DOCKET NO. 57568

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ §	PUBLIC UTILITY COMMISSION OF TEXAS

DIRECT TESTIMONY

OF

JENNIFER E. NELSON

CONCENTRIC ENERGY ADVISORS, INC.

ON BEHALF OF

EL PASO ELECTRIC COMPANY

JANUARY 2025

EXECUTIVE SUMMARY

Jennifer E. Nelson establishes that a cost of equity range of 9.90 to 11.50 percent is appropriate for El Paso Electric Company ("EPE" or the "Company") to provide a reasonable return to its equity investors. Combined with the Company's requested capital structure of 56.40 percent common equity and 43.60 percent long-term debt, Ms. Nelson recommends the midpoint of the range, or a 10.70 percent Return on Equity (sometimes referred to as the "ROE" or cost of equity).

Ms. Nelson presents multiple analytical techniques for the purposes of estimating the Company's ROE, including the constant growth and quarterly growth forms of the Discounted Cash Flow ("DCF") analysis, the traditional and empirical forms of the Capital Asset Pricing Model ("CAPM"), and a Bond Yield Plus Risk Premium analysis. In addition to the ROE estimation methods, Ms. Nelson considers the effect of certain business and financial risks on the Company's cost of equity. Ms. Nelson also considers (1) the Company's planned capital investment program and the regulatory environment in which it operates; (2) the Company's nuclear generation operations, and (3) its relatively small size. Lastly, Ms. Nelson considers the current capital market conditions, including: (1) the interest rate environment and central bank monetary policy; (2) inflationary pressure and the longer-term outlook for inflation; and (3) uncertainty in the economic environment because of a change in administration at the federal level. Each of those measures provides relevant information that affects the implementation of models used to estimate the cost of equity, as well as the interpretation of the model results.

Together with the exhibits attached to Ms. Nelson's testimony, this evidence demonstrates that the Company's requested 10.70 percent cost of equity rate, combined with its requested capital structure is reasonable and should be authorized to provide the Company with an opportunity to recover its capital costs.

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EXHIBITS

I. INTRODUCTION AND PURPOSE

Q1. PLEASE STATE YOUR NAME, AFFILIATION, AND BUSINESS ADDRESS.

A. My name is Jennifer E. Nelson. I am a Vice President at Concentric Energy Advisors. Concentric is a management consulting and economic advisory firm that specializes in 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, 01742.

Q2. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?

A. I am submitting this direct testimony ("Direct Testimony") before the Public Utility Commission of Texas ("Commission") on behalf of El Paso Electric Company ("EPE" or the "Company").

Q3. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE IN THE ENERGY AND UTILITY INDUSTRIES.

A. I have more than fifteen years of experience in the energy industry, having served as a consultant and energy/regulatory economist for state government agencies. Since 2013, I have provided consulting services to clients on a range of financial and regulatory issues including cost of capital, ratemaking policy, and regulatory strategy issues. Prior to consulting, I was a staff economist at the Massachusetts Department of Public Utilities, and a petroleum economist for the State of Alaska. I attended utility regulatory training offered by New Mexico State University's Center for Public Utilities and have earned the Certified Rate of Return Analyst designation from the Society of Utility and Regulatory Financial Analysts based on my experience and successful completion of an examination. I hold a Bachelor's degree in Business Economics from Bentley University and a Master's degree in Resource and Applied Economics from the University of Alaska. A summary of my professional and educational background, including a list of my testimony filed before regulatory commissions, is included as Exhibit JEN-1.

Q4. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE COMMISSION?

A. Yes, I have. I submitted testimony regarding the cost of capital on behalf of Wind Energy Transmission Texas, LLC in Docket No. 57299, El Paso Electric Company in Docket No. 52195, and Sharyland Utilities, L.L.C. in Docket No. 51611. Additionally, I have previously filed testimony before regulatory commissions in Arkansas, Delaware, Florida, Kentucky, Maine, Montana, New Hampshire, New Mexico, Ohio, Oklahoma, Oregon, North Carolina, South Carolina, Utah, West Virginia, and Wyoming. During my time as a consultant, I have supported the development of expert witness testimony and analyses regarding the Return on Equity ("ROE") and capital structure in more than 100 proceedings filed before numerous U.S. state regulatory commissions and the Federal Energy Regulatory Commission.

Q5. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my Direct Testimony is to present evidence and provide the Commission with a recommendation regarding EPE's ROE[1] and to assess the reasonableness of the Company's requested capital structure. My analyses and conclusions are supported by the data presented in Exhibit JEN-2 through JEN-10.

Q6. WERE EXHIBITS JEN-2 THROUGH JEN-10 PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION AND CONTROL?

A. Yes.

II. SUMMARY AND OVERVIEW OF TESTIMONY

Q7. WHAT ARE YOUR CONCLUSIONS REGARDING THE APPROPRIATE COST OF EQUITY AND CAPITAL STRUCTURE FOR EPE?

A. Based on my analyses of three widely used market-based financial models, the Company's risk profile, and the current capital market environment, I conclude that a range of

1 Throughout my Direct Testimony, I use the terms "ROE" and "cost of equity" interchangeably.

9.90 percent to 11.50 percent reflects investors' required return for an equity investment in EPE. Within that range, I recommend an ROE at the midpoint, or 10.70 percent. As to the Company's capital structure, I conclude that its requested capital structure, consisting of 56.40 percent equity and 43.60 percent debt is within industry standards and should be used for ratemaking purposes. An authorized equity ratio at the higher end of the range of its peers compensates for the Company's heightened business risk associated with its significant planned capital expenditures, above average nuclear generation, and significantly smaller size. EPE's requested Weighted Average Cost of Capital ("WACC") is shown in Figure 1 below.

Figure 1 : Weighted Average Cost of Capital

	% of Capital	Cost (%)	Weighted Cost
Long-Term Debt	43.60%	5.34%	2.33%
Common Equity	56.40%	10.70%	6.03%
Total	100.00%		8.36%

I have recognized EPE's elevated business risk associated with its small size, its nuclear generation, and the need to fund its capital expenditure budget during the rate term. In my opinion, and as explained in Company witness Ellen Lapson's testimony, EPE's requested capital structure compensates for these risks.

Q8. PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT LED TO YOUR ROE RECOMMENDATION.

A. My recommendation is developed using three widely accepted financial modeling approaches applied to a proxy group of 20 electric utility companies: (1) the constant growth and quarterly growth forms of the Discounted Cash Flow ("DCF") model; (2) the traditional and empirical forms of the Capital Asset Pricing Model ("CAPM"); and (3) the Bond Yield Plus Risk Premium approach. The results of those analytical approaches are summarized in Figure 2 below.

Figure 2: Summary of Results[2]

Constant Growth DCF	Low	Mean	High
30-Day Average	9.24%	10.10%	10.83%
90-Day Average	9.49%	10.33%	11.05%
180-Day Average	9.68%	10.53%	11.25%
Quarterly Growth DCF	**Low**	**Mean**	**High**
30-Day Average	9.44%	10.31%	11.04%
90-Day Average	9.71%	10.56%	11.30%
180-Day Average	9.92%	10.79%	11.50%
CAPM		**Current 30-Year Treasury Yield (4.07%)**	**Projected 30-Year Treasury Yield (4.19%)**
Long-Term Historical Average Market Return		11.37%	11.38%
DCF-based Expected Market Return		13.87%	13.88%
Empirical CAPM		**Current 30-Year Treasury Yield (4.07%)**	**Projected 30-Year Treasury Yield (4.19%)**
Long-Term Historical Average Market Return		11.54%	11.55%
DCF-based Expected Market Return		14.09%	14.10%
Bond Yield Plus Risk Premium			
Current 30-Year Treasury Yield (4.07%)		10.05%	
Projected 30-Year Treasury Yield (4.19%)		10.10%	

In addition to the methodologies noted above, my recommendation is supported by: (1) the regulatory environment and the Company's need to access the capital necessary to execute its capital expenditure plan; (2) the Company's nuclear generation operations; (3) the Company's small size; and (4) the financial risk associated with its capital structure. I also consider the current capital market and macroeconomic environment in which utilities such as EPE operate. Although those factors are relevant to investors, their effect on the Company's cost of equity cannot be directly quantified. While I do not make any explicit adjustments to my ROE estimates for EPE's business risks, I consider them when

2 *See*, Exhibits JEN-2 to Exhibit JEN-6. DCF and CAPM results reflect the average of the proxy group mean and median ROE estimates.

determining the reasonableness of the Company's capital structure and where cost of equity should be established within the range of results.

Q9. HOW DID YOU DETERMINE YOUR RECOMMENDED RANGE FROM THE METHODS AND RESULTS SUMMARIZED ABOVE?

A. The cost of equity is an opportunity cost that cannot be precisely quantified. Therefore, it must be estimated using various financial models. Each of the ROE-estimation models is subject to limiting assumptions and each provides a different perspective on investors' return requirements under varying market conditions. The use of multiple financial models, therefore, enables a more robust and comprehensive assessment of the cost of equity instead of relying on one specific estimation model.

After reviewing the model results shown above in Figure 2, I assess the Company's risk profile relative to a group of proxy companies. As explained in more detail throughout my testimony, my recommendation considers: (1) the regulatory environment and the Company's need to access the capital necessary to execute its capital expenditure plan; (2) the Company's nuclear generation operations; (3) the Company's significantly smaller size; and (4) EPE's financial risk reflected in its capital structure. As noted earlier, I determined that EPE's equity ratio at the higher end of the range of its peers compensates for these risks and warrants an ROE at the midpoint of my recommended range.

The low end of my range, 9.90 percent, is within the range of the low DCF results. The high end of my recommended range, 11.50 percent, is within the range of the high end of my DCF results and the low end of my CAPM results (see Figure 3 below). Based on those considerations, and considering the Company's requested capital structure, it is my opinion that an ROE of 10.70 percent is a just and reasonable estimate of EPE's cost of equity.

