October 2007	San Diego	197,990	1,650	2
10 WOOLSEY (Electrical)	November 2018	Ventura	96,949	1,643	3
11 CARR (Human Related)	July 2018	Shasta County, Trinity	229,651	1,614	8
12 GLASS (Undetermined)	September 2020	Napa & Sonoma	67,484	1,520	0
13 LNU LIGHTNING COMPLEX (Lightning / Arson)	August 2020	Napa, Solano, Sonoma, Yolo, Lake, & Colusa	363,220	1,491	6
14 CZU LIGHTNING COMPLEX (Lightning)	August 2020	Santa Cruz, San Mateo	86,509	1,490	1
15 NUNS (Powerline)	October 2017	Sonoma	54,382	1,355	3
16 DIXIE (Powerline)	July 2021	Butte, Plumas, Lassen, & Tehama	963,309	1,311	1
17 THOMAS (Powerline)	December 2017	Ventura & Santa Barbara	281,893	1,063	2
18 CALDOR (Under Investigation)	September 2021	Alpine, Amador, & El Dorado	221,774	1,003	1
19 OLD (Human Related)	October 2003	San Bernardino	91,281	1,003	6
20 JONES (Undetermined)	October 1999	Shasta	26,200	954	1

Structures include homes, outbuildings (barns, garages, sheds, etc) and commercial properties destroyed.
 This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, local or tribal responsibility.
 *Numbers not final *DINS Disclaimer: These numbers are preliminary based on aerial assessments dedicating heat sources which can include chicken coops,
 outbuildings, sheds, water containers, etc. *Validated inspections are currently being ground-verified by Damage Assessment Teams.



2/7/2025

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 7 These statistics underscore the overall increased wildfire risk in the state and
 8 wildfire liability concerns. That is, the increase in wildfire risks and uncertainties
 9 regarding cost recovery in light of the application of inverse condemnation strict
 10 liability, which increases the amount of fires and damages subject to recovery,
 11 have led SDG&E’s credit ratings to be reduced at least two notches by all three

³⁰ See Cal Fire, Statistics, available at <https://www.fire.ca.gov/our-impact/statistics>.

1 credit rating agencies since 2018—despite SDG&E’s equipment not being the
2 cause of any significant wildfire ignition during that time—and despite those
3 credit rating agencies repeatedly lauding SDG&E’s wildfire mitigation efforts.³¹

4 However, changes in credit rating do not fully capture the risk profile to
5 equity investors of a utility that, like SDG&E, is subject to catastrophic wildfire
6 risks. Such companies are exposed to the potential of massive losses due to
7 liabilities that may exceed the value of the utilities’ equity, representing a
8 significant downside risk that is essentially unbounded. Wildfire financial risk is
9 also entirely one-sided. While it represents an extraordinarily large downside risk,
10 there is no upside opportunity associated with this risk.

11 **Q. CAN INSURANCE PRODUCTS MITIGATE THE FINANCIAL**
12 **EXPOSURE TO THESE RISKS?**

13 A. A. Yes, to a point. However, SDG&E’s ability to purchase insurance at a
14 reasonable cost is influenced by several factors, including state policy and future
15 frequency of wildfires. Any loss that exceeds the level of insurance coverage is
16 subject to potential recovery in a regulatory process, either at the CPUC or FERC.
17 This translates into uncertainty, given that insurance providers are not required to
18 operate in California and doing so carries risk since the state has experienced
19 frequent wildfires. This contributes to SDG&E’s unmitigated financial risk.

³¹ See S&P, San Diego Gas & Electric Co. (June 26, 2024) at 4-5 (despite viewing SDG&E as a “global leader in wildfire prevention,” S&P assesses SDG&E’s business risk profile at the “lower end of our range for the excellent category” because “the threat of wildfires in its service territory [i]s high relative to that of its utility peers across North America.”); see also S&P Feb. 11, 2025 at 1 (SDG&E “has developed a 17-year track record of not causing a significant wildfire (in part due to its robust wildfire mitigation practices)”).

1 **Q. WHAT LEGISLATIVE ACTIONS HAVE BEEN TAKEN TO ADDRESS**
2 **THIS ISSUE?**

3 A. Assembly Bill 1054 (“AB 1054”) was signed into law by Governor Newsom on
4 July 12, 2019, creating a Wildfire Fund to mitigate the effects of wildfire
5 liabilities on utilities. There are three primary sources of risk reduction created by
6 the Wildfire Fund:

- 7 1. Establishing a revised prudence standard for determining whether a
8 utility’s costs and expenses arising from a covered wildfire are just and
9 reasonable;³²
- 10 2. Establishing a cap on wildfire related expenses that have been found to be
11 imprudently incurred equal to 20% of the utility’s transmission and
12 distribution rate base,³³ and
- 13 3. Creating liquidity through the creation of a Wildfire Fund that reimburses
14 utilities’ settled claims while the utility seeks cost recovery through the
15 Commission.

16 While these features currently help moderate the extraordinary risks of
17 California’s wildfire liability for utilities and their customers, significant risks
18 remain that are unique to California and borne by shareholders.

19 **Q. WHAT UNIQUE RISKS REMAIN AFTER THE PASSAGE OF AB 1054?**

20 A. There are several significant wildfire risks remaining after the enactment of AB
21 1054 that do not apply to utilities outside California, which would exclude all but
22 one of the proxy companies (Edison International) from this exposure. Principal
23 among these are the following:

- 24 • The legal standard known as inverse condemnation was unchanged by AB
25 1054. Under this doctrine, utilities remain strictly liable when their
26 equipment is the cause of a wildfire ignition, regardless of whether the
27 utility acted reasonably and showed no negligence. So even though AB

³² California Public Utilities (“Pub. Util.”) Code § 451.1.

³³ *Id.* at § 3292(h)(2)(C)(i).

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1054 may cap the utilities’ ultimate liability, this is a unique risk in California. Credit rating agencies continue to recognize this doctrine as a credit constraint,³⁴ and equity analysts continue to apply a discount to Sempra’s stock price based on inverse condemnation’s continuation.³⁵

- There is no precedent for the CPUC operating under the revised prudence standard or other regulatory aspects articulated in AB 1054. The risk reducing effect of the adoption of the “industry norm” for prudence depends on how the CPUC implements the standard for utilities operating under the Wildfire Fund. For example, if the CPUC were to adopt a view that it only takes minimal evidence to overcome the presumption of prudence and shift the burden of proof, then the risk reducing effect is minimal. The only relevant precedent of a CPUC prudence review is the Commission’s 2017 100 percent imprudence finding in SDG&E’s aforementioned application, further increasing uncertainty. Moody’s noted that it could again downgrade SDG&E’s credit rating if there is an “unsupportive application of the new prudency standard.”³⁶
- Under AB 1054, a utility’s insurance coverage is subject to a recommendation of “reasonable insurance coverage” by the Fund Administrator. If the Administrator should recommend a lower insurance level, and if adopted by the CPUC, the utility’s shareholders would be subject to greater risk.
- The imprudence liability cap, which is approximately \$950 million for SDG&E, can also be nullified by the Wildfire Fund Administrator if the Administrator concludes that the utility has acted in a manner that constitutes “conscious or willful disregard of the rights and safety of others”³⁷ or if a utility does not possess a safety certificate.
- Most importantly, there are imminent concerns about the Wildfire Fund’s durability. The Eaton fire and the possibility that Southern California

³⁴ See S&P Feb. 11, 2025 at 1; Moody’s Investor Services, San Diego Gas & Elec. Co at 8 (Dec. 4, 2023) (“Moody’s Dec. 4, 2023”) at 7; RRA, California Public Utilities Commission Profile (Mar. 7, 2024) (noting that AB 1054 “does nothing to alter the inverse condemnation policy, thus a substantial risk for PG&E and other utilities in the state remains”).

³⁵ See Evercore ISI, *Sempra Energy* (Aug. 6, 2024) at 2 (We continue to value SDG&E . . . by applying a 10% discount . . . due to wildfire liability issues associated with inverse condemnation.”).

³⁶ Moody’s Dec. 4, 2023 at 1 (citing as a credit challenge “execution risk in the CPUC’s implementation of the new prudency standards included in the wildfire legislation”).

³⁷ AB 1054, Chapter 3. Operations of the Fund, (3)(A), Pub. Util. Code § 3292(h)(3)(A).

1 Edison Company’s (“SCE”) equipment may be linked to the fire could
2 cause a significant draw that could materially deplete the Wildfire Fund.³⁸

3 As noted, this last concern is the most acute one following the 2025 Southern
4 California wildfires. Moody’s stated that the “fires illustrate California’s
5 increasing exposure to physical climate risks and will exacerbate strains on the
6 state’s property insurance market.”³⁹ The rating’s agency continued that “because
7 of the size and scale of the Eaton fire, this event could test the effectiveness of
8 [the AB 1054] enhancements, and test California’s regulatory support for
9 utilities.”⁴⁰ Under AB 1054, if the wildfire fund is depleted the liability cap also
10 goes away, meaning that much of the legislation’s benefits are negated.

11 As a result, on February 3, 2025, S&P placed SCE on negative watch,
12 stating that, it “reflect[s] the potential that the California wildfire fund could
13 materially deplete given the significant number and value of structures that have
14 been damaged or destroyed (over 10,000) due to the Eaton fire, and the possibility
15 that SCE’s equipment may be linked to the fire.”⁴¹ S&P continued that the
16 “negative outlooks also reflect the potential for a more-challenging operating
17 environment going forward for Edison and SCE due to wildfire risk, which could
18 weaken credit quality.”⁴²

³⁸ S&P, Feb, 11, 2025, at 1.

³⁹ Moody’s Jan. 17, 2025 at 1.

⁴⁰ *Id.* at 7.

⁴¹ S&P, Edison International and Subsidiary SoCalEdison Outlooks Revised to Negative from Stable on Potential Risk for Wildfire Fund Depletion(Feb. 3, 2025), at 1-2.

⁴² *Id.* at 2.

1 The concern about the fund’s material depletion is putting pressure on
2 SDG&E’s equity and credit ratings despite there not being a significant wildfire in
3 SDG&E’s service territory.⁴³ On February 11, 2025, S&P stated that, because the
4 Wildfire Fund was at risk of experiencing a material draw down without a
5 replenishment mechanism, S&P would continue “monitoring several
6 developments that would affect our view of SDG&E’s credit quality going
7 forward,” including:

- 8 • the ongoing investigations on whether SCE’s equipment is found to have
9 contributed or caused the Eaton fire;
- 10 • the potential level of third-party claims that may arise due to the Eaton fire,
11 and;
- 12 • whether SDG&E can continue to sustain its track record of not causing a
13 significant wildfire, given the potential for a more-challenging operating
14 environment for California investor-owned utilities due to wildfire risk.⁴⁴

15 In sum, it must be recognized that the magnitude of wildfire risk is unique
16 to California. Post AB 1054, the state’s utilities will still bear more risk than their
17 industry peers. In other words, the higher overall number and risk of wildfires, the
18 higher the risk that a utility’s equipment will be involved in one ignition. As
19 Moody’s observed, “significant exposure of [investor owned utilities in

⁴³ Fitch, Fitch Affirms Edison International and Southern California Edison’s IDRs at ‘BBB’; Outlook Stable(Jan. 17, 2025), at 1-2 (“As a result, protection provided by the fund to SCE and other utilities could be meaningfully reduced, increasing EIX and SCE’s credit risk profile.”).

⁴⁴ S&P Feb. 11, 2025 at 1-2.

1 California] to wildfire risk arises from the combination of (i) severe wind events;
2 (ii) growing housing developments in fire-prone areas; and (iii) the California
3 courts' application of the inverse condemnation legal doctrine which heightens
4 the utilities' risk exposure to property damage."⁴⁵ S&P has also added that,
5 despite viewing SDG&E as a "global leader in wildfire prevention," S&P assesses
6 SDG&E's business risk profile at the "lower end of our range for the excellent
7 category" because "the threat of wildfires in its service territory [i]s high relative
8 to that of its utility peers across North America."⁴⁶ Moody's likewise states that,
9 exposure to wildfire risk "tempers SDG&E's credit quality."⁴⁷

10 **Q. HOW DO THE RISKS OF WILDFIRE LIABILITIES AND THE**
11 **DURABILITY OF THE WILDFIRE FUND AFFECT THE COST OF**
12 **EQUITY?**

13 A. As described above, the Company experienced devastating wildfires in 2007
14 resulting in significant liabilities that were borne by shareholders. Since that time,
15 the Company has made substantial efforts to mitigate that risk as described in its
16 Wildfire Mitigation Plan ("WMP") and is recognized as a "global leader" in
17 wildfire mitigation.⁴⁸ Nonetheless, even though the Company has sought to limit
18 the potential for another catastrophic wildfire, it cannot eliminate that risk. The
19 Company has also taken steps to limit its financial exposure to the potential
20 liabilities associated with wildfire events. But it may also be financially inefficient

⁴⁵ Moody's Mar. 10, 2025 at 8.

⁴⁶ S&P Jun. 26, 2024 at 4-5.

⁴⁷ Moody's Dec. 4 2023 at 1.

⁴⁸ S&P Jun. 26, 2024 at 4.

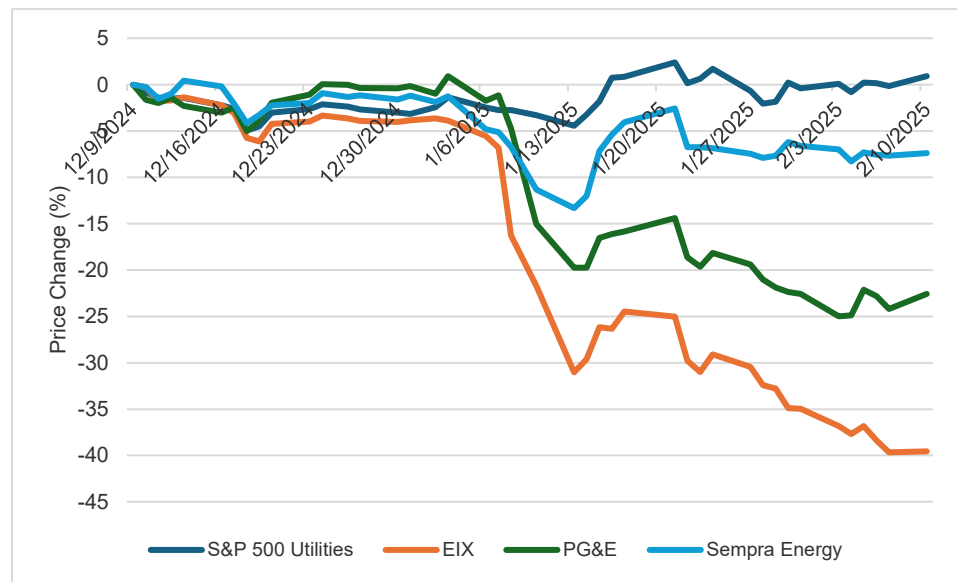
1 to fully-insure against that risk, if it is even possible. The Wildfire Fund offers the
2 potential for incremental protection, but that is dependent on the durability of the
3 fund, which is now uncertain. Given that shareholders ultimately bear the risk of
4 wildfire liabilities that are not covered by insurance or the wildfire fund, equity
5 investors are left with the question: with all other risks being equal, why would an
6 investor choose to invest in a California utility company without a return that is
7 commensurate with that additional risk?

8 **Q. IS THERE EVIDENCE THAT EQUITY INVESTORS REQUIRE AN**
9 **INCREMENTAL RETURN FOR AN INVESTMENT IN A CALIFORNIA**
10 **UTILITY COMPANY?**

11 A. Yes. The recent Eaton and Palisades fires that occurred in January 2025 in Los
12 Angeles caused a substantial shift in equity investor return requirements for
13 California utilities due to the increasing concern about wildfire risk for electric
14 utilities. As shown in Figure 13, from December 9, 2024 through February 10,
15 2025 (one month prior, and one month subsequent to the start of the Eaton and
16 Palisades fires), the stock price has declined by more than 35 percent for EIX.
17 While the Eaton fire may have (although no cause has been determined yet)
18 involved Edison International (“EIX”) subsidiary SCE’s equipment, the stock
19 price for PG&E Corporation (“PG&E”) and Sempra also declined relative to the
20 S&P 500 Utilities Index. Despite the fact that PG&E’s and SDG&E’s equipment
21 were undoubtedly not involved in the fires, PG&E’s stock price has declined
22 more than 20 percent, and Sempra’s stock price has declined more than 5 percent
23 despite a modest *increase* in stock prices across the utility industry as measured

1 by the S&P 500 Utilities Index.⁴⁹ With regard to Sempra, less than half of its
 2 assets are associated with SDG&E, and therefore the majority of its assets are not
 3 exposed to wildfire liabilities to the same degree as EIX and PG&E. As such, EIX
 4 and PG&E better represent the risks to California utilities such as SDG&E.

5 **FIGURE 13: S&P 500 UTILITIES INDEX AND CALIFORNIA UTILITIES**
 6 **STOCK PRICES PERFORMANCE (12/9/2024 TO 2/10/2025)**



7
 8 **Q. PLEASE EXPLAIN THE IMPLICATIONS OF THE CHANGE IN STOCK**
 9 **PRICE PERFORMANCE OF THE CALIFORNIA UTILITIES.**

10 **A.** While the investigation is ongoing, and there is no definitive evidence that the
 11 Eaton fire was caused by utility equipment, there has been allegations that EIX
 12 subsidiary SCE’s equipment may have been involved. To a certain degree, that
 13 explains the decline in EIX’s stock price. However, the decline in PG&E’s and
 14 Sempra’s stock prices point to investors’ recognition of the increased of wildfire

⁴⁹ Goldman Sachs, Estimating the potential costs for the Eaton fire and impact to the state wildfire fund (Jan. 31, 2025), at 1, 5 (“Since the start of the fires on 1/7, EIX, PCG, and SRE have traded down 29%/20%/3% respectively, and debate surrounding the long term outlook of the wildfire fund has been top of mind for investors.”).

1 liabilities and the limitations of the Wildfire Fund in mitigating those risks. As
2 such, this provides evidence that equity investors in a California utility, such as
3 SDG&E, require returns above that of the average utility.

4 **A. Capital Expenditure Program**

5 **Q. PLEASE DISCUSS SDG&E'S CAPITAL SPENDING PROGRAM.**

6 A. The Company plans a major capital investment program over the 2025-2029
7 period, totaling \$12.7 billion. As with any utility facing substantial capital
8 expenditure requirements, the Company's risk profile is affected in two
9 significant and related ways: (1) the heightened level of investment increases the
10 risk of under recovery or delayed recovery of the invested capital; and (2) an
11 inadequate return would put downward pressure on key credit metrics. The
12 absolute level of investment required will put significant pressure on the
13 Company's ability to raise capital, and the terms will have lasting impacts for the
14 Company's customers.⁵⁰

15 **Q. DO CREDIT RATING AGENCIES RECOGNIZE THE RISKS**
16 **ASSOCIATED WITH ELEVATED LEVELS OF CAPITAL**
17 **EXPENDITURES?**

18 A. Yes. From a credit perspective, the additional pressure on cash flows associated
19 with higher levels of capital expenditures exerts corresponding pressure on credit
20 metrics and, therefore, credit ratings. To that point, S&P explains the importance
21 of regulatory support for large capital projects:

22 When applicable, a jurisdiction's willingness to support large
23 capital projects with cash during construction is an important
24 aspect of our analysis. This is especially true when the project
25 represents a major addition to rate base and entails long lead times

⁵⁰ See Moody's Dec. 4, 2023 at 6-7

1 and technological risks that make it susceptible to construction
2 delays. Broad support for all capital spending is the most credit-
3 sustaining. Support for only specific types of capital spending,
4 such as specific environmental projects or system integrity plans, is
5 less so, but still favorable for creditors. Allowance of a cash return
6 on construction work-in-progress or similar ratemaking methods
7 historically were extraordinary measures for use in unusual
8 circumstances, but when construction costs are rising, cash flow
9 support could be crucial to maintain credit quality through the
10 spending program. Even more favorable are those jurisdictions that
11 present an opportunity for a higher return on capital projects as an
12 incentive to investors.⁵¹

13 With regard to SDG&E’s credit profile, S&P acknowledged that the Company’s
14 capital spending as a “key risk,” and more specifically “[c]ontinued negative
15 discretionary cash flow primarily driven by robust capital spending.”⁵² Moody’s
16 similarly regards the “considerable uncertainty regarding [SDG&E]s 2025-2027
17 cash flow” as a credit challenge that leaves SDG&E only “weakly positioned” at
18 SDG&E’s current credit rating.⁵³ Therefore, to the extent that SDG&E’s rates do
19 not permit the Company an opportunity for timely recovery of its full cost of
20 doing business, SDG&E will face increased recovery risk and increased pressure
21 on its credit metrics. Maintaining access to capital markets on favorable terms is
22 especially important for utilities and their customers during periods of significant
23 capital investment.

⁵¹ S&P Global Ratings, “Assessing U.S. Investor-Owned Utility Regulatory Environments” (August 10, 2016) at 7.

⁵² S&P June 26, 2024, at 1.

⁵³ Moody’s Mar. 10, 2025 at 1, 2.

1 **Q. WHAT IS YOUR CONCLUSION REGARDING HOW SDG&E’S**
2 **CAPITAL EXPENDITURE PROGRAM AFFECTS THE COMPANY’S**
3 **RISK PROFILE AND COST OF EQUITY?**

4 A. My primary conclusion is that SDG&E is projecting a substantial capital spending
5 program that will require the Company to maintain access to capital markets on
6 favorable terms and conditions. The magnitude of SDG&E’s capital program
7 places pressure on the Company’s cash flows and credit metrics. These
8 investments elevate the risk profile of SDG&E. For these reasons, it is important
9 that the authorized ROE be set at a level that allows SDG&E to continue to attract
10 both debt and equity under favorable terms under a variety of economic and
11 financial market conditions.

12 **B. Environmental and Clean Energy Mandates**

13 **Q. PLEASE DESCRIBE THE ENVIRONMENTAL MANDATES THAT**
14 **WILL BE REQUIRED BY SDG&E TO ACHIEVE CALIFORNIA’S**
15 **CLEAN ENERGY GOALS.**

16 A. Senate Bill 100 (“SB 100”) and Senate Bill 1020 (“SB 1020”) require each
17 California electric utility, including SDG&E, to procure 50 percent of its annual
18 electric energy requirements from renewable energy sources by 2026, 60 percent
19 by 2030, 90 percent by 2035, and 95 percent by 2040. In addition, SB 100 and SB
20 1020 create the policy of meeting all of California’s retail electricity supply with a
21 mix of Renewable Portfolio Standard (“RPS”) Program-eligible and zero-carbon
22 resources by 2045.⁵⁴

⁵⁴ Sempra, 2024 SEC Form 10-K (February 25, 2025) at 33, available at <https://investor.sempra.com/static-files/b0e6f794-b5d0-428f-aa4a-a56c912e6edd>.

1 **Q. HAVE YOU CONSIDERED HOW THE SB 100 AND SB 1020**
2 **REQUIREMENTS COMPARE TO OTHER STATES AND THE PROXY**
3 **COMPANIES?**

4 A. Yes. California is one of 17 states that will require at least 50 percent carbon-free
5 generation by 2050.⁵⁵ Moody's has recognized the incremental risk in California
6 relative to other states as a credit challenge, observing "[e]levated political risk
7 and public scrutiny in California amid demanding public policy goals."⁵⁶
8 Moody's specifically calls this out as a credit challenge.⁵⁷

9 The requirements imposed on SDG&E are significantly more stringent
10 relative to the proxy companies, and only matched by one other company, Edison
11 International. There are other companies that have set voluntary corporate targets,
12 and operate in states that lack the enforcement of California's mandate that an
13 investor would consider. Compliance with California climate change mitigation
14 requirements create risks for SDG&E relative to the proxy companies.

15 **C. Regulatory Risk**

16 **Q. PLEASE EXPLAIN HOW THE REGULATORY FRAMEWORK**
17 **AFFECTS INVESTORS' RISK ASSESSMENTS.**

18 A. The ratemaking process is premised on the principle that, for investors and
19 companies to commit the capital needed to provide safe and reliable utility
20 services, the utility must have the opportunity to recover invested capital and the
21 market-required return on such capital. Regulatory commissions recognize that,

⁵⁵ National Conference of State Legislatures, "Brief: State Renewable Portfolio Standards and Goals" (Aug. 13, 2021), available at <https://www.ncsl.org/energy/state-renewable-portfolio-standards-and-goals>.

⁵⁶ Moody's Mar. 10, 2025, at 1.

⁵⁷ *Id.* at 2.

1 because utility operations are capital intensive, regulatory decisions should enable
2 the utility to attract capital at reasonable terms, thereby balancing the long-term
3 interests of investors and customers. In that respect, the regulatory framework in
4 which a utility operates is one of the most important factors in both debt and
5 equity investors' risk assessments. Because investors have many investment
6 alternatives, even within a given market sector, the Company's authorized return
7 must be adequate on a relative basis to ensure its ability to attract capital under a
8 variety of economic and financial market conditions.

9 **Q. PLEASE EXPLAIN HOW CREDIT RATING AGENCIES CONSIDER**
10 **THE REGULATORY FRAMEWORK IN ESTABLISHING A**
11 **COMPANY'S CREDIT RATING.**

12 A. Moody's and S&P both consider the overall regulatory framework in establishing
13 credit ratings. Moody's establishes credit ratings based on four key factors:

14 **FIGURE 14: MOODY'S RATING FACTORS**

Factor	Weighting
Regulatory Framework	25%
Ability to Recover Costs and Earn Returns	25%
Diversification	10%
Financial Strength	40%
Total	100%

15 Two of these factors (*i.e.*, regulatory framework and the ability to recover costs
16 and earn returns) are based on the regulatory environment such that half of
17 Moody's overall assessment of business and financial risk for regulated utilities is
18

1 based upon the regulatory environment.⁵⁸ Moody’s further subdivides the first
2 two factors, Regulatory Framework and the Ability to Recover Costs and Earn
3 Returns, into sub-factors to help “provide more granularity and transparency on
4 the overall regulatory environment, which is the most important consideration for
5 this sector.”⁵⁹ Similarly, S&P has identified the regulatory environment as an
6 important factor, stating, “we believe the fundamental regulatory environment in
7 the jurisdictions in which a utility operates often influence credit quality the
8 most.”⁶⁰

9 **Q. PLEASE EXPLAIN THE EFFECT OF REGULATORY RISK ON THE**
10 **COMPANY’S ABILITY TO RAISE CAPITAL AND THE IMPACT ON**
11 **CUSTOMERS.**

12 A. Given the robust capital spending plan, and the consequent need to raise capital, it
13 is important that the Company be able to maintain access to the capital markets at
14 reasonable rates. As noted, Moody’s has stated that a downgrade of SDG&E’s
15 credit rating is possible if there is a “decrease in the level regulatory support for
16 the utility, including credit negative outcomes of its pending regulatory
17 proceedings. The rating’s agency added that SDG&E is only “weakly positioned”
18 at SDG&E’s current credit rating due to the “regulatory uncertainty following
19 [the] outcome of [SDG&E’s] 2024 General Rate Case,” and that “there is
20 considerable uncertainty regarding [SDG&E’s] 2025-2027 cash flow” arising

⁵⁸ Moody’s Investor Service, Rating Methodology, Regulated Electric and Gas Utilities (December 23, 2013) at 6.

⁵⁹ *Id.* at 3.

⁶⁰ S&P, Assessing U.S. Utility Regulatory Environments (March 11, 2010) at 2.

1 from uncertainty regarding the recovery of wildfire and other investments.⁶¹ In
2 particular, Moody's notes that it's outlook is predicated upon continued
3 regulatory support for SDG&E's wildfire mitigation plans, including no
4 modifications that will materially increase the Company's wildfire risk
5 exposure.⁶² As discussed above, the Company's capital expenditure program is
6 designed to benefit and deliver value for customers. Given the significant level of
7 planned capital expenditures, any increases in borrowing costs would have a
8 proportional impact on costs to customers.

9 **Q. HAVE YOU PERFORMED AN ANALYSIS OF THE REGULATORY**
10 **MECHANISMS FOR SDG&E AS COMPARED TO THOSE FOR THE**
11 **PROXY GROUP COMPANIES?**

12 A. Yes. I have conducted an analysis of the regulatory mechanisms that are in place
13 for SDG&E compared with those for the operating utility companies held by the
14 proxy group. The results of my analysis are presented in Exhibit JMC-9.
15 Specifically, I examined the following factors that affect the regulatory risk of
16 SDG&E and the proxy group companies: (1) test year convention; (2) rate base
17 convention; (3) revenue decoupling; (4) capital cost recovery; and (5)
18 Construction Work in Progress ("CWIP") in rate base.

19 While SDG&E has a number of regulatory balancing accounts (though
20 less than before), it is instructive to look at the overall regulatory cost recovery
21 mechanisms available to the proxy companies when evaluating the regulatory risk
22 of the subject company to the proxy group. As shown in Exhibit JCN-9, 54

⁶¹ Moody's Mar. 10, 2025, at 1, 3.

⁶² *Id.* at 2.

1 percent of the operating companies in the proxy group provide service in
2 jurisdictions that allow the use of a fully or partially forecasted test year, which is
3 effectively similar to SDG&E’s projected rate base for the forecasted test year.

4 Approximately 46 percent of the operating companies in the proxy group use
5 year-end rate base, which provides more timely cost recovery of capital
6 investments, while 54 percent, like SDG&E, use average rate base.

7 SDG&E is able to apply a true-up mechanism to mitigate volumetric risk
8 through decoupling, while approximately 54 percent of the operating companies
9 held by the proxy group have either full or partial revenue decoupling
10 mechanisms that protect against volumetric risk. Approximately 13 percent of the
11 operating companies in the proxy group have a cost recovery mechanism for
12 generation capacity, and about 43 percent have cost recovery for generic
13 infrastructure replacement. Finally, approximately 68 percent of the operating
14 companies held by the proxy group are allowed to include CWIP in a rate base.
15 Overall, from an investor perspective, the regulatory framework does not provide
16 risk mitigation that meaningfully reduces the risk of the Company relative to the
17 proxy companies. And, as noted, Moody’s recently expressed alarm that the
18 Commission’s 2024 GRC decision reducing the use of balancing accounts “could
19 negatively affect the timeliness of true-ups for recovering under-collected
20 accounts.”⁶³

⁶³ *Id.* at 6.

1 **VIII. CAPITAL STRUCTURE**

2 **Q. WHAT IS SDG&E'S PROPOSED CAPITAL STRUCTURE?**

3 A. SDG&E is proposing a financial capital structure targeting a mix of 54.00 percent
4 equity and 46.00 percent debt

5 **Q. HOW HAVE YOU ASSESSED THE REASONABLENESS OF SDG&E'S**
6 **PROPOSED CAPITAL STRUCTURE WITH RESPECT TO THE PROXY**
7 **GROUP?**

8 A. The proxy group has been selected to reflect comparable companies in terms of
9 business and financial risks. Therefore, it is appropriate to compare the financial
10 capital structures of the proxy group companies to the financial capital structure
11 proposed by the Company in order to assess whether the Company's capital
12 structure is reasonable and consistent with industry standards for companies with
13 commensurate risk. I calculated the weighted average capital structures for each
14 of the proxy group operating companies for the eight quarters ended Q3 2024.
15 Exhibit JCN-10 shows that the Company's proposed common equity ratio of
16 54.00 percent is within the range of actual common equity ratios of 43.57 percent
17 to 60.29 percent for the operating companies held by the proxy group over this
18 period.

19 **Q. WHAT IS YOUR CONCLUSION REGARDING THE**
20 **APPROPRIATENESS OF SDG&E'S PROPOSED CAPITAL STRUCTURE**
21 **IN THIS PROCEEDING?**

22 A. Based on the analysis presented in Exhibit JCN-10, my conclusion is that
23 SDG&E's proposed capital structure is reasonable. Sufficient equity in the capital
24 structure is an important factor for maintaining SDG&E's financial integrity and
25 investment grade credit rating and it is an essential component of SDG&E's

1 financial policies enabling access to capital on favorable terms in a variety of
2 market circumstances.

IX. CONCLUSION

3 **Q. WHAT IS YOUR CONCLUSION REGARDING A FAIR ROE FOR**
4 **SDG&E?**

5 A. Based on the quantitative analyses provided in my Direct Testimony, I have
6 established a range of ROE results shown previously in Figure 1 (also see Exhibit
7 JCN-2). Based on these analyses, I consider an ROE range of 10.50 percent to
8 11.50 percent to be reasonable. In creating this range, I give weight to the results
9 of the DCF, CAPM, and Bond Yield Plus Risk Premium analyses. In addition to
10 establishing the range of ROE results, I also considered SDG&E risks compared
11 to the proxy utilities and conclude that SDG&E is above average risk and that it
12 would be reasonable for SDG&E's ROE to be set in the upper end of that range,
13 given the wildfire risk alone. Therefore, from within that range, and considering
14 the Company's risk profile, I recommend an ROE of 11.25 percent.

15 **Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO THE**
16 **CAPITAL STRUCTURE FOR SDG&E IN THIS PROCEEDING?**

17 A. I support SDG&E's actual capital structure of 54.00 percent equity and 46.00
18 percent debt as reasonable relative to the range of capital structures for the
19 operating companies held by the proxy group companies.

20 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

21 A. Yes, it does.

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SUMMARY OF MY PROFESSIONAL AND EDUCATIONAL BACKGROUND

JOSHUA C. NOWAK
VICE PRESIDENT

Mr. Nowak is a financial and economic consultant with more than fifteen years of experience in the energy industry. He has provided expert testimony on regulatory issues in several proceedings before the Federal Energy Regulatory Commission and regulatory commissions in Alaska, California, Connecticut, Kentucky, Minnesota, New Brunswick, New Hampshire, New York, North Dakota, Ohio, and Texas. Mr. Nowak specializes in providing rate case services on economic conditions and financial market matters related to the cost of capital. He is also experienced in providing strategic direction on financing activities including bond offerings, credit rating analysis, and investor relations. Previously, Josh was the Director of Regulatory Strategy & Integrated Analytics at National Grid where he was responsible for issues related to the cost of capital across its federal and state jurisdictional operating companies. He holds a Bachelor's Degree in Economics and History from Boston College.

REPRESENTATIVE EXPERIENCE

Expert Testimony and Litigation Support

Mr. Nowak's work includes regulatory project management, research, and analysis for expert witness testimony. His work has included:

- Expert testimony on cost of capital, financial markets, return on equity, capital structure, and debt financing issues
- Regulatory strategy in return on equity proceedings, including coordination across several utilities in joint-party proceedings
- Extensive support for expert testimony in cost of capital and return on equity proceedings through research, financial analysis, and testimony development
- Expert testimony, sponsoring lead-lag studies, in support of utility cash working capital requirements
- Project management of expert testimony assignments, including all phases of the regulatory schedule
- Performing analysis to support expert testimony regarding affiliate expenses and allocations

Policy Analysis

Mr. Nowak has contributed to projects related to policy review including:

- A review of natural gas capacity options and a cost-benefit analysis for state regulators seeking to reduce energy costs for ratepayers
- Analysis of the economic and environmental benefits of changes to natural gas ratemaking/expansion policy



Management and Operations Consulting

Mr. Nowak has taken a lead analytical role in developing benchmarking analyses and process reviews. Specifically, he has:

- Developed benchmarking analyses, in support of expert testimony, comparing electric and gas utilities' cost and operational efficiency, taking into account a situational assessment of exogenous factors
- Performed a process review of a gas utility's expansion projects, including an evaluation of policies, procedures, and financial models
- Supported analysis for a report of the reasonableness of a shared service company's administrative and general costs

Financial Analysis

Other financial analysis Mr. Nowak has conducted include:

- Extensive analysis on issues related to utilities' cost of capital
- Developing dispatch models to estimate revenues for merchant powerplants
- Estimating damages for breach of contract in fuel delivery commitment
- Researching strategic investment opportunities for merchant generators
- A report on the profitability of various generation technologies in a deregulated energy market
- Reviewing internal financial models used by utility clients
- Supporting utility asset appraisals, including research and analysis for income approach, cost approach, and sales comparison approach

Other Experience

In his previous work, Mr. Nowak contributed to the evaluation of regulatory policy for government clients. His experience included performing policy analysis, including economic impact assessments, for federal regulations.

PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2018 – Present)

Vice President

Assistant Vice President

National Grid USA (2017 – 2018)

Director, Regulatory Strategy & Integrated Analytics

ScottMadden, Inc. (formerly Sussex Economic Advisors, LLC) (2012 – 2016)

Director

Principal



Concentric Energy Advisors, Inc. (2007 – 2012)

Senior Consultant

Consultant

Assistant Consultant

Analyst

RTI International (2006 – 2007)

Economist

EDUCATION

Boston College

B.A., Economics and History, 2006

SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
Regulatory Commission of Alaska				
ENSTAR Natural Gas Company, a Division of Semco Energy, Inc.	06/16	ENSTAR Natural Gas Company, a Division of Semco Energy, Inc.	TA 285-4	Cash Working Capital
California Public Utilities Commission				
Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company	02/24	Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company	A.22-04-008 / A.22-04-009 / A.22-04-011 / A.22-04-012	Return on Equity Policy
Southern California Gas Company and San Diego Gas & Electric Company	01/24	Southern California Gas Company and San Diego Gas & Electric Company	A.22-04-011 / A.22-04-012	Return on Equity Policy
Connecticut Public Utilities Regulatory Authority				
Yankee Gas Services Company d/b/a Eversource Energy	11/24	Yankee Gas Services Company d/b/a Eversource Energy	Docket No. 24-12-01	Return on Equity
Aquarion Water Company of Connecticut	08/22	Aquarion Water Company of Connecticut	Docket No. 22-07-01	Return on Equity
Aquarion Water Company of Connecticut	01/22	Aquarion Water Company of Connecticut	Docket No. 13-02-20RE06	Return on Equity and Cost of Debt
Federal Energy Regulatory Commission				
National Grid LNG LLC	01/25	National Grid LNG LLC	RP25-473-000	Return on Equity
San Diego Gas & Electric Company	10/24	San Diego Gas & Electric Company	ER25-270-000	Return on Equity
Power Authority of the State of New York	10/24	Power Authority of the State of New York	ER25-198-000	Return on Equity
Mid-Atlantic Offshore Development, LLC	07/24	Mid-Atlantic Offshore Development, LLC	ER24-2564-000	Return on Equity



SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation	04/21	Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation	EL21-66-000, ER21-1647-000	Transmission Ownership Risk and Returns
Central Hudson Gas & Electric Corporation	12/19	Central Hudson Gas & Electric Corporation	ER20-715-000	Return on Equity
Kentucky Public Service Commission				
Duke Energy Kentucky, Inc.	12/24	Duke Energy Kentucky, Inc.	Case No. 2024-00354	Return on Equity
Duke Energy Kentucky, Inc.	12/22	Duke Energy Kentucky, Inc.	Case No. 2022-00372	Return on Equity
Minnesota Public Utilities Commission				
Northern States Power Company (Xcel Energy Inc.)	11/24	Northern States Power Company (Xcel Energy Inc.)	G-002/GR-24-320	Return on Equity
Northern States Power Company (Xcel Energy Inc.)	11/23	Northern States Power Company (Xcel Energy Inc.)	G-002/GR-23-413	Return on Equity
New Brunswick Energy and Utilities Board				
New Brunswick Power Corporation (NB Power)	11/22	New Brunswick Power Corporation (NB Power)	Matter 541	Macroeconomic Environment and Capital Market Conditions



SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
Public Utilities Commission of New Hampshire				
Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities	04/16	Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities	Docket No. DE 16-383	Cash Working Capital
New York Public Service Commission				
Consolidated Edison Company of New York, Inc.	01/25	Consolidated Edison Company of New York, Inc.	Case 25-E-0072/ Case 25-G-0073	Return on Equity
Central Hudson Gas & Electric Corporation	08/24	Central Hudson Gas & Electric Corporation	Case 24-E-0461/ Case 24-G-0462	Return on Equity
Niagara Mohawk Power Corporation d/b/a National Grid	05/24	Niagara Mohawk Power Corporation d/b/a National Grid	Case 24-E-0322/ Case 24-G- 0323	Return on Equity
National Fuel Gas Distribution Corporation	10/23	National Fuel Gas Distribution Corporation	Case 23-G-0627	Return on Equity
Central Hudson Gas & Electric Corporation	07/23	Central Hudson Gas & Electric Corporation	Case 23-E-0418/ Case 23-G-0419	Return on Equity
The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY) and KeySpan Gas East Corporation d/b/a National Grid ("KEDLI")	04/23	The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY) and KeySpan Gas East Corporation d/b/a National Grid ("KEDLI")	Case 23-G-0225/ Case 23-G-0226	Return on Equity
Niagara Mohawk Power Corporation d/b/a National Grid	07/20	Niagara Mohawk Power Corporation d/b/a National Grid	Case 20-E-0380/ Case 20-G- 0381	Return on Equity
Niagara Mohawk Power Corporation d/b/a National Grid	07/17	Niagara Mohawk Power Corporation d/b/a National Grid	Case 17-E-0238/ Case 17-G- 0239	Capital Structure and Overall Cost of Capital



SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
North Dakota Public Service Commission				
Northern States Power Company (Xcel Energy Inc.)	12/24	Northern States Power Company (Xcel Energy Inc.)	Docket No. PU-24-376	Return on Equity
Northern States Power Company (Xcel Energy Inc.)	12/23	Northern States Power Company (Xcel Energy Inc.)	Docket No. PU-23-367	Return on Equity
Public Utilities Commission of Ohio				
Duke Energy Ohio, Inc.	01/23	Duke Energy Ohio, Inc.	Case No. 22-1153-EL-UNC	Return on Equity
Public Utility Commission of Texas				
Wind Energy Transmission Texas, LLC	12/24	Wind Energy Transmission Texas, LLC	Docket No. 52799	Cash Working Capital
Wind Energy Transmission Texas, LLC	05/15	Wind Energy Transmission Texas, LLC	Docket No. 44746	Cash Working Capital
Lone Star Transmission, LLC	05/14	Lone Star Transmission, LLC	Docket No. 42469	Cash Working Capital
Railroad Commission of Texas				
Texas Gas Service Company, a Division of One Gas, Inc.	06/16	Texas Gas Service Company, a Division of One Gas, Inc.	GUD No. 10526	Cash Working Capital
Texas Gas Service Company, a Division of One Gas, Inc.	03/16	Texas Gas Service Company, a Division of One Gas, Inc.	GUD No. 10506	Cash Working Capital
Texas Gas Service Company, a Division of One Gas, Inc.	12/15	Texas Gas Service Company, a Division of One Gas, Inc.	GUD No. 10488	Cash Working Capital



SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	03/14	CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD No. 10432	Cash Working Capital

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COMPREHENSIVE SUMMARY OF ROE RESULTS

SUMMARY OF RESULTS

Company	Ticker	Primary Analyses														Benchmark Analysis Expected Earnings	Average of DCF, CAPM, and Risk Premium		
		CONSTANT GROWTH DCF				CAPM								Risk Premium (Average)					
						Value Line Beta			Bloomberg Beta										
		30-Day Average	90-Day Average	180-Day Average	Average	Current Yield	Near-Term Projected Yield	Long-Term Projected Yield	Current Yield	Near-Term Projected Yield	Long-Term Projected Yield	Average	Current Yield	Near-Term Projected Yield	Long-Term Projected Yield			Average	
Alliant Energy Corporation	LNT	9.83%	9.86%	9.97%	9.89%	12.49%	12.48%	12.45%	11.39%	11.37%	11.30%	11.91%	10.55%	10.50%	10.35%	10.47%	12.23%	10.76%	
Ameren Corporation	AEE	9.60%	9.74%	9.96%	9.77%	12.49%	12.48%	12.45%	11.09%	11.06%	10.97%	11.76%	10.55%	10.50%	10.35%	10.47%	10.27%	10.66%	
American Electric Power Company, Inc.	AEP	10.13%	10.27%	10.29%	10.23%	12.06%	12.05%	11.99%	11.09%	11.06%	10.97%	11.54%	10.55%	10.50%	10.35%	10.47%	11.22%	10.74%	
Avista Corporation	AVA	11.04%	11.04%	11.04%	11.04%	12.92%	12.92%	12.90%	11.14%	11.12%	11.03%	12.00%	10.55%	10.50%	10.35%	10.47%	8.66%	11.17%	
Black Hills Corporation	BKH	9.44%	9.39%	9.48%	9.44%	13.78%	13.79%	13.80%	12.31%	12.30%	12.26%	13.04%	10.55%	10.50%	10.35%	10.47%	8.75%	10.98%	
CMS Energy Corporation	CMS	10.16%	10.19%	10.26%	10.20%	12.06%	12.05%	11.99%	11.00%	10.97%	10.88%	11.49%	10.55%	10.50%	10.35%	10.47%	13.79%	10.72%	
Consolidated Edison, Inc.	ED	9.34%	9.33%	9.28%	9.32%	11.63%	11.61%	11.54%	10.09%	10.05%	9.92%	10.81%	10.55%	10.50%	10.35%	10.47%	9.21%	10.20%	
DTE Energy Company	DTE	9.96%	10.02%	10.07%	10.02%	12.67%	12.66%	12.63%	11.67%	11.66%	11.59%	12.15%	10.55%	10.50%	10.35%	10.47%	12.79%	10.88%	
Duke Energy Corporation	DUK	10.01%	10.04%	10.07%	10.04%	12.49%	12.48%	12.45%	10.86%	10.83%	10.73%	11.64%	10.55%	10.50%	10.35%	10.47%	10.71%	10.72%	
Edison International	EIX	14.02%	12.43%	12.17%	12.88%	13.78%	13.79%	13.80%	12.02%	12.00%	11.95%	12.89%	10.55%	10.50%	10.35%	10.47%	14.50%	12.08%	
Entergy Corporation	ETR	9.11%	9.34%	9.76%	9.41%	13.35%	13.35%	13.35%	12.00%	11.98%	11.93%	12.66%	10.55%	10.50%	10.35%	10.47%	9.78%	10.84%	
Exelon Corporation	EXC	9.82%	10.03%	10.13%	9.99%				12.02%	12.01%	11.96%	12.00%	10.55%	10.50%	10.35%	10.47%	10.12%	10.82%	
Eergy, Inc.	EVRG	10.57%	10.73%	10.92%	10.74%	12.92%	12.92%	12.90%	11.39%	11.37%	11.29%	12.13%	10.55%	10.50%	10.35%	10.47%	10.12%	11.11%	
FirstEnergy Corporation	FE	10.70%	10.64%	10.60%	10.64%	12.49%	12.48%	12.45%	11.49%	11.47%	11.40%	11.96%	10.55%	10.50%	10.35%	10.47%	14.99%	11.02%	
IDACORP, Inc.	IDA	10.83%	10.83%	11.02%	10.89%	12.06%	12.05%	11.99%	11.35%	11.33%	11.26%	11.67%	10.55%	10.50%	10.35%	10.47%	9.24%	11.01%	
NextEra Energy, Inc.	NEE	11.31%	11.16%	11.07%	11.18%	13.78%	13.79%	13.80%	11.66%	11.64%	11.57%	12.71%	10.55%	10.50%	10.35%	10.47%	14.64%	11.45%	
NorthWestern Corporation	NWE	10.48%	10.50%	10.53%	10.50%	13.35%	13.35%	13.35%	12.13%	12.12%	12.07%	12.73%	10.55%	10.50%	10.35%	10.47%	8.14%	11.23%	
OGE Energy Corporation	OGE	10.20%	10.31%	10.50%	10.33%	13.78%	13.79%	13.80%	12.49%	12.48%	12.44%	13.13%	10.55%	10.50%	10.35%	10.47%	13.16%	11.31%	
Pinnacle West Capital Corporation	PNW	9.65%	9.66%	9.76%	9.69%	12.92%	12.92%	12.90%	11.73%	11.71%	11.64%	12.30%	10.55%	10.50%	10.35%	10.47%	8.80%	10.82%	
Portland General Electric Company	POR	12.85%	12.60%	12.51%	12.65%	12.92%	12.92%	12.90%	11.37%	11.35%	11.28%	12.12%	10.55%	10.50%	10.35%	10.47%	9.88%	11.75%	
PPL Corporation	PPL	10.35%	10.41%	10.55%	10.44%	14.21%	14.22%	14.26%	12.71%	12.71%	12.68%	13.47%	10.55%	10.50%	10.35%	10.47%	9.66%	11.46%	
Public Service Enterprise Group Inc.	PEG	9.62%	9.55%	9.65%	9.61%	13.35%	13.35%	13.35%	12.03%	12.02%	11.97%	12.68%	10.55%	10.50%	10.35%	10.47%	12.86%	10.92%	
Southern Company	SO	9.97%	9.96%	9.97%	9.97%	12.92%	12.92%	12.90%	11.33%	11.31%	11.23%	12.10%	10.55%	10.50%	10.35%	10.47%	14.68%	10.85%	
TXNM Energy, Inc.	TXNM	7.87%	7.99%	8.27%	8.04%	12.49%	12.48%	12.45%	11.72%	11.71%	11.64%	12.08%	10.55%	10.50%	10.35%	10.47%	10.30%	10.20%	
Wisconsin Energy Corporation	WEC	10.50%	10.62%	10.82%	10.65%	12.06%	12.05%	11.99%	10.93%	10.90%	10.81%	11.46%	10.55%	10.50%	10.35%	10.47%	13.16%	10.86%	
Xcel Energy Inc.	XEL	10.21%	10.23%	10.46%	10.30%	12.06%	12.05%	11.99%	10.91%	10.88%	10.79%	11.45%	10.55%	10.50%	10.35%	10.47%	11.39%	10.74%	
Low		7.87%	7.99%	8.27%	8.04%	11.63%	11.61%	11.54%	10.09%	10.05%	9.92%	10.81%					8.14%	10.20%	
Median		10.15%	10.21%	10.27%	10.22%	12.92%	12.92%	12.90%	11.44%	11.42%	11.35%	12.09%	10.55%	10.50%	10.35%	10.47%	10.51%	10.87%	
Mean		10.29%	10.26%	10.35%	10.30%	12.84%	12.84%	12.82%	11.53%	11.52%	11.44%	12.15%	10.55%	10.50%	10.35%	10.47%	11.27%	10.97%	
High		14.02%	12.60%	12.51%	12.88%	14.21%	14.22%	14.26%	12.71%	12.71%	12.68%	13.47%					14.99%	12.08%	

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PROXY GROUP SCREENING ANALYSIS

PROXY GROUP SCREENING DATA AND RESULTS - PROXY GROUP

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	
Company	Ticker	Dividends	S&P Credit Rating Between BBB- and AAA	Covered by More Than 1 Analyst	Postive Growth Rates From At Least 2 Sources	Regulated Operating Income of Total > 80%	Significant Merger or Transaction	Include?
ALLETE, Inc.	ALE	Yes	BBB	Yes	Yes	98.08%	Yes	No
Alliant Energy Corporation	LNT	Yes	A-	Yes	Yes	97.09%	No	Yes
Ameren Corporation	AEE	Yes	BBB+	Yes	Yes	98.34%	No	Yes
American Electric Power Company, Inc.	AEP	Yes	BBB+	Yes	Yes	97.85%	No	Yes
Avista Corporation	AVA	Yes	BBB	Yes	Yes	100.00%	No	Yes
Black Hills Corporation	BKH	Yes	BBB+	Yes	Yes	100.00%	No	Yes
CenterPoint Energy, Inc.	CNP	Yes	BBB+	Yes	Yes	100.00%	Yes	No
CMS Energy Corporation	CMS	Yes	BBB+	Yes	Yes	85.56%	No	Yes
Consolidated Edison, Inc.	ED	Yes	A-	Yes	Yes	83.65%	No	Yes
Dominion Resources, Inc.	D	Yes	BBB+	Yes	Yes	92.34%	Yes	No
DTE Energy Company	DTE	Yes	BBB+	Yes	Yes	89.70%	No	Yes
Duke Energy Corporation	DUK	Yes	BBB+	Yes	Yes	94.64%	No	Yes
Edison International	EIX	Yes	BBB	Yes	Yes	100.74%	No	Yes
Entergy Corporation	ETR	Yes	BBB+	Yes	Yes	98.52%	No	Yes
Eversource Energy	ES	Yes	BBB+	Yes	Yes	94.96%	Yes	No
Exelon Corporation	EXC	Yes	BBB+	Yes	Yes	100.00%	No	Yes
FirstEnergy Corporation	FE	Yes	BBB	Yes	Yes	100.00%	No	Yes
Eergy, Inc.	EVRG	Yes	BBB+	Yes	Yes	100.00%	No	Yes
Hawaiian Electric Industries, Inc.	HE	No	B-	Yes	No	78.87%	No	No
IDACORP, Inc.	IDA	Yes	BBB	Yes	Yes	99.98%	No	Yes
MGE Energy, Inc.	MGEE	Yes	AA-	No	No	74.71%	No	No
NextEra Energy, Inc.	NEE	Yes	A-	Yes	Yes	87.65%	No	Yes
NorthWestern Corporation	NWE	Yes	BBB	Yes	Yes	99.96%	No	Yes
OGE Energy Corporation	OGE	Yes	BBB+	Yes	Yes	100.00%	No	Yes
Otter Tail Corporation	OTTR	Yes	BBB	Yes	Yes	33.33%	No	No
PG&E Corporation	PCG	Yes	BB	Yes	Yes	100.00%	No	No
Pinnacle West Capital Corporation	PNW	Yes	BBB+	Yes	Yes	100.00%	No	Yes
Portland General Electric Company	POR	Yes	BBB+	Yes	Yes	100.00%	No	Yes
PPL Corporation	PPL	Yes	A-	Yes	Yes	100.00%	No	Yes
Public Service Enterprise Group Inc.	PEG	Yes	BBB+	Yes	Yes	83.86%	No	Yes
Sempra Energy	SRE	Yes	BBB+	Yes	Yes	46.73%	No	No
Southern Company	SO	Yes	A-	Yes	Yes	93.73%	No	Yes
TXNM Energy, Inc.	TXNM	Yes	BBB	Yes	Yes	100.00%	No	Yes
Unitil Corporation	UTL	Yes	BBB+	Yes	No	100.00%	Yes	No
Wisconsin Energy Corporation	WEC	Yes	A-	Yes	Yes	98.56%	No	Yes
Xcel Energy Inc.	XEL	Yes	BBB+	Yes	Yes	100.00%	No	Yes

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: S&P Capital IQ Pro
- [3] Source: S&P Capital IQ and Zacks
- [4] Source: S&P Capital IQ, Value Line Investment Survey, and Zacks
- [5] Source: Form 10-Ks for 2023, 2022, & 2021, three-year average
- [6] Source: S&P Capital IQ Pro

JCN-4

CONSTANT GROWTH DISCOUNTED CASH FLOW (“DCF”) ANALYSIS

30-DAY CONSTANT GROWTH DCF

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Value Line Earnings Growth	S&P Cap. IQ Earnings Growth	Zacks Earnings Growth	Average Growth Rate	Low ROE	Mean ROE	High ROE
Alliant Energy Corporation	LNT	\$2.03	\$60.73	3.34%	3.45%	6.00%	6.75%	6.40%	6.38%	9.44%	9.83%	10.21%
Ameren Corporation	AEE	\$2.68	\$96.50	2.78%	2.87%	6.50%	7.00%	6.70%	6.73%	9.37%	9.60%	9.87%
American Electric Power Company, Inc.	AEP	\$3.72	\$101.14	3.68%	3.79%	6.50%	6.50%	6.00%	6.33%	9.79%	10.13%	10.30%
Avista Corporation	AVA	\$1.96	\$37.26	5.26%	5.41%	5.50%	5.50%	5.90%	5.63%	10.91%	11.04%	11.32%
Black Hills Corporation	BKH	\$2.70	\$59.35	4.56%	4.66%	4.00%	5.03%	5.30%	4.78%	8.65%	9.44%	9.98%
CMS Energy Corporation	CMS	\$2.17	\$68.76	3.16%	3.26%	6.00%	7.00%	7.70%	6.90%	9.25%	10.16%	10.98%
Consolidated Edison, Inc.	ED	\$3.40	\$95.44	3.56%	3.66%	6.00%	5.44%	5.60%	5.68%	9.09%	9.34%	9.67%
DTE Energy Company	DTE	\$4.36	\$125.09	3.49%	3.60%	4.50%	7.00%	7.60%	6.37%	8.06%	9.96%	11.22%
Duke Energy Corporation	DUK	\$4.18	\$113.11	3.70%	3.81%	6.00%	6.30%	6.30%	6.20%	9.81%	10.01%	10.11%
Edison International	EIX	\$3.31	\$54.06	6.12%	6.36%	6.50%	8.00%	8.50%	7.67%	12.82%	14.02%	14.88%
Energy Corporation	ETR	\$2.40	\$83.02	2.89%	2.98%	0.50%	8.40%	9.50%	6.13%	3.40%	9.11%	12.53%
Exelon Corporation	EXC	\$1.60	\$41.53	3.85%	3.97%	NMF	6.00%	5.70%	5.85%	9.66%	9.82%	9.97%
Evergy, Inc.	EVRG	\$2.67	\$65.61	4.07%	4.20%	7.50%	5.71%	5.90%	6.37%	9.89%	10.57%	11.72%
FirstEnergy Corporation	FE	\$1.70	\$40.36	4.21%	4.35%	5.50%	6.65%	6.90%	6.35%	9.83%	10.70%	11.26%
IDACORP, Inc.	IDA	\$3.44	\$111.34	3.09%	3.21%	6.00%	8.46%	8.40%	7.62%	9.18%	10.83%	11.68%
NextEra Energy, Inc.	NEE	\$2.27	\$70.24	3.23%	3.35%	8.50%	7.57%	7.80%	7.96%	10.92%	11.31%	11.86%
NorthWestern Corporation	NWE	\$2.60	\$53.98	4.82%	4.95%	4.50%	6.00%	6.10%	5.53%	9.43%	10.48%	11.06%
OGE Energy Corporation	OGE	\$1.69	\$43.43	3.88%	4.00%	6.50%	6.00%	6.10%	6.20%	10.00%	10.20%	10.51%
Pinnacle West Capital Corporation	PNW	\$3.58	\$88.55	4.04%	4.15%	4.00%	6.90%	5.60%	5.50%	8.12%	9.65%	11.08%
Portland General Electric Company	POR	\$2.00	\$42.27	4.73%	4.92%	5.50%	6.00%	12.30%	7.93%	10.36%	12.85%	17.32%
PPL Corporation	PPL	\$1.03	\$33.91	3.04%	3.15%	7.50%	7.30%	6.80%	7.20%	9.94%	10.35%	10.65%
Public Service Enterprise Group Inc.	PEG	\$2.40	\$84.46	2.84%	2.94%	6.00%	6.45%	7.60%	6.68%	8.93%	9.62%	10.55%
Southern Company	SO	\$2.88	\$85.57	3.37%	3.47%	6.50%	6.20%	6.80%	6.50%	9.67%	9.97%	10.28%
TXNM Energy, Inc.	TXNM	\$1.63	\$49.52	3.29%	3.37%	4.00%	6.50%	3.00%	4.50%	6.34%	7.87%	9.90%
Wisconsin Energy Corporation	WEC	\$3.57	\$101.55	3.52%	3.64%	6.00%	7.00%	7.60%	6.87%	9.62%	10.50%	11.25%
Xcel Energy Inc.	XEL	\$2.19	\$68.03	3.22%	3.33%	6.50%	7.25%	6.90%	6.88%	9.82%	10.21%	10.59%
Median				3.54%	3.65%	6.00%	6.58%	6.75%	6.37%	9.64%	10.15%	10.81%
Mean				3.76%	3.88%	5.70%	6.65%	6.88%	6.41%	9.32%	10.29%	11.18%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 30-day average as of February 28, 2025
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.50 x [8])
- [5] Source: Value Line
- [6] Source: S&P Capital IQ
- [7] Source: Zacks
- [8] Equals Average ([5], [6], [7])
- [9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7]))
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7]))

90-DAY CONSTANT GROWTH DCF

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Value Line Earnings Growth	S&P Cap. IQ Earnings Growth	Zacks Earnings Growth	Average Growth Rate	Low ROE	Mean ROE	High ROE
Alliant Energy Corporation	LNT	\$2.03	\$60.28	3.37%	3.48%	6.00%	6.75%	6.40%	6.38%	9.47%	9.86%	10.23%
Ameren Corporation	AEE	\$2.68	\$92.12	2.91%	3.01%	6.50%	7.00%	6.70%	6.73%	9.50%	9.74%	10.01%
American Electric Power Company, Inc.	AEP	\$3.72	\$97.41	3.82%	3.94%	6.50%	6.50%	6.00%	6.33%	9.93%	10.27%	10.44%
Avista Corporation	AVA	\$1.96	\$37.26	5.26%	5.41%	5.50%	5.50%	5.90%	5.63%	10.91%	11.04%	11.32%
Black Hills Corporation	BKH	\$2.70	\$59.99	4.51%	4.61%	4.00%	5.03%	5.30%	4.78%	8.60%	9.39%	9.93%
CMS Energy Corporation	CMS	\$2.17	\$68.27	3.18%	3.29%	6.00%	7.00%	7.70%	6.90%	9.27%	10.19%	11.00%
Consolidated Edison, Inc.	ED	\$3.40	\$95.77	3.55%	3.65%	6.00%	5.44%	5.60%	5.68%	9.08%	9.33%	9.66%
DTE Energy Company	DTE	\$4.36	\$123.14	3.54%	3.65%	4.50%	7.00%	7.60%	6.37%	8.12%	10.02%	11.28%
Duke Energy Corporation	DUK	\$4.18	\$112.35	3.72%	3.84%	6.00%	6.30%	6.30%	6.20%	9.83%	10.04%	10.14%
Edison International	EIX	\$3.31	\$72.11	4.59%	4.77%	6.50%	8.00%	8.50%	7.67%	11.24%	12.43%	13.29%
Entergy Corporation	ETR	\$2.40	\$77.14	3.11%	3.21%	0.50%	8.40%	9.50%	6.13%	3.62%	9.34%	12.76%
Exelon Corporation	EXC	\$1.60	\$39.40	4.06%	4.18%	NMF	6.00%	5.70%	5.85%	9.88%	10.03%	10.18%
Evergy, Inc.	EVRG	\$2.67	\$63.23	4.22%	4.36%	7.50%	5.71%	5.90%	6.37%	10.05%	10.73%	11.88%
FirstEnergy Corporation	FE	\$1.70	\$40.87	4.16%	4.29%	5.50%	6.65%	6.90%	6.35%	9.77%	10.64%	11.20%
IDACORP, Inc.	IDA	\$3.44	\$111.31	3.09%	3.21%	6.00%	8.46%	8.40%	7.62%	9.18%	10.83%	11.68%
NextEra Energy, Inc.	NEE	\$2.27	\$73.66	3.08%	3.20%	8.50%	7.57%	7.80%	7.96%	10.77%	11.16%	11.71%
NorthWestern Corporation	NWE	\$2.60	\$53.82	4.83%	4.96%	4.50%	6.00%	6.10%	5.53%	9.44%	10.50%	11.08%
OGE Energy Corporation	OGE	\$1.69	\$42.31	3.98%	4.11%	6.50%	6.00%	6.10%	6.20%	10.10%	10.31%	10.61%
Pinnacle West Capital Corporation	PNW	\$3.58	\$88.36	4.05%	4.16%	4.00%	6.90%	5.60%	5.50%	8.13%	9.66%	11.09%
Portland General Electric Company	POR	\$2.00	\$44.57	4.49%	4.67%	5.50%	6.00%	12.30%	7.93%	10.11%	12.60%	17.06%
PPL Corporation	PPL	\$1.03	\$33.25	3.10%	3.21%	7.50%	7.30%	6.80%	7.20%	10.00%	10.41%	10.71%
Public Service Enterprise Group Inc.	PEG	\$2.40	\$86.62	2.77%	2.86%	6.00%	6.45%	7.60%	6.68%	8.85%	9.55%	10.48%
Southern Company	SO	\$2.88	\$86.06	3.35%	3.46%	6.50%	6.20%	6.80%	6.50%	9.65%	9.96%	10.26%
TXNM Energy, Inc.	TXNM	\$1.63	\$47.81	3.41%	3.49%	4.00%	6.50%	3.00%	4.50%	6.46%	7.99%	10.02%
Wisconsin Energy Corporation	WEC	\$3.57	\$98.32	3.63%	3.76%	6.00%	7.00%	7.60%	6.87%	9.74%	10.62%	11.37%
Xcel Energy Inc.	XEL	\$2.19	\$67.72	3.23%	3.35%	6.50%	7.25%	6.90%	6.88%	9.84%	10.23%	10.60%
Median				3.59%	3.70%	6.00%	6.58%	6.75%	6.37%	9.70%	10.21%	10.86%
Mean				3.73%	3.85%	5.70%	6.65%	6.88%	6.41%	9.29%	10.26%	11.15%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 90-day average as of February 28, 2025
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.50 x [8])
- [5] Source: Value Line
- [6] Source: S&P Capital IQ
- [7] Source: Zacks
- [8] Equals Average ([5], [6], [7])
- [9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7]))
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7]))

180-DAY CONSTANT GROWTH DCF

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Value Line Earnings Growth	S&P Cap. IQ Earnings Growth	Zacks Earnings Growth	Average Growth Rate	Low ROE	Mean ROE	High ROE
Alliant Energy Corporation	LNT	\$2.03	\$58.33	3.48%	3.59%	6.00%	6.75%	6.40%	6.38%	9.58%	9.97%	10.35%
Ameren Corporation	AEE	\$2.68	\$85.95	3.12%	3.22%	6.50%	7.00%	6.70%	6.73%	9.72%	9.96%	10.23%
American Electric Power Company, Inc.	AEP	\$3.72	\$96.94	3.84%	3.96%	6.50%	6.50%	6.00%	6.33%	9.95%	10.29%	10.46%
Avista Corporation	AVA	\$1.96	\$37.28	5.26%	5.41%	5.50%	5.50%	5.90%	5.63%	10.90%	11.04%	11.31%
Black Hills Corporation	BKH	\$2.70	\$58.92	4.59%	4.70%	4.00%	5.03%	5.30%	4.78%	8.68%	9.48%	10.01%
CMS Energy Corporation	CMS	\$2.17	\$66.86	3.25%	3.36%	6.00%	7.00%	7.70%	6.90%	9.34%	10.26%	11.07%
Consolidated Edison, Inc.	ED	\$3.40	\$97.07	3.50%	3.60%	6.00%	5.44%	5.60%	5.68%	9.03%	9.28%	9.61%
DTE Energy Company	DTE	\$4.36	\$121.64	3.58%	3.70%	4.50%	7.00%	7.60%	6.37%	8.17%	10.07%	11.32%
Duke Energy Corporation	DUK	\$4.18	\$111.33	3.75%	3.87%	6.00%	6.30%	6.30%	6.20%	9.87%	10.07%	10.17%
Edison International	EIX	\$3.31	\$76.32	4.34%	4.50%	6.50%	8.00%	8.50%	7.67%	10.98%	12.17%	13.02%
Entergy Corporation	ETR	\$2.40	\$68.15	3.52%	3.63%	0.50%	8.40%	9.50%	6.13%	4.03%	9.76%	13.19%
Exelon Corporation	EXC	\$1.60	\$38.51	4.16%	4.28%	NMF	6.00%	5.70%	5.85%	9.97%	10.13%	10.28%
Evergy, Inc.	EVRG	\$2.67	\$60.48	4.41%	4.56%	7.50%	5.71%	5.90%	6.37%	10.25%	10.92%	12.08%
FirstEnergy Corporation	FE	\$1.70	\$41.30	4.12%	4.25%	5.50%	6.65%	6.90%	6.35%	9.73%	10.60%	11.16%
IDACORP, Inc.	IDA	\$3.44	\$105.18	3.27%	3.40%	6.00%	8.46%	8.40%	7.62%	9.37%	11.02%	11.87%
NextEra Energy, Inc.	NEE	\$2.27	\$75.81	2.99%	3.11%	8.50%	7.57%	7.80%	7.96%	10.68%	11.07%	11.62%
NorthWestern Corporation	NWE	\$2.60	\$53.52	4.86%	4.99%	4.50%	6.00%	6.10%	5.53%	9.47%	10.53%	11.11%
OGE Energy Corporation	OGE	\$1.69	\$40.43	4.17%	4.30%	6.50%	6.00%	6.10%	6.20%	10.29%	10.50%	10.80%
Pinnacle West Capital Corporation	PNW	\$3.58	\$86.34	4.15%	4.26%	4.00%	6.90%	5.60%	5.50%	8.23%	9.76%	11.19%
Portland General Electric Company	POR	\$2.00	\$45.41	4.40%	4.58%	5.50%	6.00%	12.30%	7.93%	10.03%	12.51%	16.98%
PPL Corporation	PPL	\$1.03	\$31.86	3.23%	3.35%	7.50%	7.30%	6.80%	7.20%	10.14%	10.55%	10.85%
Public Service Enterprise Group Inc.	PEG	\$2.40	\$83.48	2.87%	2.97%	6.00%	6.45%	7.60%	6.68%	8.96%	9.65%	10.58%
Southern Company	SO	\$2.88	\$85.58	3.37%	3.47%	6.50%	6.20%	6.80%	6.50%	9.67%	9.97%	10.28%
TXNM Energy, Inc.	TXNM	\$1.63	\$44.15	3.69%	3.77%	4.00%	6.50%	3.00%	4.50%	6.75%	8.27%	10.31%
Wisconsin Energy Corporation	WEC	\$3.57	\$93.29	3.83%	3.96%	6.00%	7.00%	7.60%	6.87%	9.94%	10.82%	11.57%
Xcel Energy Inc.	XEL	\$2.19	\$63.42	3.45%	3.57%	6.50%	7.25%	6.90%	6.88%	10.07%	10.46%	10.83%
Median				3.72%	3.82%	6.00%	6.58%	6.75%	6.37%	9.72%	10.27%	10.96%
Mean				3.82%	3.94%	5.70%	6.65%	6.88%	6.41%	9.38%	10.35%	11.24%

Notes:

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional, equals 180-day average as of February 28, 2025
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.50 x [8])
- [5] Source: Value Line
- [6] Source: S&P Capital IQ
- [7] Source: Zacks
- [8] Equals Average ([5], [6], [7])
- [9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7]))
- [10] Equals [4] + [8]
- [11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7]))

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MARKET RISK PREMIUM (“MRP”)

MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES

[1] Estimate of the S&P 500 Dividend Yield	1.31%
[2] Estimate of the S&P 500 Growth Rate	13.76%
[3] S&P 500 Estimated Required Market Return	15.16%

Notes:

- [1] Sum of [9]
 [2] Sum of [11]
 [3] Equals (([1] x (1 + 0.5 x [2])) + [2])

STANDARD AND POOR'S 500 INDEX

Name	Ticker	Price	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
			Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.	
LyondellBasell Industries NV	LYB	76.83	323	24,850	0.05%	6.98%	0.00%	-1.50%	0.00%	
American Express Co	AXP	300.96	703	211,434	0.43%	0.93%	0.00%	9.00%	0.04%	
Verizon Communications Inc	VZ	43.10	4,210	181,438	0.36%	6.29%	0.02%	0.50%	0.00%	
Texas Pacific Land Corp	TPL	1,427.95	23	32,821	0.07%	0.45%	0.00%	10.50%	0.01%	
Broadcom Inc	AVGO	199.43	4,687	934,799	1.88%	1.18%	0.02%	30.00%	0.56%	
Boeing Co/The	BA	174.63	750	Excl.	0.00%	n/a	n/a		n/a	
Solventum Corp	SOLV	79.75	173	Excl.	0.00%	n/a	n/a		n/a	
Caterpillar Inc	CAT	343.95	478	164,385	0.33%	1.64%	0.01%	10.50%	0.03%	
JPMorgan Chase & Co	JPM	264.65	2,796	739,989	1.49%	1.89%	0.03%	8.00%	0.12%	
Chevron Corp	CVX	158.62	1,761	279,266	0.56%	4.31%	0.02%	4.00%	0.02%	
Coca-Cola Co/The	KO	71.21	4,301	306,274	0.62%	2.86%	0.02%	7.00%	0.04%	
AbbVie Inc	ABBV	209.03	1,765	369,012	0.74%	3.14%	0.02%	4.00%	0.03%	
Walt Disney Co/The	DIS	113.80	1,808	205,726	0.41%	0.88%	0.00%	31.00%	0.13%	
Corpay Inc	CPAY	367.05	70	25,785	0.05%	n/a	n/a	15.50%	0.01%	
Extra Space Storage Inc	EXR	152.56	212	32,340	0.07%	4.25%	0.00%	5.00%	0.00%	
Exxon Mobil Corp	XOM	111.33	4,339	483,077	0.97%	3.56%	0.03%	-2.50%	-0.02%	
Phillips 66	PSX	129.69	408	52,874	0.11%	3.55%	0.00%	1.00%	0.00%	
General Electric Co	GE	206.98	1,073	222,150	0.45%	0.70%	0.00%	21.00%	0.09%	
HP Inc	HPQ	30.87	943	29,110	0.06%	3.75%	0.00%	12.50%	0.01%	
Home Depot Inc/The	HD	396.60	993	393,968	0.79%	2.32%	0.02%	6.50%	0.05%	
Monolithic Power Systems Inc	MPWR	611.01	49	29,805	0.06%	1.02%	0.00%	12.00%	0.01%	
International Business Machines Corp	IBM	252.44	927	234,079	0.47%	2.65%	0.01%	3.00%	0.01%	
Johnson & Johnson	JNJ	165.02	2,408	397,305	0.80%	3.01%	0.02%	3.00%	0.02%	
Lululemon Athletica Inc	LULU	365.61	117	42,655	0.09%	n/a	n/a	13.00%	0.01%	
McDonald's Corp	MCD	308.33	714	220,290	0.44%	2.30%	0.01%	8.50%	0.04%	
Merck & Co Inc	MRK	92.25	2,526	233,027	0.47%	3.51%	0.02%	15.50%	0.07%	
3M Co	MMM	155.12	543	84,215	0.17%	1.88%	0.00%	31.00%	0.05%	
American Water Works Co Inc	AWK	135.97	195	26,507	0.05%	2.25%	0.00%	4.50%	0.00%	
Bank of America Corp	BAC	46.10	7,605	350,576	0.70%	2.26%	0.02%	7.00%	0.05%	
Pfizer Inc	PFE	26.43	5,667	149,788	0.30%	6.51%	0.02%	2.50%	0.01%	
Procter & Gamble Co/The	PG	173.84	2,345	407,629	0.82%	2.32%	0.02%	5.00%	0.04%	
AT&T Inc	T	27.41	7,178	196,754	0.40%	4.05%	0.02%	6.50%	0.03%	
Travelers Cos Inc/The	TRV	258.49	227	58,607	0.12%	1.62%	0.00%	10.50%	0.01%	
RTX Corp	RTX	132.99	1,332	177,159	0.36%	1.89%	0.01%	12.00%	0.04%	
Analog Devices Inc	ADI	230.06	496	114,104	0.23%	1.72%	0.00%	9.00%	0.02%	
Walmart Inc	WMT	98.61	8,033	792,172	1.59%	0.95%	0.02%	9.50%	0.15%	
Cisco Systems Inc	CSCO	64.11	3,978	255,048	0.51%	2.56%	0.01%	5.50%	0.03%	
Intel Corp	INTC	23.73	4,330	102,751	0.21%	n/a	n/a	-2.00%	0.00%	
General Motors Co	GM	49.13	995	48,884	0.10%	0.98%	0.00%	7.50%	0.01%	
Microsoft Corp	MSFT	396.99	7,434	2,951,217	5.93%	0.84%	0.05%	14.50%	0.86%	
Dollar General Corp	DG	74.18	220	16,314	0.03%	3.18%	0.00%	-0.50%	0.00%	
Cigna Group/The	CI	308.85	274	84,526	0.17%	1.96%	0.00%	11.00%	0.02%	
Kinder Morgan Inc	KMI	27.10	2,222	60,215	0.12%	4.24%	0.01%	9.00%	0.01%	
Citigroup Inc	C	79.95	1,884	150,664	0.30%	2.80%	0.01%	3.00%	0.01%	
American International Group Inc	AIG	82.94	593	49,211	0.10%	1.93%	0.00%	12.50%	0.01%	
Altria Group Inc	MO	55.85	1,691	94,423	0.19%	7.31%	0.01%	6.00%	0.01%	
HCA Healthcare Inc	HCA	306.30	248	76,067	0.15%	0.94%	0.00%	10.00%	0.02%	
International Paper Co	IP	56.35	526	29,647	0.06%	3.28%	0.00%	5.50%	0.00%	
Hewlett Packard Enterprise Co	HPE	19.81	1,313	26,019	0.05%	2.62%	0.00%	7.50%	0.00%	
Abbott Laboratories	ABT	138.01	1,734	239,354	0.48%	1.71%	0.01%	4.50%	0.02%	
Aflac Inc	AFL	109.47	547	59,835	0.12%	2.12%	0.00%	7.50%	0.01%	
Air Products and Chemicals Inc	APD	316.15	222	70,336	0.14%	2.26%	0.00%	10.50%	0.01%	
Super Micro Computer Inc	SMCI	41.46	593	24,606	0.05%	n/a	n/a	39.00%	0.02%	
Royal Caribbean Cruises Ltd	RCL	246.10	269	Excl.	0.00%	1.22%	0.00%		n/a	
Hess Corp	HES	148.94	308	45,917	0.09%	1.34%	0.00%	7.50%	0.01%	
Lennox International Inc	LII	601.05	36	21,385	0.04%	0.77%	0.00%	12.50%	0.01%	
Archer-Daniels-Midland Co	ADM	47.20	480	22,642	0.05%	4.32%	0.00%	3.00%	0.00%	
Automatic Data Processing Inc	ADP	315.18	407	128,238	0.26%	1.95%	0.01%	8.50%	0.02%	
Verisk Analytics Inc	VRSK	296.91	140	41,649	0.08%	0.61%	0.00%	11.00%	0.01%	
AutoZone Inc	AZO	3,493.01	17	58,620	0.12%	n/a	n/a	11.50%	0.01%	
Linde PLC	LIN	467.05	473	220,873	0.44%	1.28%	0.01%	7.00%	0.03%	

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		Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Avery Dennison Corp	AVY	187.97	79	14,849	0.03%	1.87%	0.00%	2.00%	0.00%
Enphase Energy Inc	ENPH	57.33	132	7,595	0.02%	n/a	n/a	14.00%	0.00%
MSCI Inc	MSCI	590.51	78	45,854	0.09%	1.22%	0.00%	9.50%	0.01%
Ball Corp	BALL	52.69	283	14,902	0.03%	1.52%	0.00%	10.50%	0.00%
Axon Enterprise Inc	AXON	528.45	76	40,297	0.08%	n/a	n/a	26.00%	0.02%
Dayforce Inc	DAY	61.99	158	Excl.	0.00%	n/a	n/a	n/a	n/a
Carrier Global Corp	CARR	64.80	864	55,986	0.11%	1.39%	0.00%	13.00%	0.01%
Bank of New York Mellon Corp/The	BK	88.95	716	63,717	0.13%	2.11%	0.00%	10.50%	0.01%
Otis Worldwide Corp	OTIS	99.78	397	39,565	0.08%	1.56%	0.00%	11.00%	0.01%
Baxter International Inc	BAX	34.51	512	17,656	0.04%	1.97%	0.00%	3.50%	0.00%
Becton Dickinson & Co	BDX	225.53	287	64,758	0.13%	1.84%	0.00%	7.00%	0.01%
Berkshire Hathaway Inc	BRK/B	513.83	1,338	687,531	1.38%	n/a	n/a	9.00%	0.12%
Best Buy Co Inc	BBY	89.91	214	19,222	0.04%	4.18%	0.00%	1.00%	0.00%
Boston Scientific Corp	BSX	103.79	1,476	153,171	0.31%	n/a	n/a	12.50%	0.04%
Bristol-Myers Squibb Co	BMJ	59.62	2,029	120,988	0.24%	4.16%	0.01%	1.00%	0.00%
Brown-Forman Corp	BF/B	33.11	304	10,050	0.02%	2.74%	0.00%	14.00%	0.00%
Coterra Energy Inc	CTRA	26.99	764	20,624	0.04%	3.26%	0.00%	7.00%	0.00%
Hilton Worldwide Holdings Inc	HLT	264.96	241	Excl.	0.00%	0.23%	0.00%	n/a	n/a
Carnival Corp	CCL	23.93	1,164	Excl.	0.00%	n/a	n/a	n/a	n/a
Builders FirstSource Inc	BLDR	138.99	114	15,792	0.03%	n/a	n/a	6.50%	0.00%
UDR Inc	UDR	45.18	331	14,961	0.03%	3.76%	0.00%	1.50%	0.00%
Clorox Co/The	CLX	156.39	123	19,266	0.04%	3.12%	0.00%	7.00%	0.00%
Paycom Software Inc	PAYC	219.47	57	12,568	0.03%	0.68%	0.00%	14.00%	0.00%
CMS Energy Corp	CMS	73.05	299	21,827	0.04%	2.97%	0.00%	6.00%	0.00%
Colgate-Palmolive Co	CL	91.17	812	73,988	0.15%	2.19%	0.00%	11.50%	0.02%
EPAM Systems Inc	EPAM	206.14	57	11,693	0.02%	n/a	n/a	20.50%	0.00%
Conagra Brands Inc	CAG	25.54	477	12,191	0.02%	5.48%	0.00%	2.00%	0.00%
Airbnb Inc	ABNB	138.87	440	61,103	0.12%	n/a	n/a	23.00%	0.03%
Consolidated Edison Inc	ED	101.52	347	35,198	0.07%	3.35%	0.00%	6.00%	0.00%
Corning Inc	GLW	50.15	857	42,957	0.09%	2.23%	0.00%	17.50%	0.02%
GoDaddy Inc	GDDY	179.50	141	25,373	0.05%	n/a	n/a	27.00%	0.01%
Cummins Inc	CMI	368.18	137	50,618	0.10%	1.98%	0.00%	8.50%	0.01%
Caesars Entertainment Inc	CZR	33.22	212	Excl.	0.00%	n/a	n/a	n/a	n/a
Danaher Corp	DHR	207.76	715	148,488	0.30%	0.62%	0.00%	2.00%	0.01%
Target Corp	TGT	124.24	458	56,928	0.11%	3.61%	0.00%	8.00%	0.01%
Deere & Co	DE	480.79	271	130,493	0.26%	1.35%	0.00%	3.00%	0.01%
Dominion Energy Inc	D	56.62	852	48,243	0.10%	4.72%	0.00%	3.50%	0.00%
Dover Corp	DOV	198.77	137	27,276	0.05%	1.04%	0.00%	5.00%	0.00%
Alliant Energy Corp	LNT	64.53	257	16,564	0.03%	3.15%	0.00%	6.00%	0.00%
Steel Dynamics Inc	STLD	135.07	152	20,564	0.04%	1.48%	0.00%	0.50%	0.00%
Duke Energy Corp	DUK	117.49	771	90,585	0.18%	3.56%	0.01%	6.00%	0.01%
Regency Centers Corp	REG	76.70	181	13,911	0.03%	3.68%	0.00%	11.50%	0.00%
Eaton Corp PLC	ETN	293.32	392	114,981	0.23%	1.42%	0.00%	11.00%	0.03%
Ecolab Inc	ECL	269.01	283	76,129	0.15%	0.97%	0.00%	10.50%	0.02%
Revvity Inc	RVTY	112.15	120	13,475	0.03%	0.25%	0.00%	-1.50%	0.00%
Dell Technologies Inc	DELL	102.76	357	36,720	0.07%	2.04%	0.00%	2.50%	0.00%
Emerson Electric Co	EMR	121.61	564	68,576	0.14%	1.74%	0.00%	12.50%	0.02%
EOG Resources Inc	EOG	126.94	554	70,315	0.14%	3.07%	0.00%	7.00%	0.01%
Aon PLC	AON	409.12	216	88,370	0.18%	0.66%	0.00%	12.50%	0.02%
Entergy Corp	ETR	87.31	430	37,579	0.08%	2.75%	0.00%	3.00%	0.00%
Equifax Inc	EFX	245.20	124	30,411	0.06%	0.64%	0.00%	7.00%	0.00%
EQT Corp	EQT	48.17	597	Excl.	0.00%	1.31%	0.00%	n/a	n/a
IQVIA Holdings Inc	IQV	188.80	176	33,248	0.07%	n/a	n/a	9.00%	0.01%
Gartner Inc	IT	498.32	77	38,280	0.08%	n/a	n/a	8.00%	0.01%
FedEx Corp	FDX	262.90	241	63,320	0.13%	2.10%	0.00%	9.00%	0.01%
FMC Corp	FMC	36.90	125	4,607	0.01%	6.29%	0.00%	3.50%	0.00%
Brown & Brown Inc	BRO	118.54	286	33,894	0.07%	0.51%	0.00%	12.50%	0.01%
Ford Motor Co	F	9.55	3,893	37,174	0.07%	1.57%	0.00%	17.00%	0.01%
NextEra Energy Inc	NEE	70.17	2,057	144,342	0.29%	3.23%	0.01%	8.50%	0.02%
Franklin Resources Inc	BEN	20.25	525	10,639	0.02%	6.32%	0.00%	4.00%	0.00%
Garmin Ltd	GRMN	228.93	192	44,047	0.09%	1.57%	0.00%	8.00%	0.01%
Freeport-McMoRan Inc	FCX	36.91	1,437	53,042	0.11%	1.63%	0.00%	11.00%	0.01%
Dexcom Inc	DXCM	88.37	391	Excl.	0.00%	n/a	n/a	n/a	n/a
General Dynamics Corp	GD	252.60	270	68,291	0.14%	2.25%	0.00%	9.50%	0.01%
General Mills Inc	GIS	60.62	551	33,416	0.07%	3.96%	0.00%	4.50%	0.00%
Genuine Parts Co	GPC	124.88	139	17,331	0.03%	3.30%	0.00%	3.50%	0.00%
Atmos Energy Corp	ATO	152.13	159	24,147	0.05%	2.29%	0.00%	6.00%	0.00%
WW Grainger Inc	GWV	1,021.21	48	49,239	0.10%	0.80%	0.00%	7.50%	0.01%
Halliburton Co	HAL	26.37	868	22,892	0.05%	2.58%	0.00%	16.00%	0.01%
L3Harris Technologies Inc	LHX	206.11	188	38,813	0.08%	2.33%	0.00%	9.00%	0.01%
Healthpeak Properties Inc	DOC	20.46	700	14,313	0.03%	5.96%	0.00%	7.00%	0.00%
Insulet Corp	PODD	272.27	70	Excl.	0.00%	n/a	n/a	n/a	n/a
Fortive Corp	FTV	79.54	340	27,067	0.05%	0.40%	0.00%	10.50%	0.01%
Hershey Co/The	HSY	172.71	148	25,526	0.05%	3.17%	0.00%	7.00%	0.00%
Synchrony Financial	SYF	60.68	389	23,589	0.05%	1.65%	0.00%	47.00%	0.02%
Hormel Foods Corp	HRL	28.63	550	15,744	0.03%	4.05%	0.00%	6.00%	0.00%

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Arthur J Gallagher & Co	AJG	337.74	255	86,022	0.17%	0.77%	0.00%	16.50%	0.03%
Mondelez International Inc	MDLZ	64.23	1,294	83,083	0.17%	2.93%	0.00%	7.50%	0.01%
CenterPoint Energy Inc	CNP	34.38	652	22,406	0.05%	2.56%	0.00%	6.50%	0.00%
Humana Inc	HUM	270.42	121	32,625	0.07%	1.31%	0.00%	2.00%	0.00%
Willis Towers Watson PLC	WTW	339.65	100	33,861	0.07%	1.08%	0.00%	9.50%	0.01%
Illinois Tool Works Inc	ITW	263.98	294	77,478	0.16%	2.27%	0.00%	9.00%	0.01%
CDW Corp/DE	CDW	178.20	132	23,610	0.05%	1.40%	0.00%	7.00%	0.00%
Trane Technologies PLC	TT	353.70	224	79,332	0.16%	1.06%	0.00%	14.00%	0.02%
Interpublic Group of Cos Inc/The	IPG	27.40	373	10,211	0.02%	4.82%	0.00%	8.50%	0.00%
International Flavors & Fragrances Inc	IFF	81.81	256	20,917	0.04%	1.96%	0.00%	0.50%	0.00%
Generac Holdings Inc	GNRC	136.15	60	8,116	0.02%	n/a	n/a	12.50%	0.00%
NXP Semiconductors NV	NXPI	215.59	254	54,678	0.11%	1.88%	0.00%	7.50%	0.01%
Kellanova	K	82.90	345	28,618	0.06%	2.75%	0.00%	2.50%	0.00%
Broadridge Financial Solutions Inc	BR	241.22	117	28,227	0.06%	1.46%	0.00%	9.50%	0.01%
Kimberly-Clark Corp	KMB	142.01	332	47,103	0.09%	3.55%	0.00%	7.50%	0.01%
Kimco Realty Corp	KIM	22.10	674	14,898	0.03%	4.52%	0.00%	18.00%	0.01%
Oracle Corp	ORCL	166.06	2,797	464,463	0.93%	0.96%	0.01%	10.00%	0.09%
Kroger Co/The	KR	64.82	724	46,904	0.09%	1.97%	0.00%	5.00%	0.00%
Lennar Corp	LEN	119.63	234	27,935	0.06%	1.67%	0.00%	6.00%	0.00%
Eli Lilly & Co	LLY	920.63	948	872,914	1.75%	0.65%	0.01%	28.50%	0.50%
Charter Communications Inc	CHTR	363.57	142	51,607	0.10%	n/a	n/a	9.00%	0.01%
Loews Corp	L	86.67	213	18,449	0.04%	0.29%	0.00%	15.50%	0.01%
Lowe's Cos Inc	LOW	248.64	565	140,395	0.28%	1.85%	0.01%	5.50%	0.02%
Hubbell Inc	HUBB	371.59	54	19,942	0.04%	1.42%	0.00%	9.50%	0.00%
IDEX Corp	IEX	194.33	76	14,727	0.03%	1.42%	0.00%	5.00%	0.00%
Marsh & McLennan Cos Inc	MMC	237.84	491	116,811	0.23%	1.37%	0.00%	12.50%	0.03%
Masco Corp	MAS	75.18	212	15,937	0.03%	1.65%	0.00%	9.50%	0.00%
S&P Global Inc	SPGI	533.74	315	168,128	0.34%	0.72%	0.00%	8.50%	0.03%
Medtronic PLC	MDT	92.02	1,283	118,020	0.24%	3.04%	0.01%	6.00%	0.01%
Viatris Inc	VTRS	9.23	1,194	11,018	0.02%	5.20%	0.00%	-1.50%	0.00%
CVS Health Corp	CVS	65.72	1,261	82,859	0.17%	4.05%	0.01%	0.50%	0.00%
DuPont de Nemours Inc	DD	81.77	418	34,184	0.07%	2.01%	0.00%	9.00%	0.01%
Micron Technology Inc	MU	93.63	1,114	104,320	0.21%	0.49%	0.00%	47.50%	0.10%
Motorola Solutions Inc	MSI	440.22	167	73,489	0.15%	0.99%	0.00%	10.00%	0.01%
Cboe Global Markets Inc	CBOE	210.80	105	22,071	0.04%	1.20%	0.00%	14.50%	0.01%
Newmont Corp	NEM	42.84	1,127	48,275	0.10%	2.33%	0.00%	13.00%	0.01%
NIKE Inc	NKE	79.43	1,181	93,826	0.19%	2.01%	0.00%	10.50%	0.02%
NiSource Inc	NI	40.81	470	19,178	0.04%	2.74%	0.00%	8.00%	0.00%
Norfolk Southern Corp	NSC	245.75	226	55,646	0.11%	2.20%	0.00%	12.00%	0.01%
Principal Financial Group Inc	PFGE	89.04	226	20,085	0.04%	3.37%	0.00%	4.00%	0.00%
Eversource Energy	ES	63.01	367	23,111	0.05%	4.78%	0.00%	5.50%	0.00%
Northrop Grumman Corp	NOC	461.74	145	66,839	0.13%	1.78%	0.00%	7.50%	0.01%
Wells Fargo & Co	WFC	78.32	3,288	257,531	0.52%	2.04%	0.01%	9.50%	0.05%
Nucor Corp	NUE	137.47	231	Excl.	0.00%	1.60%	0.00%	n/a	n/a
Occidental Petroleum Corp	OXY	48.84	939	45,836	0.09%	1.97%	0.00%	6.00%	0.01%
Omnicom Group Inc	OMC	82.76	196	16,262	0.03%	3.38%	0.00%	7.00%	0.00%
ONEOK Inc	OKE	100.39	624	62,677	0.13%	4.10%	0.01%	14.50%	0.02%
Raymond James Financial Inc	RJF	154.67	205	31,693	0.06%	1.29%	0.00%	10.00%	0.01%
PG&E Corp	PCG	16.34	2,194	35,843	0.07%	0.61%	0.00%	9.00%	0.01%
Parker-Hannifin Corp	PH	668.51	129	86,081	0.17%	0.98%	0.00%	12.50%	0.02%
Rollins Inc	ROL	52.39	484	25,369	0.05%	1.26%	0.00%	9.50%	0.00%
PPL Corp	PPL	35.21	738	25,995	0.05%	3.10%	0.00%	7.50%	0.00%
Aptiv PLC	APTIV	65.12	229	Excl.	0.00%	n/a	n/a	n/a	n/a
ConocoPhillips	COP	99.15	1,272	126,156	0.25%	3.15%	0.01%	4.00%	0.01%
PulteGroup Inc	PHM	103.28	202	20,910	0.04%	0.85%	0.00%	8.00%	0.00%
Pinnacle West Capital Corp	PNW	92.54	119	11,021	0.02%	3.87%	0.00%	4.00%	0.00%
PNC Financial Services Group Inc/The	PNC	191.92	396	75,952	0.15%	3.33%	0.01%	7.00%	0.01%
PPG Industries Inc	PPG	113.22	227	25,696	0.05%	2.40%	0.00%	5.00%	0.00%
Progressive Corp/The	PGR	282.00	586	165,199	0.33%	0.14%	0.00%	23.50%	0.08%
Veralto Corp	VLTO	99.76	248	24,696	0.05%	0.44%	0.00%	6.00%	0.00%
Public Service Enterprise Group Inc	PEG	81.15	499	40,458	0.08%	3.11%	0.00%	6.00%	0.00%
Cooper Cos Inc/The	COO	90.38	200	18,072	0.04%	n/a	n/a	8.50%	0.00%
Edison International	EIX	54.44	385	20,961	0.04%	6.08%	0.00%	6.50%	0.00%
Schlumberger NV	SLB	41.66	1,360	56,652	0.11%	2.74%	0.00%	18.00%	0.02%
Charles Schwab Corp/The	SCHW	79.53	1,814	144,233	0.29%	1.36%	0.00%	10.50%	0.03%
Sherwin-Williams Co/The	SHW	362.27	252	91,115	0.18%	0.87%	0.00%	12.00%	0.02%
West Pharmaceutical Services Inc	WST	232.34	72	16,799	0.03%	0.36%	0.00%	7.50%	0.00%
J M Smucker Co/The	SJM	110.53	106	11,762	0.02%	3.91%	0.00%	6.50%	0.00%
Snap-on Inc	SNA	341.17	52	17,875	0.04%	2.51%	0.00%	5.50%	0.00%
AMETEK Inc	AME	189.30	231	43,664	0.09%	0.66%	0.00%	10.00%	0.01%
Uber Technologies Inc	UBER	76.01	2,089	Excl.	0.00%	n/a	n/a	n/a	n/a
Southern Co/The	SO	89.79	1,095	98,287	0.20%	3.21%	0.01%	6.50%	0.01%
Truist Financial Corp	TFC	46.35	1,305	60,503	0.12%	4.49%	0.01%	2.00%	0.00%
Southwest Airlines Co	LUV	31.06	593	Excl.	0.00%	2.32%	0.00%	n/a	n/a
W R Berkley Corp	WRB	63.08	379	23,922	0.05%	0.51%	0.00%	14.50%	0.01%
Stanley Black & Decker Inc	SWK	86.53	154	13,361	0.03%	3.79%	0.00%	11.00%	0.00%

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		Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Public Storage	PSA	303.62	175	53,260	0.11%	3.95%	0.00%	7.00%	0.01%
Arista Networks Inc	ANET	93.05	1,261	117,347	0.24%	n/a	n/a	16.00%	0.04%
Sysco Corp	SY	75.54	489	36,956	0.07%	2.70%	0.00%	9.50%	0.01%
Corteva Inc	CTVA	62.98	692	43,598	0.09%	1.08%	0.00%	7.00%	0.01%
Texas Instruments Inc	TXN	195.99	910	178,416	0.36%	2.78%	0.01%	3.00%	0.01%
Textron Inc	TXT	74.73	183	13,644	0.03%	0.11%	0.00%	13.00%	0.00%
Thermo Fisher Scientific Inc	TMO	528.96	377	199,556	0.40%	0.33%	0.00%	6.00%	0.02%
TJX Cos Inc/The	TJX	124.76	1,124	140,250	0.28%	1.20%	0.00%	12.50%	0.04%
Globe Life Inc	GL	127.43	84	10,685	0.02%	0.85%	0.00%	11.00%	0.00%
Johnson Controls International plc	JCI	85.66	660	56,548	0.11%	1.73%	0.00%	13.00%	0.01%
Ulta Beauty Inc	ULTA	366.36	46	16,989	0.03%	n/a	n/a	6.00%	0.00%
Union Pacific Corp	UNP	246.69	604	149,071	0.30%	2.17%	0.01%	8.00%	0.02%
Keysight Technologies Inc	KEYS	159.53	173	27,584	0.06%	n/a	n/a	5.50%	0.00%
UnitedHealth Group Inc	UNH	474.96	915	434,452	0.87%	1.77%	0.02%	11.00%	0.10%
Blackstone Inc	BX	161.16	722	116,358	0.23%	3.57%	0.01%	16.00%	0.04%
Ventas Inc	VTR	69.18	437	30,241	0.06%	2.78%	0.00%	23.00%	0.01%
Labcorp Holdings Inc	LH	251.04	84	21,012	0.04%	1.15%	0.00%	1.50%	0.00%
Vulcan Materials Co	VMC	247.31	132	32,672	0.07%	0.79%	0.00%	8.00%	0.01%
Weyerhaeuser Co	WY	30.10	726	21,840	0.04%	2.79%	0.00%	-2.00%	0.00%
Williams Cos Inc/The	WMB	58.18	1,219	70,943	0.14%	3.44%	0.00%	9.50%	0.01%
Constellation Energy Corp	CEG	250.55	315	Excl.	0.00%	0.62%	0.00%	n/a	n/a
WEC Energy Group Inc	WEC	106.69	318	33,901	0.07%	3.35%	0.00%	6.00%	0.00%
Adobe Inc	ADBE	438.56	435	190,905	0.38%	n/a	n/a	13.50%	0.05%
Vistra Corp	VST	133.66	340	Excl.	0.00%	0.67%	0.00%	n/a	n/a
AES Corp/The	AES	11.59	711	8,241	0.02%	6.07%	0.00%	14.00%	0.00%
Expeditors International of Washington Inc	EXPD	117.36	138	16,199	0.03%	1.24%	0.00%	-1.50%	0.00%
Amgen Inc	AMGN	308.06	537	165,491	0.33%	3.09%	0.01%	5.50%	0.02%
Apple Inc	AAPL	241.84	15,022	3,632,938	7.30%	0.41%	0.03%	9.00%	0.66%
Autodesk Inc	ADSK	274.21	215	58,955	0.12%	n/a	n/a	14.00%	0.02%
Cintas Corp	CTAS	207.50	404	83,735	0.17%	0.75%	0.00%	14.00%	0.02%
Comcast Corp	CMCSA	35.88	3,772	135,324	0.27%	3.68%	0.01%	7.50%	0.02%
Molson Coors Beverage Co	TAP	61.29	190	11,655	0.02%	3.07%	0.00%	11.50%	0.00%
KLA Corp	KLAC	708.84	133	94,195	0.19%	0.96%	0.00%	13.00%	0.02%
Marriott International Inc/MD	MAR	280.45	276	77,319	0.16%	0.90%	0.00%	11.00%	0.02%
Fiserv Inc	FI	235.69	561	132,290	0.27%	n/a	n/a	9.50%	0.03%
McCormick & Co Inc/MD	MKC	82.61	253	20,861	0.04%	2.18%	0.00%	4.50%	0.00%
PACCAR Inc	PCAR	107.24	525	56,280	0.11%	1.23%	0.00%	14.50%	0.02%
Costco Wholesale Corp	COST	1,048.61	444	465,477	0.94%	0.44%	0.00%	11.50%	0.11%
Stryker Corp	SYK	386.19	382	147,362	0.30%	0.87%	0.00%	9.50%	0.03%
Tyson Foods Inc	TSN	61.34	286	17,555	0.04%	3.26%	0.00%	6.00%	0.00%
Lamb Weston Holdings Inc	LW	51.87	143	7,399	0.01%	2.85%	0.00%	10.50%	0.00%
Applied Materials Inc	AMAT	158.07	812	128,423	0.26%	1.01%	0.00%	9.00%	0.02%
Cardinal Health Inc	CAH	129.48	242	31,278	0.06%	1.56%	0.00%	6.50%	0.00%
Cincinnati Financial Corp	CINF	147.81	157	23,136	0.05%	2.35%	0.00%	14.00%	0.01%
Paramount Global	PARA	11.36	630	7,157	0.01%	1.76%	0.00%	3.00%	0.00%
DR Horton Inc	DHI	126.81	315	39,961	0.08%	1.26%	0.00%	4.00%	0.00%
Electronic Arts Inc	EA	129.12	261	33,651	0.07%	0.59%	0.00%	14.00%	0.01%
Erie Indemnity Co	ERIE	428.07	46	19,772	0.04%	1.28%	0.00%	18.00%	0.01%
Fair Isaac Corp	FICO	1,886.35	24	46,061	0.09%	n/a	n/a	20.50%	0.02%
Fastenal Co	FAST	75.73	573	43,427	0.09%	2.27%	0.00%	9.00%	0.01%
M&T Bank Corp	MTB	191.72	164	31,506	0.06%	2.82%	0.00%	5.50%	0.00%
Xcel Energy Inc	XEL	72.10	575	41,425	0.08%	3.16%	0.00%	6.50%	0.01%
Fifth Third Bancorp	FITB	43.47	666	28,934	0.06%	3.40%	0.00%	5.00%	0.00%
Gilead Sciences Inc	GILD	114.31	1,246	142,461	0.29%	2.76%	0.01%	2.50%	0.01%
Hasbro Inc	HAS	65.11	140	9,085	0.02%	4.30%	0.00%	8.50%	0.00%
Huntington Bancshares Inc/OH	HBAN	16.47	1,454	23,943	0.05%	3.76%	0.00%	7.00%	0.00%
Welltower Inc	WELL	153.51	641	98,447	0.20%	1.75%	0.00%	27.50%	0.05%
Biogen Inc	BIIB	140.50	146	20,566	0.04%	n/a	n/a	1.00%	0.00%
Northern Trust Corp	NTRS	110.22	196	21,570	0.04%	2.72%	0.00%	5.00%	0.00%
Packaging Corp of America	PKG	213.09	90	19,136	0.04%	2.35%	0.00%	9.00%	0.00%
Paychex Inc	PAYX	151.67	360	54,611	0.11%	2.58%	0.00%	8.00%	0.01%
QUALCOMM Inc	QCOM	157.17	1,106	173,830	0.35%	2.16%	0.01%	6.00%	0.02%
Ross Stores Inc	ROST	140.32	330	46,296	0.09%	1.05%	0.00%	9.50%	0.01%
IDEXX Laboratories Inc	IDXX	437.11	81	35,549	0.07%	n/a	n/a	10.50%	0.01%
Starbucks Corp	SBUX	115.81	1,136	131,549	0.26%	2.11%	0.01%	7.00%	0.02%
KeyCorp	KEY	17.32	1,105	19,141	0.04%	4.73%	0.00%	-1.50%	0.00%
Fox Corp	FOXA	57.60	218	12,548	0.03%	0.94%	0.00%	8.50%	0.00%
Fox Corp	FOX	54.07	236	Excl.	0.00%	1.00%	0.00%	n/a	n/a
State Street Corp	STT	99.23	288	28,625	0.06%	3.06%	0.00%	7.50%	0.00%
Norwegian Cruise Line Holdings Ltd	NCLH	22.72	440	Excl.	0.00%	n/a	n/a	n/a	n/a
US Bancorp	USB	46.90	1,560	73,159	0.15%	4.26%	0.01%	4.00%	0.01%
A O Smith Corp	AOS	66.48	118	7,822	0.02%	2.05%	0.00%	9.00%	0.00%
Gen Digital Inc	GEN	27.33	616	16,844	0.03%	1.83%	0.00%	10.50%	0.00%
T Rowe Price Group Inc	TROW	105.72	223	23,537	0.05%	4.81%	0.00%	5.50%	0.00%
Waste Management Inc	WM	232.78	402	93,604	0.19%	1.42%	0.00%	8.50%	0.02%
Constellation Brands Inc	STZ	175.50	181	31,714	0.06%	2.30%	0.00%	7.50%	0.00%