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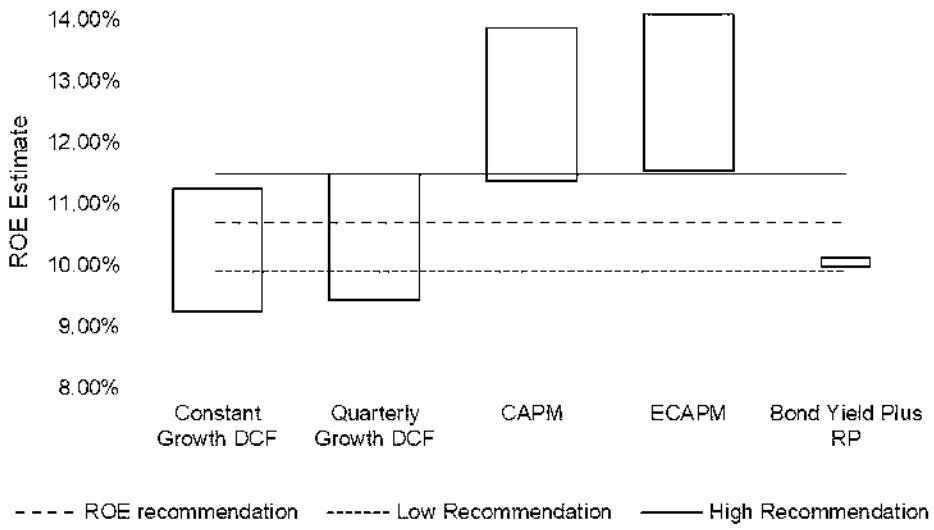
Figure 3: Range of ROE Estimate Model Results and Recommendation

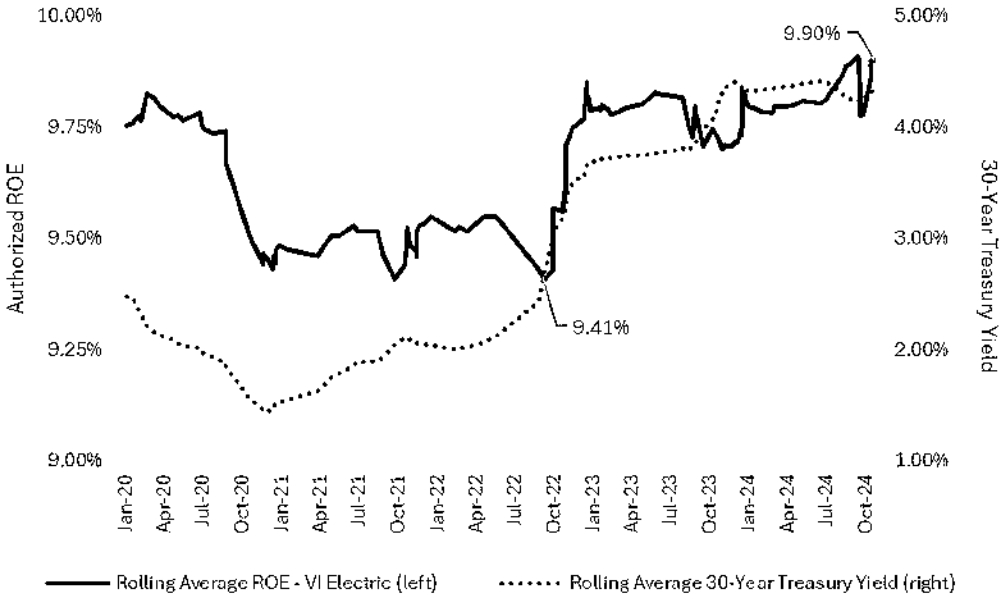


Q10. HOW HAVE AUTHORIZED RETURNS FOR VERTICALLY INTEGRATED ELECTRIC UTILITIES COMPARED TO HIGHER BOND YIELDS?

A. Prevailing long-term bond yields have a significant impact on utilities' cost of capital, as well as investors' assessment of fair and reasonable return of investment capital. For example, rising treasury yields signal to investors that they can earn a higher return investing in risk-free government bonds. Consequently, investors expect higher returns when investing in assets riskier than government-issued bonds, such as utility equities. As shown in Figure 4, regulators have acknowledged rising capital costs in their ROE decisions, albeit in a lagged fashion. On a nine-month rolling average basis,[3] the average authorized ROEs for vertically integrated electric utilities have increased nearly 50 basis points since the Commission's order in the Company's last rate case in September 2022, rising from 9.41 percent to 9.90 percent.

3 A nine-month rolling average captures the length of the average rate case.

Figure 4: Authorized Returns for Vertically Integrated Utilities vs. 30-Year U.S. Treasuries



Q11. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

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

- Section III – Provides a summary of issues regarding the cost of equity estimation in regulatory proceedings, describes the regulatory guidelines pertinent to the development of the cost of capital, explains my selection of the proxy group used to develop my analytical results, and describes my analyses on which my ROE determination is based;
- Section IV – Discusses the specific business risks that have a direct bearing on the Company's cost of equity;
- Section V – Assesses the Company's requested capital structure;
- Section VI – Reviews the current capital market conditions and the effect on the cost of equity; and
- Section VII – Summarizes my conclusions and recommendations.

III. COST OF EQUITY ESTIMATION

A. Regulatory Guidelines and Financial Considerations

Q12. BEFORE ADDRESSING THE SPECIFIC ASPECTS OF THIS PROCEEDING, PLEASE EXPLAIN THE CONNECTION BETWEEN THE COST OF CAPITAL AND A UTILITY'S COST OF SERVICE.

A. Under the cost-of-service ratemaking paradigm, the development of utility rates begins with determining the utility's total cost to serve customers. This is known as the revenue requirement, since the utility's revenues must be sufficient to recover its costs to serve customers. The revenue requirement consists of four components: (1) operating and maintenance ("O&M") expenses, (2) taxes, (3) the return *of* capital through depreciation expense, and (4) the return *on* capital through the regulated return on rate base. The return on rate base is calculated as the weighted average cost of capital multiplied by the rate base. The return on capital must be sufficient to allow the utility to repay its debt obligations and compensate equity investors for the use of their financial capital. From that important perspective, the return on capital reflects a cost to the utility just as any other component of the revenue requirement.

Q13. PLEASE EXPLAIN THE COST OF CAPITAL CONCEPTUALLY.

A. The cost of capital is the return that investors require to commit capital to a firm. Investors will provide funds to a firm only if the return that they *expect* is equal to, or greater than, the return that they *require* to accept the risk of investing capital in the firm. Simply, the cost of capital is the expected rate of return prevailing in the capital markets on alternative investments of similar risk.[4] Conceptually, the cost of capital is: (1) forward looking and reflects an expected rate of return; (2) an opportunity cost; (3) determined in the capital markets, and (4) dependent on, and proportional to, the risk of the investment.[5]

Because the cost of equity is expectational and premised on the principle of opportunity costs, it cannot be precisely quantified. Instead, it must be estimated by

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4 Lawrence A. Kolbe, James A. Read, Jr., and George R. Hall, The Cost of Capital – Estimating the Rate of Return for Public Utilities, The MIT Press, Cambridge, MA, at 13 (1985).

5 Lawrence A. Kolbe, James A. Read, Jr., and George R. Hall, The Cost of Capital – Estimating the Rate of Return for Public Utilities, The MIT Press, Cambridge, MA, at 13 (1985).

applying market data to various financial models that are simplified representations of investor behavior and expectations. Moreover, equity investors have a subordinate claim to cash flows owed to debt investments and other claims; the uncertainty (or risk) associated with those residual cash flows determines the cost of equity. In the end, the cost of equity should reflect the return that investors require considering the subject company's risk profile and the returns available on comparable investments.

Q14. HOW IS THE COST OF EQUITY ESTIMATED IN REGULATORY PROCEEDINGS?

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

The ROE reflects the cost of raising and retaining equity capital and is estimated by using one or more market-based analytical approaches. Although quantitative models are used to estimate the ROE, the cost of equity cannot be precisely quantified through a strict mathematical exercise. As such, a reasonable and appropriate ROE reflects the financial, economic, and regulatory environment in which the estimate is developed, as well as the subject company's risk profile.

Q15. PLEASE BRIEFLY SUMMARIZE THE GUIDELINES USED IN ESTABLISHING THE COST OF CAPITAL FOR A REGULATED UTILITY.

A. Public utility regulation is rooted in the principle that utilities receive a fair rate of return sufficient to attract the capital required to provide safe and reliable public utility service for customers at reasonable rates. The U.S. Supreme Court ("Supreme Court") established the guiding principles for establishing a fair return for capital in two seminal cases: (1) *Bluefield Water Works and Improvement Co. v. Public Service Comm'n.* ("*Bluefield*");[6] and (2) *Federal Power Comm'n v. Hope Natural Gas Co.* ("*Hope*").[7] In *Bluefield*, the Court stated:

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6 See, Bluefield Water Works and Improvement Co. v. Public Service Comm'n., 262 U.S. 679, 692 (1923).

7 See, Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

> A public utility is entitled to such rates as will permit it to earn a return upon 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; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure 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.[8]

The Supreme Court therefore recognized that: (1) a regulated public utility cannot remain financially sound unless the return it is allowed to earn on its invested capital is at least equal to the cost of capital (the principle relating to the demand for capital); and (2) a regulated public utility will not be able to attract capital if it does not offer investors an opportunity to earn a return on their investment equal to the return they expect to earn on other investments of similar risk (the principle relating to the supply of capital).

In *Hope*, the Supreme Court reiterated the three primary standards for a regulated rate of return:

> [Th]e return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[9]

In summary, the Supreme Court has recognized that the fair return should be: (1) commensurate with returns investors expect to earn on other investments of similar risk (the "comparable risk" standard); (2) sufficient to assure confidence in the company's financial integrity (the "financial integrity" standard); and (3) adequate to maintain and

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8 Bluefield Water Works and Improvement Co. v. Public Service Comm'n., 262 U.S. 679, 692 (1923).

9 Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

support the company's credit and to attract capital (the "capital attraction" standard). Importantly, a fair and reasonable rate of return satisfies all three standards.

Q16. HAS THE COMMISSION ALSO APPLIED THE *HOPE* AND *BLUEFIELD* STANDARDS AS GUIDANCE FOR SETTING RATES?