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Invesco Ltd	IVZ	17.39	448	7,784	0.02%	4.72%	0.00%	10.50%	0.00%
Intuit Inc	INTU	613.84	280	171,606	0.34%	0.68%	0.00%	13.50%	0.05%
Morgan Stanley	MS	133.11	1,613	214,687	0.43%	2.78%	0.01%	9.50%	0.04%
Microchip Technology Inc	MCHP	58.86	538	31,656	0.06%	3.09%	0.00%	1.50%	0.00%
CrowdStrike Holdings Inc	CRWD	389.66	246	Excl.	0.00%	n/a	n/a	n/a	n/a
Chubb Ltd	CB	285.48	400	114,310	0.23%	1.28%	0.00%	11.00%	0.03%
Hologic Inc	HOLX	63.39	224	14,224	0.03%	n/a	n/a	2.00%	0.00%
Citizens Financial Group Inc	CFG	45.77	437	20,008	0.04%	3.67%	0.00%	5.50%	0.00%
Jabil Inc	JBL	154.92	109	16,914	0.03%	0.21%	0.00%	13.50%	0.00%
O'Reilly Automotive Inc	ORLY	1,373.64	58	79,301	0.16%	n/a	n/a	10.50%	0.02%
Allstate Corp/The	ALL	199.15	265	52,780	0.11%	2.01%	0.00%	29.00%	0.03%
Equity Residential	EQR	74.17	380	28,163	0.06%	3.64%	0.00%	-4.00%	0.00%
BorgWarner Inc	BWA	29.77	219	6,510	0.01%	1.48%	0.00%	5.50%	0.00%
Keurig Dr Pepper Inc	KDP	33.52	1,357	45,478	0.09%	2.74%	0.00%	9.50%	0.01%
Host Hotels & Resorts Inc	HST	16.13	699	11,277	0.02%	4.96%	0.00%	15.00%	0.00%
Incyte Corp	INCY	73.50	194	14,224	0.03%	n/a	n/a	33.50%	0.01%
Simon Property Group Inc	SPG	186.09	326	60,716	0.12%	4.51%	0.01%	3.50%	0.00%
Eastman Chemical Co	EMN	97.85	115	11,269	0.02%	3.39%	0.00%	3.50%	0.00%
AvalonBay Communities Inc	AVB	226.18	142	32,175	0.06%	3.09%	0.00%	5.50%	0.00%
Prudential Financial Inc	PRU	115.10	354	40,745	0.08%	4.69%	0.00%	4.00%	0.00%
United Parcel Service Inc	UPS	119.03	740	88,067	0.18%	5.51%	0.01%	2.50%	0.00%
Walgreens Boots Alliance Inc	WBA	10.68	864	9,229	0.02%	n/a	n/a	-11.00%	0.00%
STERIS PLC	STE	219.26	98	21,542	0.04%	1.04%	0.00%	8.00%	0.00%
McKesson Corp	MCK	640.26	125	80,241	0.16%	0.44%	0.00%	10.00%	0.02%
Lockheed Martin Corp	LMT	450.37	235	106,011	0.21%	2.93%	0.01%	12.00%	0.03%
Cencora Inc	COR	253.54	194	49,114	0.10%	0.87%	0.00%	6.50%	0.01%
Capital One Financial Corp	COF	200.55	381	76,475	0.15%	1.20%	0.00%	2.50%	0.00%
The Campbell's Company	CPB	40.06	298	11,942	0.02%	3.89%	0.00%	7.00%	0.00%
Waters Corp	WAT	377.34	59	22,418	0.05%	n/a	n/a	6.50%	0.00%
Nordson Corp	NDSN	210.29	57	11,968	0.02%	1.48%	0.00%	10.50%	0.00%
Dollar Tree Inc	DLTR	72.86	215	15,668	0.03%	n/a	n/a	20.00%	0.01%
Darden Restaurants Inc	DRI	200.46	117	23,483	0.05%	2.79%	0.00%	10.50%	0.00%
Evergy Inc	EVRG	68.91	230	15,832	0.03%	3.87%	0.00%	7.50%	0.00%
Match Group Inc	MTCH	31.71	250	7,941	0.02%	2.40%	0.00%	11.00%	0.00%
NVR Inc	NVR	7,245.58	3	21,668	0.04%	n/a	n/a	1.50%	0.00%
NetApp Inc	NTAP	99.81	203	20,303	0.04%	2.08%	0.00%	9.00%	0.00%
Old Dominion Freight Line Inc	ODFL	176.50	213	37,514	0.08%	0.63%	0.00%	7.00%	0.01%
DaVita Inc	DVA	147.88	80	11,830	0.02%	n/a	n/a	10.50%	0.00%
Hartford Insurance Group Inc/The	HIG	118.28	285	33,756	0.07%	1.76%	0.00%	7.00%	0.00%
Iron Mountain Inc	IRM	93.17	294	27,368	0.06%	3.37%	0.00%	8.00%	0.00%
Estee Lauder Cos Inc/The	EL	71.91	234	16,839	0.03%	1.95%	0.00%	3.50%	0.00%
Cadence Design Systems Inc	CDNS	250.50	274	68,664	0.14%	n/a	n/a	12.00%	0.02%
Tyler Technologies Inc	TYL	608.43	43	26,171	0.05%	n/a	n/a	8.00%	0.00%
Universal Health Services Inc	UHS	175.25	58	10,121	0.02%	0.46%	0.00%	13.00%	0.00%
Skyworks Solutions Inc	SWKS	66.66	161	Excl.	0.00%	4.20%	0.00%	n/a	n/a
Quest Diagnostics Inc	DGX	172.90	111	19,188	0.04%	1.85%	0.00%	3.50%	0.00%
Rockwell Automation Inc	ROK	287.15	113	32,469	0.07%	1.82%	0.00%	9.50%	0.01%
Kraft Heinz Co/The	KHC	30.71	1,195	36,698	0.07%	5.21%	0.00%	4.50%	0.00%
American Tower Corp	AMT	205.62	467	96,119	0.19%	3.15%	0.01%	11.00%	0.02%
Regeneron Pharmaceuticals Inc	REGN	698.74	108	75,120	0.15%	0.50%	0.00%	2.00%	0.00%
Amazon.com Inc	AMZN	212.28	10,598	2,249,686	4.52%	n/a	n/a	24.50%	1.11%
Jack Henry & Associates Inc	JKHY	173.59	73	12,654	0.03%	1.34%	0.00%	6.50%	0.00%
Ralph Lauren Corp	RL	271.14	40	10,814	0.02%	1.22%	0.00%	12.00%	0.00%
BXP Inc	BXP	70.93	158	11,222	0.02%	5.53%	0.00%	0.50%	0.00%
Amphenol Corp	APH	66.60	1,211	80,658	0.16%	0.99%	0.00%	14.00%	0.02%
Howmet Aerospace Inc	HWM	136.60	405	55,326	0.11%	0.29%	0.00%	12.00%	0.01%
Valero Energy Corp	VLO	130.73	315	41,177	0.08%	3.46%	0.00%	-5.00%	0.00%
Synopsys Inc	SNPS	457.28	155	70,705	0.14%	n/a	n/a	12.00%	0.02%
CH Robinson Worldwide Inc	CHRW	101.62	119	12,063	0.02%	2.44%	0.00%	5.00%	0.00%
Accenture PLC	ACN	348.50	625	217,980	0.44%	1.70%	0.01%	12.50%	0.05%
TransDigm Group Inc	TDG	1,367.20	56	76,679	0.15%	n/a	n/a	19.00%	0.03%
Yum! Brands Inc	YUM	156.37	279	43,643	0.09%	1.82%	0.00%	10.00%	0.01%
Prologis Inc	PLD	123.92	926	114,772	0.23%	3.26%	0.01%	0.50%	0.00%
FirstEnergy Corp	FE	38.77	577	22,359	0.04%	4.38%	0.00%	5.50%	0.00%
VeriSign Inc	VRSN	237.88	95	22,503	0.05%	n/a	n/a	12.00%	0.01%
Quanta Services Inc	PWR	259.63	148	38,477	0.08%	0.15%	0.00%	18.00%	0.01%
Henry Schein Inc	HSIC	72.17	124	8,962	0.02%	n/a	n/a	8.00%	0.00%
Ameren Corp	AEE	101.56	267	27,067	0.05%	2.80%	0.00%	6.50%	0.00%
ANSYS Inc	ANSS	333.25	88	29,210	0.06%	n/a	n/a	9.50%	0.01%
FactSet Research Systems Inc	FDS	461.74	38	17,560	0.04%	0.90%	0.00%	9.00%	0.00%
NVIDIA Corp	NVDA	124.92	24,400	3,048,048	6.13%	0.03%	0.00%	41.00%	2.51%
Cognizant Technology Solutions Corp	CTSH	83.33	495	41,216	0.08%	1.49%	0.00%	9.00%	0.01%
Intuitive Surgical Inc	ISRG	573.15	357	204,418	0.41%	n/a	n/a	14.00%	0.06%
Take-Two Interactive Software Inc	TTWO	211.98	176	Excl.	0.00%	n/a	n/a	n/a	n/a
Republic Services Inc	RSG	237.02	312	74,018	0.15%	0.98%	0.00%	11.00%	0.02%
eBay Inc	EBAY	64.74	466	30,169	0.06%	1.79%	0.00%	11.50%	0.01%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Goldman Sachs Group Inc/The	GS	622.29	312	194,179	0.39%	1.93%	0.01%	7.50%	0.03%
SBA Communications Corp	SBAC	217.90	108	23,449	0.05%	2.04%	0.00%	19.00%	0.01%
Sempra	SRE	71.57	651	46,625	0.09%	3.60%	0.00%	6.00%	0.01%
Moody's Corp	MCO	503.94	180	90,709	0.18%	0.75%	0.00%	8.50%	0.02%
ON Semiconductor Corp	ON	47.05	421	19,828	0.04%	n/a	n/a	7.00%	0.00%
Booking Holdings Inc	BKNG	5,016.01	33	164,601	0.33%	0.77%	0.00%	22.00%	0.07%
F5 Inc	FFIV	292.43	58	16,859	0.03%	n/a	n/a	10.00%	0.00%
Akamai Technologies Inc	AKAM	80.68	150	12,128	0.02%	n/a	n/a	6.00%	0.00%
Charles River Laboratories International Inc	CRL	165.31	51	8,454	0.02%	n/a	n/a	4.50%	0.00%
MarketAxess Holdings Inc	MKTX	192.79	38	7,267	0.01%	1.58%	0.00%	9.00%	0.00%
Devon Energy Corp	DVN	36.22	649	23,507	0.05%	2.65%	0.00%	1.50%	0.00%
Bio-Techne Corp	TECH	61.75	158	9,762	0.02%	0.52%	0.00%	11.00%	0.00%
Alphabet Inc	GOOGL	170.28	5,833	Excl.	0.00%	0.47%	0.00%	n/a	n/a
Teleflex Inc	TFX	132.75	46	6,155	0.01%	1.02%	0.00%	8.50%	0.00%
Allegion plc	ALLE	128.71	86	11,106	0.02%	1.58%	0.00%	8.50%	0.00%
Netflix Inc	NFLX	980.56	428	419,442	0.84%	n/a	n/a	16.50%	0.14%
Warner Bros Discovery Inc	WBD	11.46	2,455	Excl.	0.00%	n/a	n/a	n/a	n/a
Agilent Technologies Inc	A	127.92	285	36,494	0.07%	0.78%	0.00%	6.50%	0.00%
Trimble Inc	TRMB	71.98	246	17,692	0.04%	n/a	n/a	6.00%	0.00%
Elevance Health Inc	ELV	396.88	227	90,231	0.18%	1.72%	0.00%	9.50%	0.02%
CME Group Inc	CME	253.77	360	91,447	0.18%	1.97%	0.00%	6.00%	0.01%
Juniper Networks Inc	JNPR	36.20	333	12,061	0.02%	2.43%	0.00%	7.00%	0.00%
DTE Energy Co	DTE	133.70	207	27,666	0.06%	3.26%	0.00%	8.50%	0.00%
Celanese Corp	CE	50.94	109	5,569	0.01%	0.24%	0.00%	4.50%	0.00%
Nasdaq Inc	NDAQ	82.78	575	47,611	0.10%	1.16%	0.00%	3.50%	0.00%
Philip Morris International Inc	PM	155.28	1,555	241,438	0.49%	3.48%	0.02%	5.00%	0.02%
Ingersoll Rand Inc	IR	84.78	403	34,173	0.07%	0.09%	0.00%	10.50%	0.01%
Salesforce Inc	CRM	297.85	957	285,042	0.57%	0.54%	0.00%	24.50%	0.14%
Roper Technologies Inc	ROP	584.50	107	62,767	0.13%	0.56%	0.00%	9.00%	0.01%
Huntington Ingalls Industries Inc	HII	175.58	39	6,870	0.01%	3.08%	0.00%	10.00%	0.00%
MetLife Inc	MET	86.18	681	58,708	0.12%	2.53%	0.00%	7.50%	0.01%
Tapestry Inc	TPR	85.42	207	17,683	0.04%	1.64%	0.00%	9.00%	0.00%
CSX Corp	CSX	32.01	1,895	60,647	0.12%	1.62%	0.00%	10.00%	0.01%
Edwards Lifesciences Corp	EW	71.62	590	42,241	0.08%	n/a	n/a	6.50%	0.01%
Ameriprise Financial Inc	AMP	537.30	96	51,644	0.10%	1.10%	0.00%	10.00%	0.01%
Zebra Technologies Corp	ZBRA	315.05	51	16,187	0.03%	n/a	n/a	5.50%	0.00%
Zimmer Biomet Holdings Inc	ZBH	104.32	199	20,766	0.04%	0.92%	0.00%	6.50%	0.00%
Camden Property Trust	CPT	124.06	107	13,244	0.03%	3.39%	0.00%	-8.50%	0.00%
CBRE Group Inc	CBRE	141.94	300	42,587	0.09%	n/a	n/a	6.00%	0.01%
Mastercard Inc	MA	576.31	905	521,497	1.05%	0.53%	0.01%	14.50%	0.15%
CarMax Inc	KMX	82.97	154	12,761	0.03%	n/a	n/a	3.00%	0.00%
Intercontinental Exchange Inc	ICE	173.23	575	99,532	0.20%	1.11%	0.00%	7.50%	0.02%
Fidelity National Information Services Inc	FIS	71.12	530	37,672	0.08%	2.25%	0.00%	4.50%	0.00%
Smurfit WestRock PLC	SW	52.07	520	Excl.	0.00%	3.31%	0.00%	n/a	n/a
Chipotle Mexican Grill Inc	CMG	53.97	1,355	73,148	0.15%	n/a	n/a	20.50%	0.03%
Wynn Resorts Ltd	WYNN	89.32	106	9,504	0.02%	1.12%	0.00%	27.00%	0.01%
Live Nation Entertainment Inc	LYV	143.36	233	Excl.	0.00%	n/a	n/a	n/a	n/a
Assurant Inc	AIZ	207.89	51	10,559	0.02%	1.54%	0.00%	9.50%	0.00%
NRG Energy Inc	NRG	105.71	198	20,938	0.04%	1.66%	0.00%	11.00%	0.00%
Monster Beverage Corp	MNST	54.65	973	53,148	0.11%	n/a	n/a	11.50%	0.01%
Regions Financial Corp	RF	23.71	905	21,469	0.04%	4.22%	0.00%	5.00%	0.00%
Baker Hughes Co	BKR	44.59	990	44,149	0.09%	2.06%	0.00%	30.00%	0.03%
Mosaic Co/The	MOS	23.92	318	7,598	0.02%	3.68%	0.00%	-11.00%	0.00%
Expedia Group Inc	EXPE	197.96	123	24,415	0.05%	0.81%	0.00%	39.00%	0.02%
CF Industries Holdings Inc	CF	81.02	170	Excl.	0.00%	2.47%	0.00%	n/a	n/a
APA Corp	APA	20.70	370	7,658	0.02%	4.83%	0.00%	6.00%	0.00%
Leidos Holdings Inc	LDOS	129.97	131	17,048	0.03%	1.23%	0.00%	8.00%	0.00%
Alphabet Inc	GOOG	172.22	5,497	946,693	1.90%	0.46%	0.01%	13.50%	0.26%
First Solar Inc	FSLR	136.18	107	14,580	0.03%	n/a	n/a	34.50%	0.01%
Discover Financial Services	DFS	195.19	252	49,111	0.10%	1.43%	0.00%	4.00%	0.00%
Visa Inc	V	362.71	1,723	625,081	1.26%	0.65%	0.01%	13.50%	0.17%
Mid-America Apartment Communities Inc	MAA	168.12	117	19,654	0.04%	3.60%	0.00%	-15.00%	-0.01%
Xylem Inc/NY	XYL	130.89	243	31,799	0.06%	1.22%	0.00%	12.00%	0.01%
Marathon Petroleum Corp	MPC	150.18	313	46,943	0.09%	2.42%	0.00%	-6.00%	-0.01%
Tractor Supply Co	TSCO	55.35	532	29,421	0.06%	1.66%	0.00%	10.50%	0.01%
Advanced Micro Devices Inc	AMD	99.86	1,620	161,821	0.33%	n/a	n/a	17.00%	0.06%
ResMed Inc	RMD	233.52	147	34,296	0.07%	0.91%	0.00%	11.00%	0.01%
Mettler-Toledo International Inc	MTD	1,272.72	21	26,621	0.05%	n/a	n/a	9.50%	0.01%
VICI Properties Inc	VICI	32.49	1,043	33,892	0.07%	5.32%	0.00%	10.50%	0.01%
Copart Inc	CPRT	54.80	966	52,942	0.11%	n/a	n/a	9.00%	0.01%
Jacobs Solutions Inc	J	128.11	123	15,699	0.03%	1.00%	0.00%	11.00%	0.00%
Albemarle Corp	ALB	77.03	118	9,057	0.02%	2.10%	0.00%	-3.50%	0.00%
Fortinet Inc	FTNT	108.01	769	83,057	0.17%	n/a	n/a	18.00%	0.03%
Moderna Inc	MRNA	30.96	386	11,945	0.02%	n/a	n/a	-16.00%	0.00%
Essex Property Trust Inc	ESS	311.57	64	20,042	0.04%	3.30%	0.00%	4.00%	0.00%
CoStar Group Inc	CSGP	76.25	410	31,272	0.06%	n/a	n/a	11.50%	0.01%

STANDARD AND POOR'S 500 INDEX

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Realty Income Corp	O	57.03	892	50,843	0.10%	5.64%	0.01%	5.00%	0.01%
Westinghouse Air Brake Technologies Corp	WAB	185.36	171	31,668	0.06%	0.54%	0.00%	16.00%	0.01%
Palantir Technologies Inc	PLTR	84.92	2,249	Excl.	0.00%	n/a	n/a	n/a	n/a
Pool Corp	POOL	347.00	38	13,058	0.03%	1.38%	0.00%	0.50%	0.00%
Western Digital Corp	WDC	48.93	348	17,019	0.03%	n/a	n/a	22.50%	0.01%
PepsiCo Inc	PEP	153.47	1,371	210,484	0.42%	3.53%	0.01%	7.50%	0.03%
TE Connectivity PLC	TEL	154.03	298	45,955	0.09%	1.69%	0.00%	10.50%	0.01%
Diamondback Energy Inc	FANG	158.96	289	46,010	0.09%	2.52%	0.00%	2.50%	0.00%
Palo Alto Networks Inc	PANW	190.43	662	Excl.	0.00%	n/a	n/a	n/a	n/a
ServiceNow Inc	NOW	929.76	206	191,531	0.39%	n/a	n/a	32.50%	0.13%
Church & Dwight Co Inc	CHD	111.20	246	27,352	0.05%	1.06%	0.00%	6.50%	0.00%
Federal Realty Investment Trust	FRT	105.42	86	9,032	0.02%	4.17%	0.00%	2.50%	0.00%
MGM Resorts International	MGM	34.76	286	9,926	0.02%	n/a	n/a	25.00%	0.00%
American Electric Power Co Inc	AEP	106.05	533	56,547	0.11%	3.51%	0.00%	6.50%	0.01%
Invitation Homes Inc	INVH	34.01	613	20,838	0.04%	3.41%	0.00%	7.50%	0.00%
PTC Inc	PTC	163.63	120	19,689	0.04%	n/a	n/a	29.00%	0.01%
JB Hunt Transport Services Inc	JBHT	161.19	100	16,120	0.03%	1.09%	0.00%	6.00%	0.00%
Lam Research Corp	LRCX	76.74	1,284	98,508	0.20%	1.20%	0.00%	12.50%	0.02%
Mohawk Industries Inc	MHK	117.59	63	7,360	0.01%	n/a	n/a	1.00%	0.00%
GE HealthCare Technologies Inc	GEHC	87.35	457	Excl.	0.00%	0.16%	0.00%	n/a	n/a
Pentair PLC	PNR	94.20	165	15,526	0.03%	1.06%	0.00%	12.00%	0.00%
Vertex Pharmaceuticals Inc	VRTX	479.79	257	123,205	0.25%	n/a	n/a	10.00%	0.02%
Amcor PLC	AMCR	10.12	1,445	14,627	0.03%	5.04%	0.00%	11.50%	0.00%
Meta Platforms Inc	META	668.20	2,190	1,463,290	2.94%	0.31%	0.01%	19.00%	0.56%
T-Mobile US Inc	TMUS	269.69	1,142	307,917	0.62%	1.31%	0.01%	18.00%	0.11%
United Rentals Inc	URI	642.32	65	41,948	0.08%	1.11%	0.00%	19.00%	0.02%
Alexandria Real Estate Equities Inc	ARE	102.26	173	17,700	0.04%	5.16%	0.00%	9.50%	0.00%
Honeywell International Inc	HON	212.89	650	138,361	0.28%	2.12%	0.01%	11.00%	0.03%
Delta Air Lines Inc	DAL	60.12	646	38,835	0.08%	1.00%	0.00%	28.00%	0.02%
United Airlines Holdings Inc	UAL	93.81	329	Excl.	0.00%	n/a	n/a	n/a	n/a
Seagate Technology Holdings PLC	STX	101.91	212	21,575	0.04%	2.83%	0.00%	31.00%	0.01%
News Corp	NWS	32.28	189	Excl.	0.00%	0.62%	0.00%	n/a	n/a
Centene Corp	CNC	58.16	496	28,850	0.06%	n/a	n/a	9.50%	0.01%
Apollo Global Management Inc	APO	149.27	570	85,156	0.17%	1.24%	0.00%	23.50%	0.04%
Martin Marietta Materials Inc	MLM	483.14	61	29,459	0.06%	0.65%	0.00%	11.00%	0.01%
Teradyne Inc	TER	109.86	162	17,766	0.04%	0.44%	0.00%	10.50%	0.00%
PayPal Holdings Inc	PYPL	71.05	989	70,286	0.14%	n/a	n/a	11.50%	0.02%
Tesla Inc	TSLA	292.98	3,217	942,375	1.89%	n/a	n/a	16.50%	0.31%
Blackrock Inc	BLK	977.78	155	151,804	0.31%	2.13%	0.01%	9.50%	0.03%
KKR & Co Inc	KKR	135.59	888	120,435	0.24%	0.52%	0.00%	5.00%	0.01%
Arch Capital Group Ltd	ACGL	92.91	375	34,874	0.07%	n/a	n/a	15.00%	0.01%
Dow Inc	DOW	38.11	700	Excl.	0.00%	7.35%	0.00%	n/a	n/a
Everest Group Ltd	EG	353.22	43	15,165	0.03%	2.26%	0.00%	14.50%	0.00%
Teledyne Technologies Inc	TDY	515.02	47	24,121	0.05%	n/a	n/a	8.00%	0.00%
Domino's Pizza Inc	DPZ	489.71	34	16,795	0.03%	1.42%	0.00%	12.50%	0.00%
GE Vernova Inc	GEV	335.18	276	Excl.	0.00%	0.30%	0.00%	n/a	n/a
News Corp	NWSA	28.62	378	10,820	0.02%	0.70%	0.00%	14.50%	0.00%
Exelon Corp	EXC	44.20	1,005	Excl.	0.00%	3.62%	0.00%	n/a	n/a
Global Payments Inc	GPN	105.28	248	26,069	0.05%	0.95%	0.00%	13.50%	0.01%
Crown Castle Inc	CCI	94.10	435	40,896	0.08%	6.65%	0.01%	-0.50%	0.00%
Align Technology Inc	ALGN	187.03	74	13,765	0.03%	n/a	n/a	17.00%	0.00%
Kenvue Inc	KVUE	23.60	1,911	Excl.	0.00%	3.47%	0.00%	n/a	n/a
Targa Resources Corp	TRGP	201.72	218	43,996	0.09%	1.49%	0.00%	22.00%	0.02%
Bunge Global SA	BG	74.19	134	9,939	0.02%	3.67%	0.00%	0.00%	0.00%
LKQ Corp	LKQ	42.19	259	10,934	0.02%	2.84%	0.00%	7.00%	0.00%
Deckers Outdoor Corp	DECK	139.36	152	21,151	0.04%	n/a	n/a	16.00%	0.01%
Workday Inc	WDAY	263.34	214	56,355	0.11%	n/a	n/a	15.50%	0.02%
Zoetis Inc	ZTS	167.24	448	74,889	0.15%	1.20%	0.00%	7.50%	0.01%
Equinix Inc	EQIX	904.62	97	88,048	0.18%	2.07%	0.00%	15.00%	0.03%
Digital Realty Trust Inc	DLR	156.32	337	52,624	0.11%	3.12%	0.00%	-5.00%	-0.01%
Molina Healthcare Inc	MOH	301.12	56	16,712	0.03%	n/a	n/a	10.50%	0.00%
Las Vegas Sands Corp	LVS	44.71	716	Excl.	0.00%	2.24%	0.00%	n/a	n/a

Notes:

- [4] Source: Bloomberg Professional
- [5] Source: Bloomberg Professional
- [6] Equals [4] x [5]
- [7] Equals [6] / Sum of Column [6]
- [8] Source: Bloomberg Professional
- [9] Equals [7] x [8]
- [10] Source: Value Line, as of February 28, 2025
- [11] Equals [7] x [10]

MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY

[1] Estimate of the S&P 500 Dividend Yield	1.49%
[2] Estimate of the S&P 500 Growth Rate	9.98%
[3] S&P 500 Estimated Required Market Return	11.54%

Notes:

- [1] Sum of [9]
 [2] Sum of [11]
 [3] Equals ([1] x (1 + 0.5 x [2])) + [2]

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STANDARD AND POOR'S 500 INDEX

Name	Ticker	Price	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
			Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.	
LyondellBasell Industries NV	LYB	76.83	323	Excl.	Excl.	6.98%	n/a	-1.50%	n/a	
American Express Co	AXP	300.96	703	211,434	0.54%	0.93%	0.00%	9.00%	0.05%	
Verizon Communications Inc	VZ	43.10	4,210	181,438	0.46%	6.29%	0.03%	0.50%	0.00%	
Texas Pacific Land Corp	TPL	1,427.95	23	32,821	0.08%	0.45%	0.00%	10.50%	0.01%	
Broadcom Inc	AVGO	199.43	4,687	Excl.	Excl.	1.18%	n/a	30.00%	n/a	
Boeing Co/The	BA	174.63	750	Excl.	Excl.	n/a	n/a	n/a	n/a	
Solventum Corp	SOLV	79.75	173	Excl.	Excl.	n/a	n/a	n/a	n/a	
Caterpillar Inc	CAT	343.95	478	164,385	0.42%	1.64%	0.01%	10.50%	0.04%	
JPMorgan Chase & Co	JPM	264.65	2,796	739,989	1.88%	1.89%	0.04%	8.00%	0.15%	
Chevron Corp	CVX	158.62	1,761	279,266	0.71%	4.31%	0.03%	4.00%	0.03%	
Coca-Cola Co/The	KO	71.21	4,301	306,274	0.78%	2.86%	0.02%	7.00%	0.05%	
AbbVie Inc	ABBV	209.03	1,765	369,012	0.94%	3.14%	0.03%	4.00%	0.04%	
Walt Disney Co/The	DIS	113.80	1,808	Excl.	Excl.	0.88%	n/a	31.00%	n/a	
Corpay Inc	CPAY	367.05	70	25,785	0.07%	n/a	n/a	15.50%	0.01%	
Extra Space Storage Inc	EXR	152.56	212	32,340	0.08%	4.25%	0.00%	5.00%	0.00%	
Exxon Mobil Corp	XOM	111.33	4,339	Excl.	Excl.	3.56%	n/a	-2.50%	n/a	
Phillips 66	PSX	129.69	408	52,874	0.13%	3.55%	0.00%	1.00%	0.00%	
General Electric Co	GE	206.98	1,073	Excl.	Excl.	0.70%	n/a	21.00%	n/a	
HP Inc	HPQ	30.87	943	29,110	0.07%	3.75%	0.00%	12.50%	0.01%	
Home Depot Inc/The	HD	396.60	993	393,968	1.00%	2.32%	0.02%	6.50%	0.07%	
Monolithic Power Systems Inc	MPWR	611.01	49	29,805	0.08%	1.02%	0.00%	12.00%	0.01%	
International Business Machines Corp	IBM	252.44	927	234,079	0.59%	2.65%	0.02%	3.00%	0.02%	
Johnson & Johnson	JNJ	165.02	2,408	397,305	1.01%	3.01%	0.03%	3.00%	0.03%	
Lululemon Athletica Inc	LULU	365.61	117	42,655	0.11%	n/a	n/a	13.00%	0.01%	
McDonald's Corp	MCD	308.33	714	220,290	0.56%	2.30%	0.01%	8.50%	0.05%	
Merck & Co Inc	MRK	92.25	2,526	233,027	0.59%	3.51%	0.02%	15.50%	0.09%	
3M Co	MMM	155.12	543	Excl.	Excl.	1.88%	n/a	31.00%	n/a	
American Water Works Co Inc	AWK	135.97	195	26,507	0.07%	2.25%	0.00%	4.50%	0.00%	
Bank of America Corp	BAC	46.10	7,605	350,576	0.89%	2.26%	0.02%	7.00%	0.06%	
Pfizer Inc	PFE	26.43	5,667	149,788	0.38%	6.51%	0.02%	2.50%	0.01%	
Procter & Gamble Co/The	PG	173.84	2,345	407,629	1.03%	2.32%	0.02%	5.00%	0.05%	
AT&T Inc	T	27.41	7,178	196,754	0.50%	4.05%	0.02%	6.50%	0.03%	
Travelers Cos Inc/The	TRV	258.49	227	58,607	0.15%	1.62%	0.00%	10.50%	0.02%	
RTX Corp	RTX	132.99	1,332	177,159	0.45%	1.89%	0.01%	12.00%	0.05%	
Analog Devices Inc	ADI	230.06	496	114,104	0.29%	1.72%	0.00%	9.00%	0.03%	
Walmart Inc	WMT	98.61	8,033	792,172	2.01%	0.95%	0.02%	9.50%	0.19%	
Cisco Systems Inc	CSCO	64.11	3,978	255,048	0.65%	2.56%	0.02%	5.50%	0.04%	
Intel Corp	INTC	23.73	4,330	Excl.	Excl.	n/a	n/a	-2.00%	n/a	
General Motors Co	GM	49.13	995	48,884	0.12%	0.98%	0.00%	7.50%	0.01%	
Microsoft Corp	MSFT	396.99	7,434	2,951,217	7.49%	0.84%	0.06%	14.50%	1.09%	
Dollar General Corp	DG	74.18	220	Excl.	Excl.	3.18%	n/a	-0.50%	n/a	
Cigna Group/The	CI	308.85	274	84,526	0.21%	1.96%	0.00%	11.00%	0.02%	
Kinder Morgan Inc	KMI	27.10	2,222	60,215	0.15%	4.24%	0.01%	9.00%	0.01%	
Citigroup Inc	C	79.95	1,884	150,664	0.38%	2.80%	0.01%	3.00%	0.01%	
American International Group Inc	AIG	82.94	593	49,211	0.12%	1.93%	0.00%	12.50%	0.02%	
Altria Group Inc	MO	55.85	1,691	94,423	0.24%	7.31%	0.02%	6.00%	0.01%	
HCA Healthcare Inc	HCA	306.30	248	76,067	0.19%	0.94%	0.00%	10.00%	0.02%	
International Paper Co	IP	56.35	526	29,647	0.08%	3.28%	0.00%	5.50%	0.00%	
Hewlett Packard Enterprise Co	HPE	19.81	1,313	26,019	0.07%	2.62%	0.00%	7.50%	0.00%	
Abbott Laboratories	ABT	138.01	1,734	239,354	0.61%	1.71%	0.01%	4.50%	0.03%	
Aflac Inc	AFL	109.47	547	59,835	0.15%	2.12%	0.00%	7.50%	0.01%	
Air Products and Chemicals Inc	APD	316.15	222	70,336	0.18%	2.26%	0.00%	10.50%	0.02%	
Super Micro Computer Inc	SMCI	41.46	593	Excl.	Excl.	n/a	n/a	39.00%	n/a	
Royal Caribbean Cruises Ltd	RCL	246.10	269	Excl.	Excl.	1.22%	n/a	n/a	n/a	
Hess Corp	HES	148.94	308	45,917	0.12%	1.34%	0.00%	7.50%	0.01%	
Lennox International Inc	LII	601.05	36	21,385	0.05%	0.77%	0.00%	12.50%	0.01%	
Archer-Daniels-Midland Co	ADM	47.20	480	22,642	0.06%	4.32%	0.00%	3.00%	0.00%	
Automatic Data Processing Inc	ADP	315.18	407	128,238	0.33%	1.95%	0.01%	8.50%	0.03%	
Verisk Analytics Inc	VRSK	296.91	140	41,649	0.11%	0.61%	0.00%	11.00%	0.01%	
AutoZone Inc	AZO	3,493.01	17	58,620	0.15%	n/a	n/a	11.50%	0.02%	
Linde PLC	LIN	467.05	473	220,873	0.56%	1.28%	0.01%	7.00%	0.04%	