A. Yes, it has. The Commission upholds the precedents of the *Hope* and *Bluefield* cases and regularly acknowledges that a utility is entitled to a fair and reasonable return.[10] The Public Utility Regulatory Act[11] describes the Commission's obligation with regard to establishing a reasonable return:

> In establishing an electric utility's rates, the regulatory authority shall establish the utility's overall revenues at an amount that will permit the utility a reasonable opportunity to earn a reasonable return on the utility's invested capital used and useful in providing service to the public in excess of the utility's reasonable and necessary operating expenses. [12]

This position was affirmatively stated in *Gulf States Utilities Company v. Public Utility Commission of Texas*, where the Texas Supreme Court stated:

> The Commission's rate fixing power operates exclusively within a range of reasonableness, bounded on the one hand by the utility's constitutional right to a fair and reasonable return, and on the other hand by its customers' statutory right to rates that are not unreasonable or exorbitant.[13]

Based on those standards, the authorized ROE should provide EPE with the *opportunity* to earn (which is not a guarantee) a fair and reasonable return and should enable efficient access to external capital under a variety of market conditions.

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10 *See for example, Application of Southwest Public Service Company for Authority to Change Rates*, Docket No. 43695, Proposal for Decision at 53-54 (October 12, 2015). Affirmed by the Commission's Final Order (December 18, 2015) and Order on Rehearing (February 23, 2016).

11 Tex. Util. Code Ann. §§ 11.001-66.016 (West 2007 & Supp. 2014).

12 Tex. Util. Code Ann. § 36.051 (West 2007 & Supp. 2014).

13 *Gulf States Utilities Company v. Pub. Util. Comm'n*, 784 S.W.2d 519, 520 (Tex. App.—Austin 1990), aff'd, 809 S.W.2d 201 (1991).

Q17. WHY IS IT IMPORTANT FOR A UTILITY TO BE ALLOWED THE OPPORTUNITY TO EARN A RETURN ADEQUATE TO ATTRACT CAPITAL AT REASONABLE TERMS?

A. A return that is adequate to attract capital at reasonable terms enables the utility to provide safe and reliable service while maintaining its financial integrity. As discussed above, and in keeping with the *Hope* and *Bluefield* standards, that return should be commensurate with the returns expected for investments of equivalent risk.

The ratemaking process is based on the principle that, for investors and companies to commit the capital needed to provide safe and reliable utility services, the utility must have a reasonable opportunity to recover the return of, and the market-required return on, invested capital. To meet its legal obligation to serve, the allowed ROE should enable the subject utility to maintain its financial integrity in a variety of economic and capital market conditions. To preserve and enhance service reliability, EPE must generate adequate cash flow from operations and have efficient access to external capital needed to undertake its capital investment plan regardless of the economic and capital market conditions at the time.

Further, the financial community carefully monitors utility companies' current and expected financial conditions, as well as the regulatory environment in which those companies operate. In that respect, the regulatory environment is one of the most important factors considered in both debt and equity investors' assessments of risk.[14] That consideration is especially important during uncertain economic and financial conditions in which the utility may require access to capital markets.

The outcome of the Commission's order in this case, therefore, should provide EPE with the opportunity to earn an ROE that is: (1) adequate to attract capital at reasonable terms, (2) sufficient to ensure its financial integrity, and (3) commensurate with returns on investments in enterprises having corresponding risks. To the extent EPE has a reasonable opportunity to earn its market-based cost of equity, neither customers nor shareholders are disadvantaged. In fact, a return that is adequate to attract capital at reasonable terms

14 See, e.g., Moody's Investors Service, Rating Methodology: Regulated Gas and Electric Utilities, at 4 (June 23, 2017).

enables EPE to provide customers with safe, reliable service while maintaining its financial integrity.

Q18. HAVE RECENT EVENTS ILLUSTRATED THE IMPORTANCE FOR A UTILITY TO MAINTAIN A STRONG FINANCIAL PROFILE TO ENABLE ACCESS TO CAPITAL?

A. Yes. There have been several significant events that have affected utilities in recent years. These include severe weather events and natural disasters that are unpredictable, costly, and beyond utilities' control such as hurricanes, wildfires, and Winter Storm Uri, for example. Texas is no stranger to severe weather, and utilities must be prepared operationally and financially for significant and unpredictable weather events that are occurring with increasing frequency. Other examples include global events like the COVID-19 pandemic, the war in Ukraine, or the 2008-2009 Great Recession that can affect utilities directly, but also the economic and capital market environments in which utilities raise capital. Because utilities have an obligation to serve and cannot delay investments in critical infrastructure, they must be able to access capital markets efficiently and on reasonable terms even when markets are volatile or constrained. As Company witness Ellen Lapson explains, a utility with a strong financial profile has a higher likelihood (though not a guarantee) of withstanding adverse events and accessing capital at reasonable terms when needed for the benefit of customers.

Lastly, EPE's significantly smaller size magnifies these risks because as a significantly smaller company, unpredictable and adverse events may affect EPE's revenues or expenses more acutely. It is critical that the Company has the financial strength to withstand such events with a margin of safety.

Q19. WHAT ARE YOUR CONCLUSIONS REGARDING THE REGULATORY PRINCIPLES PERTAINING TO THE COST OF CAPITAL FOR A PUBLIC UTILITY?

A. Congruent to other costs in a utility's cost of service, the regulated return on rate base is a cost that EPE incurs as part of its normal operations, including the need to compensate equity investors for the use of their capital. Under the *Hope* and *Bluefield* standards, the cost of equity authorized for EPE in this proceeding should be: (1) adequate to attract

capital at reasonable terms; (2) sufficient to ensure its financial integrity; and (3) commensurate with returns on investments having similar risks.

Because utilities are capital intensive and investors have many investment alternatives, the Company's financial profile must be adequate on a relative basis to ensure its ability to attract capital under a variety of economic and financial market conditions. The Commission's decision regarding the authorized ROE and capital structure in this proceeding will directly affect the Company's ability to attract the capital needed to maintain and enhance service to customers.

B. Proxy Group Selection

Q20. WHY IS IT NECESSARY TO SELECT A GROUP OF PROXY COMPANIES TO DETERMINE THE COST OF EQUITY FOR EPE?

A. The cost of equity for a given enterprise depends on the risks attendant to the business in which the company is engaged. According to financial theory, the value of a given company is equal to the aggregate market value of its constituent business units. The value of the individual business units reflects the risks and opportunities inherent in the business sectors in which those units operate. In this proceeding, we focus on estimating the cost of equity for EPE's Texas-jurisdictional operations. EPE is a wholly owned subsidiary of Sun Jupiter Holdings LLC. Because the ROE is a market-based concept estimated by applying market data to various financial models, and EPE is not a standalone, publicly traded entity, it is necessary to establish a group consisting of companies that are both publicly traded and reasonably comparable to the Company in certain fundamental respects to serve as its "proxy" in the ROE estimation process. Even if the Company were a publicly traded entity, short-term events could bias its market value during a given period. A significant benefit of using a proxy group is that it moderates the effects of anomalous, temporary events associated with any one company.

Q21. PLEASE PROVIDE A SUMMARY PROFILE OF EPE.

A. EPE is a 100 percent rate regulated, vertically integrated electric company that provides electric services to approximately 456,000 retail customers in Texas and New Mexico.[15] The Company's current long-term issuer credit ratings are as follows:

Figure 5: EPE's Current Long-term Issuer Credit Ratings[16]

Rating Agency	Current Credit Rating	Outlook
Moody's Investors Service ("Moody's")	Baa2	Stable
Fitch Ratings ("Fitch")	BBB	Stable

Q22. DOES THE FACT THAT EPE IS A SUBSIDIARY OF A PRIVATELY HELD COMPANY AFFECT ITS COST OF EQUITY?

A. No. The cost of equity depends on the risk of a firm's operations and the assets supporting those operations. In other words, the cost of equity depends on the *use* of capital, not on the *source* of capital. Therefore, the Company's corporate structure, including whether it (or its parent) is privately held or publicly traded, does not affect the analysis. That is, the ROE is not determined by reference to EPE's parent company.

Q23. WHAT CRITERIA DO YOU USE TO SELECT THE PROXY GROUP?

A. Because estimating the cost of equity is a comparative exercise, it is necessary to develop a proxy group of companies with risk profiles that are reasonably comparable to the subject company. As each company is unique, no two companies will have identical business and financial risk profiles. In selecting a proxy group, my objective is to balance the competing interests of selecting companies that are representative of the risks and prospects faced by EPE, while at the same time ensuring that there is a sufficient number of companies in the proxy group. To develop my proxy group, I begin with the companies that *Value Line* classifies as Electric Utilities, and applied the following screening criteria:

15 Source: S&P Global Market Intelligence, as of December 31, 2023.

16 Source: Bloomberg Professional Services.

- Because certain of the models used in my analyses assume that earnings and dividends grow over time, I exclude companies that do not consistently pay quarterly cash dividends, or have cut their dividend in the last two years;
- Because certain of the models assume that earnings grow over time, I exclude companies that do not have positive earnings growth rates from at least two sources;
- To ensure that the growth rates used in my analyses are not biased by a single analyst, all the companies in my proxy group are consistently covered by at least two utility industry equity analysts;
- Because EPE is a vertically integrated electric utility (*i.e.*, utilities that own and operate regulated generation, transmission, and distribution assets), I exclude companies that are not vertically integrated;
- I exclude companies that do not have (or its primary regulated electric utility subsidiary does not have) an investment-grade corporate or senior unsecured bond credit rating from Standard and Poor's ("S&P") and Moody's Investor's Service ("Moody's);
- To incorporate companies that are primarily regulated electric utilities, I first exclude companies that have less than 60.00 percent of net operating income from regulated operations. I then exclude companies within this group that have less than 60.00 percent of total regulated operating income from regulated electric operations, on average, over the last three years; and
- I eliminate companies that have had significant merger activity or transactions or have had a recent financial event that could affect its market data or financial condition.

Q24. WHICH COMPANIES MEET YOUR SCREENING CRITERIA?