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Name	Ticker	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Avery Dennison Corp	AVY	187.97	79	14,849	0.04%	1.87%	0.00%	2.00%	0.00%
Enphase Energy Inc	ENPH	57.33	132	7,595	0.02%	n/a	n/a	14.00%	0.00%
MSCI Inc	MSCI	590.51	78	45,854	0.12%	1.22%	0.00%	9.50%	0.01%
Ball Corp	BALL	52.69	283	14,902	0.04%	1.52%	0.00%	10.50%	0.00%
Axon Enterprise Inc	AXON	528.45	76	Excl.	Excl.	n/a	n/a	26.00%	n/a
Dayforce Inc	DAY	61.99	158	Excl.	Excl.	n/a	n/a	n/a	n/a
Carrier Global Corp	CARR	64.80	864	55,986	0.14%	1.39%	0.00%	13.00%	0.02%
Bank of New York Mellon Corp/The	BK	88.95	716	63,717	0.16%	2.11%	0.00%	10.50%	0.02%
Otis Worldwide Corp	OTIS	99.78	397	39,565	0.10%	1.56%	0.00%	11.00%	0.01%
Baxter International Inc	BAX	34.51	512	17,656	0.04%	1.97%	0.00%	3.50%	0.00%
Becton Dickinson & Co	BDX	225.53	287	64,758	0.16%	1.84%	0.00%	7.00%	0.01%
Berkshire Hathaway Inc	BRK/B	513.83	1,338	687,531	1.75%	n/a	n/a	9.00%	0.16%
Best Buy Co Inc	BBY	89.91	214	19,222	0.05%	4.18%	0.00%	1.00%	0.00%
Boston Scientific Corp	BSX	103.79	1,476	153,171	0.39%	n/a	n/a	12.50%	0.05%
Bristol-Myers Squibb Co	BMJ	59.62	2,029	120,988	0.31%	4.16%	0.01%	1.00%	0.00%
Brown-Forman Corp	BF/B	33.11	304	10,050	0.03%	2.74%	0.00%	14.00%	0.00%
Coterra Energy Inc	CTRA	26.99	764	20,624	0.05%	3.26%	0.00%	7.00%	0.00%
Hilton Worldwide Holdings Inc	HLT	264.96	241	Excl.	Excl.	0.23%	n/a	n/a	n/a
Carnival Corp	CCL	23.93	1,164	Excl.	Excl.	n/a	n/a	n/a	n/a
Builders FirstSource Inc	BLDR	138.99	114	15,792	0.04%	n/a	n/a	6.50%	0.00%
UDR Inc	UDR	45.18	331	14,961	0.04%	3.76%	0.00%	1.50%	0.00%
Clorox Co/The	CLX	156.39	123	19,266	0.05%	3.12%	0.00%	7.00%	0.00%
Paycom Software Inc	PAYC	219.47	57	12,568	0.03%	0.68%	0.00%	14.00%	0.00%
CMS Energy Corp	CMS	73.05	299	21,827	0.06%	2.97%	0.00%	6.00%	0.00%
Colgate-Palmolive Co	CL	91.17	812	73,988	0.19%	2.19%	0.00%	11.50%	0.02%
EPAM Systems Inc	EPAM	206.14	57	Excl.	Excl.	n/a	n/a	20.50%	n/a
Conagra Brands Inc	CAG	25.54	477	12,191	0.03%	5.48%	0.00%	2.00%	0.00%
Airbnb Inc	ABNB	138.87	440	Excl.	Excl.	n/a	n/a	23.00%	n/a
Consolidated Edison Inc	ED	101.52	347	35,198	0.09%	3.35%	0.00%	6.00%	0.01%
Corning Inc	GLW	50.15	857	42,957	0.11%	2.23%	0.00%	17.50%	0.02%
GoDaddy Inc	GDDY	179.50	141	Excl.	Excl.	n/a	n/a	27.00%	n/a
Cummins Inc	CMI	368.18	137	50,618	0.13%	1.98%	0.00%	8.50%	0.01%
Caesars Entertainment Inc	CZR	33.22	212	Excl.	Excl.	n/a	n/a	n/a	n/a
Danaher Corp	DHR	207.76	715	148,488	0.38%	0.62%	0.00%	2.00%	0.01%
Target Corp	TGT	124.24	458	56,928	0.14%	3.61%	0.01%	8.00%	0.01%
Deere & Co	DE	480.79	271	130,493	0.33%	1.35%	0.00%	3.00%	0.01%
Dominion Energy Inc	D	56.62	852	48,243	0.12%	4.72%	0.01%	3.50%	0.00%
Dover Corp	DOV	198.77	137	27,276	0.07%	1.04%	0.00%	5.00%	0.00%
Alliant Energy Corp	LNT	64.53	257	16,564	0.04%	3.15%	0.00%	6.00%	0.00%
Steel Dynamics Inc	STLD	135.07	152	20,564	0.05%	1.48%	0.00%	0.50%	0.00%
Duke Energy Corp	DUK	117.49	771	90,585	0.23%	3.56%	0.01%	6.00%	0.01%
Regency Centers Corp	REG	76.70	181	13,911	0.04%	3.68%	0.00%	11.50%	0.00%
Eaton Corp PLC	ETN	293.32	392	114,981	0.29%	1.42%	0.00%	11.00%	0.03%
Ecolab Inc	ECL	269.01	283	76,129	0.19%	0.97%	0.00%	10.50%	0.02%
Revvity Inc	RVTY	112.15	120	Excl.	Excl.	0.25%	n/a	-1.50%	n/a
Dell Technologies Inc	DELL	102.76	357	36,720	0.09%	2.04%	0.00%	2.50%	0.00%
Emerson Electric Co	EMR	121.61	564	68,576	0.17%	1.74%	0.00%	12.50%	0.02%
EOG Resources Inc	EOG	126.94	554	70,315	0.18%	3.07%	0.01%	7.00%	0.01%
Aon PLC	AON	409.12	216	88,370	0.22%	0.66%	0.00%	12.50%	0.03%
Entergy Corp	ETR	87.31	430	37,579	0.10%	2.75%	0.00%	3.00%	0.00%
Equifax Inc	EFX	245.20	124	30,411	0.08%	0.64%	0.00%	7.00%	0.01%
EQT Corp	EQT	48.17	597	Excl.	Excl.	1.31%	n/a	n/a	n/a
IQVIA Holdings Inc	IQV	188.80	176	33,248	0.08%	n/a	n/a	9.00%	0.01%
Gartner Inc	IT	498.32	77	38,280	0.10%	n/a	n/a	8.00%	0.01%
FedEx Corp	FDX	262.90	241	63,320	0.16%	2.10%	0.00%	9.00%	0.01%
FMC Corp	FMC	36.90	125	4,607	0.01%	6.29%	0.00%	3.50%	0.00%
Brown & Brown Inc	BRO	118.54	286	33,894	0.09%	0.51%	0.00%	12.50%	0.01%
Ford Motor Co	F	9.55	3,893	37,174	0.09%	1.57%	0.00%	17.00%	0.02%
NextEra Energy Inc	NEE	70.17	2,057	144,342	0.37%	3.23%	0.01%	8.50%	0.03%
Franklin Resources Inc	BEN	20.25	525	10,639	0.03%	6.32%	0.00%	4.00%	0.00%
Garmin Ltd	GRMN	228.93	192	44,047	0.11%	1.57%	0.00%	8.00%	0.01%
Freepoint-McMoRan Inc	FCX	36.91	1,437	53,042	0.13%	1.63%	0.00%	11.00%	0.01%
Dexcom Inc	DXCM	88.37	391	Excl.	Excl.	n/a	n/a	n/a	n/a
General Dynamics Corp	GD	252.60	270	68,291	0.17%	2.25%	0.00%	9.50%	0.02%
General Mills Inc	GIS	60.62	551	33,416	0.08%	3.96%	0.00%	4.50%	0.00%
Genuine Parts Co	GPC	124.88	139	17,331	0.04%	3.30%	0.00%	3.50%	0.00%
Atmos Energy Corp	ATO	152.13	159	24,147	0.06%	2.29%	0.00%	6.00%	0.00%
WW Grainger Inc	GWW	1,021.21	48	49,239	0.12%	0.80%	0.00%	7.50%	0.01%
Halliburton Co	HAL	26.37	868	22,892	0.06%	2.58%	0.00%	16.00%	0.01%
L3Harris Technologies Inc	LHX	206.11	188	38,813	0.10%	2.33%	0.00%	9.00%	0.01%
Healthpeak Properties Inc	DOC	20.46	700	14,313	0.04%	5.96%	0.00%	7.00%	0.00%
Insulet Corp	PODD	272.27	70	Excl.	Excl.	n/a	n/a	n/a	n/a
Fortive Corp	FTV	79.54	340	27,067	0.07%	0.40%	0.00%	10.50%	0.01%
Hershey Co/The	HSY	172.71	148	25,526	0.06%	3.17%	0.00%	7.00%	0.00%
Synchrony Financial	SYF	60.68	389	Excl.	Excl.	1.65%	n/a	47.00%	n/a
Hormel Foods Corp	HRL	28.63	550	15,744	0.04%	4.05%	0.00%	6.00%	0.00%

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Arthur J Gallagher & Co	AJG	337.74	255	86,022	0.22%	0.77%	0.00%	16.50%	0.04%
Mondelez International Inc	MDLZ	64.23	1,294	83,083	0.21%	2.93%	0.01%	7.50%	0.02%
CenterPoint Energy Inc	CNP	34.38	652	22,406	0.06%	2.56%	0.00%	6.50%	0.00%
Humana Inc	HUM	270.42	121	32,625	0.08%	1.31%	0.00%	2.00%	0.00%
Willis Towers Watson PLC	WTW	339.65	100	33,861	0.09%	1.08%	0.00%	9.50%	0.01%
Illinois Tool Works Inc	ITW	263.98	294	77,478	0.20%	2.27%	0.00%	9.00%	0.02%
CDW Corp/DE	CDW	178.20	132	23,610	0.06%	1.40%	0.00%	7.00%	0.00%
Trane Technologies PLC	TT	353.70	224	79,332	0.20%	1.06%	0.00%	14.00%	0.03%
Interpublic Group of Cos Inc/The	IPG	27.40	373	10,211	0.03%	4.82%	0.00%	8.50%	0.00%
International Flavors & Fragrances Inc	IFF	81.81	256	20,917	0.05%	1.96%	0.00%	0.50%	0.00%
Generac Holdings Inc	GNRC	136.15	60	8,116	0.02%	n/a	n/a	12.50%	0.00%
NXP Semiconductors NV	NXPI	215.59	254	54,678	0.14%	1.88%	0.00%	7.50%	0.01%
Kellanova	K	82.90	345	28,618	0.07%	2.75%	0.00%	2.50%	0.00%
Broadridge Financial Solutions Inc	BR	241.22	117	28,227	0.07%	1.46%	0.00%	9.50%	0.01%
Kimberly-Clark Corp	KMB	142.01	332	47,103	0.12%	3.55%	0.00%	7.50%	0.01%
Kimco Realty Corp	KIM	22.10	674	14,898	0.04%	4.52%	0.00%	18.00%	0.01%
Oracle Corp	ORCL	166.06	2,797	464,463	1.18%	0.96%	0.01%	10.00%	0.12%
Kroger Co/The	KR	64.82	724	46,904	0.12%	1.97%	0.00%	5.00%	0.01%
Lennar Corp	LEN	119.63	234	27,935	0.07%	1.67%	0.00%	6.00%	0.00%
Eli Lilly & Co	LLY	920.63	948	Excl.	Excl.	0.65%	n/a	28.50%	n/a
Charter Communications Inc	CHTR	363.57	142	51,607	0.13%	n/a	n/a	9.00%	0.01%
Loews Corp	L	86.67	213	18,449	0.05%	0.29%	0.00%	15.50%	0.01%
Lowe's Cos Inc	LOW	248.64	565	140,395	0.36%	1.85%	0.01%	5.50%	0.02%
Hubbell Inc	HUBB	371.59	54	19,942	0.05%	1.42%	0.00%	9.50%	0.00%
IDEX Corp	IEX	194.33	76	14,727	0.04%	1.42%	0.00%	5.00%	0.00%
Marsh & McLennan Cos Inc	MMC	237.84	491	116,811	0.30%	1.37%	0.00%	12.50%	0.04%
Masco Corp	MAS	75.18	212	15,937	0.04%	1.65%	0.00%	9.50%	0.00%
S&P Global Inc	SPGI	533.74	315	168,128	0.43%	0.72%	0.00%	8.50%	0.04%
Medtronic PLC	MDT	92.02	1,283	118,020	0.30%	3.04%	0.01%	6.00%	0.02%
Viatris Inc	VTRS	9.23	1,194	Excl.	Excl.	5.20%	n/a	-1.50%	n/a
CVS Health Corp	CVS	65.72	1,261	82,859	0.21%	4.05%	0.01%	0.50%	0.00%
DuPont de Nemours Inc	DD	81.77	418	34,184	0.09%	2.01%	0.00%	9.00%	0.01%
Micron Technology Inc	MU	93.63	1,114	Excl.	Excl.	0.49%	n/a	47.50%	n/a
Motorola Solutions Inc	MSI	440.22	167	73,489	0.19%	0.99%	0.00%	10.00%	0.02%
Choe Global Markets Inc	CBOE	210.80	105	22,071	0.06%	1.20%	0.00%	14.50%	0.01%
Newmont Corp	NEM	42.84	1,127	48,275	0.12%	2.33%	0.00%	13.00%	0.02%
NIKE Inc	NKE	79.43	1,181	93,826	0.24%	2.01%	0.00%	10.50%	0.03%
NiSource Inc	NI	40.81	470	19,178	0.05%	2.74%	0.00%	8.00%	0.00%
Norfolk Southern Corp	NSC	245.75	226	55,646	0.14%	2.20%	0.00%	12.00%	0.02%
Principal Financial Group Inc	PFGE	89.04	226	20,085	0.05%	3.37%	0.00%	4.00%	0.00%
Eversource Energy	ES	63.01	367	23,111	0.06%	4.78%	0.00%	5.50%	0.00%
Northrop Grumman Corp	NOC	461.74	145	66,839	0.17%	1.78%	0.00%	7.50%	0.01%
Wells Fargo & Co	WFC	78.32	3,288	257,531	0.65%	2.04%	0.01%	9.50%	0.06%
Nucor Corp	NUE	137.47	231	Excl.	Excl.	1.60%	n/a	n/a	n/a
Occidental Petroleum Corp	OXY	48.84	939	45,836	0.12%	1.97%	0.00%	6.00%	0.01%
Omnicom Group Inc	OMC	82.76	196	16,262	0.04%	3.38%	0.00%	7.00%	0.00%
ONEOK Inc	OKE	100.39	624	62,677	0.16%	4.10%	0.01%	14.50%	0.02%
Raymond James Financial Inc	RJF	154.67	205	31,693	0.08%	1.29%	0.00%	10.00%	0.01%
PG&E Corp	PCG	16.34	2,194	35,843	0.09%	0.61%	0.00%	9.00%	0.01%
Parker-Hannifin Corp	PH	668.51	129	86,081	0.22%	0.98%	0.00%	12.50%	0.03%
Rollins Inc	ROL	52.39	484	25,369	0.06%	1.26%	0.00%	9.50%	0.01%
PPL Corp	PPL	35.21	738	25,995	0.07%	3.10%	0.00%	7.50%	0.00%
Aptiv PLC	APTIV	65.12	229	Excl.	Excl.	n/a	n/a	n/a	n/a
ConocoPhillips	COP	99.15	1,272	126,156	0.32%	3.15%	0.01%	4.00%	0.01%
PulteGroup Inc	PHM	103.28	202	20,910	0.05%	0.85%	0.00%	8.00%	0.00%
Pinnacle West Capital Corp	PNW	92.54	119	11,021	0.03%	3.87%	0.00%	4.00%	0.00%
PNC Financial Services Group Inc/The	PNC	191.92	396	75,952	0.19%	3.33%	0.01%	7.00%	0.01%
PPG Industries Inc	PPG	113.22	227	25,696	0.07%	2.40%	0.00%	5.00%	0.00%
Progressive Corp/The	PGR	282.00	586	Excl.	Excl.	0.14%	n/a	23.50%	n/a
Veralto Corp	VLTO	99.76	248	24,696	0.06%	0.44%	0.00%	6.00%	0.00%
Public Service Enterprise Group Inc	PEG	81.15	499	40,458	0.10%	3.11%	0.00%	6.00%	0.01%
Cooper Cos Inc/The	COO	90.38	200	18,072	0.05%	n/a	n/a	8.50%	0.00%
Edison International	EIX	54.44	385	20,961	0.05%	6.08%	0.00%	6.50%	0.00%
Schlumberger NV	SLB	41.66	1,360	56,652	0.14%	2.74%	0.00%	18.00%	0.03%
Charles Schwab Corp/The	SCHW	79.53	1,814	144,233	0.37%	1.36%	0.00%	10.50%	0.04%
Sherwin-Williams Co/The	SHW	362.27	252	91,115	0.23%	0.87%	0.00%	12.00%	0.03%
West Pharmaceutical Services Inc	WST	232.34	72	16,799	0.04%	0.36%	0.00%	7.50%	0.00%
J M Smucker Co/The	SJM	110.53	106	11,762	0.03%	3.91%	0.00%	6.50%	0.00%
Snap-on Inc	SNA	341.17	52	17,875	0.05%	2.51%	0.00%	5.50%	0.00%
AMETEK Inc	AME	189.30	231	43,664	0.11%	0.66%	0.00%	10.00%	0.01%
Uber Technologies Inc	UBER	76.01	2,089	Excl.	Excl.	n/a	n/a	n/a	n/a
Southern Co/The	SO	89.79	1,095	98,287	0.25%	3.21%	0.01%	6.50%	0.02%
Truist Financial Corp	TFC	46.35	1,305	60,503	0.15%	4.49%	0.01%	2.00%	0.00%
Southwest Airlines Co	LUV	31.06	593	Excl.	Excl.	2.32%	n/a	n/a	n/a
W R Berkley Corp	WRB	63.08	379	23,922	0.06%	0.51%	0.00%	14.50%	0.01%
Stanley Black & Decker Inc	SWK	86.53	154	13,361	0.03%	3.79%	0.00%	11.00%	0.00%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Public Storage	PSA	303.62	175	53,260	0.14%	3.95%	0.01%	7.00%	0.01%
Arista Networks Inc	ANET	93.05	1,261	117,347	0.30%	n/a	n/a	16.00%	0.05%
Sysco Corp	SY	75.54	489	36,956	0.09%	2.70%	0.00%	9.50%	0.01%
Corteva Inc	CTVA	62.98	692	43,598	0.11%	1.08%	0.00%	7.00%	0.01%
Texas Instruments Inc	TXN	195.99	910	178,416	0.45%	2.78%	0.01%	3.00%	0.01%
Textron Inc	TXT	74.73	183	13,644	0.03%	0.11%	0.00%	13.00%	0.00%
Thermo Fisher Scientific Inc	TMO	528.96	377	199,556	0.51%	0.33%	0.00%	6.00%	0.03%
TJX Cos Inc/The	TJX	124.76	1,124	140,250	0.36%	1.20%	0.00%	12.50%	0.04%
Globe Life Inc	GL	127.43	84	10,685	0.03%	0.85%	0.00%	11.00%	0.00%
Johnson Controls International plc	JCI	85.66	660	56,548	0.14%	1.73%	0.00%	13.00%	0.02%
Ulta Beauty Inc	ULTA	366.36	46	16,989	0.04%	n/a	n/a	6.00%	0.00%
Union Pacific Corp	UNP	246.69	604	149,071	0.38%	2.17%	0.01%	8.00%	0.03%
Keysight Technologies Inc	KEYS	159.53	173	27,584	0.07%	n/a	n/a	5.50%	0.00%
UnitedHealth Group Inc	UNH	474.96	915	434,452	1.10%	1.77%	0.02%	11.00%	0.12%
Blackstone Inc	BX	161.16	722	116,358	0.30%	3.57%	0.01%	16.00%	0.05%
Ventas Inc	VTR	69.18	437	Excl.	Excl.	n/a	n/a	23.00%	n/a
Labcorp Holdings Inc	LH	251.04	84	21,012	0.05%	1.15%	0.00%	1.50%	0.00%
Vulcan Materials Co	VMC	247.31	132	32,672	0.08%	0.79%	0.00%	8.00%	0.01%
Weyerhaeuser Co	WY	30.10	726	Excl.	Excl.	n/a	n/a	-2.00%	n/a
Williams Cos Inc/The	WMB	58.18	1,219	70,943	0.18%	3.44%	0.01%	9.50%	0.02%
Constellation Energy Corp	CEG	250.55	315	Excl.	Excl.	0.62%	n/a	n/a	n/a
WEC Energy Group Inc	WEC	106.69	318	33,901	0.09%	3.35%	0.00%	6.00%	0.01%
Adobe Inc	ADBE	438.56	435	190,905	0.48%	n/a	n/a	13.50%	0.07%
Vistra Corp	VST	133.66	340	Excl.	Excl.	0.67%	n/a	n/a	n/a
AES Corp/The	AES	11.59	711	8,241	0.02%	6.07%	0.00%	14.00%	0.00%
Expeditors International of Washington Inc	EXPD	117.36	138	Excl.	Excl.	1.24%	n/a	-1.50%	n/a
Amgen Inc	AMGN	308.06	537	165,491	0.42%	3.09%	0.01%	5.50%	0.02%
Apple Inc	AAPL	241.84	15,022	3,632,938	9.22%	0.41%	0.04%	9.00%	0.83%
Autodesk Inc	ADSK	274.21	215	58,955	0.15%	n/a	n/a	14.00%	0.02%
Cintas Corp	CTAS	207.50	404	83,735	0.21%	0.75%	0.00%	14.00%	0.03%
Comcast Corp	CMCSA	35.88	3,772	135,324	0.34%	3.68%	0.01%	7.50%	0.03%
Molson Coors Beverage Co	TAP	61.29	190	11,655	0.03%	3.07%	0.00%	11.50%	0.00%
KLA Corp	KLAC	708.84	133	94,195	0.24%	0.96%	0.00%	13.00%	0.03%
Marriott International Inc/MD	MAR	280.45	276	77,319	0.20%	0.90%	0.00%	11.00%	0.02%
Fiserv Inc	FI	235.69	561	132,290	0.34%	n/a	n/a	9.50%	0.03%
McCormick & Co Inc/MD	MKC	82.61	253	20,861	0.05%	2.18%	0.00%	4.50%	0.00%
PACCAR Inc	PCAR	107.24	525	56,280	0.14%	1.23%	0.00%	14.50%	0.02%
Costco Wholesale Corp	COST	1,048.61	444	465,477	1.18%	0.44%	0.01%	11.50%	0.14%
Stryker Corp	SYK	386.19	382	147,362	0.37%	0.87%	0.00%	9.50%	0.04%
Tyson Foods Inc	TSN	61.34	286	17,555	0.04%	3.26%	0.00%	6.00%	0.00%
Lamb Weston Holdings Inc	LW	51.87	143	7,399	0.02%	2.85%	0.00%	10.50%	0.00%
Applied Materials Inc	AMAT	158.07	812	128,423	0.33%	1.01%	0.00%	9.00%	0.03%
Cardinal Health Inc	CAH	129.48	242	31,278	0.08%	1.56%	0.00%	6.50%	0.01%
Cincinnati Financial Corp	CINF	147.81	157	23,136	0.06%	2.35%	0.00%	14.00%	0.01%
Paramount Global	PARA	11.36	630	7,157	0.02%	1.76%	0.00%	3.00%	0.00%
DR Horton Inc	DHI	126.81	315	39,961	0.10%	1.26%	0.00%	4.00%	0.00%
Electronic Arts Inc	EA	129.12	261	33,651	0.09%	0.59%	0.00%	14.00%	0.01%
Erie Indemnity Co	ERIE	428.07	46	19,772	0.05%	1.28%	0.00%	18.00%	0.01%
Fair Isaac Corp	FICO	1,886.35	24	Excl.	Excl.	n/a	n/a	20.50%	n/a
Fastenal Co	FAST	75.73	573	43,427	0.11%	2.27%	0.00%	9.00%	0.01%
M&T Bank Corp	MTB	191.72	164	31,506	0.08%	2.82%	0.00%	5.50%	0.00%
Xcel Energy Inc	XEL	72.10	575	41,425	0.11%	3.16%	0.00%	6.50%	0.01%
Fifth Third Bancorp	FITB	43.47	666	28,934	0.07%	3.40%	0.00%	5.00%	0.00%
Gilead Sciences Inc	GILD	114.31	1,246	142,461	0.36%	2.76%	0.01%	2.50%	0.01%
Hasbro Inc	HAS	65.11	140	9,085	0.02%	4.30%	0.00%	8.50%	0.00%
Huntington Bancshares Inc/OH	HBAN	16.47	1,454	23,943	0.06%	3.76%	0.00%	7.00%	0.00%
Welltower Inc	WELL	153.51	641	Excl.	Excl.	1.75%	n/a	27.50%	n/a
Biogen Inc	BIIB	140.50	146	20,566	0.05%	n/a	n/a	1.00%	0.00%
Northern Trust Corp	NTRS	110.22	196	21,570	0.05%	2.72%	0.00%	5.00%	0.00%
Packaging Corp of America	PKG	213.09	90	19,136	0.05%	2.35%	0.00%	9.00%	0.00%
Paychex Inc	PAYX	151.67	360	54,611	0.14%	2.58%	0.00%	8.00%	0.01%
QUALCOMM Inc	QCOM	157.17	1,106	173,830	0.44%	2.16%	0.01%	6.00%	0.03%
Ross Stores Inc	ROST	140.32	330	46,296	0.12%	1.05%	0.00%	9.50%	0.01%
IDEXX Laboratories Inc	IDXX	437.11	81	35,549	0.09%	n/a	n/a	10.50%	0.01%
Starbucks Corp	SBUX	115.81	1,136	131,549	0.33%	2.11%	0.01%	7.00%	0.02%
KeyCorp	KEY	17.32	1,105	Excl.	Excl.	4.73%	n/a	-1.50%	n/a
Fox Corp	FOXA	57.60	218	12,548	0.03%	0.94%	0.00%	8.50%	0.00%
Fox Corp	FOX	54.07	236	Excl.	Excl.	1.00%	n/a	n/a	n/a
State Street Corp	STT	99.23	288	28,625	0.07%	3.06%	0.00%	7.50%	0.01%
Norwegian Cruise Line Holdings Ltd	NCLH	22.72	440	Excl.	Excl.	n/a	n/a	n/a	n/a
US Bancorp	USB	46.90	1,560	73,159	0.19%	4.26%	0.01%	4.00%	0.01%
A O Smith Corp	AOS	66.48	118	7,822	0.02%	2.05%	0.00%	9.00%	0.00%
Gen Digital Inc	GEN	27.33	616	16,844	0.04%	1.83%	0.00%	10.50%	0.00%
T Rowe Price Group Inc	TROW	105.72	223	23,537	0.06%	4.81%	0.00%	5.50%	0.00%
Waste Management Inc	WM	232.78	402	93,604	0.24%	1.42%	0.00%	8.50%	0.02%
Constellation Brands Inc	STZ	175.50	181	31,714	0.08%	2.30%	0.00%	7.50%	0.01%

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Invesco Ltd	IVZ	17.39	448	7,784	0.02%	4.72%	0.00%	10.50%	0.00%
Intuit Inc	INTU	613.84	280	171,606	0.44%	0.68%	0.00%	13.50%	0.06%
Morgan Stanley	MS	133.11	1,613	214,687	0.54%	2.78%	0.02%	9.50%	0.05%
Microchip Technology Inc	MCHP	58.86	538	31,656	0.08%	3.09%	0.00%	1.50%	0.00%
CrowdStrike Holdings Inc	CRWD	389.66	246	Excl.	Excl.	n/a	n/a		n/a
Chubb Ltd	CB	285.48	400	114,310	0.29%	1.28%	0.00%	11.00%	0.03%
Hologic Inc	HOLX	63.39	224	14,224	0.04%	n/a	n/a	2.00%	0.00%
Citizens Financial Group Inc	CFG	45.77	437	20,008	0.05%	3.67%	0.00%	5.50%	0.00%
Jabil Inc	JBL	154.92	109	16,914	0.04%	0.21%	0.00%	13.50%	0.01%
O'Reilly Automotive Inc	ORLY	1,373.64	58	79,301	0.20%	n/a	n/a	10.50%	0.02%
Allstate Corp/The	ALL	199.15	265	Excl.	Excl.	2.01%	n/a	29.00%	n/a
Equity Residential	EQR	74.17	380	Excl.	Excl.	3.64%	n/a	-4.00%	n/a
BorgWarner Inc	BWA	29.77	219	6,510	0.02%	1.48%	0.00%	5.50%	0.00%
Keurig Dr Pepper Inc	KDP	33.52	1,357	45,478	0.12%	2.74%	0.00%	9.50%	0.01%
Host Hotels & Resorts Inc	HST	16.13	699	11,277	0.03%	4.96%	0.00%	15.00%	0.00%
Incyte Corp	INCY	73.50	194	Excl.	Excl.	n/a	n/a	33.50%	n/a
Simon Property Group Inc	SPG	186.09	326	60,716	0.15%	4.51%	0.01%	3.50%	0.01%
Eastman Chemical Co	EMN	97.85	115	11,269	0.03%	3.39%	0.00%	3.50%	0.00%
AvalonBay Communities Inc	AVB	226.18	142	32,175	0.08%	3.09%	0.00%	5.50%	0.00%
Prudential Financial Inc	PRU	115.10	354	40,745	0.10%	4.69%	0.00%	4.00%	0.00%
United Parcel Service Inc	UPS	119.03	740	88,067	0.22%	5.51%	0.01%	2.50%	0.01%
Walgreens Boots Alliance Inc	WBA	10.68	864	Excl.	Excl.	n/a	n/a	-11.00%	n/a
STERIS PLC	STE	219.26	98	21,542	0.05%	1.04%	0.00%	8.00%	0.00%
McKesson Corp	MCK	640.26	125	80,241	0.20%	0.44%	0.00%	10.00%	0.02%
Lockheed Martin Corp	LMT	450.37	235	106,011	0.27%	2.93%	0.01%	12.00%	0.03%
Cencora Inc	COR	253.54	194	49,114	0.12%	0.87%	0.00%	6.50%	0.01%
Capital One Financial Corp	COF	200.55	381	76,475	0.19%	1.20%	0.00%	2.50%	0.00%
The Campbell's Company	CPB	40.06	298	11,942	0.03%	3.89%	0.00%	7.00%	0.00%
Waters Corp	WAT	377.34	59	22,418	0.06%	n/a	n/a	6.50%	0.00%
Nordson Corp	NDSN	210.29	57	11,968	0.03%	1.48%	0.00%	10.50%	0.00%
Dollar Tree Inc	DLTR	72.86	215	15,668	0.04%	n/a	n/a	20.00%	0.01%
Darden Restaurants Inc	DRI	200.46	117	23,483	0.06%	2.79%	0.00%	10.50%	0.01%
Energy Inc	EVRG	68.91	230	15,832	0.04%	3.87%	0.00%	7.50%	0.00%
Match Group Inc	MTCH	31.71	250	7,941	0.02%	2.40%	0.00%	11.00%	0.00%
NVR Inc	NVR	7,245.58	3	21,668	0.06%	n/a	n/a	1.50%	0.00%
NetApp Inc	NTAP	99.81	203	20,303	0.05%	2.08%	0.00%	9.00%	0.00%
Old Dominion Freight Line Inc	ODFL	176.50	213	37,514	0.10%	0.63%	0.00%	7.00%	0.01%
DaVita Inc	DVA	147.88	80	11,830	0.03%	n/a	n/a	10.50%	0.00%
Hartford Insurance Group Inc/The	HIG	118.28	285	33,756	0.09%	1.76%	0.00%	7.00%	0.01%
Iron Mountain Inc	IRM	93.17	294	27,368	0.07%	3.37%	0.00%	8.00%	0.01%
Estee Lauder Cos Inc/The	EL	71.91	234	16,839	0.04%	1.95%	0.00%	3.50%	0.00%
Cadence Design Systems Inc	CDNS	250.50	274	68,664	0.17%	n/a	n/a	12.00%	0.02%
Tyler Technologies Inc	TYL	608.43	43	26,171	0.07%	n/a	n/a	8.00%	0.01%
Universal Health Services Inc	UHS	175.25	58	10,121	0.03%	0.46%	0.00%	13.00%	0.00%
Skyworks Solutions Inc	SWKS	66.66	161	Excl.	Excl.	4.20%	n/a		n/a
Quest Diagnostics Inc	DGXI	172.90	111	19,188	0.05%	1.85%	0.00%	3.50%	0.00%
Rockwell Automation Inc	ROK	287.15	113	32,469	0.08%	1.82%	0.00%	9.50%	0.01%
Kraft Heinz Co/The	KHC	30.71	1,195	36,698	0.09%	5.21%	0.00%	4.50%	0.00%
American Tower Corp	AMT	205.62	467	96,119	0.24%	3.15%	0.01%	11.00%	0.03%
Regeneron Pharmaceuticals Inc	REGN	698.74	108	75,120	0.19%	0.50%	0.00%	2.00%	0.00%
Amazon.com Inc	AMZN	212.28	10,598	Excl.	Excl.	n/a	n/a	24.50%	n/a
Jack Henry & Associates Inc	JKHY	173.59	73	12,654	0.03%	1.34%	0.00%	6.50%	0.00%
Ralph Lauren Corp	RL	271.14	40	10,814	0.03%	1.22%	0.00%	12.00%	0.00%
BXP Inc	BXP	70.93	158	11,222	0.03%	5.53%	0.00%	0.50%	0.00%
Amphenol Corp	APH	66.60	1,211	80,658	0.20%	0.99%	0.00%	14.00%	0.03%
Howmet Aerospace Inc	HWM	136.60	405	55,326	0.14%	0.29%	0.00%	12.00%	0.02%
Valero Energy Corp	VLO	130.73	315	Excl.	Excl.	3.46%	n/a	-5.00%	n/a
Synopsys Inc	SNPS	457.28	155	70,705	0.18%	n/a	n/a	12.00%	0.02%
CH Robinson Worldwide Inc	CHRW	101.62	119	12,063	0.03%	2.44%	0.00%	5.00%	0.00%
Accenture PLC	ACN	348.50	625	217,980	0.55%	1.70%	0.01%	12.50%	0.07%
TransDigm Group Inc	TDG	1,367.20	56	76,679	0.19%	n/a	n/a	19.00%	0.04%
Yum! Brands Inc	YUM	156.37	279	43,643	0.11%	1.82%	0.00%	10.00%	0.01%
Prologis Inc	PLD	123.92	926	114,772	0.29%	3.26%	0.01%	0.50%	0.00%
FirstEnergy Corp	FE	38.77	577	22,359	0.06%	4.38%	0.00%	5.50%	0.00%
VeriSign Inc	VRSN	237.88	95	22,503	0.06%	n/a	n/a	12.00%	0.01%
Quanta Services Inc	PWR	259.63	148	38,477	0.10%	0.15%	0.00%	18.00%	0.02%
Henry Schein Inc	HSIC	72.17	124	8,962	0.02%	n/a	n/a	8.00%	0.00%
Ameren Corp	AEE	101.56	267	27,067	0.07%	2.80%	0.00%	6.50%	0.00%
ANSYS Inc	ANSS	333.25	88	29,210	0.07%	n/a	n/a	9.50%	0.01%
FactSet Research Systems Inc	FDS	461.74	38	17,560	0.04%	0.90%	0.00%	9.00%	0.00%
NVIDIA Corp	NVDA	124.92	24,400	Excl.	Excl.	0.03%	n/a	41.00%	n/a
Cognizant Technology Solutions Corp	CTSH	83.33	495	41,216	0.10%	1.49%	0.00%	9.00%	0.01%
Intuitive Surgical Inc	ISRG	573.15	357	204,418	0.52%	n/a	n/a	14.00%	0.07%
Take-Two Interactive Software Inc	TTWO	211.98	176	Excl.	Excl.	n/a	n/a		n/a
Republic Services Inc	RSG	237.02	312	74,018	0.19%	0.98%	0.00%	11.00%	0.02%
eBay Inc	EBAY	64.74	466	30,169	0.08%	1.79%	0.00%	11.50%	0.01%