A. The criteria discussed above resulted in a proxy group of the following 20 companies:

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Figure 6: Proxy Group Screening Results

Company	Ticker
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Avista Corporation	AVA
CMS Energy Corporation	CMS
DTE Energy Company	DTE
Duke Energy Corporation	DUK
Edison International	EIX
Entergy Corporation	ETR
Evergy, Inc.	EVRG
IDACORP, Inc.	IDA
NextEra Energy, Inc.	NEE
NorthWestern Energy Group, Inc.	NWE
OGE Energy Corp.	OGE
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
PPL Corporation	PPL
Southern Company	SO
TXNM Energy	TXNM
Xcel Energy Inc.	XEL

The screening criteria results in a group of electric utilities that are comparable (but not identical) to the financial and operational characteristics of EPE. The screening criterion requiring an investment grade credit rating ensures that the proxy companies, like EPE, are in sound financial condition. Additionally, the criterion screening on the percent of net operating income from regulated electric operations distinguishes between electric utilities that are subject to regulation and those with substantial unregulated operations and are exposed to higher risks. In my opinion, these screens collectively reflect key risk factors that investors consider in making investments in electric utilities.

Q25. HOW DOES EPE COMPARE TO THE PROXY GROUP?

A. As shown below in Figure 7, EPE (on a total company basis) is considerably smaller in terms of both market capitalization, net utility plant, and customers. Additionally, EPE's percentage of net generation from nuclear plants is higher than all its peers and more than 2.8 times the proxy group average.

Figure 7: Proxy Group Summary

Company	Market Capitalization ($million)[17]	Net Utility Plant ($million)[18]	Electric Customers[19]	Regulated Nuclear Net Generation (% of Total)[20]
Alliant Energy Corp.	15,566.96	16,306.90	995,135	0.00%
Ameren Corporation	23,335.70	31,327.51	2,480,189	28.37%
American Electric Power Co.	54,595.51	73,183.96	4,481,146	25.28%
Avista Corporation	3,049.77	5,227.44	413,831	0.00%
CMS Energy Corp.	21,099.26	22,476.60	1,884,290	0.00%
DTE Energy Company	26,583.45	24,218.64	2,266,460	23.39%
Duke Energy Corp.	89,034.86	101,195.00	8,330,346	37.19%
Edison International	33,632.13	54,377.88	5,263,405	46.60%
Entergy Corp.	28,142.28	43,819.64	3,009,516	26.22%
Evergy, Inc.	14,259.72	23,840.51	1,662,492	27.00%
IDACORP, Inc.	5,489.90	5,556.88	625,440	0.00%
NextEra Energy, Inc.	173,739.04	69,473.22	5,845,147	19.79%
NorthWestern Corp.	3,507.61	5,466.61	467,684	0.00%
OGE Energy Corp.	8,239.58	11,015.95	892,274	0.00%
Pinnacle West Capital Corp.	10,064.84	19,095.95	1,370,930	36.22%
Portland General Electric Co.	4,936.89	8,417.51	928,859	0.00%
PPL Corporation	24,405.54	26,733.47	2,476,169	0.00%
The Southern Company	98,707.94	72,198.50	4,463,993	24.58%
TXNM Energy, Inc	3,948.07	7,535.19[21]	811,561	32.01%
Xcel Energy Inc.	36,404.79	50,623.79	3,801,019	15.67%
Average	**33,937.20**	**34,976.63**	**2,623,494**	**17.12%**
El Paso Electric (Total Company)	$3,579.59[22]	$4,146.45	456,323	48.26%

17 As of September 30, 2024.

18 As of December 31, 2023; excluding nuclear fuel.

19 As of December 31, 2023. Source: S&P Capital IQ.

20 As of December 31, 2023. Source: S&P Capital IQ.

21 Source: TXNM Energy, Inc 10-K, filed on February 29, 2024.

22 EPE is not publicly traded. Implied Market Capitalization = EPE Total Company Rate Base x Requested Equity Ratio x Median Proxy Group Market-to-Book Ratio of 1.84. *See* Exhibit JEN-8, page 2.

C. Cost of Equity Models

Q26. WHAT ANALYTICAL APPROACHES DO YOU USE TO DETERMINE THE COMPANY'S ROE?

A. As noted earlier, I rely on the constant growth and quarterly growth forms of the DCF model, the traditional and empirical forms of the CAPM, and the Bond Yield Plus Risk Premium approach. The models that I apply are commonly used in practice,[23] as well as in regulatory proceedings. Additionally, each model provides a different insight into investors' views of risk and return. Therefore, the use of multiple methods provides a comprehensive and robust perspective on investors' return requirements.

1. Constant Growth Discounted Cash Flow Model

Q27. PLEASE DESCRIBE THE CONSTANT GROWTH DCF APPROACH.

A. The Constant Growth DCF approach is based on the theory that a stock's current price represents the present value of all expected future cash flows. In its simplified form, the Constant Growth DCF model shown in Equation [1] below sets the ROE equal to the expected dividend yield plus the expected long-term annual growth rate in perpetuity:

$$k = \frac{D_0 (1+g)}{P} + g \qquad [1]$$

where:

k = the required ROE,

D_0 = the current annualized dividend,

P = the current stock price, and

g = the expected long-term annual growth rate.

Q28. WHAT ASSUMPTIONS UNDERLIE THE CONSTANT GROWTH DCF MODEL?

A. The Constant Growth DCF model assumes: (1) a constant average annual growth rate for earnings and dividends; (2) dividends are paid annually, and the dividend payout ratio is stable; (3) a constant Price/Earnings multiple; and (4) a discount rate greater than the

23 See for example., Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed., 1994, at 341.

expected growth rate. The model also assumes that the current cost of equity will remain constant in perpetuity.

Q29. WHAT MARKET DATA DID YOU USE TO CALCULATE THE DIVIDEND YIELD IN YOUR CONSTANT GROWTH DCF MODEL?

A. I calculate the Constant Growth DCF result for each of the proxy companies using the following inputs:

- The average daily closing prices for the 30-, 90-, and 180-trading days ended September 30, 2024, for the term *P*;
- The current quarterly dividend as of September 30, 2024 multiplied by 4, for the term D_0; and
- Long-term earnings per share ("EPS") growth rate projections as of September 30, 2024, reported by Zacks, S&P Capital IQ,[24] and *Value Line* for the long-term growth rate, g.

Q30. WHY DO YOU USE THREE AVERAGING PERIODS TO CALCULATE AN AVERAGE STOCK PRICE?

A. I do so to ensure that the model's results are not skewed by anomalous events that may affect stock prices on any given trading day. At the same time, the average period should reasonably reflect the expected capital market conditions over the long term. Using 30-, 90-, and 180-trading day averaging periods reasonably balances those concerns.

Q31. HOW DO YOU CALCULATE THE EXPECTED DIVIDEND YIELD OVER THE COMING YEAR?

A. Because utility companies tend to increase their quarterly dividends at different times throughout the year, it is reasonable to assume dividend increases will be evenly distributed over calendar quarters. Therefore, I calculate the expected dividend yield by applying one-

24 In prior testimonies, I have relied on analysts' consensus long-term EPS projections from First Call as reported by Yahoo! Finance. As of November 2024, Yahoo! Finance no longer publishes consensus long-term projected EPS growth rates. Therefore, I now rely on analysts' consensus EPS growth rate projections reported by S&P Capital IQ as a third source.

half of the long-term growth rate to the current dividend yield. That adjustment ensures that the expected dividend yield is, on average, representative of the coming 12-month period.

Q32. WHY IS THE PROJECTED EPS GROWTH THE APPROPRIATE MEASURE OF LONG-TERM GROWTH IN THE CONSTANT GROWTH DCF MODEL?

A. In its Constant Growth form, the DCF model (*i.e.*, as presented in Equation [1] above) assumes a single expected growth estimate in perpetuity, which assumes a fixed payout ratio, and the same constant growth rate in EPS, dividends per share, and book value per share. In the long run, dividend growth can only be sustained by earnings growth.

Further, academic studies have clearly and consistently shown that measures of earnings and cash flow are strongly related to returns, and that analysts' forecasts of growth are superior to other measures of growth in predicting stock prices.[25] For example, the research of Vander Weide and Carleton demonstrates that earnings growth projections have a statistically significant relationship to stock valuation levels, while dividend growth rates do not.[26] Those findings suggest that investors form their investment decisions based on expectations of growth in earnings, not dividends. Lastly, the only forward-looking growth rates that are available on a consensus basis are analysts' EPS growth rates. The fact that earnings growth projections are the only widely available estimates of growth further supports the conclusion that earnings growth is the most meaningful measure of growth among the investment community. For these reasons, earnings growth is the appropriate measure of long-term growth in the DCF model.

Q33. WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF ANALYSIS?

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25 *See, e.g.*, Andreas C. Christofi, Petros C. Christofi, Marcus Lori and Donald M. Moliver, *Evaluating Common Stocks Using Value Line's Projected Cash Flows and Implied Growth Rate*, Journal of Investing (Spring 1999); Harris and Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management at 21 (Summer 1992); and Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management (Spring 1988); Robert S. Harris, *Using Analysts' Growth Forecasts to Estimate Shareholder Required Rate of Return*, Financial Management (Spring 1986).

26 See Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management (Spring 1988).

A. To provide a spectrum of DCF-based ROE estimates, I calculate the low, mean, and high Constant Growth DCF result for each proxy company using the low, mean, and high EPS growth estimate. The mean result combines the average of the three EPS growth rate estimates with each proxy company's expected dividend yield. The high DCF result adds the maximum EPS growth rate estimate with each proxy company's expected dividend yield. Similarly, the low DCF result adds the minimum EPS growth rate estimate for each proxy company to the expected dividend yield. I then calculate the mean and median low, mean, and high DCF results for the proxy group. In developing my ROE recommendation, I rely on the average of the mean and median proxy group Constant Growth DCF results (*see* Figure 8, below, and Exhibit JEN-2). By relying on the average of the mean and median proxy group results, I consider the individual DCF results of each proxy company while mitigating the effect of the highest and lowest estimates.

Figure 8: Constant Growth DCF Results[27]

	Low	Mean	High
30-Day Average	9.24%	10.10%	10.83%
90-Day Average	9.49%	10.33%	11.05%
180-Day Average	9.68%	10.53%	11.25%

2. Quarterly Growth Discounted Cash Flow Model

Q34. PLEASE DESCRIBE THE QUARTERLY GROWTH DCF MODEL.

A. As noted earlier, the Constant Growth DCF model is based on several limiting assumptions, one of which is that dividends are paid annually. However, most dividend-paying companies, including utilities, pay dividends on a quarterly basis. Although the dividend yield adjustment discussed earlier is intended to reflect that assumption by increasing the observed dividend yield by one-half of the expected growth rate, it does not fully account for the quarterly receipt and reinvestment of dividends. Consequently, the Constant Growth DCF model likely understates the cost of equity. The Quarterly Growth DCF model specifically incorporates the quarterly payment of dividends, and the associated

27 *See*, Exhibit JEN-2. Average of the proxy group mean and median results.

quarterly compounding of those dividends as they are reinvested at the required ROE. As noted by Dr. Roger Morin:

> Clearly, given that dividends are paid quarterly and that the observed stock price reflects the quarterly nature of dividend payments, the market-required return must recognize quarterly compounding, for the investor receives dividend checks and reinvests the proceeds on a quarterly schedule... The annual DCF model inherently understates the investors' true return because it assumes all cash flows received by investors are paid annually.[28]

Q35. HOW IS THE DIVIDEND YIELD PORTION OF THE QUARTERLY DCF MODEL CALCULATED?

A. To reflect the timing and compounding of quarterly dividends, the model replaces the "D" component of the Constant Growth DCF model with the following equation:

$$D = d_1 (1 + k)^{0.75} + d_2 (1 + k)^{0.50} + d_3 (1 + k)^{0.25} + d_4 (1 + k)^0 \quad [2]$$

where:

d_1, d_2, d_3, d_4 = expected quarterly dividends over the coming year; and

k = the required Return on Equity.[29]

To calculate the expected dividends over the coming year for the proxy companies (*i.e.*, d_1, d_2, d_3, and d_4), I obtained the last four paid quarterly dividends for each company and multiplied them by one plus the growth rate (*i.e.*, $1 + g$). To provide a spectrum of quarterly growth DCF-based ROE estimates, I calculate the low, mean, and high quarterly growth DCF result for each proxy company using the low, mean, and high ESP growth estimates. For the P component of the dividend yield, I used the same average stock prices applied in the Constant Growth DCF analysis for each proxy company.

Q36. WHAT ARE THE RESULTS OF YOUR QUARTERLY GROWTH DCF ANALYSES?

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28 Roger A. Morin, New Regulatory Finance, at 344 (2006).

29 Because the required ROE (k) is a variable in the dividend yield calculation, the Quarterly Growth DCF model is solved iteratively.

A. My Quarterly Growth DCF results are summarized in Figure 9 below (*see also*, Exhibit JEN-3). As with my Constant Growth DCF analysis, I rely on the average of the mean and median proxy group results.

Figure 9: Quarterly Growth DCF Results[30]

	Low	Mean	High
30-Day Average	9.44%	10.31%	11.04%
90-Day Average	9.71%	10.56%	11.30%
180-Day Average	9.92%	10.79%	11.50%

3. Capital Asset Pricing Model and Empirical Capital Asset Pricing Model

Q37. PLEASE DESCRIBE THE GENERAL FORM OF THE CAPM.

A. The CAPM is a risk premium method 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. As shown in Equation [3], the CAPM is defined by four components, each of which theoretically is a forward-looking estimate:

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

where:

K_e = the required market ROE for a security;

β = the Beta coefficient of that security;

r_f = the risk-free rate of return; and

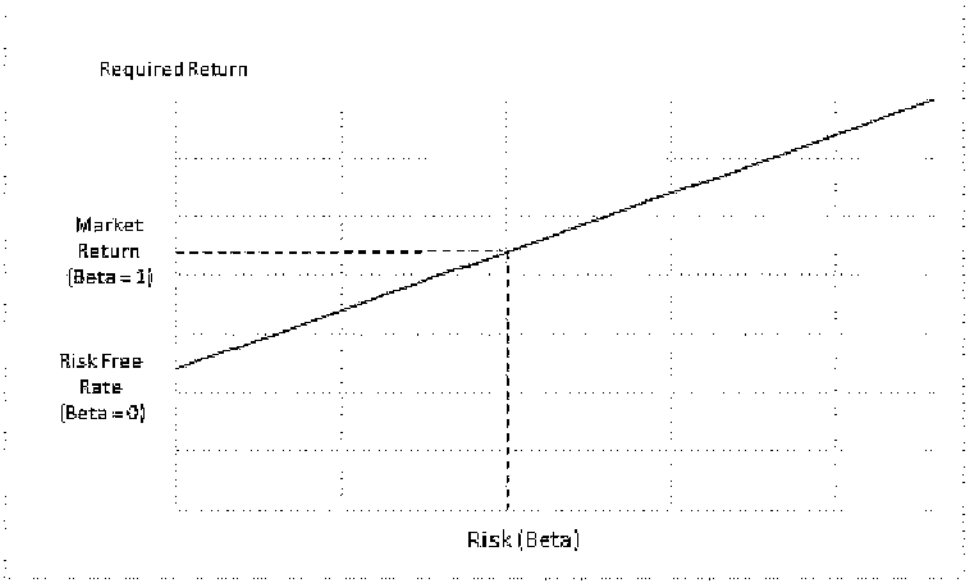
r_m = the required return on the market as a whole.

Equation [3] describes the Security Market Line ("SML"), or the CAPM risk-return relationship, depicted in Figure 10 below. The intercept is the risk-free rate (r_f) which has a Beta coefficient of zero, and the slope is the expected market risk premium ($r_m - r_f$). As shown in Figure 10, the SML is upward sloping, illustrating the principle that investments of higher risk require a higher return. By definition, r_m, the return on the market, has a Beta coefficient of 1.00. A Beta coefficient of less than 1.00 generally indicates less market risk and a lower required return than the market; conversely, a company with a Beta coefficient

30 *See*, Exhibit JEN-3. Average of the proxy group mean and median results.

greater than 1.00 has higher market risk, thereby warranting a higher required return than the market by investors.

Figure 10: Security Market Line



The CAPM assumes that all non-market or unsystematic risk, can be eliminated through diversification. The risk that cannot be eliminated through diversification is called market, or systematic risk. Systemic (or non-diversifiable) risk is measured by the Beta coefficient, which is defined as:

$$\beta_j = \frac{\sigma_j}{\sigma_m} \times \rho_{j,m} \quad [4]$$

where σ_j is the standard deviation of returns for company "j," σ_m is the standard deviation of returns for the broad market (as measured, for example, by the S&P 500 Index), and $\rho_{j,m}$ is the correlation of returns between company j and the broad market. The Beta coefficient, therefore, represents both relative volatility (*i.e.*, the standard deviation) of returns, and the correlation in returns between the subject company and the overall market.

Q38. WHAT RISK-FREE RATE ASSUMPTIONS DID YOU INCLUDE IN YOUR CAPM ANALYSIS?

A. I apply two different estimates of the risk-free rate: (1) the 30-day average yield on 30-year Treasury bonds as of September 30, 2024 (*i.e.*, 4.07 percent);[31] and (2) a projected 30-year Treasury yield (*i.e.*, 4.19 percent).[32]

Q39. WHY DO YOU RELY ON THE 30-YEAR TREASURY YIELD IN THE CAPM ANALYSIS?

A. In determining the security most relevant to the application of the CAPM, the term (or maturity) should approximate the life of the underlying investment. Electric utilities are typically long-term duration investments; therefore, the 30-year Treasury yield is most suitable for the risk-free rate applied in the CAPM.

Q40. WHAT BETA COEFFICIENTS DO YOU USE IN YOUR CAPM MODEL?

A. As shown in Exhibit JEN-5, my CAPM analyses rely on the average Beta coefficients from *Value Line* and Bloomberg for each proxy company as of September 30, 2024. Beta coefficients from both services are calculated using weekly returns over a five-year period, adjusted to reflect the tendency of Beta coefficients to regress toward the market mean of 1.00.

Q41. WHAT ESTIMATES OF THE EXPECTED MARKET RETURN DO YOU USE TO CALCULATE THE MARKET RISK PREMIUM?

A. I consider two estimates of the expected market return. The first estimate calculates the market capitalization-weighted ROE of the S&P 500 Index by applying the Constant Growth DCF model to the S&P 500 Index. The second estimate is the long-run historical arithmetic average market return of 12.04 percent reported by Kroll (formerly Duff & Phelps) for the years 1926 to 2023.[33]

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31 Source: Bloomberg Professional Services.

32 The average of: (1) the average projected 30-year Treasury yield for the six quarters ended Q1 2026; and (2) the average long-term projected 30-year Treasury yield for the years 2026-2030 and 2031-2035 reported by Blue Chip Financial Forecast. See, Blue Chip Financial Forecast, Vol. 43, No. 10, October 1, 2024, at 2 and Blue Chip Financial Forecast, Vol. 43, No. 12, June 1, 2024, at 14.

33 Source: Kroll, Cost of Capital Navigator.

Q42. PLEASE FURTHER EXPLAIN YOUR FORWARD-LOOKING DCF APPROACH TO ESTIMATING THE MARKET RETURN.

A. Using the Constant Growth DCF model described earlier, I develop two estimates of the expected market return by applying dividend yields from Bloomberg and projected earnings growth rates from Bloomberg and *Value Line*. I calculate a market capitalization-weighted dividend yield and projected earnings growth rate for the S&P 500 Index and applied those estimates to the Constant Growth DCF formula, using the same half-growth rate assumption described earlier. The expected market return from Bloomberg and *Value Line* are 16.25 percent and 14.77 percent, respectively (*see* Exhibit JEN-4). To be conservative, I rely on *Value Line's* expected market return estimate of 14.77 percent in my CAPM analyses.

Q43. IS THE VALUE-LINE BASED DCF-BASED ESTIMATE OF 14.77 PERCENT CONSISTENT WITH ACTUAL OBSERVED RETURNS ON THE MARKET?

A. Yes, it is. As shown in Figure 11 below, an expected market required return of 14.77 percent or higher occurred in 49 of the last 98 years (i.e., 50 percent of the time). Since 2009, the annual market return has averaged 14.91 percent, and equaled or exceeded 14.77 percent in nine of the last 15 years and 11 of the last 22 years. In other words, an annual market return of 14.77 percent, or higher, has occurred frequently.