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Goldman Sachs Group Inc/The	GS	622.29	312	194,179	0.49%	1.93%	0.01%	7.50%	0.04%
SBA Communications Corp	SBAC	217.90	108	23,449	0.06%	2.04%	0.00%	19.00%	0.01%
Sempra	SRE	71.57	651	46,625	0.12%	3.60%	0.00%	6.00%	0.01%
Moody's Corp	MCO	503.94	180	90,709	0.23%	0.75%	0.00%	8.50%	0.02%
ON Semiconductor Corp	ON	47.05	421	19,828	0.05%	n/a	n/a	7.00%	0.00%
Booking Holdings Inc	BKNG	5,016.01	33	Excl.	Excl.	0.77%	n/a	22.00%	n/a
F5 Inc	FFIV	292.43	58	16,859	0.04%	n/a	n/a	10.00%	0.00%
Akamai Technologies Inc	AKAM	80.68	150	12,128	0.03%	n/a	n/a	6.00%	0.00%
Charles River Laboratories International Inc	CRL	165.31	51	8,454	0.02%	n/a	n/a	4.50%	0.00%
MarketAxess Holdings Inc	MKTX	192.79	38	7,267	0.02%	1.58%	0.00%	9.00%	0.00%
Devon Energy Corp	DVN	36.22	649	23,507	0.06%	2.65%	0.00%	1.50%	0.00%
Bio-Techne Corp	TECH	61.75	158	9,762	0.02%	0.52%	0.00%	11.00%	0.00%
Alphabet Inc	GOOGL	170.28	5,833	Excl.	Excl.	0.47%	n/a	n/a	n/a
Teleflex Inc	TFX	132.75	46	6,155	0.02%	1.02%	0.00%	8.50%	0.00%
Allegion plc	ALLE	128.71	86	11,106	0.03%	1.58%	0.00%	8.50%	0.00%
Netflix Inc	NFLX	980.56	428	419,442	1.06%	n/a	n/a	16.50%	0.18%
Warner Bros Discovery Inc	WBD	11.46	2,455	Excl.	Excl.	n/a	n/a	n/a	n/a
Agilent Technologies Inc	A	127.92	285	36,494	0.09%	0.78%	0.00%	6.50%	0.01%
Trimble Inc	TRMB	71.98	246	17,692	0.04%	n/a	n/a	6.00%	0.00%
Elevance Health Inc	ELV	396.88	227	90,231	0.23%	1.72%	0.00%	9.50%	0.02%
CME Group Inc	CME	253.77	360	91,447	0.23%	1.97%	0.00%	6.00%	0.01%
Juniper Networks Inc	JNPR	36.20	333	12,061	0.03%	2.43%	0.00%	7.00%	0.00%
DTE Energy Co	DTE	133.70	207	27,666	0.07%	3.26%	0.00%	8.50%	0.01%
Celanese Corp	CE	50.94	109	5,569	0.01%	0.24%	0.00%	4.50%	0.00%
Nasdaq Inc	NDAQ	82.78	575	47,611	0.12%	1.16%	0.00%	3.50%	0.00%
Philip Morris International Inc	PM	155.28	1,555	241,438	0.61%	3.48%	0.02%	5.00%	0.03%
Ingersoll Rand Inc	IR	84.78	403	34,173	0.09%	0.09%	0.00%	10.50%	0.01%
Salesforce Inc	CRM	297.85	957	Excl.	Excl.	0.54%	n/a	24.50%	n/a
Roper Technologies Inc	ROP	584.50	107	62,767	0.16%	0.56%	0.00%	9.00%	0.01%
Huntington Ingalls Industries Inc	HII	175.58	39	6,870	0.02%	3.08%	0.00%	10.00%	0.00%
MetLife Inc	MET	86.18	681	58,708	0.15%	2.53%	0.00%	7.50%	0.01%
Tapestry Inc	TPR	85.42	207	17,683	0.04%	1.64%	0.00%	9.00%	0.00%
CSX Corp	CSX	32.01	1,895	60,647	0.15%	1.62%	0.00%	10.00%	0.02%
Edwards Lifesciences Corp	EW	71.62	590	42,241	0.11%	n/a	n/a	6.50%	0.01%
Ameriprise Financial Inc	AMP	537.30	96	51,644	0.13%	1.10%	0.00%	10.00%	0.01%
Zebra Technologies Corp	ZBRA	315.05	51	16,187	0.04%	n/a	n/a	5.50%	0.00%
Zimmer Biomet Holdings Inc	ZBH	104.32	199	20,766	0.05%	0.92%	0.00%	6.50%	0.00%
Camden Property Trust	CPT	124.06	107	Excl.	Excl.	3.39%	n/a	-8.50%	n/a
CBRE Group Inc	CBRE	141.94	300	42,587	0.11%	n/a	n/a	6.00%	0.01%
Mastercard Inc	MA	576.31	905	521,497	1.32%	0.53%	0.01%	14.50%	0.19%
CarMax Inc	KMX	82.97	154	12,761	0.03%	n/a	n/a	3.00%	0.00%
Intercontinental Exchange Inc	ICE	173.23	575	99,532	0.25%	1.11%	0.00%	7.50%	0.02%
Fidelity National Information Services Inc	FIS	71.12	530	37,672	0.10%	2.25%	0.00%	4.50%	0.00%
Smurfit WestRock PLC	SW	52.07	520	Excl.	Excl.	3.31%	n/a	n/a	n/a
Chipotle Mexican Grill Inc	CMG	53.97	1,355	Excl.	Excl.	n/a	n/a	20.50%	n/a
Wynn Resorts Ltd	WYNN	89.32	106	Excl.	Excl.	1.12%	n/a	27.00%	n/a
Live Nation Entertainment Inc	LYV	143.36	233	Excl.	Excl.	n/a	n/a	n/a	n/a
Assurant Inc	AIZ	207.89	51	10,559	0.03%	1.54%	0.00%	9.50%	0.00%
NRG Energy Inc	NRG	105.71	198	20,938	0.05%	1.66%	0.00%	11.00%	0.01%
Monster Beverage Corp	MNST	54.65	973	53,148	0.13%	n/a	n/a	11.50%	0.02%
Regions Financial Corp	RF	23.71	905	21,469	0.05%	4.22%	0.00%	5.00%	0.00%
Baker Hughes Co	BKR	44.59	990	Excl.	Excl.	2.06%	n/a	30.00%	n/a
Mosaic Co/The	MOS	23.92	318	Excl.	Excl.	3.68%	n/a	-11.00%	n/a
Expedia Group Inc	EXPE	197.96	123	Excl.	Excl.	0.81%	n/a	39.00%	n/a
CF Industries Holdings Inc	CF	81.02	170	Excl.	Excl.	2.47%	n/a	n/a	n/a
APA Corp	APA	20.70	370	7,658	0.02%	4.83%	0.00%	6.00%	0.00%
Leidos Holdings Inc	LDOS	129.97	131	17,048	0.04%	1.23%	0.00%	8.00%	0.00%
Alphabet Inc	GOOG	172.22	5,497	946,693	2.40%	0.46%	0.01%	13.50%	0.32%
First Solar Inc	FSLR	136.18	107	Excl.	Excl.	n/a	n/a	34.50%	n/a
Discover Financial Services	DFS	195.19	252	49,111	0.12%	1.43%	0.00%	4.00%	0.00%
Visa Inc	V	362.71	1,723	625,081	1.59%	0.65%	0.01%	13.50%	0.21%
Mid-America Apartment Communities Inc	MAA	168.12	117	Excl.	Excl.	3.60%	n/a	-15.00%	n/a
Xylem Inc/NY	XYL	130.89	243	31,799	0.08%	1.22%	0.00%	12.00%	0.01%
Marathon Petroleum Corp	MPC	150.18	313	Excl.	Excl.	2.42%	n/a	-6.00%	n/a
Tractor Supply Co	TSCO	55.35	532	29,421	0.07%	1.66%	0.00%	10.50%	0.01%
Advanced Micro Devices Inc	AMD	99.86	1,620	161,821	0.41%	n/a	n/a	17.00%	0.07%
ResMed Inc	RMD	233.52	147	34,296	0.09%	0.91%	0.00%	11.00%	0.01%
Mettler-Toledo International Inc	MTD	1,272.72	21	26,621	0.07%	n/a	n/a	9.50%	0.01%
VICI Properties Inc	VICI	32.49	1,043	33,892	0.09%	5.32%	0.00%	10.50%	0.01%
Copart Inc	CPRT	54.80	966	52,942	0.13%	n/a	n/a	9.00%	0.01%
Jacobs Solutions Inc	J	128.11	123	15,699	0.04%	1.00%	0.00%	11.00%	0.00%
Albemarle Corp	ALB	77.03	118	Excl.	Excl.	2.10%	n/a	-3.50%	n/a
Fortinet Inc	FTNT	108.01	769	83,057	0.21%	n/a	n/a	18.00%	0.04%
Moderna Inc	MRNA	30.96	386	Excl.	Excl.	n/a	n/a	-16.00%	n/a
Essex Property Trust Inc	ESS	311.57	64	20,042	0.05%	3.30%	0.00%	4.00%	0.00%
CoStar Group Inc	CSGP	76.25	410	31,272	0.08%	n/a	n/a	11.50%	0.01%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Realty Income Corp	O	57.03	892	50,843	0.13%	5.64%	0.01%	5.00%	0.01%
Westinghouse Air Brake Technologies Corp	WAB	185.36	171	31,668	0.08%	0.54%	0.00%	16.00%	0.01%
Palantir Technologies Inc	PLTR	84.92	2,249	Excl.	Excl.	n/a	n/a	n/a	n/a
Pool Corp	POOL	347.00	38	13,058	0.03%	1.38%	0.00%	0.50%	0.00%
Western Digital Corp	WDC	48.93	348	Excl.	Excl.	n/a	n/a	22.50%	n/a
PepsiCo Inc	PEP	153.47	1,371	210,484	0.53%	3.53%	0.02%	7.50%	0.04%
TE Connectivity PLC	TEL	154.03	298	45,955	0.12%	1.69%	0.00%	10.50%	0.01%
Diamondback Energy Inc	FANG	158.96	289	46,010	0.12%	2.52%	0.00%	2.50%	0.00%
Palo Alto Networks Inc	PANW	190.43	662	Excl.	Excl.	n/a	n/a	n/a	n/a
ServiceNow Inc	NOW	929.76	206	Excl.	Excl.	n/a	n/a	32.50%	n/a
Church & Dwight Co Inc	CHD	111.20	246	27,352	0.07%	1.06%	0.00%	6.50%	0.00%
Federal Realty Investment Trust	FRT	105.42	86	9,032	0.02%	4.17%	0.00%	2.50%	0.00%
MGM Resorts International	MGM	34.76	286	Excl.	Excl.	n/a	n/a	25.00%	n/a
American Electric Power Co Inc	AEP	106.05	533	56,547	0.14%	3.51%	0.01%	6.50%	0.01%
Invitation Homes Inc	INVH	34.01	613	20,838	0.05%	3.41%	0.00%	7.50%	0.00%
PTC Inc	PTC	163.63	120	Excl.	Excl.	n/a	n/a	29.00%	n/a
JB Hunt Transport Services Inc	JBHT	161.19	100	16,120	0.04%	1.09%	0.00%	6.00%	0.00%
Lam Research Corp	LRCX	76.74	1,284	98,508	0.25%	1.20%	0.00%	12.50%	0.03%
Mohawk Industries Inc	MHK	117.59	63	7,360	0.02%	n/a	n/a	1.00%	0.00%
GE HealthCare Technologies Inc	GEHC	87.35	457	Excl.	Excl.	0.16%	n/a	n/a	n/a
Pentair PLC	PNR	94.20	165	15,526	0.04%	1.06%	0.00%	12.00%	0.00%
Vertex Pharmaceuticals Inc	VRTX	479.79	257	123,205	0.31%	n/a	n/a	10.00%	0.03%
Ancor PLC	AMCR	10.12	1,445	14,627	0.04%	5.04%	0.00%	11.50%	0.00%
Meta Platforms Inc	META	668.20	2,190	1,463,290	3.71%	0.31%	0.01%	19.00%	0.71%
T-Mobile US Inc	TMUS	269.69	1,142	307,917	0.78%	1.31%	0.01%	18.00%	0.14%
United Rentals Inc	URI	642.32	65	41,948	0.11%	1.11%	0.00%	19.00%	0.02%
Alexandria Real Estate Equities Inc	ARE	102.26	173	17,700	0.04%	5.16%	0.00%	9.50%	0.00%
Honeywell International Inc	HON	212.89	650	138,361	0.35%	2.12%	0.01%	11.00%	0.04%
Delta Air Lines Inc	DAL	60.12	646	Excl.	Excl.	1.00%	n/a	28.00%	n/a
United Airlines Holdings Inc	UAL	93.81	329	Excl.	Excl.	n/a	n/a	n/a	n/a
Seagate Technology Holdings PLC	STX	101.91	212	Excl.	Excl.	2.83%	n/a	31.00%	n/a
News Corp	NWS	32.28	189	Excl.	Excl.	0.62%	n/a	n/a	n/a
Centene Corp	CNC	58.16	496	28,850	0.07%	n/a	n/a	9.50%	0.01%
Apollo Global Management Inc	APO	149.27	570	Excl.	Excl.	1.24%	n/a	23.50%	n/a
Martin Marietta Materials Inc	MLM	483.14	61	29,459	0.07%	0.65%	0.00%	11.00%	0.01%
Teradyne Inc	TER	109.86	162	17,766	0.05%	0.44%	0.00%	10.50%	0.00%
PayPal Holdings Inc	PYPL	71.05	989	70,286	0.18%	n/a	n/a	11.50%	0.02%
Tesla Inc	TSLA	292.98	3,217	942,375	2.39%	n/a	n/a	16.50%	0.39%
Blackrock Inc	BLK	977.78	155	151,804	0.39%	2.13%	0.01%	9.50%	0.04%
KKR & Co Inc	KKR	135.59	888	120,435	0.31%	0.52%	0.00%	5.00%	0.02%
Arch Capital Group Ltd	ACGL	92.91	375	34,874	0.09%	n/a	n/a	15.00%	0.01%
Dow Inc	DOW	38.11	700	Excl.	Excl.	7.35%	n/a	n/a	n/a
Everest Group Ltd	EG	353.22	43	15,165	0.04%	2.26%	0.00%	14.50%	0.01%
Teledyne Technologies Inc	TDY	515.02	47	24,121	0.06%	n/a	n/a	8.00%	0.00%
Domino's Pizza Inc	DPZ	489.71	34	16,795	0.04%	1.42%	0.00%	12.50%	0.01%
GE Vernova Inc	GEV	335.18	276	Excl.	Excl.	0.30%	n/a	n/a	n/a
News Corp	NWSA	28.62	378	10,820	0.03%	0.70%	0.00%	14.50%	0.00%
Exelon Corp	EXC	44.20	1,005	Excl.	Excl.	3.62%	n/a	n/a	n/a
Global Payments Inc	GPV	105.28	248	26,069	0.07%	0.95%	0.00%	13.50%	0.01%
Crown Castle Inc	CCI	94.10	435	Excl.	Excl.	6.65%	n/a	-0.50%	n/a
Align Technology Inc	ALGN	187.03	74	13,765	0.03%	n/a	n/a	17.00%	0.01%
Kenvue Inc	KVUE	23.60	1,911	Excl.	Excl.	3.47%	n/a	n/a	n/a
Targa Resources Corp	TRGP	201.72	218	Excl.	Excl.	1.49%	n/a	22.00%	n/a
Bunge Global SA	BG	74.19	134	9,939	0.03%	3.67%	0.00%	0.00%	0.00%
LKQ Corp	LKQ	42.19	259	10,934	0.03%	2.84%	0.00%	7.00%	0.00%
Deckers Outdoor Corp	DECK	139.36	152	21,151	0.05%	n/a	n/a	16.00%	0.01%
Workday Inc	WDAY	263.34	214	56,355	0.14%	n/a	n/a	15.50%	0.02%
Zoetis Inc	ZTS	167.24	448	74,889	0.19%	1.20%	0.00%	7.50%	0.01%
Equinix Inc	EQIX	904.62	97	88,048	0.22%	2.07%	0.00%	15.00%	0.03%
Digital Realty Trust Inc	DLR	156.32	337	Excl.	Excl.	3.12%	n/a	-5.00%	n/a
Molina Healthcare Inc	MOH	301.12	56	16,712	0.04%	n/a	n/a	10.50%	0.00%
Las Vegas Sands Corp	LVS	44.71	716	Excl.	Excl.	2.24%	n/a	n/a	n/a

Notes:

- [4] Source: Bloomberg Professional
- [5] Source: Bloomberg Professional
- [6] Equals [4] x [5], excluding companies with growth rates <0% or >20%
- [7] Equals [6] / Sum of Column [6], excluding companies with growth rates <0% or >20%
- [8] Source: Bloomberg Professional
- [9] Equals [7] x [8]
- [10] Source: Value Line, as of February 28, 2025
- [11] Equals [7] x [10]

JCN-6

CAPITAL ASSET PRICING MODEL (“CAPM”) ANALYSIS

CAPITAL ASSET PRICING MODEL - CURRENT RISK-FREE RATE, VALUE LINE BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.73%	0.90	15.16%	10.43%	14.12%
Ameren Corporation	AEE	4.73%	0.90	15.16%	10.43%	14.12%
American Electric Power Company, Inc.	AEP	4.73%	0.85	15.16%	10.43%	13.60%
Avista Corporation	AVA	4.73%	0.95	15.16%	10.43%	14.64%
Black Hills Corporation	BKH	4.73%	1.05	15.16%	10.43%	15.68%
CMS Energy Corporation	CMS	4.73%	0.85	15.16%	10.43%	13.60%
Consolidated Edison, Inc.	ED	4.73%	0.80	15.16%	10.43%	13.07%
DTE Energy Company	DTE	4.73%	1.00	15.16%	10.43%	15.16%
Duke Energy Corporation	DUK	4.73%	0.90	15.16%	10.43%	14.12%
Edison International	EIX	4.73%	1.05	15.16%	10.43%	15.68%
Entergy Corporation	ETR	4.73%	1.00	15.16%	10.43%	15.16%
Exelon Corporation	EXC	4.73%	NMF	15.16%	10.43%	NA
Eergy, Inc.	EVRG	4.73%	0.95	15.16%	10.43%	14.64%
FirstEnergy Corporation	FE	4.73%	0.90	15.16%	10.43%	14.12%
IDACORP, Inc.	IDA	4.73%	0.85	15.16%	10.43%	13.60%
NextEra Energy, Inc.	NEE	4.73%	1.05	15.16%	10.43%	15.68%
NorthWestern Corporation	NWE	4.73%	1.00	15.16%	10.43%	15.16%
OGE Energy Corporation	OGE	4.73%	1.05	15.16%	10.43%	15.68%
Pinnacle West Capital Corporation	PNW	4.73%	0.95	15.16%	10.43%	14.64%
Portland General Electric Company	POR	4.73%	0.95	15.16%	10.43%	14.64%
PPL Corporation	PPL	4.73%	1.10	15.16%	10.43%	16.20%
Public Service Enterprise Group Inc.	PEG	4.73%	1.00	15.16%	10.43%	15.16%
Southern Company	SO	4.73%	0.95	15.16%	10.43%	14.64%
TXNM Energy, Inc.	TXNM	4.73%	0.90	15.16%	10.43%	14.12%
Wisconsin Energy Corporation	WEC	4.73%	0.85	15.16%	10.43%	13.60%
Xcel Energy Inc.	XEL	4.73%	0.85	15.16%	10.43%	13.60%
Median			0.95			14.64%
Mean			0.94			14.58%

Notes:
 [1] Source: Bloomberg Professional, 30-day average as of February 28, 2025
 [2] Source: Value Line Reports
 [3] Source: Exhibit JCN-5, page 1
 [4] Equals [3] - [1]
 [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2025 - Q1 2026)	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.64%	0.90	15.16%	10.52%	14.11%
Ameren Corporation	AEE	4.64%	0.90	15.16%	10.52%	14.11%
American Electric Power Company, Inc.	AEP	4.64%	0.85	15.16%	10.52%	13.58%
Avista Corporation	AVA	4.64%	0.95	15.16%	10.52%	14.64%
Black Hills Corporation	BKH	4.64%	1.05	15.16%	10.52%	15.69%
CMS Energy Corporation	CMS	4.64%	0.85	15.16%	10.52%	13.58%
Consolidated Edison, Inc.	ED	4.64%	0.80	15.16%	10.52%	13.06%
DTE Energy Company	DTE	4.64%	1.00	15.16%	10.52%	15.16%
Duke Energy Corporation	DUK	4.64%	0.90	15.16%	10.52%	14.11%
Edison International	EIX	4.64%	1.05	15.16%	10.52%	15.69%
Entergy Corporation	ETR	4.64%	1.00	15.16%	10.52%	15.16%
Exelon Corporation	EXC	4.64%	NMF	15.16%	10.52%	NA
Eergy, Inc.	EVRG	4.64%	0.95	15.16%	10.52%	14.64%
FirstEnergy Corporation	FE	4.64%	0.90	15.16%	10.52%	14.11%
IDACORP, Inc.	IDA	4.64%	0.85	15.16%	10.52%	13.58%
NextEra Energy, Inc.	NEE	4.64%	1.05	15.16%	10.52%	15.69%
NorthWestern Corporation	NWE	4.64%	1.00	15.16%	10.52%	15.16%
OGE Energy Corporation	OGE	4.64%	1.05	15.16%	10.52%	15.69%
Pinnacle West Capital Corporation	PNW	4.64%	0.95	15.16%	10.52%	14.64%
Portland General Electric Company	POR	4.64%	0.95	15.16%	10.52%	14.64%
PPL Corporation	PPL	4.64%	1.10	15.16%	10.52%	16.21%
Public Service Enterprise Group Inc.	PEG	4.64%	1.00	15.16%	10.52%	15.16%
Southern Company	SO	4.64%	0.95	15.16%	10.52%	14.64%
TXNM Energy, Inc.	TXNM	4.64%	0.90	15.16%	10.52%	14.11%
Wisconsin Energy Corporation	WEC	4.64%	0.85	15.16%	10.52%	13.58%
Xcel Energy Inc.	XEL	4.64%	0.85	15.16%	10.52%	13.58%
Median			0.95			14.64%
Mean			0.94			14.57%

Notes:
 [1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 3, February 28, 2025 at 2
 [2] Source: Value Line Reports
 [3] Source: Exhibit JCN-5, page 1
 [4] Equals [3] - [1]
 [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL – LONG-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2026 - 2030)	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.30%	0.90	15.16%	10.86%	14.08%
Ameren Corporation	AEE	4.30%	0.90	15.16%	10.86%	14.08%
American Electric Power Company, Inc.	AEP	4.30%	0.85	15.16%	10.86%	13.53%
Avista Corporation	AVA	4.30%	0.95	15.16%	10.86%	14.62%
Black Hills Corporation	BKH	4.30%	1.05	15.16%	10.86%	15.70%
CMS Energy Corporation	CMS	4.30%	0.85	15.16%	10.86%	13.53%
Consolidated Edison, Inc.	ED	4.30%	0.80	15.16%	10.86%	12.99%
DTE Energy Company	DTE	4.30%	1.00	15.16%	10.86%	15.16%
Duke Energy Corporation	DUK	4.30%	0.90	15.16%	10.86%	14.08%
Edison International	EIX	4.30%	1.05	15.16%	10.86%	15.70%
Entergy Corporation	ETR	4.30%	1.00	15.16%	10.86%	15.16%
Exelon Corporation	EXC	4.30%	NMF	15.16%	10.86%	NA
Eergy, Inc.	EVRG	4.30%	0.95	15.16%	10.86%	14.62%
FirstEnergy Corporation	FE	4.30%	0.90	15.16%	10.86%	14.08%
IDACORP, Inc.	IDA	4.30%	0.85	15.16%	10.86%	13.53%
NextEra Energy, Inc.	NEE	4.30%	1.05	15.16%	10.86%	15.70%
NorthWestern Corporation	NWE	4.30%	1.00	15.16%	10.86%	15.16%
OGE Energy Corporation	OGE	4.30%	1.05	15.16%	10.86%	15.70%
Pinnacle West Capital Corporation	PNW	4.30%	0.95	15.16%	10.86%	14.62%
Portland General Electric Company	POR	4.30%	0.95	15.16%	10.86%	14.62%
PPL Corporation	PPL	4.30%	1.10	15.16%	10.86%	16.25%
Public Service Enterprise Group Inc.	PEG	4.30%	1.00	15.16%	10.86%	15.16%
Southern Company	SO	4.30%	0.95	15.16%	10.86%	14.62%
TXNM Energy, Inc.	TXNM	4.30%	0.90	15.16%	10.86%	14.08%
Wisconsin Energy Corporation	WEC	4.30%	0.85	15.16%	10.86%	13.53%
Xcel Energy Inc.	XEL	4.30%	0.85	15.16%	10.86%	13.53%
Median			0.95			14.62%
Mean			0.94			14.55%

Notes:

- [1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
- [2] Source: Value Line Reports
- [3] Source: Exhibit JCN-5, page 1
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE, BLOOMBERG BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.73%	0.77	15.16%	10.43%	12.79%
Ameren Corporation	AEE	4.73%	0.74	15.16%	10.43%	12.42%
American Electric Power Company, Inc.	AEP	4.73%	0.74	15.16%	10.43%	12.42%
Avista Corporation	AVA	4.73%	0.74	15.16%	10.43%	12.48%
Black Hills Corporation	BKH	4.73%	0.88	15.16%	10.43%	13.90%
CMS Energy Corporation	CMS	4.73%	0.73	15.16%	10.43%	12.31%
Consolidated Edison, Inc.	ED	4.73%	0.62	15.16%	10.43%	11.21%
DTE Energy Company	DTE	4.73%	0.81	15.16%	10.43%	13.13%
Duke Energy Corporation	DUK	4.73%	0.71	15.16%	10.43%	12.14%
Edison International	EIX	4.73%	0.85	15.16%	10.43%	13.55%
Entergy Corporation	ETR	4.73%	0.84	15.16%	10.43%	13.52%
Exelon Corporation	EXC	4.73%	0.85	15.16%	10.43%	13.55%
Eergy, Inc.	EVRG	4.73%	0.77	15.16%	10.43%	12.79%
FirstEnergy Corporation	FE	4.73%	0.78	15.16%	10.43%	12.91%
IDACORP, Inc.	IDA	4.73%	0.77	15.16%	10.43%	12.74%
NextEra Energy, Inc.	NEE	4.73%	0.80	15.16%	10.43%	13.11%
NorthWestern Corporation	NWE	4.73%	0.86	15.16%	10.43%	13.68%
OGE Energy Corporation	OGE	4.73%	0.90	15.16%	10.43%	14.11%
Pinnacle West Capital Corporation	PNW	4.73%	0.81	15.16%	10.43%	13.19%
Portland General Electric Company	POR	4.73%	0.77	15.16%	10.43%	12.77%
PPL Corporation	PPL	4.73%	0.93	15.16%	10.43%	14.39%
Public Service Enterprise Group Inc.	PEG	4.73%	0.85	15.16%	10.43%	13.56%
Southern Company	SO	4.73%	0.77	15.16%	10.43%	12.71%
TXNM Energy, Inc.	TXNM	4.73%	0.81	15.16%	10.43%	13.19%
Wisconsin Energy Corporation	WEC	4.73%	0.72	15.16%	10.43%	12.23%
Xcel Energy Inc.	XEL	4.73%	0.72	15.16%	10.43%	12.20%
Median			0.78			12.85%
Mean			0.79			12.96%

Notes:

- [1] Source: Bloomberg Professional, 30-day average as of February 28, 2025
- [2] Source: Bloomberg Professional, as of February 28, 2025
- [3] Source: Exhibit JCN-5, page 1
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2025 - Q1 2026)	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.64%	0.77	15.16%	10.52%	12.77%
Ameren Corporation	AEE	4.64%	0.74	15.16%	10.52%	12.40%
American Electric Power Company, Inc.	AEP	4.64%	0.74	15.16%	10.52%	12.40%
Avista Corporation	AVA	4.64%	0.74	15.16%	10.52%	12.46%
Black Hills Corporation	BKH	4.64%	0.88	15.16%	10.52%	13.89%
CMS Energy Corporation	CMS	4.64%	0.73	15.16%	10.52%	12.29%
Consolidated Edison, Inc.	ED	4.64%	0.62	15.16%	10.52%	11.18%
DTE Energy Company	DTE	4.64%	0.81	15.16%	10.52%	13.11%
Duke Energy Corporation	DUK	4.64%	0.71	15.16%	10.52%	12.12%
Edison International	EIX	4.64%	0.85	15.16%	10.52%	13.53%
Entergy Corporation	ETR	4.64%	0.84	15.16%	10.52%	13.51%
Exelon Corporation	EXC	4.64%	0.85	15.16%	10.52%	13.54%
Eergy, Inc.	EVRG	4.64%	0.77	15.16%	10.52%	12.76%
FirstEnergy Corporation	FE	4.64%	0.78	15.16%	10.52%	12.89%
IDACORP, Inc.	IDA	4.64%	0.77	15.16%	10.52%	12.72%
NextEra Energy, Inc.	NEE	4.64%	0.80	15.16%	10.52%	13.09%
NorthWestern Corporation	NWE	4.64%	0.86	15.16%	10.52%	13.67%
OGE Energy Corporation	OGE	4.64%	0.90	15.16%	10.52%	14.10%
Pinnacle West Capital Corporation	PNW	4.64%	0.81	15.16%	10.52%	13.18%
Portland General Electric Company	POR	4.64%	0.77	15.16%	10.52%	12.75%
PPL Corporation	PPL	4.64%	0.93	15.16%	10.52%	14.38%
Public Service Enterprise Group Inc.	PEG	4.64%	0.85	15.16%	10.52%	13.55%
Southern Company	SO	4.64%	0.77	15.16%	10.52%	12.69%
TXNM Energy, Inc.	TXNM	4.64%	0.81	15.16%	10.52%	13.18%
Wisconsin Energy Corporation	WEC	4.64%	0.72	15.16%	10.52%	12.20%
Xcel Energy Inc.	XEL	4.64%	0.72	15.16%	10.52%	12.18%
Median			0.78			12.83%
Mean			0.79			12.94%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 3, February 28, 2025 at 2

[2] Source: Bloomberg Professional, as of February 28, 2025

[3] Source: Exhibit JCN-5, page 1

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2026 - 2030)	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.30%	0.77	15.16%	10.86%	12.70%
Ameren Corporation	AEE	4.30%	0.74	15.16%	10.86%	12.31%
American Electric Power Company, Inc.	AEP	4.30%	0.74	15.16%	10.86%	12.31%
Avista Corporation	AVA	4.30%	0.74	15.16%	10.86%	12.37%
Black Hills Corporation	BKH	4.30%	0.88	15.16%	10.86%	13.85%
CMS Energy Corporation	CMS	4.30%	0.73	15.16%	10.86%	12.19%
Consolidated Edison, Inc.	ED	4.30%	0.62	15.16%	10.86%	11.05%
DTE Energy Company	DTE	4.30%	0.81	15.16%	10.86%	13.05%
Duke Energy Corporation	DUK	4.30%	0.71	15.16%	10.86%	12.02%
Edison International	EIX	4.30%	0.85	15.16%	10.86%	13.48%
Entergy Corporation	ETR	4.30%	0.84	15.16%	10.86%	13.45%
Exelon Corporation	EXC	4.30%	0.85	15.16%	10.86%	13.49%
Eergy, Inc.	EVRG	4.30%	0.77	15.16%	10.86%	12.69%
FirstEnergy Corporation	FE	4.30%	0.78	15.16%	10.86%	12.81%
IDACORP, Inc.	IDA	4.30%	0.77	15.16%	10.86%	12.65%
NextEra Energy, Inc.	NEE	4.30%	0.80	15.16%	10.86%	13.03%
NorthWestern Corporation	NWE	4.30%	0.86	15.16%	10.86%	13.62%
OGE Energy Corporation	OGE	4.30%	0.90	15.16%	10.86%	14.07%
Pinnacle West Capital Corporation	PNW	4.30%	0.81	15.16%	10.86%	13.11%
Portland General Electric Company	POR	4.30%	0.77	15.16%	10.86%	12.67%
PPL Corporation	PPL	4.30%	0.93	15.16%	10.86%	14.36%
Public Service Enterprise Group Inc.	PEG	4.30%	0.85	15.16%	10.86%	13.50%
Southern Company	SO	4.30%	0.77	15.16%	10.86%	12.61%
TXNM Energy, Inc.	TXNM	4.30%	0.81	15.16%	10.86%	13.11%
Wisconsin Energy Corporation	WEC	4.30%	0.72	15.16%	10.86%	12.11%
Xcel Energy Inc.	XEL	4.30%	0.72	15.16%	10.86%	12.08%
Median			0.78			12.76%
Mean			0.79			12.87%

Notes:

[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14

[2] Source: Bloomberg Professional, as of February 28, 2025

[3] Source: Exhibit JCN-5, page 1

[4] Equals [3] - [1]

[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL – CURRENT RISK-FREE RATE, VALUE LINE BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.73%	0.90	11.54%	6.81%	10.86%
Ameren Corporation	AEE	4.73%	0.90	11.54%	6.81%	10.86%
American Electric Power Company, Inc.	AEP	4.73%	0.85	11.54%	6.81%	10.52%
Avista Corporation	AVA	4.73%	0.95	11.54%	6.81%	11.20%
Black Hills Corporation	BKH	4.73%	1.05	11.54%	6.81%	11.88%
CMS Energy Corporation	CMS	4.73%	0.85	11.54%	6.81%	10.52%
Consolidated Edison, Inc.	ED	4.73%	0.80	11.54%	6.81%	10.18%
DTE Energy Company	DTE	4.73%	0.80	11.54%	6.81%	10.18%
Duke Energy Corporation	DUK	4.73%	0.90	11.54%	6.81%	10.86%
Edison International	EIX	4.73%	1.05	11.54%	6.81%	11.88%
Entergy Corporation	ETR	4.73%	1.00	11.54%	6.81%	11.54%
Exelon Corporation	EXC	4.73%	NMF	11.54%	6.81%	NA
Eversource Energy	EVRG	4.73%	0.95	11.54%	6.81%	11.20%
FirstEnergy Corporation	FE	4.73%	0.90	11.54%	6.81%	10.86%
IDACORP, Inc.	IDA	4.73%	0.85	11.54%	6.81%	10.52%
NextEra Energy, Inc.	NEE	4.73%	1.05	11.54%	6.81%	11.88%
NorthWestern Corporation	NWE	4.73%	1.00	11.54%	6.81%	11.54%
OGE Energy Corporation	OGE	4.73%	1.05	11.54%	6.81%	11.88%
Pinnacle West Capital Corporation	PNW	4.73%	0.95	11.54%	6.81%	11.20%
Portland General Electric Company	POR	4.73%	0.95	11.54%	6.81%	11.20%
PPL Corporation	PPL	4.73%	1.10	11.54%	6.81%	12.22%
Public Service Enterprise Group Inc.	PEG	4.73%	1.00	11.54%	6.81%	11.54%
Southern Company	SO	4.73%	0.95	11.54%	6.81%	11.20%
TXNM Energy, Inc.	TXNM	4.73%	0.90	11.54%	6.81%	10.86%
Wisconsin Energy Corporation	WEC	4.73%	0.85	11.54%	6.81%	10.52%
Xcel Energy Inc.	XEL	4.73%	0.85	11.54%	6.81%	10.52%
Median			0.95			11.20%
Mean			0.94			11.11%

Notes:

- [1] Source: Bloomberg Professional, 30-day average as of February 28, 2025
- [2] Source: Value Line Reports
- [3] Source: Exhibit JCN-5, page 8
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL – NEAR-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2025 - Q1 2026)	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
Alliant Energy Corporation	LNT	4.64%	0.90	11.54%	6.90%	10.85%
Ameren Corporation	AEE	4.64%	0.90	11.54%	6.90%	10.85%
American Electric Power Company, Inc.	AEP	4.64%	0.85	11.54%	6.90%	10.51%
Avista Corporation	AVA	4.64%	0.95	11.54%	6.90%	11.20%
Black Hills Corporation	BKH	4.64%	1.05	11.54%	6.90%	11.89%
CMS Energy Corporation	CMS	4.64%	0.85	11.54%	6.90%	10.51%
Consolidated Edison, Inc.	ED	4.64%	0.80	11.54%	6.90%	10.16%
DTE Energy Company	DTE	4.64%	0.80	11.54%	6.90%	10.16%
Duke Energy Corporation	DUK	4.64%	0.90	11.54%	6.90%	10.85%
Edison International	EIX	4.64%	1.05	11.54%	6.90%	11.89%
Entergy Corporation	ETR	4.64%	1.00	11.54%	6.90%	11.54%
Exelon Corporation	EXC	4.64%	NMF	11.54%	6.90%	NA
Eversource Energy	EVRG	4.64%	0.95	11.54%	6.90%	11.20%
FirstEnergy Corporation	FE	4.64%	0.90	11.54%	6.90%	10.85%
IDACORP, Inc.	IDA	4.64%	0.85	11.54%	6.90%	10.51%
NextEra Energy, Inc.	NEE	4.64%	1.05	11.54%	6.90%	11.89%
NorthWestern Corporation	NWE	4.64%	1.00	11.54%	6.90%	11.54%
OGE Energy Corporation	OGE	4.64%	1.05	11.54%	6.90%	11.89%
Pinnacle West Capital Corporation	PNW	4.64%	0.95	11.54%	6.90%	11.20%
Portland General Electric Company	POR	4.64%	0.95	11.54%	6.90%	11.20%
PPL Corporation	PPL	4.64%	1.10	11.54%	6.90%	12.23%
Public Service Enterprise Group Inc.	PEG	4.64%	1.00	11.54%	6.90%	11.54%
Southern Company	SO	4.64%	0.95	11.54%	6.90%	11.20%
TXNM Energy, Inc.	TXNM	4.64%	0.90	11.54%	6.90%	10.85%
Wisconsin Energy Corporation	WEC	4.64%	0.85	11.54%	6.90%	10.51%
Xcel Energy Inc.	XEL	4.64%	0.85	11.54%	6.90%	10.51%
Median			0.95			11.20%
Mean			0.94			11.10%

Notes:

- [1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 3, February 28, 2025 at 2
- [2] Source: Value Line Reports
- [3] Source: Exhibit JCN-5, page 8
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL – LONG-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2026 - 2030)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm - Rf)	ROE (K)
Alliant Energy Corporation	LNT	4.30%	0.90	11.54%	7.24%	10.82%
Ameren Corporation	AEE	4.30%	0.90	11.54%	7.24%	10.82%
American Electric Power Company, Inc.	AEP	4.30%	0.85	11.54%	7.24%	10.46%
Avista Corporation	AVA	4.30%	0.95	11.54%	7.24%	11.18%
Black Hills Corporation	BKH	4.30%	1.05	11.54%	7.24%	11.91%
CMS Energy Corporation	CMS	4.30%	0.85	11.54%	7.24%	10.46%
Consolidated Edison, Inc.	ED	4.30%	0.80	11.54%	7.24%	10.09%
DTE Energy Company	DTE	4.30%	0.80	11.54%	7.24%	10.09%
Duke Energy Corporation	DUK	4.30%	0.90	11.54%	7.24%	10.82%
Edison International	EIX	4.30%	1.05	11.54%	7.24%	11.91%
Entergy Corporation	ETR	4.30%	1.00	11.54%	7.24%	11.54%
Exelon Corporation	EXC	4.30%	NMF	11.54%	7.24%	NA
Eergy, Inc.	EVRG	4.30%	0.95	11.54%	7.24%	11.18%
FirstEnergy Corporation	FE	4.30%	0.90	11.54%	7.24%	10.82%
IDACORP, Inc.	IDA	4.30%	0.85	11.54%	7.24%	10.46%
NextEra Energy, Inc.	NEE	4.30%	1.05	11.54%	7.24%	11.91%
NorthWestern Corporation	NWE	4.30%	1.00	11.54%	7.24%	11.54%
OGE Energy Corporation	OGE	4.30%	1.05	11.54%	7.24%	11.91%
Pinnacle West Capital Corporation	PNW	4.30%	0.95	11.54%	7.24%	11.18%
Portland General Electric Company	POR	4.30%	0.95	11.54%	7.24%	11.18%
PPL Corporation	PPL	4.30%	1.10	11.54%	7.24%	12.27%
Public Service Enterprise Group Inc.	PEG	4.30%	1.00	11.54%	7.24%	11.54%
Southern Company	SO	4.30%	0.95	11.54%	7.24%	11.18%
TXNM Energy, Inc.	TXNM	4.30%	0.90	11.54%	7.24%	10.82%
Wisconsin Energy Corporation	WEC	4.30%	0.85	11.54%	7.24%	10.46%
Xcel Energy Inc.	XEL	4.30%	0.85	11.54%	7.24%	10.46%
Median			0.95			11.18%
Mean			0.94			11.08%

Notes:

- [1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
- [2] Source: Value Line Reports
- [3] Source: Exhibit JCN-5, page 8
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL – CURRENT RISK-FREE RATE, BLOOMBERG BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
 $K = R_f + \beta (R_m - R_f)$

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm - Rf)	ROE (K)
Alliant Energy Corporation	LNT	4.73%	0.77	11.54%	6.81%	10.00%
Ameren Corporation	AEE	4.73%	0.74	11.54%	6.81%	9.75%
American Electric Power Company, Inc.	AEP	4.73%	0.74	11.54%	6.81%	9.75%
Avista Corporation	AVA	4.73%	0.74	11.54%	6.81%	9.79%
Black Hills Corporation	BKH	4.73%	0.88	11.54%	6.81%	10.72%
CMS Energy Corporation	CMS	4.73%	0.73	11.54%	6.81%	9.68%
Consolidated Edison, Inc.	ED	4.73%	0.62	11.54%	6.81%	8.96%
DTE Energy Company	DTE	4.73%	0.81	11.54%	6.81%	10.22%
Duke Energy Corporation	DUK	4.73%	0.71	11.54%	6.81%	9.57%
Edison International	EIX	4.73%	0.85	11.54%	6.81%	10.49%
Entergy Corporation	ETR	4.73%	0.84	11.54%	6.81%	10.47%
Exelon Corporation	EXC	4.73%	0.85	11.54%	6.81%	10.49%
Eergy, Inc.	EVRG	4.73%	0.77	11.54%	6.81%	9.99%
FirstEnergy Corporation	FE	4.73%	0.78	11.54%	6.81%	10.07%
IDACORP, Inc.	IDA	4.73%	0.77	11.54%	6.81%	9.96%
NextEra Energy, Inc.	NEE	4.73%	0.80	11.54%	6.81%	10.20%
NorthWestern Corporation	NWE	4.73%	0.86	11.54%	6.81%	10.58%
OGE Energy Corporation	OGE	4.73%	0.90	11.54%	6.81%	10.86%
Pinnacle West Capital Corporation	PNW	4.73%	0.81	11.54%	6.81%	10.26%
Portland General Electric Company	POR	4.73%	0.77	11.54%	6.81%	9.98%
PPL Corporation	PPL	4.73%	0.93	11.54%	6.81%	11.04%
Public Service Enterprise Group Inc.	PEG	4.73%	0.85	11.54%	6.81%	10.50%
Southern Company	SO	4.73%	0.77	11.54%	6.81%	9.95%
TXNM Energy, Inc.	TXNM	4.73%	0.81	11.54%	6.81%	10.26%
Wisconsin Energy Corporation	WEC	4.73%	0.72	11.54%	6.81%	9.63%
Xcel Energy Inc.	XEL	4.73%	0.72	11.54%	6.81%	9.61%
Median			0.78			10.03%
Mean			0.79			10.11%

Notes:

- [1] Source: Bloomberg Professional, 30-day average as of February 28, 2025
- [2] Source: Bloomberg Professional, as of February 28, 2025
- [3] Source: Exhibit JCN-5, page 8
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm - Rf)

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2025 - Q1 2026)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm - Rf)	ROE (K)
Alliant Energy Corporation	LNT	4.64%	0.77	11.54%	6.90%	9.98%
Ameren Corporation	AEE	4.64%	0.74	11.54%	6.90%	9.73%
American Electric Power Company, Inc.	AEP	4.64%	0.74	11.54%	6.90%	9.73%
Avista Corporation	AVA	4.64%	0.74	11.54%	6.90%	9.77%
Black Hills Corporation	BKH	4.64%	0.88	11.54%	6.90%	10.71%
CMS Energy Corporation	CMS	4.64%	0.73	11.54%	6.90%	9.66%
Consolidated Edison, Inc.	ED	4.64%	0.62	11.54%	6.90%	8.93%
DTE Energy Company	DTE	4.64%	0.81	11.54%	6.90%	10.20%
Duke Energy Corporation	DUK	4.64%	0.71	11.54%	6.90%	9.55%
Edison International	EIX	4.64%	0.85	11.54%	6.90%	10.47%
Entergy Corporation	ETR	4.64%	0.84	11.54%	6.90%	10.46%
Exelon Corporation	EXC	4.64%	0.85	11.54%	6.90%	10.48%
Eversource Energy	EVRG	4.64%	0.77	11.54%	6.90%	9.97%
FirstEnergy Corporation	FE	4.64%	0.78	11.54%	6.90%	10.05%
IDACORP, Inc.	IDA	4.64%	0.77	11.54%	6.90%	9.94%
NextEra Energy, Inc.	NEE	4.64%	0.80	11.54%	6.90%	10.19%
NorthWestern Corporation	NWE	4.64%	0.86	11.54%	6.90%	10.57%
OGE Energy Corporation	OGE	4.64%	0.90	11.54%	6.90%	10.85%
Pinnacle West Capital Corporation	PNW	4.64%	0.81	11.54%	6.90%	10.24%
Portland General Electric Company	POR	4.64%	0.77	11.54%	6.90%	9.96%
PPL Corporation	PPL	4.64%	0.93	11.54%	6.90%	11.03%
Public Service Enterprise Group Inc.	PEG	4.64%	0.85	11.54%	6.90%	10.49%
Southern Company	SO	4.64%	0.77	11.54%	6.90%	9.92%
TXNM Energy, Inc.	TXNM	4.64%	0.81	11.54%	6.90%	10.24%
Wisconsin Energy Corporation	WEC	4.64%	0.72	11.54%	6.90%	9.60%
Xcel Energy Inc.	XEL	4.64%	0.72	11.54%	6.90%	9.59%
Median			0.78			10.01%
Mean			0.79			10.09%

Notes:

- [1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 3, February 28, 2025 at 2
- [2] Source: Bloomberg Professional, as of February 28, 2025
- [3] Source: Exhibit JCN-5, page 8
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm - Rf)

		[1]	[2]	[3]	[4]	[5]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2026 - 2030)	Beta (β)	Market Return (Rm)	Market Risk Premium (Rm - Rf)	ROE (K)
Alliant Energy Corporation	LNT	4.30%	0.77	11.54%	7.24%	9.90%
Ameren Corporation	AEE	4.30%	0.74	11.54%	7.24%	9.64%
American Electric Power Company, Inc.	AEP	4.30%	0.74	11.54%	7.24%	9.64%
Avista Corporation	AVA	4.30%	0.74	11.54%	7.24%	9.68%
Black Hills Corporation	BKH	4.30%	0.88	11.54%	7.24%	10.67%
CMS Energy Corporation	CMS	4.30%	0.73	11.54%	7.24%	9.56%
Consolidated Edison, Inc.	ED	4.30%	0.62	11.54%	7.24%	8.80%
DTE Energy Company	DTE	4.30%	0.81	11.54%	7.24%	10.13%
Duke Energy Corporation	DUK	4.30%	0.71	11.54%	7.24%	9.45%
Edison International	EIX	4.30%	0.85	11.54%	7.24%	10.42%
Entergy Corporation	ETR	4.30%	0.84	11.54%	7.24%	10.40%
Exelon Corporation	EXC	4.30%	0.85	11.54%	7.24%	10.43%
Eversource Energy	EVRG	4.30%	0.77	11.54%	7.24%	9.89%
FirstEnergy Corporation	FE	4.30%	0.78	11.54%	7.24%	9.98%
IDACORP, Inc.	IDA	4.30%	0.77	11.54%	7.24%	9.87%
NextEra Energy, Inc.	NEE	4.30%	0.80	11.54%	7.24%	10.12%
NorthWestern Corporation	NWE	4.30%	0.86	11.54%	7.24%	10.52%
OGE Energy Corporation	OGE	4.30%	0.90	11.54%	7.24%	10.82%
Pinnacle West Capital Corporation	PNW	4.30%	0.81	11.54%	7.24%	10.18%
Portland General Electric Company	POR	4.30%	0.77	11.54%	7.24%	9.88%
PPL Corporation	PPL	4.30%	0.93	11.54%	7.24%	11.01%
Public Service Enterprise Group Inc.	PEG	4.30%	0.85	11.54%	7.24%	10.43%
Southern Company	SO	4.30%	0.77	11.54%	7.24%	9.84%
TXNM Energy, Inc.	TXNM	4.30%	0.81	11.54%	7.24%	10.18%
Wisconsin Energy Corporation	WEC	4.30%	0.72	11.54%	7.24%	9.51%
Xcel Energy Inc.	XEL	4.30%	0.72	11.54%	7.24%	9.49%
Median			0.78			9.94%
Mean			0.79			10.02%

Notes:

- [1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
- [2] Source: Bloomberg Professional, as of February 28, 2025
- [3] Source: Exhibit JCN-5, page 8
- [4] Equals [3] - [1]
- [5] Equals [1] + [2] x [4]

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BOND YIELD PLUS RISK PREMIUM ANALYSIS

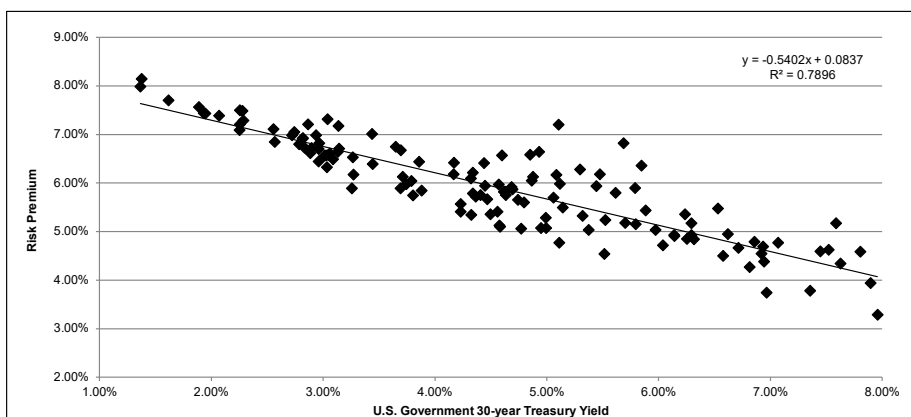
BOND YIELD PLUS RISK PREMIUM ANALYSIS
Risk Premium -- Electric Utilities (US)

	[1]	[2]	[3]
	Average		
	Authorized VI	U.S. Govt. 30-	
	Electric ROE	year Treasury	Risk Premium
1992.1	12.38%	7.80%	4.58%
1992.2	11.83%	7.89%	3.93%
1992.3	12.03%	7.45%	4.59%
1992.4	12.14%	7.52%	4.62%
1993.1	11.84%	7.07%	4.77%
1993.2	11.64%	6.86%	4.79%
1993.3	11.15%	6.31%	4.84%
1993.4	11.04%	6.14%	4.90%
1994.1	11.07%	6.57%	4.49%
1994.2	11.13%	7.35%	3.78%
1994.3	12.75%	7.58%	5.17%
1994.4	11.24%	7.96%	3.28%
1995.1	11.96%	7.63%	4.34%
1995.2	11.32%	6.94%	4.37%
1995.3	11.37%	6.71%	4.66%
1995.4	11.58%	6.23%	5.35%
1996.1	11.46%	6.29%	5.17%
1996.2	11.46%	6.92%	4.54%
1996.3	10.70%	6.96%	3.74%
1996.4	11.56%	6.62%	4.94%
1997.1	11.08%	6.81%	4.27%
1997.2	11.62%	6.93%	4.68%
1997.3	12.00%	6.53%	5.47%
1997.4	11.06%	6.14%	4.92%
1998.1	11.31%	5.88%	5.43%
1998.2	12.20%	5.85%	6.35%
1998.3	11.65%	5.47%	6.18%
1998.4	12.30%	5.10%	7.20%
1999.1	10.40%	5.37%	5.03%
1999.2	10.94%	5.79%	5.15%
1999.3	10.75%	6.04%	4.71%
1999.4	11.10%	6.25%	4.85%
2000.1	11.21%	6.29%	4.92%
2000.2	11.00%	5.97%	5.03%
2000.3	11.68%	5.79%	5.89%
2000.4	12.50%	5.69%	6.81%
2001.1	11.38%	5.44%	5.93%
2001.2	10.88%	5.70%	5.18%
2001.3	10.76%	5.52%	5.23%
2001.4	11.57%	5.30%	6.27%
2002.1	10.05%	5.51%	4.54%
2002.2	11.41%	5.61%	5.79%
2002.3	11.25%	5.08%	6.17%
2002.4	11.57%	4.93%	6.64%
2003.1	11.43%	4.85%	6.58%
2003.2	11.16%	4.60%	6.56%
2003.3	9.88%	5.11%	4.76%
2003.4	11.09%	5.11%	5.98%
2004.1	11.00%	4.88%	6.12%
2004.2	10.64%	5.32%	5.32%
2004.3	10.75%	5.06%	5.69%
2004.4	10.91%	4.86%	6.04%
2005.1	10.56%	4.69%	5.87%
2005.2	10.13%	4.47%	5.66%
2005.3	10.85%	4.44%	6.41%
2005.4	10.59%	4.68%	5.91%
2006.1	10.38%	4.63%	5.75%
2006.2	10.63%	5.14%	5.49%
2006.3	10.06%	4.99%	5.07%
2006.4	10.39%	4.74%	5.65%
2007.1	10.39%	4.80%	5.59%
2007.2	10.27%	4.99%	5.28%
2007.3	10.02%	4.95%	5.07%
2007.4	10.43%	4.61%	5.81%
2008.1	10.15%	4.41%	5.75%
2008.2	10.54%	4.57%	5.97%
2008.3	10.38%	4.44%	5.94%
2008.4	10.39%	3.65%	6.74%
2009.1	10.45%	3.44%	7.01%
2009.2	10.58%	4.17%	6.42%
2009.3	10.41%	4.32%	6.09%
2009.4	10.54%	4.34%	6.21%
2010.1	10.45%	4.62%	5.82%
2010.2	10.08%	4.36%	5.71%
2010.3	10.29%	3.86%	6.43%
2010.4	10.34%	4.17%	6.17%
2011.1	9.96%	4.56%	5.40%
2011.2	10.12%	4.34%	5.78%
2011.3	10.36%	3.69%	6.67%
2011.4	10.34%	3.04%	7.31%
2012.1	10.30%	3.14%	7.17%
2012.2	9.92%	2.93%	6.98%
2012.3	9.78%	2.74%	7.04%
2012.4	10.07%	2.86%	7.21%

BOND YIELD PLUS RISK PREMIUM ANALYSIS
Risk Premium -- Electric Utilities (US)

	[1]	[2]	[3]
	Average Authorized VI Electric ROE	U.S. Govt. 30- year Treasury	Risk Premium
2013.1	9.77%	3.13%	6.64%
2013.2	9.84%	3.14%	6.70%
2013.3	9.83%	3.71%	6.12%
2013.4	9.82%	3.79%	6.04%
2014.1	9.57%	3.69%	5.88%
2014.2	9.83%	3.44%	6.39%
2014.3	9.79%	3.26%	6.52%
2014.4	9.78%	2.96%	6.81%
2015.1	9.66%	2.55%	7.11%
2015.2	9.50%	2.88%	6.61%
2015.3	9.40%	2.96%	6.44%
2015.4	9.65%	2.96%	6.69%
2016.1	9.70%	2.72%	6.98%
2016.2	9.41%	2.57%	6.84%
2016.3	9.76%	2.28%	7.48%
2016.4	9.55%	2.83%	6.72%
2017.1	9.61%	3.04%	6.57%
2017.2	9.61%	2.90%	6.71%
2017.3	9.73%	2.82%	6.91%
2017.4	9.74%	2.82%	6.92%
2018.1	9.59%	3.02%	6.57%
2018.2	9.57%	3.09%	6.49%
2018.3	9.66%	3.06%	6.60%
2018.4	9.44%	3.27%	6.17%
2019.1	9.57%	3.01%	6.56%
2019.2	9.58%	2.78%	6.79%
2019.3	9.57%	2.29%	7.28%
2019.4	9.74%	2.25%	7.49%
2020.1	9.45%	1.89%	7.56%
2020.2	9.52%	1.38%	8.14%
2020.3	9.34%	1.37%	7.98%
2020.4	9.32%	1.62%	7.70%
2021.1	9.45%	2.07%	7.38%
2021.2	9.46%	2.25%	7.20%
2021.3	9.37%	1.93%	7.44%
2021.4	9.37%	1.94%	7.43%
2022.1	9.34%	2.25%	7.09%
2022.2	9.35%	3.03%	6.32%
2022.3	9.14%	3.26%	5.88%
2022.4	9.72%	3.88%	5.84%
2023.1	9.71%	3.74%	5.97%
2023.2	9.54%	3.80%	5.74%
2023.3	9.63%	4.23%	5.41%
2023.4	9.68%	4.58%	5.09%
2024.1	9.66%	4.32%	5.34%
2024.2	9.70%	4.58%	5.12%
2024.3	9.79%	4.23%	5.56%
2024.4	9.85%	4.50%	5.35%
2025.1	9.83%	4.77%	5.06%
AVERAGE	10.46%	4.54%	5.92%
MEDIAN	10.36%	4.57%	5.93%

BOND YIELD PLUS RISK PREMIUM ANALYSIS
Risk Premium -- Electric Utilities (US)



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.888566614
R Square	0.789550628
Adjusted R Square	0.787944145
Standard Error	0.004488746
Observations	133

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.009902702	0.009902702	491.4775058	3.62318E-46
Residual	131	0.002639498	2.01488E-05		
Total	132	0.0125422			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.083712157	0.001171698	71.44514398	8.6676E-107	0.081394259	0.08603006
X Variable 1	-0.540195215	0.024366823	-22.16929196	3.62318E-46	-0.588398604	-0.4919918

	[7]	[8]	[9]
	U.S. Govt. 30-year Treasury	Risk Premium	ROE
Current 30-day average of 30-year U.S. Treasury bond yield [4]	4.73%	5.82%	10.55%
Blue Chip Near-Term Projected Forecast (Q2 2025 - Q2 2026) [5]	4.64%	5.86%	10.50%
Blue Chip Long-Term Projected Forecast (2026-2030) [6]	4.30%	6.05%	10.35%
AVERAGE			10.47%

Notes:

- [1] Source: Regulatory Research Associates, rate cases through February 28, 2025
- [2] Source: Bloomberg Professional, quarterly bond yields are the average of each trading day in the quarter
- [3] Equals Column [1] - Column [2]
- [4] Source: Bloomberg Professional, 30-day average as of February 28, 2025
- [5] Source: Blue Chip Financial Forecasts, Vol. 44, No. 3, February 28, 2025 at 2
- [6] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
- [7] See notes [4], [5] & [6]
- [8] Equals $0.083712 + (-0.540195 \times \text{Column [7]})$
- [9] Equals Column [7] + Column [8]

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EXPECTED EARNINGS ANALYSIS

EXPECTED EARNINGS ANALYSIS

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
		Value Line ROE 2027-2029	Value Line Total Capital 2023	Value Line Common Equity Ratio 2023	Total Equity 2023	Value Line Total Capital 2027-2029	Value Line Common Equity Ratio 2027-2029	Total Equity 2027-2029	Compound Annual Growth Rate	Adjustment Factor	Adjusted Return on Common Equity
Alliant Energy Corporation	LNT	12.00%	15,002.00	45.20%	6,781	17,070.00	48.00%	8,193.60	3.86%	1.019	12.23%
Ameren Corporation	AEE	10.00%	24,847.00	43.80%	10,883	29,500.00	48.50%	14,307.50	5.62%	1.027	10.27%
American Electric Power Company, Inc.	AEP	11.00%	62,837.00	42.00%	26,392	75,900.00	42.50%	32,257.50	4.10%	1.020	11.22%
Avista Corporation	AVA	8.50%	5,091.30	48.80%	2,485	5,600.00	53.50%	2,996.00	3.81%	1.019	8.66%
Black Hills Corporation	BKH	8.50%	7,016.50	45.80%	3,214	9,675.00	44.50%	4,305.38	6.02%	1.029	8.75%
CMS Energy Corporation	CMS	13.50%	22,114.00	33.10%	7,320	24,900.00	36.50%	9,088.50	4.42%	1.022	13.79%
Consolidated Edison, Inc.	ED	9.00%	44,200.00	49.50%	21,879	57,600.00	48.00%	27,648.00	4.79%	1.023	9.21%
DTE Energy Company	DTE	12.50%	26,282.00	38.00%	9,987	32,200.00	39.00%	12,558.00	4.69%	1.023	12.79%
Duke Energy Corporation	DUK	10.50%	127,650.00	38.00%	48,507	160,500.00	37.00%	59,385.00	4.13%	1.020	10.71%
Edison International	EIX	14.00%	48,260.00	28.70%	13,851	66,000.00	30.00%	19,800.00	7.41%	1.036	14.50%
Entergy Corporation	ETR	9.50%	37,851.00	38.60%	14,610	50,555.00	39.00%	19,716.45	6.18%	1.030	9.78%
Exelon Corporation	EXC	10.00%	65,250.00	39.00%	25,448	81,000.00	35.50%	28,755.00	2.47%	1.012	10.12%
Evergy, Inc.	EVRG	10.00%	20,019.00	48.00%	9,609	23,400.00	46.50%	10,881.00	2.52%	1.012	10.12%
FirstEnergy Corporation	FE	14.50%	31,900.00	34.00%	10,846	40,500.00	37.50%	15,187.50	6.97%	1.034	14.99%
IDACORP, Inc.	IDA	9.00%	5,683.40	51.20%	2,910	7,500.00	50.50%	3,787.50	5.41%	1.026	9.24%
NextEra Energy, Inc.	NEE	14.00%	122,486.00	41.00%	50,219	189,400.00	42.00%	79,548.00	9.64%	1.046	14.64%
NorthWestern Corporation	NWE	8.00%	5,475.40	50.90%	2,787	6,700.00	49.50%	3,316.50	3.54%	1.017	8.14%
OGE Energy Corporation	OGE	13.00%	9,238.20	49.60%	4,582	10,400.00	50.00%	5,200.00	2.56%	1.013	13.16%
Pinnacle West Capital Corporation	PNW	8.50%	13,718.00	45.00%	6,173	18,300.00	48.00%	8,784.00	7.31%	1.035	8.80%
Portland General Electric Company	POR	9.50%	7,513.00	44.20%	3,321	10,750.00	46.00%	4,945.00	8.29%	1.040	9.88%
PPL Corporation	PPL	9.50%	29,875.00	49.00%	14,639	34,280.00	50.50%	17,311.40	3.41%	1.017	9.66%
Public Service Enterprise Group Inc.	PEG	12.50%	35,425.00	45.50%	16,118	48,900.00	44.00%	21,516.00	5.95%	1.029	12.86%
Southern Company	SO	14.50%	85,000.00	36.00%	30,600	93,500.00	37.00%	34,595.00	2.48%	1.012	14.68%
TXNM Energy, Inc.	TXNM	10.00%	6,602.30	35.60%	2,350	10,400.00	30.50%	3,172.00	6.18%	1.030	10.30%
Wisconsin Energy Corporation	WEC	13.00%	26,279.00	44.50%	11,694	29,800.00	44.50%	13,261.00	2.55%	1.013	13.16%
Xcel Energy Inc.	XEL	11.00%	42,529.00	41.40%	17,607	64,225.00	39.00%	25,047.75	7.30%	1.035	11.39%
Median											10.51%
Mean											11.27%

Notes:

[1] Source: Value Line

[2] Source: Value Line

[3] Source: Value Line

[4] Equals [2] x [3]

[5] Source: Value Line

[6] Source: Value Line

[7] Equals [5] x [6]

[8] Equals ([7] / [4]) ^ (1/5) - 1

[9] Equals 2 x (1 + [8]) / (2 + [8])

[10] Equals [1] x [9]

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REGULATORY FRAMEWORK COMPARISON

COMPARISON OF PROXY GROUP COMPANIES
REGULATORY FRAMEWORK

Proxy Group Company	TICKER	Operation State	Operation		[2]		[3]		[4]		
							Decoupling			New Capital	
					Test Year	Rate Base	Full	Partial	Generation Capacity	Generic Infrastructure	CWIP in Rate Base
Alliant Energy Corporation	LNT	Iowa	Electric	1	Historical	Average				No	
	LNT	Iowa	Gas	1	Historical	Average				No	
	LNT	Wisconsin	Electric	1	Fully Forecast	Average				Rider	
	LNT	Wisconsin	Gas	1	Fully Forecast	Average				Rider	
Ameren Corporation	AEE	Illinois	Electric	1	Fully Forecast	Average				Partial	
	AEE	Illinois	Gas	1	Fully Forecast	Average		x		Partial	
	AEE	Missouri	Electric	1	Partially Forecast	Year End		x		No	
	AEE	Missouri	Gas	1	Partially Forecast	Year End		x		No	
American Electric Power Company, Inc.	AEP	Arkansas	Electric	1	Partially Forecast	Year End		x		No	
	AEP	Indiana	Electric	1	Historical	Year End		x		Partial	
	AEP	Kentucky	Electric	1	Historical	Year End		x		Yes	
	AEP	Louisiana	Electric	1	Historical	Average		x		Partial	
	AEP	Michigan	Electric	1	Fully Forecast	Average				Yes	
	AEP	Ohio	Electric	1	Partially Forecast	Year End		x		x	Partial (yes if 75% complete)
	AEP	Oklahoma	Electric	1	Historical	Year End		x		x	Yes
	AEP	Tennessee	Electric	1	Fully Forecast	Average					Yes
	AEP	Texas	Electric	1	Historical	Year End				x	No
	AEP	Texas	Electric	1	Historical	Year End				x	No
	AEP	Virginia	Electric	1	Historical	Year End			x		No
	AEP	West Virginia	Electric	1	Historical	Average					No (large projects may be allowed)
Avista Corporation	AVA	Washington	Electric	1	Historical	Year End			x		
	AVA	Washington	Gas	1	Historical	Year End			x		
	AVA	Idaho	Electric	1	Historical	Year End		x		No	
	AVA	Idaho	Gas	1	Historical	Year End		x		No	
	AVA	Oregon	Gas	1	Fully Forecast	Average		x			No
Black Hills Corporation	BKH	South Dakota	Electric	1	Historical	Average			x		Rider
	BKH	Wyoming	Electric	1	Historical	Year End			x		No
	BKH	Colorado	Electric	1	Historical	Average			x	x	Partial
CMS Energy Corporation	CMS	Michigan	Electric	1	Fully Forecast	Average					Yes
	CMS	Michigan	Gas	1	Fully Forecast	Average			x		Yes
Consolidated Edison	ED	New Jersey	Electric	1	Partially Forecast	Year End			x		Case-specific
	ED	New York	Electric	1	Fully Forecast	Average		x			Yes
	ED	New York	Gas	1	Fully Forecast	Average		x			Yes
	ED	New York	Electric	1	Fully Forecast	Average		x			Yes
	ED	New York	Gas	1	Fully Forecast	Average		x			Yes

COMPARISON OF PROXY GROUP COMPANIES
REGULATORY FRAMEWORK

Proxy Group Company	TICKER	Operation State	Operation		[1]		[2]		[3]		[4]
					Test Year	Rate Base	Decoupling		New Capital		CWIP in Rate Base
							Full	Partial	Generation Capacity	Generic Infrastructure	
DTE Energy Company	DTE	Michigan	Electric	1	Fully Forecast	Average					Yes
	DTE	Michigan	Gas	1	Fully Forecast	Average		x		x	Yes
Duke Energy Corporation	DUK	Florida	Electric	1	Fully Forecast	Average			x		Yes
	DUK	Indiana	Electric	1	Historical	Year End		x	x	x	Partial
	DUK	Kentucky	Electric	1	Fully Forecast	Average		x			Yes
	DUK	Kentucky	Gas	1	Fully Forecast	Average				x	Yes
	DUK	North Carolina	Electric	1	Historical	Year End					Yes
	DUK	North Carolina	Gas	1	Historical	Year End	x			x	Yes
	DUK	Ohio	Electric	1	Partially Forecast	Year End		x		x	Partial (yes if 75% complete)
	DUK	Ohio	Gas	1	Partially Forecast	Year End				x	Partial (yes if 75% complete)
	DUK	South Carolina	Electric	1	Historical	N/A					Yes
DUK	South Carolina	Gas	1	Historical	N/A		x			Yes	
Edison International	EIX	California	Electric	1	Fully Forecast	Average	x				No
Entergy Corporation	ETR	Arkansas	Electric	1	Partially Forecast	Average		x	x	x	No
	ETR	Louisiana-NOCC	Electric	1	Fully Forecast	Average		x	x		Partial
	ETR	Louisiana-NOCC	Gas	1	Fully Forecast	Average					Partial
	ETR	Louisiana	Electric	1	Historical	Average		x	x	x	Partial
	ETR	Louisiana	Gas	1	Historical	Average		x		x	Partial
	ETR	Mississippi	Electric	1	Fully Forecast	Average		x			Partial
	ETR	Texas	Electric	1	Historical	Year End				x	No
Exelon Corporation	EXC	Delaware	Electric	1	Historical	Average				x	Partial
	EXC	Delaware	Gas	1	Historical	Average				x	No
	EXC	DC	Electric	1	Partially Forecast	Average		x		x	Partial
	EXC	Illinois	Electric	1	Fully Forecast	Average					Partial
	EXC	Maryland	Electric	1	Historical	Average	x				Yes
	EXC	Maryland	Gas	1	Historical	Average	x			x	Yes
	EXC	New Jersey	Electric	1	Partially Forecast	Year End				x	Case-specific
	EXC	Pennsylvania	Electric	1	Fully Forecast	Year End				x	No
EXC	Pennsylvania	Gas	1	Fully Forecast	Year End				x	No	
Eversource Energy	EVRG	Kansas	Electric	1	Historical	Year End		x			Partial
	EVRG	Missouri	Electric	1	Partially Forecast	Year End		x		x	No
Eversource Energy	ES	Connecticut	Electric	1		Average	x			x	No
	ES	Massachusetts	Electric	1	Historical	Year End	x			x	No
	ES	New Hampshire	Electric	1	Historical	Year End		x		x	No
FirstEnergy Corporation	FE	Maryland	Electric	1	Historical	Average	x				Yes
	FE	New Jersey	Electric	1	Partially Forecast	Year End		x		x	Case-specific
	FE	Ohio	Electric	1	Partially Forecast	Year End		x		x	Partial (yes if 75% complete)
	FE	Pennsylvania	Electric	1	Fully Forecast	Year End				x	No
	FE	West Virginia	Electric	1	Historical	Average					No (large projects may be allowed)

COMPARISON OF PROXY GROUP COMPANIES
REGULATORY FRAMEWORK

Proxy Group Company	TICKER	[1]			[2]		[3]			[4]	
		Operation State	Operation		Test Year	Rate Base	Decoupling		New Capital		CWIP in Rate Base
							Full	Partial	Generation Capacity	Generic Infrastructure	
IDACORP	IDA	Idaho	Electric	1	Partially Forecast	Average	x				No
	IDA	Oregon	Electric	1	Fully Forecast	Average					No
NorthWestern Corporation	NWE	Montana	Electric	1	Historical	Average					No
	NWE	Montana	Gas	1	Historical	Average					No
	NWE	Nebraska	Gas	1							Yes
	NWE	South Dakota	Elec.	1	Historical	Average					Rider
	NWE	South Dakota	Gas	1	Historical	Average					Rider
OGE Energy Corporation	OGE	Arkansas	Electric	1	Partially Forecast	Year End		x	x		No
	OGE	Oklahoma	Electric	1	Historical	Year End		x		x	Yes
Pinnacle West Capital Corporation	PNW	Arizona	Electric	1	Historical	Year End		x			No
Portland General Electric Company	POR	Oregon	Electric	1	Fully Forecast	Average		x	x		No
PPL Corporation	PPL	Kentucky	Electric	1	Fully Forecast	Average		x			Yes
	PPL	Kentucky	Gas	1	Fully Forecast	Average		x			Yes
	PPL	Pennsylvania	Electric	1	Fully Forecast	Year End				x	No
	PPL	Rhode Island	Electric	1	Fully Forecast	Average	x			x	No
	PPL	Rhode Island	Gas	1	Fully Forecast	Average	x			x	No
	PPL	Virginia	Electric	1	Historical	Year End			x		No
Public Service Enterprise Group	PEG	New Jersey	Electric	1	Partially Forecast	Year End		x		x	Case-specific
	PEG	New Jersey	Gas	1	Partially Forecast	Year End		x		x	Case-specific
Southern Company	SO	Alabama	Electric	1	Historical				x		Yes
	SO	Georgia	Electric	1	Partially Forecast	Average			x		Limited basis
	SO	Mississippi	Electric	1	Fully Forecast	Year End		x			Partial
TXNM Energy, Inc.	TXNM	New Mexico	Electric	1	Historical	Year End					Yes
	TXNM	Texas	Electric	1	Historical	Year End				x	No
Wisconsin Energy Corporation	WEC	Wisconsin	Electric	1	Fully Forecast	NA					Rider
	WEC	Wisconsin	Gas	1	Fully Forecast	NA					Rider
	WEC	Wisconsin	Gas	1	Fully Forecast	NA					Rider
	WEC	Wisconsin	Electric	1	Fully Forecast	NA					Rider
	WEC	Michigan	Electric	1							Yes

COMPARISON OF PROXY GROUP COMPANIES
REGULATORY FRAMEWORK

Proxy Group Company	TICKER	[1]		[2]			[3]		[4]		
		Operation State	Operation	Test Year	Rate Base	Decoupling		New Capital		CWIP in Rate Base	
						Full	Partial	Generation Capacity	Generic Infrastructure		
Xcel Energy Inc.	XEL	Colorado	Electric	1	Historical	Average		x	x	Partial	
	XEL	Colorado	Gas	1	Historical	Average		x	x	Partial	
	XEL	Minnesota	Electric	1	Fully Forecast	Average		x		Partial	
	XEL	Minnesota	Gas	1	Fully Forecast	Average			x	Partial	
	XEL	New Mexico	Electric	1	Historical	Year End				Yes	
	XEL	North Dakota	Electric	1	Fully Forecast	Average			x	Partial	
	XEL	North Dakota	Gas	1	Fully Forecast	Average				Partial	
	XEL	South Dakota	Electric	1	Historical	Average		x	x	Rider	
	XEL	Texas	Electric	1	Historical	Year End			x	No	
	XEL	Wisconsin	Electric	1	Fully Forecast	Average				Rider	
	XEL	Wisconsin	Gas	1	Fully Forecast	Average				Rider	
Proxy Company Totals					Forecast: 62	Year End: 43	17	44	15	49	77
Total Jurisdictions				114							
Percent of Jurisdictions					Forecast: 54%	Average: 54%	14.9%	38.6%	13.2%	43.0%	67.5%
San Diego Gas and Electric		California	Electric	1	Fully Forecast	Average	x				No
San Diego Gas and Electric		California	Gas	1	Fully Forecast	Average	x				No

Notes:

[1] Source: "Adjustment Clauses: A State-by-state Overview," Regulatory Research Associates, July 18, 2022. Operating subsidiaries not covered in this report were excluded from this exhibit.