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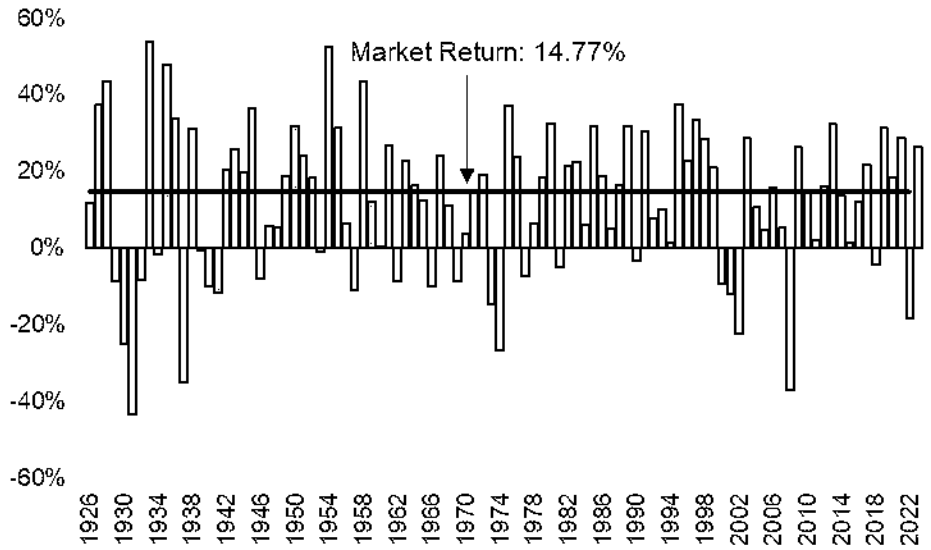
Figure 11: Annual Market Return (1926-2023)[34]



Q44. WHY DO YOU ALSO CONSIDER THE LONG-TERM ARITHMETIC AVERAGE HISTORICAL RETURN ON THE MARKET OF 12.04 PERCENT AS AN ALTERNATE ESTIMATE OF THE EXPECTED MARKET RETURN?

A. My objective is to develop a reasonable estimate of the expected market return over the long term to calculate an expected market risk premium. Because the cost of equity is forward looking, any estimate – whether based on historical or projected data – assumes the estimate reflects investors' expectations into the future. From that perspective, applying the long-run historical arithmetic average market return as an alternate estimate of the expected market return is prospective in nature. The 14.77 percent forward market return is consistent with historically observed market returns (as shown in Figure 11 above) yet is above the long-term arithmetic average market return. Therefore, it may be reasonable to expect that, over the long term, the market return will revert to its long-run historical arithmetic average.

Q45. WITH THE RISK-FREE RATES AND REQUIRED MARKET RETURN ESTIMATES

34 Source: Kroll, 2023 SBBI Yearbook, Appendix A-1, A-7 (years 1926-2022); Cost of Capital Navigator (2023 data).

DESCRIBED ABOVE, HOW DO YOU CALCULATE THE MARKET RISK PREMIUM?

A. I apply two estimates of the risk-free rate and two estimates of the expected market return. Combined, those variables produce four estimates of the market risk premium, ranging from 7.85 percent to 10.70 percent as shown below in Figure 12.

Figure 12: Market Risk Premium Estimates

	Current Risk-Free Rate (4.07%)	Projected Risk-Free Rate (4.19%)
Value Line DCF-based Expected Market Return (14.77%)	10.70%	10.57%
Long-Term Historical Average Market Return (12.04%)	7.97%	7.85%

Q46. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A. As shown in Exhibit JEN-5, the CAPM results range from 11.37 percent to 13.88 percent (*see* Figure 13 below).

Figure 13: Summary of CAPM Results[35]

	Current Risk-Free Rate (4.07%)	Projected Risk-Free Rate (4.19%)
Long-Term Historical Average Market Return	11.37%	11.38%
DCF-Based Expected Market Return	13.87%	13.88%

Q47. DO YOU CONSIDER ANOTHER FORM OF THE CAPM?

A. Yes, I also consider the Empirical CAPM ("ECAPM") approach, which calculates the product of the adjusted Beta coefficient and the Market Risk Premium and applies a weight of 75.00 percent to that result. The model then applies a 25.00 percent weight to the Market Risk Premium, without any effect from the Beta coefficient.[36] The results of the two

35 *See*, Exhibit JEN-5.

36 *See, e.g.*, Roger A. Morin, New Regulatory Finance, at 189-190 (2006).

calculations are summed, along with the risk-free rate, to produce the ECAPM result, as expressed in Equation [5] below:

$$k_e = r_f + 0.75\beta(r_m - r_f) + 0.25(r_m - r_f) \quad [5]$$

where:

k_e = the required market ROE;

β = Adjusted Beta coefficient of an individual security;

r_f = the risk-free rate of return; and

r_m = the required return on the market as a whole.

Q48. WHAT IS THE BENEFIT OF THE ECAPM APPROACH?

A. The ECAPM corrects the tendency of the CAPM to underestimate the cost of equity for companies, such as regulated utilities, with low Beta coefficients, and to overstate the cost of equity for companies with high Beta coefficients. As discussed below, the ECAPM recognizes academic research that indicates that the risk-return relationship is flatter than the relationship estimated by the CAPM, and that the CAPM under-estimates the alpha, or the constant return term.[37]

Numerous tests of the CAPM have measured the extent to which security returns and Beta coefficients are related as predicted by the CAPM. The ECAPM method reflects the finding that the actual SML is not as steeply sloped as the SML predicted by the CAPM formula.[38] Fama and French found that the actual returns on the low Beta coefficient portfolios were higher than the CAPM-predicted returns, and vice versa for the high Beta coefficient portfolios.[39] Similarly, Dr. Morin states:

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

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37 *Id.*, at 191 ("The ECAPM and the use of adjusted betas comprised two separate features of asset pricing. Even if a company's beta is estimated accurately, the CAPM still understates the return for low-beta stocks.").

38 *Id.*, at 175.

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

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

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

where x is a fraction to be determined empirically. The value of x that best explains the observed relationship Return = 0.0829 + 0.0520 β is between 0.25 and 0.30. If x = 0.25, the equation becomes:

$$K = R_F + 0.25(R_M - R_F) + 0.75\,\beta(R_M - R_F)$$[40]

Q49. DOES THE APPLICATION OF ADJUSTED BETA COEFFICIENTS IN THE ECAPM ADDRESS THE EMPIRICAL ISSUES WITH THE CAPM?

A. No, it does not. Beta coefficients are adjusted because of their general regression tendency to converge toward 1.00 over time, *i.e.*, over successive calculations. As also noted earlier, numerous studies have determined that at any given point in time, the actual SML is not as steeply sloped as the SML predicted by the CAPM formula. To that point, Dr. Morin explains:

> Some have argued that the use of the ECAPM is inconsistent with the use of adjusted betas, such as those supplied by Value Line and Bloomberg. This is because the reason for using the ECAPM is to allow for the tendency of betas to regress toward the mean value of 1.00 over time, and, since Value Line betas are already adjusted for such trend, an ECAPM analysis results in double-counting. This argument is erroneous. Fundamentally, the ECAPM is not an adjustment, increase or decrease, in beta. This is obvious from the fact that the expected return on high beta securities is actually lower than that produced by the CAPM estimate. The ECAPM is a formal recognition that the observed risk-return tradeoff is flatter than predicted by the CAPM based on myriad empirical evidence. The ECAPM and the use of adjusted betas comprised two separate features of asset pricing. Even if a company's beta is estimated accurately, the CAPM still understates the return for low-beta stocks. Even if the ECAPM is used, the return for low-

40 Roger A. Morin, New Regulatory Finance, at 175, 190 (2006).

beta securities is understated if the betas are understated. Referring back to Figure 6-1, the ECAPM is a return (vertical axis) adjustment and not a beta (horizontal axis) adjustment. Both adjustments are necessary.[41]

Therefore, it is appropriate to rely on adjusted Beta coefficients in both the CAPM and ECAPM.

Q50. ARE YOU AWARE OF ACADEMIC STUDIES THAT SUPPORT THE USE OF THE ECAPM FOR UTILITIES?

A. Yes, I am. In a 2011 study by Stéphane Chrétien and Frank Coggins, the authors studied the CAPM's ability to estimate the risk premium for the utility industry in particular subgroups of utilities.[42] The study considered the traditional CAPM approach, the Fama-French three-factor model, and a model similar to the ECAPM. In the study, the ECAPM relied on adjusted Beta coefficients similar to *Value Line*'s approach. As Chrétien and Coggins found, the ECAPM significantly outperformed the traditional CAPM model at predicting the observed risk premium for the various utility subgroups.

Q51. WHAT ARE THE RESULTS OF YOUR ECAPM ANALYSES?

A. I apply the same market return, Beta coefficients, and risk-free rates described earlier to the ECAPM formula shown in Equation [5] above. The results of my ECAPM analyses are shown on Exhibit JEN-5 and summarized in Figure 14 below.

Figure 14: Summary of ECAPM Results[43]

	Current Risk-Free Rate (4.07%)	**Projected Risk-Free Rate (4.19%)**
Long-Term Historical Average Market Return	11.54%	11.55%
DCF-Based Expected Market Return	14.09%	14.10%

41 *Ibid.*, at 191.

42 Stéphane Chrétien and Frank Coggins, *Cost of Equity for Energy Utilities: Beyond The CAPM*, Energy Studies Review, Vol. 18, No. 2 (2011).

43 *See*, Exhibit JEN-5.

4. Bond Yield Plus Risk Premium Approach

Q52. PLEASE DESCRIBE THE BOND YIELD PLUS RISK PREMIUM APPROACH.

A. The Bond Yield Plus Risk Premium approach is based on the basic financial principle of risk and return, which states that equity investors require a premium over the return required as a bondholder to compensate for the residual risk associated with equity ownership. Risk Premium approaches, therefore, estimate the cost of equity as the sum of the equity risk premium and the yield on a particular class of bonds.

Q53. PLEASE EXPLAIN HOW YOU PERFORM YOUR BOND YIELD PLUS RISK PREMIUM ANALYSIS.

A. I first define the equity risk premium as the difference between the authorized ROE and the then-prevailing level of long-term (*i.e.*, 30-year) Treasury yield, using the authorized ROE for 1,799 electric utility rate proceedings between January 1, 1980 and September 30, 2024. To reflect the prevailing level of bond yields during the pendency of the proceedings, I calculate the average 30-year Treasury yield over the average period between the filing of the rate case and the date of the final order (approximately 200 days).

Because the data spans several economic cycles over more than four decades, the analysis incorporates changes in the equity risk premium over time. Prior research, for example, has shown that the equity risk premium is inversely related to the level of bond yields.[44]

Q54. HOW DO YOU ANALYZE THE RELATIONSHIP BETWEEN BOND YIELDS AND THE EQUITY RISK PREMIUM?

A. I estimate the relationship between bond yields and the equity risk premium by applying regression analysis, in which the observed equity risk premium described above is the

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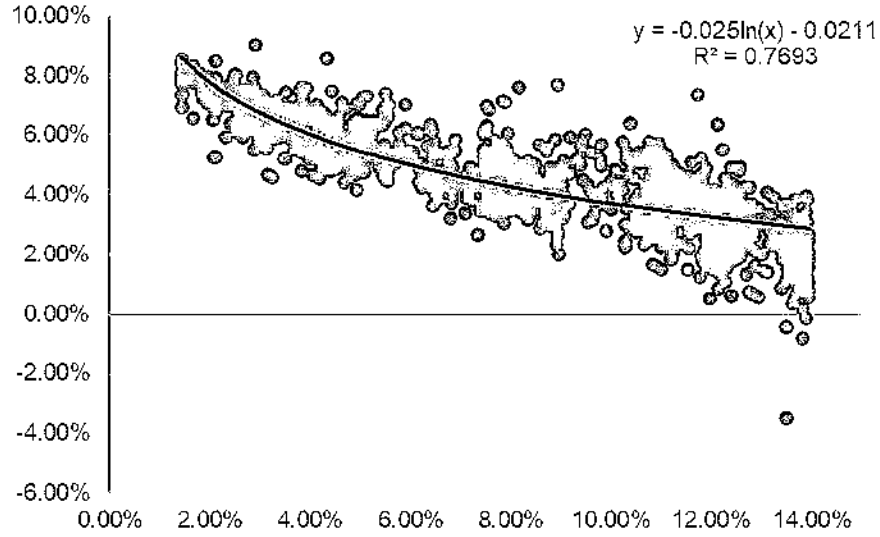
44 In other words, declines in the 30-year Treasury yield are related to an increase in the Equity Risk Premium and vice versa. *See, for example,* Robert S. Harris and Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management, (Summer 1992), at 63-70; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, Financial Management, (Spring 1985), at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, *An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry*, Financial Management, (Autumn 1995), at 89-95.

dependent variable, and the 30-year Treasury yield is the independent variable. To account for the variability in bond yields and authorized ROEs over several decades, I used the semi-log regression, in which the equity risk premium is expressed as a function of the natural log of the 30-year Treasury yield:

$$RP = \alpha + \beta\,(\mathrm{LN}(I_{30})) \quad [6]$$

Figure 15: Equity Risk Premium[45]



As Figure 15 illustrates, the equity risk premium increases as interest rates fall. The finding that the equity risk premium and interest rates are inversely related is supported by published research. For example, Dr. Roger Morin cites several studies and concludes that, "beginning in 1980, risk premiums varied inversely with the level of interest rates – rising when rates fell and declining when interest rates rose."[46] Applying the regression coefficients in Figure 15 produces ROE estimates of 10.05 percent to 10.10 percent (*see* also Exhibit JEN-6).

45 *See*, Exhibit JEN-6.

46 Roger A. Morin, Ph.D., New Regulatory Finance, Public Utilities Reports, Inc., at 128 (2006).

Figure 16: Summary of Bond Yield Plus Risk Premium Results[47]

	30-Year Treasury Bond	Risk Premium	Return on Equity
Current 30-Year Treasury	4.07%	5.98%	10.05%
Projected 30-Year Treasury	4.19%	5.90%	10.10%

IV. BUSINESS RISKS AND OTHER CONSIDERATIONS

Q55. ARE THERE FACTORS SPECIFIC TO EPE'S OPERATING ENVIRONMENT THAT YOU CONSIDERED IN YOUR ROE RECOMMENDATION?

A. Yes, there are several additional factors that have a direct bearing on EPE's ability to earn a fair return and on the Company's riskiness relative to the proxy group, including (1) the regulatory environment and the Company's need to access the capital necessary to execute its capital expenditure plan; (2) the Company's nuclear generation operations; and (3) the Company's small size relative to the proxy group. Those factors, which are discussed below, should be considered in terms of their overall effect on EPE's business risk and, therefore, its cost of equity.

A. Planned Capital Expenditures, Regulatory Environment, and Capital Access

Q56. DO YOU HAVE ANY PRELIMINARY THOUGHTS ON THE IMPORTANCE OF ACCESS TO CAPITAL FOR ELECTRIC UTILITIES SUCH AS EPE?

A. Yes, I do. As a capital-intensive enterprise, the allowed ROE should enable EPE to finance capital expenditures and working capital requirements at reasonable rates and to maintain its financial integrity in a variety of economic and capital market conditions. As discussed throughout my Direct Testimony, a return that is adequate to attract capital at reasonable terms enables the utility to provide customers with safe, reliable service while maintaining its financial soundness. This is especially important during periods in which a large capital expenditure program is planned.

Electric utilities are one of the most capital-intensive sectors. On average, electric utilities generate less than one-third as much revenue per dollar of assets as the non-utility

47 *See*, Exhibit JEN-6.

U.S. companies covered by *Value Line*.[48] To fund the significant capital expenditures needed to maintain, expand, and modernize existing infrastructure, electric utilities require sufficient internally generated cash flow and ongoing access to investor supplied capital, as further discussed in Company witness Ellen Lapson's testimony.[49] Because electric utilities are often cash flow negative (*i.e.*, cash spent on plant is often more than cash flow received from operations), it is critical that regulation enable timely cost recovery and provide predictable, adequate, and achievable allowed returns that support the financial integrity of the utility.

Q57. PLEASE BRIEFLY SUMMARIZE THE COMPANY'S CAPITAL INVESTMENT PLANS.

A. As discussed in the direct testimony of Richard Gonzalez, the Company projects approximately $4.40 billion in planned capital expenditures over the 2025 to 2029 timeframe. Compared to the capital expenditure budget presented in EPE's 2021 rate case, the total capital expenditure expectations for the forward-looking five-year period have increased by approximately 170 percent.[50] Because the Company will continue to make substantial investments in its utility operations, it will require efficient access to capital markets during the period that rates established in this proceeding will be in effect.

The Company's capital investments are critical to the continued buildout of infrastructure and electric distribution in the Western Electricity Coordinating Council (WECC) region. In its 2024 Western Assessment of Resource Adequacy report ("Western Assessment"), WECC notes that the annual demand for the region is forecasted to grow 20.4 percent, from 942 terawatt hours ("TWh") in 2025 to 1,134 TWh in 2034.[51] The expected growth is more than double the 9.6 percent growth forecast in resource plans in 2022, and over four times the growth rate between 2013 and 2022.[52] This large growth in

48 Source: *Value Line*.

49 *See*, Direct Testimony of Ellen Lapson, CFA.

50 *Application of El Paso Electric Company to Change Rates*, Docket No. 52195, Direct Testimony of Lisa D. Budtke, at 2.

51 Western Assessment of Resource Adequacy Report, https://feature.wecc.org/wara/

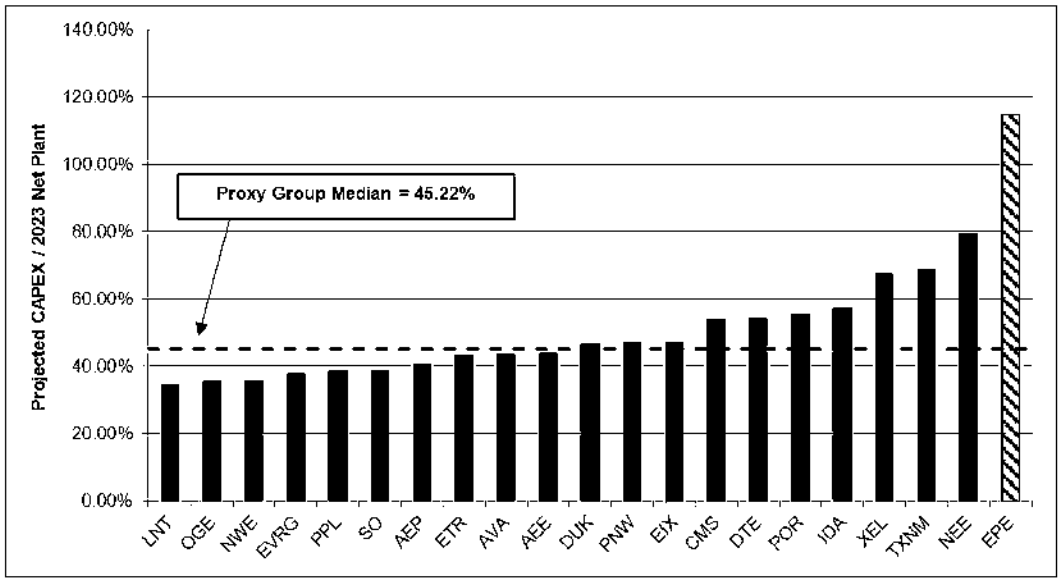
52 *Ibid.*

demand, driven primarily by data centers, manufacturing facilities, and cryptocurrency mining operations, will create challenges for building out unprecedent amounts of new resources over the next decade, with the effects of large-load growth the greatest in the next three to five years.[53]

Q58. HOW DOES EPE'S CAPITAL SPENDING PROGRAM COMPARE TO THOSE OF THE PROXY COMPANIES?

A. To assess the magnitude of EPE's planned capital investment program, I compared its ratio of projected capital expenditures to net utility plant to the ratios for the proxy companies. Figure 17 below shows that EPE's planned capital expenditures as a percentage of net plant is higher than all the proxy companies even though the proxy companies are significantly larger companies with more resources. EPE's ratio of projected capital expenditures to net utility plant of 114.93 percent is 2.54 times higher than the median ratio for the proxy group of 45.22 percent.