[2] Source: "Alternative Regulation for Evolving Utility Challenges," Prepared by Pacific Economics Group Research for Edison Electric Institute, Table 6, November 2015; S&P RRA Research; Company Investor Presenta

[3] Source: "Adjustment Clauses: A State-by-state Overview," Regulatory Research Associates, July 18, 2022.

[4] Source: S&P Global Market Intelligence, Regulatory Research Associates, Commission Profiles

[5] This exhibit includes the adjustment mechanisms for the electric and gas distribution companies.

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CAPITAL STRUCTURE ANALYSIS

CAPITAL STRUCTURE ANALYSIS
COMMON EQUITY RATIO [1]

Proxy Group Company	Ticker	2024Q3	2024Q2	2024Q1	2023Q4	2023Q3	2023Q2	2023Q1	2022Q4	Average
Alliant Energy Corporation	LNT	50.96%	51.76%	51.59%	52.10%	52.28%	52.35%	52.27%	52.60%	51.99%
Ameren Corporation	AEE	54.11%	53.32%	53.87%	54.17%	53.90%	52.81%	53.23%	53.91%	53.66%
American Electric Power Company, Inc.	AEP	48.74%	48.26%	49.16%	48.45%	48.59%	47.75%	48.17%	48.56%	48.46%
Avista Corporation	AVA	49.35%	49.34%	49.28%	49.74%	48.97%	48.81%	48.58%	50.65%	49.34%
Black Hills Corporation	BKH	57.18%	57.07%	56.31%	56.23%	61.11%	60.67%	60.14%	59.88%	58.58%
CMS Energy Corporation	CMS	47.63%	48.32%	48.04%	49.18%	50.39%	50.73%	49.64%	49.87%	49.23%
Consolidated Edison, Inc.	ED	46.82%	46.53%	48.09%	47.50%	49.23%	48.86%	48.93%	46.73%	47.84%
DTE Energy Company	DTE	48.35%	47.76%	47.56%	49.72%	47.52%	47.03%	47.25%	50.41%	48.20%
Duke Energy Corporation	DUK	53.53%	52.93%	51.96%	52.69%	52.38%	51.69%	51.77%	53.04%	52.50%
Edison International	EIX	42.96%	42.77%	42.28%	44.77%	43.49%	43.75%	43.71%	44.82%	43.57%
Entergy Corporation	ETR	51.66%	50.87%	50.81%	52.01%	50.48%	50.03%	49.16%	47.70%	50.34%
Exelon Corporation	EXC	52.66%	52.73%	53.83%	53.27%	52.93%	52.66%	53.28%	53.42%	53.10%
Eversource Energy, Inc.	EVRG	54.10%	53.42%	54.60%	54.23%	54.91%	54.50%	55.33%	55.23%	54.54%
FirstEnergy Corporation	FE	59.32%	57.33%	54.18%	54.19%	54.19%	54.96%	54.91%	55.52%	55.57%
IDACORP, Inc.	IDA	49.62%	51.57%	49.46%	49.42%	49.37%	52.04%	50.57%	54.37%	50.80%
NextEra Energy, Inc.	NEE	59.47%	59.13%	62.68%	58.67%	58.93%	59.14%	61.16%	63.14%	60.29%
NorthWestern Corporation	NWE	50.03%	50.78%	50.74%	49.89%	50.78%	50.15%	50.91%	50.34%	50.45%
OGE Energy Corporation	OGE	53.33%	53.08%	53.67%	53.53%	53.28%	53.30%	53.22%	55.65%	53.63%
Pinnacle West Capital Corporation	PNW	51.77%	50.49%	49.61%	49.56%	50.19%	48.80%	50.82%	50.25%	50.19%
Portland General Electric Company	POR	44.96%	43.94%	43.76%	45.37%	46.47%	47.79%	47.10%	43.24%	45.33%
PPL Corporation	PPL	56.40%	56.04%	55.53%	56.49%	56.56%	56.51%	56.36%	56.77%	56.33%
Public Service Enterprise Group Inc.	PEG	54.32%	55.19%	54.77%	55.40%	55.06%	55.64%	54.23%	55.16%	54.97%
Southern Company	SO	56.14%	54.84%	54.37%	54.82%	55.02%	53.45%	55.07%	54.58%	54.79%
TXNM Energy, Inc.	TXNM	50.73%	49.44%	50.87%	50.43%	48.32%	48.24%	49.60%	48.85%	49.56%
Wisconsin Energy Corporation	WEC	56.32%	58.31%	59.58%	59.32%	59.58%	59.11%	57.88%	55.58%	58.21%
Xcel Energy Inc.	XEL	54.08%	53.47%	54.29%	54.47%	53.95%	53.72%	55.46%	54.84%	54.29%
MEAN		52.10%	51.87%	51.96%	52.14%	52.23%	52.10%	52.26%	52.51%	52.14%
LOW		42.96%	42.77%	42.28%	44.77%	43.49%	43.75%	43.71%	43.24%	43.57%
HIGH		59.47%	59.13%	62.68%	59.32%	61.11%	60.67%	61.16%	63.14%	60.29%

CAPITAL STRUCTURE ANALYSIS
COMMON EQUITY RATIO - UTILITY OPERATING COMPANIES [2]

Company Name	Ticker	2024Q3	2024Q2	2024Q1	2023Q4	2023Q3	2023Q2	2023Q1	2022Q4	Average
Interstate Power and Light Company	LNT	48.71%	50.39%	50.13%	49.74%	49.81%	50.60%	50.59%	50.55%	50.06%
Wisconsin Power and Light Company	LNT	53.67%	53.25%	53.17%	54.77%	55.12%	54.29%	54.12%	55.03%	54.18%
Ameren Illinois Company	AEE	55.04%	54.74%	57.15%	56.39%	55.82%	55.16%	56.61%	55.83%	55.84%
Union Electric Company	AEE	53.27%	52.03%	50.93%	52.16%	52.18%	50.66%	50.27%	52.20%	51.71%
AEP Texas, Inc.	AEP	44.02%	44.11%	46.12%	45.69%	45.24%	43.19%	43.55%	42.07%	44.25%
Appalachian Power Company	AEP	49.65%	49.46%	49.16%	48.44%	48.20%	47.70%	48.37%	47.76%	48.59%
Indiana Michigan Power Company	AEP	50.16%	49.13%	49.14%	48.32%	48.35%	48.22%	47.89%	49.29%	48.81%
Kentucky Power Company	AEP	44.49%	42.57%	42.54%	42.26%	43.85%	43.47%	43.94%	43.82%	43.37%
Kingsport Power Company	AEP	52.73%	52.51%	51.80%	51.12%	50.81%	49.97%	49.57%	53.89%	51.55%
Ohio Power Company	AEP	50.23%	49.47%	51.79%	51.30%	50.72%	50.14%	51.81%	50.79%	50.78%
Public Service Company of Oklahoma	AEP	52.78%	52.12%	52.10%	51.75%	51.73%	50.51%	50.00%	55.70%	52.09%
Southwestern Electric Power Company	AEP	50.85%	50.60%	51.71%	50.68%	51.38%	50.85%	50.65%	52.54%	51.16%
Wheeling Power Company	AEP	44.24%	43.74%	44.17%	39.99%	47.55%	47.04%	49.60%	49.14%	45.68%
Black Hills Power, Inc.	BKH	63.83%	63.52%	63.09%	63.38%	62.86%	62.47%	62.11%	61.83%	62.89%
Cheyenne Light, Fuel and Power Company	BKH	47.82%	47.81%	46.30%	45.45%	57.63%	57.09%	56.18%	55.98%	51.78%
Consumers Energy Company	CMS	47.63%	48.32%	48.04%	49.18%	50.39%	50.73%	49.64%	49.87%	49.23%
Consolidated Edison Company of New York, Inc.	ED	46.78%	46.40%	48.02%	47.44%	49.21%	48.86%	48.92%	46.75%	47.80%
Orange and Rockland Utilities, Inc.	ED	47.58%	49.07%	49.39%	48.57%	49.60%	48.90%	49.10%	46.44%	48.58%
DTE Electric Company	DTE	48.35%	47.76%	47.56%	49.72%	47.52%	47.03%	47.25%	50.41%	48.20%
Duke Energy Carolinas, LLC	DUK	52.36%	51.57%	51.05%	52.00%	51.50%	50.77%	51.75%	52.78%	51.72%
Duke Energy Florida, LLC	DUK	54.45%	53.94%	51.75%	51.31%	52.11%	51.76%	51.29%	50.74%	52.17%
Duke Energy Indiana, LLC	DUK	53.13%	52.85%	51.31%	52.55%	52.12%	51.56%	51.08%	52.06%	52.08%
Duke Energy Ohio, Inc.	DUK	62.21%	61.98%	61.55%	64.39%	63.21%	60.53%	60.19%	65.87%	62.49%
Duke Energy Progress, LLC	DUK	51.39%	50.69%	50.18%	50.72%	49.99%	49.64%	49.28%	51.27%	50.40%
Southern California Edison Company	EIX	42.96%	42.77%	42.28%	44.77%	43.49%	43.75%	43.71%	44.82%	43.57%
Entergy Arkansas, Inc.	ETR	48.46%	47.46%	46.64%	45.08%	45.76%	46.72%	45.35%	47.95%	46.68%
Entergy Louisiana, LLC	ETR	54.14%	52.62%	52.61%	55.45%	52.85%	51.63%	51.05%	47.17%	52.19%
Entergy Mississippi, Inc.	ETR	48.94%	48.19%	48.57%	49.32%	47.97%	46.98%	45.52%	46.43%	47.74%
Entergy New Orleans, LLC	ETR	52.44%	51.21%	52.81%	54.37%	53.18%	48.29%	48.30%	47.94%	51.07%
Entergy Texas, Inc.	ETR	50.18%	52.04%	51.34%	51.05%	49.73%	51.53%	50.74%	50.36%	50.87%
Atlantic City Electric Company	EXC	50.09%	50.01%	50.03%	49.85%	50.09%	50.11%	50.08%	50.08%	50.04%
Baltimore Gas and Electric Company	EXC	51.63%	51.66%	54.97%	54.21%	52.97%	53.13%	55.54%	53.81%	53.49%
Commonwealth Edison Company	EXC	54.43%	53.59%	55.01%	54.95%	54.65%	54.04%	53.59%	55.29%	54.44%
Delmarva Power & Light Company	EXC	50.33%	50.15%	50.21%	50.22%	50.37%	50.30%	50.21%	50.33%	50.26%
PECO Energy Company	EXC	53.11%	55.51%	55.55%	53.10%	52.89%	52.63%	55.20%	53.50%	53.94%
Potomac Electric Power Company	EXC	50.23%	50.14%	50.10%	50.10%	50.07%	50.07%	50.09%	50.03%	50.10%
Energy Metro	EVRG	51.21%	50.40%	52.25%	52.00%	51.77%	51.88%	55.06%	52.03%	52.08%
Evergys Missouri West, Inc.	EVRG	52.18%	51.40%	56.08%	56.02%	55.84%	54.99%	54.95%	54.41%	54.43%
Westar Energy (KPL)	EVRG	56.86%	56.31%	55.72%	55.18%	56.83%	56.24%	55.79%	58.03%	56.37%
Cleveland Electric Illuminating Company	FE	67.08%	55.54%	55.59%	55.54%	55.67%	55.40%	55.24%	55.10%	56.89%
Jersey Central Power & Light Company	FE	75.34%	74.92%	66.51%	65.79%	65.67%	65.16%	64.99%	64.86%	67.91%
Monongahela Power Company	FE	53.16%	52.12%	46.10%	45.09%	44.88%	49.54%	49.80%	49.23%	48.74%
Ohio Edison Company	FE	54.30%	53.27%	53.33%	57.90%	57.73%	57.90%	57.69%	57.49%	56.20%
Potomac Edison Company	FE	50.90%	50.56%	50.31%	49.65%	49.51%	54.28%	54.06%	53.39%	51.58%
Toledo Edison Company	FE	55.41%	54.83%	54.98%	54.67%	55.66%	56.07%	56.59%	57.09%	55.66%
FirstEnergy Pennsylvania Holding Company LLC	FE	49.41%	48.72%	48.65%						48.93%
Metropolitan Edison Company	FE				49.86%	50.92%	50.70%	50.09%	51.85%	50.68%
Pennsylvania Electric Company	FE				46.24%	46.10%	45.66%	46.84%	50.97%	47.16%
Pennsylvania Power Company	FE				53.60%	52.55%	51.68%	50.44%	49.28%	51.51%
West Penn Power Company	FE				50.03%	49.72%	49.03%	48.55%	48.80%	49.23%
Idaho Power Co.	IDA	49.62%	51.57%	49.46%	49.42%	49.37%	52.04%	50.57%	54.37%	50.80%
Florida Power & Light Company	NEE	59.47%	59.13%	62.68%	58.67%	58.93%	59.14%	61.16%	63.14%	60.29%
NorthWestern Corporation	NWE	50.03%	50.78%	50.74%	49.89%	50.78%	50.15%	50.91%	50.34%	50.45%
Oklahoma Gas and Electric Company	OGE	53.33%	53.08%	53.67%	53.53%	53.28%	53.30%	53.22%	55.65%	53.63%
Arizona Public Service Company	PNW	51.77%	50.49%	49.61%	49.56%	50.19%	48.80%	50.82%	50.25%	50.19%
Portland General Electric Company	POR	44.96%	43.94%	43.76%	45.37%	46.47%	47.79%	47.10%	43.24%	45.33%
Kentucky Utilities Company	PPL	54.14%	54.17%	53.54%	53.47%	53.75%	53.48%	53.03%	53.86%	53.68%
Louisville Gas and Electric Company	PPL	53.32%	53.22%	52.87%	52.83%	53.02%	52.94%	52.85%	54.48%	53.19%
Narragansett Electric Company	PPL	62.48%	61.15%	60.03%	65.94%	65.63%	65.92%	65.76%	65.43%	64.04%
PPL Electric Utilities Corporation	PPL	56.34%	56.15%	55.92%	56.26%	56.27%	56.20%	56.20%	56.04%	56.17%
Public Service Electric and Gas Company	PEG	54.32%	55.19%	54.77%	55.40%	55.06%	55.64%	54.23%	55.16%	54.97%
Alabama Power Company	SO	53.97%	53.56%	53.33%	52.36%	52.40%	52.50%	52.85%	52.22%	52.90%
Georgia Power Company	SO	57.47%	55.57%	55.14%	56.32%	56.74%	53.96%	56.45%	56.05%	55.96%
Mississippi Power Company	SO	55.62%	55.25%	52.95%	55.01%	54.66%	54.33%	55.83%	55.67%	54.91%
Public Service Company of New Mexico	TXNM	50.73%	49.44%	50.87%	50.43%	48.32%	48.24%	49.60%	48.85%	49.56%
Wisconsin Electric Power Company	WEC	55.68%	58.91%	61.22%	60.88%	60.86%	60.41%	58.71%	56.06%	59.09%
Wisconsin Public Service Corporation	WEC	57.63%	57.17%	56.52%	56.45%	57.27%	56.75%	56.43%	54.77%	56.62%
Northern States Power Company - MN	XEL	52.90%	52.22%	51.71%	52.58%	52.41%	52.16%	53.15%	52.79%	52.49%
Northern States Power Company - WI	XEL	52.97%	52.63%	54.86%	52.77%	52.44%	52.05%	54.42%	53.45%	53.20%
Public Service Company of Colorado	XEL	55.21%	54.38%	56.73%	56.47%	55.47%	55.23%	58.33%	57.18%	56.12%
Southwestern Public Service Company	XEL	54.28%	54.29%	54.21%	54.41%	54.25%	54.14%	54.22%	54.30%	54.26%

Notes:

[1] Ratios are weighted by actual common equity and long-term debt of Operating Subsidiaries.

[2] Natural Gas and Electric Operating Subsidiaries with data listed as N/A from SNL Financial have been excluded from the analysis.

CAPITAL STRUCTURE ANALYSIS

LONG-TERM DEBT RATIO [1]

Proxy Group Company	Ticker	2024Q3	2024Q2	2024Q1	2023Q4	2023Q3	2023Q2	2023Q1	2022Q4	Average
Alliant Energy Corporation	LNT	49.04%	48.24%	48.41%	47.90%	47.72%	47.65%	47.73%	47.40%	48.01%
Ameren Corporation	AEE	45.89%	46.68%	46.13%	45.83%	46.10%	47.19%	46.77%	46.09%	46.34%
American Electric Power Company, Inc.	AEP	51.26%	51.74%	50.84%	51.55%	51.41%	52.25%	51.83%	51.44%	51.54%
Avista Corporation	AVA	50.65%	50.66%	50.72%	50.26%	51.03%	51.19%	51.42%	49.35%	50.66%
Black Hills Corporation	BKH	42.82%	42.93%	43.69%	43.77%	38.89%	39.33%	39.86%	40.12%	41.42%
CMS Energy Corporation	CMS	52.37%	51.68%	51.96%	50.82%	49.61%	49.27%	50.36%	50.13%	50.77%
Consolidated Edison, Inc.	ED	53.18%	53.47%	51.91%	52.50%	50.77%	51.14%	51.07%	53.27%	52.16%
DTE Energy Company	DTE	51.65%	52.24%	52.44%	50.28%	52.48%	52.97%	52.75%	49.59%	51.80%
Duke Energy Corporation	DUK	46.47%	47.07%	48.04%	47.31%	47.62%	48.31%	48.23%	46.96%	47.50%
Edison International	EIX	57.04%	57.23%	57.72%	55.23%	56.51%	56.25%	56.29%	55.18%	56.43%
Entergy Corporation	ETR	48.34%	49.13%	49.19%	47.99%	49.52%	49.97%	50.84%	52.30%	49.66%
Exelon Corporation	EXC	47.34%	47.27%	46.17%	46.73%	47.07%	47.34%	46.72%	46.58%	46.90%
Evergy, Inc.	EVRG	45.90%	46.58%	45.40%	45.77%	45.09%	45.50%	44.67%	44.77%	45.46%
FirstEnergy Corporation	FE	40.68%	42.67%	45.82%	45.81%	45.81%	45.04%	45.09%	44.48%	44.43%
IDACORP, Inc.	IDA	50.38%	48.43%	50.54%	50.58%	50.63%	47.96%	49.43%	45.63%	49.20%
NextEra Energy, Inc.	NEE	40.53%	40.87%	37.32%	41.33%	41.07%	40.86%	38.84%	36.86%	39.71%
NorthWestern Corporation	NWE	49.97%	49.22%	49.26%	50.11%	49.22%	49.85%	49.09%	49.66%	49.55%
OGE Energy Corporation	OGE	46.67%	46.92%	46.33%	46.47%	46.72%	46.70%	46.78%	44.35%	46.37%
Pinnacle West Capital Corporation	PNW	48.23%	49.51%	50.39%	50.44%	49.81%	51.20%	49.18%	49.75%	49.81%
Portland General Electric Company	POR	55.04%	56.06%	56.24%	54.63%	53.53%	52.21%	52.90%	56.76%	54.67%
PPL Corporation	PPL	43.60%	43.96%	44.47%	43.51%	43.44%	43.49%	43.64%	43.23%	43.67%
Public Service Enterprise Group Inc.	PEG	45.68%	44.81%	45.23%	44.60%	44.94%	44.36%	45.77%	44.84%	45.03%
Southern Company	SO	43.86%	45.16%	45.63%	45.18%	44.98%	46.55%	44.93%	45.42%	45.21%
TXNM Energy, Inc.	TXNM	49.27%	50.56%	49.13%	49.57%	51.68%	51.76%	50.40%	51.15%	50.44%
Wisconsin Energy Corporation	WEC	43.68%	41.69%	40.42%	40.68%	40.42%	40.89%	42.12%	44.42%	41.79%
Xcel Energy Inc.	XEL	45.92%	46.53%	45.71%	45.53%	46.05%	46.28%	44.54%	45.16%	45.71%
MEAN		47.90%	48.13%	48.04%	47.86%	47.77%	47.90%	47.74%	47.49%	47.86%
LOW		40.53%	40.87%	37.32%	40.68%	38.89%	39.33%	38.84%	36.86%	39.71%
HIGH		57.04%	57.23%	57.72%	55.23%	56.51%	56.25%	56.29%	56.76%	56.43%

CAPITAL STRUCTURE ANALYSIS
LONG-TERM DEBT RATIO - UTILITY OPERATING COMPANIES [2]

Company Name	Ticker	2024Q3	2024Q2	2024Q1	2023Q4	2023Q3	2023Q2	2023Q1	2022Q4	Average
Interstate Power and Light Company	LNT	51.29%	49.61%	49.87%	50.26%	50.19%	49.40%	49.41%	49.45%	49.94%
Wisconsin Power and Light Company	LNT	46.33%	46.75%	46.83%	45.23%	44.88%	45.71%	45.88%	44.97%	45.82%
Ameren Illinois Company	AEE	44.96%	45.26%	42.85%	43.61%	44.18%	44.84%	43.39%	44.17%	44.16%
Union Electric Company	AEE	46.73%	47.97%	49.07%	47.84%	47.82%	49.34%	49.73%	47.80%	48.29%
AEP Texas, Inc.	AEP	55.98%	55.89%	53.88%	54.31%	54.76%	56.81%	56.45%	57.93%	55.75%
Appalachian Power Company	AEP	50.35%	50.54%	50.84%	51.56%	51.80%	52.30%	51.63%	52.24%	51.41%
Indiana Michigan Power Company	AEP	49.84%	50.87%	50.86%	51.68%	51.65%	51.78%	52.11%	50.71%	51.19%
Kentucky Power Company	AEP	55.51%	57.43%	57.46%	57.74%	56.15%	56.53%	56.06%	56.18%	56.63%
Kingsport Power Company	AEP	47.27%	47.49%	48.20%	48.88%	49.19%	50.03%	50.43%	46.11%	48.45%
Ohio Power Company	AEP	49.77%	50.53%	48.21%	48.70%	49.28%	49.86%	48.19%	49.21%	49.22%
Public Service Company of Oklahoma	AEP	47.22%	47.88%	47.90%	48.25%	48.27%	49.49%	50.00%	44.30%	47.91%
Southwestern Electric Power Company	AEP	49.15%	49.40%	48.29%	49.32%	48.62%	49.15%	49.35%	47.46%	48.84%
Wheeling Power Company	AEP	55.76%	56.26%	55.83%	60.01%	52.45%	52.96%	50.40%	50.86%	54.32%
Black Hills Power, Inc.	BKH	36.17%	36.48%	36.91%	36.62%	37.14%	37.53%	37.89%	38.17%	37.11%
Cheyenne Light, Fuel and Power Company	BKH	52.18%	52.19%	53.70%	54.55%	42.37%	42.91%	43.82%	44.02%	48.22%
Consumers Energy Company	CMS	52.37%	51.68%	51.96%	50.82%	49.61%	49.27%	50.36%	50.13%	50.77%
Consolidated Edison Company of New York, Inc.	ED	53.22%	53.60%	51.98%	52.56%	50.79%	51.14%	51.08%	53.25%	52.20%
Orange and Rockland Utilities, Inc.	ED	52.42%	50.93%	50.61%	51.43%	50.40%	51.10%	50.90%	53.56%	51.42%
DTE Electric Company	DTE	51.65%	52.24%	52.44%	50.28%	52.48%	52.97%	52.75%	49.59%	51.80%
Duke Energy Carolinas, LLC	DUK	47.64%	48.43%	48.95%	48.00%	48.50%	49.23%	48.25%	47.22%	48.28%
Duke Energy Florida, LLC	DUK	45.55%	46.06%	48.25%	48.69%	47.89%	48.24%	48.71%	49.26%	47.83%
Duke Energy Indiana, LLC	DUK	46.87%	47.15%	48.69%	47.45%	47.88%	48.44%	48.92%	47.94%	47.92%
Duke Energy Ohio, Inc.	DUK	37.79%	38.02%	38.45%	35.61%	36.79%	39.47%	39.81%	34.13%	37.51%
Duke Energy Progress, LLC	DUK	48.61%	49.31%	49.82%	49.28%	50.01%	50.36%	50.72%	48.73%	49.60%
Southern California Edison Company	EIX	57.04%	57.23%	57.72%	55.23%	56.51%	56.25%	56.29%	55.18%	56.43%
Entergy Arkansas, Inc.	ETR	51.54%	52.54%	53.36%	54.92%	54.24%	53.28%	54.65%	52.05%	53.32%
Entergy Louisiana, LLC	ETR	45.86%	47.38%	47.39%	44.55%	47.15%	48.37%	48.95%	52.83%	47.81%
Entergy Mississippi, Inc.	ETR	51.06%	51.81%	51.43%	50.68%	52.03%	53.02%	54.48%	53.57%	52.26%
Entergy New Orleans, LLC	ETR	47.56%	48.79%	47.19%	45.63%	46.82%	51.71%	51.70%	52.06%	48.93%
Entergy Texas, Inc.	ETR	49.82%	47.96%	48.66%	48.95%	50.27%	48.47%	49.26%	49.64%	49.13%
Atlantic City Electric Company	EXC	49.91%	49.99%	49.97%	50.15%	49.91%	49.89%	49.92%	49.92%	49.96%
Baltimore Gas and Electric Company	EXC	48.37%	48.34%	45.03%	45.79%	47.03%	46.87%	44.46%	46.19%	46.51%
Commonwealth Edison Company	EXC	45.57%	46.41%	44.99%	45.05%	45.35%	45.96%	46.41%	44.71%	45.56%
Delmarva Power & Light Company	EXC	49.67%	49.85%	49.79%	49.78%	49.63%	49.70%	49.79%	49.67%	49.74%
PECO Energy Company	EXC	46.89%	44.49%	44.45%	46.90%	47.11%	47.37%	44.80%	46.50%	46.06%
Potomac Electric Power Company	EXC	49.77%	49.86%	49.90%	49.90%	49.93%	49.93%	49.91%	49.97%	49.90%
Energy Metro	EVRG	48.79%	49.60%	47.75%	48.00%	48.23%	48.12%	44.94%	47.97%	47.92%
Energy Missouri West, Inc.	EVRG	47.82%	48.60%	43.92%	43.98%	44.16%	45.01%	45.43%	45.59%	45.57%
Westar Energy (KPL)	EVRG	43.14%	43.69%	44.28%	44.82%	43.17%	43.76%	44.21%	41.97%	43.63%
Cleveland Electric Illuminating Company	FE	32.92%	44.46%	44.41%	44.46%	44.33%	44.60%	44.76%	44.90%	43.11%
Jersey Central Power & Light Company	FE	24.66%	25.08%	33.49%	34.21%	34.33%	34.84%	35.01%	35.14%	32.09%
Monongahela Power Company	FE	46.84%	47.88%	53.90%	54.91%	55.12%	50.46%	50.20%	50.77%	51.26%
Ohio Edison Company	FE	45.70%	46.73%	46.67%	42.10%	42.27%	42.10%	42.31%	42.51%	43.80%
Potomac Edison Company	FE	49.10%	49.44%	49.69%	50.35%	50.49%	45.72%	45.94%	46.61%	48.42%
Toledo Edison Company	FE	44.59%	45.17%	45.02%	45.33%	44.34%	43.93%	43.41%	42.91%	44.34%
FirstEnergy Pennsylvania Holding Company LLC	FE	50.59%	51.28%	51.35%						51.07%
Metropolitan Edison Company	FE				50.14%	49.08%	49.30%	49.91%	48.15%	49.32%
Pennsylvania Electric Company	FE				53.76%	53.90%	54.34%	53.16%	49.03%	52.84%
Pennsylvania Power Company	FE				46.40%	47.45%	48.32%	49.56%	50.72%	48.49%
West Penn Power Company	FE				49.97%	50.28%	50.97%	51.45%	51.20%	50.77%
Idaho Power Co.	IDA	50.38%	48.43%	50.54%	50.58%	50.63%	47.96%	49.43%	45.63%	49.20%
Florida Power & Light Company	NEE	40.53%	40.87%	37.32%	41.33%	41.07%	40.86%	38.84%	36.86%	39.71%
NorthWestern Corporation	NWE	49.97%	49.22%	49.26%	50.11%	49.22%	49.85%	49.09%	49.66%	49.55%
Oklahoma Gas and Electric Company	OGE	46.67%	46.92%	46.33%	46.47%	46.72%	46.70%	46.78%	44.35%	46.37%
Arizona Public Service Company	PNW	48.23%	49.51%	50.39%	50.44%	49.81%	51.20%	49.18%	49.75%	49.81%
Portland General Electric Company	POR	55.04%	56.06%	56.24%	54.63%	53.53%	52.21%	52.90%	56.76%	54.67%
Kentucky Utilities Company	PPL	45.86%	45.83%	46.46%	46.53%	46.25%	46.52%	46.97%	46.14%	46.32%
Louisville Gas and Electric Company	PPL	46.68%	46.78%	47.13%	47.17%	46.98%	47.06%	47.15%	45.52%	46.81%
Narragansett Electric Company	PPL	37.52%	38.85%	39.97%	34.06%	34.37%	34.08%	34.24%	34.57%	35.96%
PPL Electric Utilities Corporation	PPL	43.66%	43.85%	44.08%	43.74%	43.73%	43.80%	43.80%	43.96%	43.83%
Public Service Electric and Gas Company	PEG	45.68%	44.81%	45.23%	44.60%	44.94%	44.36%	45.77%	44.84%	45.03%
Alabama Power Company	SO	46.03%	46.44%	46.67%	47.64%	47.60%	47.50%	47.15%	47.78%	47.10%
Georgia Power Company	SO	42.53%	44.43%	44.86%	43.68%	43.26%	46.04%	43.55%	43.95%	44.04%
Mississippi Power Company	SO	44.38%	44.75%	47.05%	44.99%	45.34%	45.67%	44.17%	44.33%	45.09%
Public Service Company of New Mexico	TXNM	49.27%	50.56%	49.13%	49.57%	51.68%	51.76%	50.40%	51.15%	50.44%
Wisconsin Electric Power Company	WEC	44.32%	41.09%	38.78%	39.12%	39.14%	39.59%	41.29%	43.94%	40.91%
Wisconsin Public Service Corporation	WEC	42.37%	42.83%	43.48%	43.55%	42.73%	43.25%	43.57%	45.23%	43.38%
Northern States Power Company - MN	XEL	47.10%	47.78%	48.29%	47.42%	47.59%	47.84%	46.85%	47.21%	47.51%
Northern States Power Company - WI	XEL	47.03%	47.37%	45.14%	47.23%	47.56%	47.95%	45.58%	46.55%	46.80%
Public Service Company of Colorado	XEL	44.79%	45.62%	43.27%	43.53%	44.53%	44.77%	41.67%	42.82%	43.88%
Southwestern Public Service Company	XEL	45.72%	45.71%	45.79%	45.59%	45.75%	45.86%	45.78%	45.70%	45.74%

Notes:

[1] Ratios are weighted by actual common equity and long-term debt of Operating Subsidiaries.

[2] Natural Gas and Electric Operating Subsidiaries with data listed as N/A from SNL Financial have been excluded from the analysis.