Figure 17: Ratio of Planned Capital Expenditures (2025-2029) to 2023 Net Utility Plant[54]



53 *Ibid.*

54 *See*, Exhibit JEN-7.

Q59. HOW DO THE COMPANY'S CAPITAL EXPENDITURE REQUIREMENTS AFFECT ITS RISK PROFILE?

A. As with any utility facing substantial capital expenditure requirements, the Company's risk profile is affected in two significant and related ways: (1) the heightened level of investment increases the risk of under recovery or delayed recovery of the invested capital; and (2) an inadequate return would put downward pressure on key credit metrics due to both the reduction in cash flow and an increase in debt to fund its expenditures.

Q60. DO CREDIT RATING AGENCIES RECOGNIZE RISK ASSOCIATED WITH INCREASED CAPITAL EXPENDITURES?

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

> When applicable, a jurisdiction's willingness to support large capital projects with cash during construction is an important aspect of our analysis. This is especially true when the project represents a major addition to rate base and entails long lead times and technological risks that make it susceptible to construction delays. Broad support for all capital spending is the most credit-sustaining. Support for only specific types of capital spending, such as specific environmental projects or system integrity plans, is less so, but still favorable for creditors. Allowance of a cash return on construction work-in-progress or similar ratemaking methods historically were extraordinary measures for use in unusual circumstances, but when construction costs are rising, cash flow support could be crucial to maintain credit quality through the spending program. Even more favorable are those jurisdictions that present an opportunity for a higher return on capital projects as an incentive to investors.[55]

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55 S&P Ratings Direct, Industry Economic and Ratings Outlook: U.S. Regulated Utilities Will Likely Stay On A Stable Trajectory For The Rest Of 2012 And Into 2013, at 6 (July 17, 2012).

Moody's also notes that growing power demand, the need to improve grid resilience, and advancing efforts to reduce carbon emissions is increasing capital expenditure pressure for utilities, widening cash flow deficits and weakening their financial strength:

> Credit pressure is emerging most acutely for companies with large, complete or multiyear projects or for those that are experiencing a delay in the recovery of investment costs. Unlike exogenous events of recent year – such as severe storms, commodity price spikes and the COVID-19 pandemic, which we viewed as temporary events – capital spending and related financings are core long-term financial policy issues.[56]

To the extent that the regulatory environment does not enable timely and sufficient cost recovery of its full cost of doing business, including capital costs, the Company will face increased pressure on its credit metrics thus raising the cost of both debt and equity. Maintaining access to capital markets on favorable terms is especially important for utilities and their customers during periods of significant capital investment. In 2020, Texas passed the generation cost recovery rider (the GCRR), allowing the Company to recover its investments into generation.[57] The GCRR, coupled with the existing distribution and transmission riders allow EPE to partially offset the regulatory lag in the recovery of its investment capital.58 Capital recovery mechanisms are viewed positively by investors. However, maintaining the ability to access to capital markets on favorable terms, in the form of financial integrity (i.e., capital structure and return on equity) is especially important for utilities and their customers during periods of significant capital investment.

Q61. HOW DOES THE REGULATORY ENVIRONMENT IN WHICH A UTILITY OPERATES AFFECT ITS COST OF CAPITAL?

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56 Moody's Ratings, "High capital spending will weigh on credit quality without supportive company actions," October 21, 2024.

57 16 Tex. Admin. Code (TAC) § 25.248, Adopted by Texas Register, Volume 45, No. 30, July 24, 2020, TexReg 5156, effective July 28, 2020.

58 Fitch Ratings, El Paso Electric Company, May 2, 2024.

A. The regulatory environment is one of the most important factors investors consider when assessing a utility's risk, as it is a significant driver of earnings and cash flow that are of utmost importance to investors.[59] Investors and rating agencies understand that a constructive regulatory environment is critical to utilities' credit and financial integrity, especially during stressed market conditions. In fact, 50 percent of the factors that weigh in Moody's ratings determinations relate to the nature of regulation. Predictability and consistency of regulatory actions are among the factors considered by Moody's in assessing the regulatory framework:

> As the revenues set by the regulator are a primary component of a utility's cash flow, the utility's ability to obtain predictable and supportive treatment within its regulatory framework is one of the most significant factors in assessing a utility's credit quality.
>
> ***
>
> In situations where the regulatory framework is less supportive, or is more contentious, a utility's credit quality can deteriorate rapidly.[60]

Similarly, S&P observes that the regulatory environment in the jurisdictions where a utility operates is a "significant aspect of regulatory risk that influences credit quality".[61] S&P explains:

> [w]hen we evaluate U.S utility regulatory environments, we consider financial stability to be of substantial importance. Cash takes precedence in credit analysis. A regulatory jurisdiction that recognizes the significance of cash flow in its decision-making is one that will appeal to creditors.[62]

Consequently, a utility that operates in a less predictable and more challenging regulatory environment is likely to be viewed as a riskier investment, and may result in

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59 Moody's Investors Service, Rating Methodology, Regulated Electric and Gas Utilities, at 4 (June 23, 2017).

60 Moody's Investors Service, Regulatory Frameworks – Ratings and Credit Quality for Investor-Owned Utilities, at 2 (June 18, 2010).

61 S&P Global Ratings, RatingsDirect, *Assessing U.S. Investor-Owned Utility Regulatory Environments,* at 2 (August 10, 2016).

62 S&P Global Ratings, RatingsDirect, *Assessing U.S. Investor-Owned Utility Regulatory Environments,* at 6 (August 10, 2016).

lower credit ratings, constrained access to capital (particularly in volatile and adverse market environments), and higher costs of both debt and equity, all else equal. To meet the obligation to serve, it is in customers' best interests to ensure that a utility has efficient access to capital on reasonable terms in all market environments.

Q62. HOW DO THE CREDIT RATING AGENCIES VIEW THE REGULATORY ENVIRONMENTS IN WHICH THE COMPANY OPERATES?

A. Fitch has commented on the Company's challenging regulatory environment, noting that "utilities in Texas and New Mexico have historically received authorized returns on equity that are slightly lower than the nationwide average."[63] Furthermore, the ratings agency has noted that the use of the historical test year has created additional regulatory lag that has made it difficult for the Company to earn its authorized ROE.[64]

In its recent credit rating affirmation release, Moody's commented that EPE's Baa2 credit rating is predicated on the expectation of continued timely recovery of capital investments and a continued credit supportive regulatory environment in Texas.[65] If the regulatory environment in Texas were to become more contentious and less predictable and constructive, it would increase EPE's regulatory risk and create downward pressure on its credit ratings.[66]

Q63. HAVE YOU COMPARED EPE'S REGULATORY RISK RELATIVE TO THE ELECTRIC UTILITIES WITHIN THE PROXY GROUP?

A. Yes, I have. The regulatory environment significantly affects both the access to and the cost of capital. Regulatory decisions regarding the authorized ROE and capital structure directly affect the subject utility's internal cash flow generation, and therefore the financial metrics reviewed by ratings agencies in their ratings assessments. Because credit ratings are intended to reflect the ability to meet financial obligations as they come due, the ability

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63 FitchRatings, El Paso Electric Company, May 2, 2024.

64 *Ibid.*

65 Moody's Ratings, "Rating Action: Moody's Ratings affirms El Paso Electric Ratings, outlook stable," June 11, 2024.

66 *Ibid.*

to generate the cash flows required to meet those obligations (and to provide a cushion for unexpected events) is of critical importance to both debt and equity investors.

To assess the regulatory environment of the proxy companies and EPE, I reviewed the key cost recovery mechanisms and ratemaking frameworks for each of the electric operating companies within the proxy group in the jurisdictions in which they operate, including the cost recovery and volumetric risk mitigation mechanisms in place, test year, and rate base methodology.

As shown in Exhibit JEN-9, like EPE, all the proxy group operating companies with retail supply obligation have a fuel and/or purchased power cost recovery mechanism, 86 percent have a mechanism to recover energy efficiency program costs, and 65 percent have a capital cost recovery mechanism. However, unlike 62 percent of the proxy group, EPE does not have a mechanism to mitigate volumetric risk, such as revenue decoupling or a lost revenue adjustment mechanism for its energy efficiency programs. Further, 52 percent of the proxy companies are able to use a full or partial forecast test year, whereas the Commission uses a historical test year. Lastly, Regulatory Research Associates ("RRA") ranks the Commission as "Below Average/1"[67] and views Texas' regulatory climate as "somewhat more restrictive than average from an investor viewpoint."[68]

On balance, from an investor perspective, the regulatory mechanisms available to the Company do not offer any level of risk mitigation that is meaningfully different from the proxy companies. Furthermore, these regulatory mechanisms are only as effective as their implementation, including a compensatory return. It is in customers' best interest that the regulatory environment in Texas be viewed as predictable, balanced, and supportive of utility investment.

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67 RRA maintains three principal rating categories for regulatory climates: Above Average, Average, and Below Average. Within the principal rating categories, the numbers 1, 2, and 3 indicate relative position. The designation 1 indicates a stronger rating; 2, a mid-range rating; and, 3, a weaker rating. The evaluations are assigned from an investor perspective and indicate the relative regulatory risk associated with the ownership of securities issued by the jurisdiction's utilities. RRA endeavors to maintain an approximately equal number of ratings above the average and below the average.

68 Regulatory Research Associates, Commission Profiles, Public Utility Commission of Texas, accessed December 18, 2024.

Q64. DO THE COMPANY'S REGULATORY MECHANISMS REDUCE ITS RISK?

A. No, they do not. The Company employs cost recovery mechanisms similar to those used by the proxy group; as such, its risk relative to the proxy group is not reduced as a result of its rate structures. Further, because the proxy companies all have similar mechanisms, any effects on the cost of equity associated with the rate mechanisms are captured in the analytical model results.

It is important to remember that risk assessment is a comparative exercise. Rate adjustment mechanisms are common in the industry and the financial community is fully aware of their prevalence. In fact, rate adjustment mechanisms have become more common in the industry, not less. As noted earlier, the proxy companies all have similar mechanisms available to them. While the specific details of the mechanics of the rate adjustment mechanisms may differ from utility to utility and jurisdiction to jurisdiction, their objective is the same: To improve the timeliness of cost recovery and mitigate (but not necessarily eliminate) earnings erosion associated with regulatory lag. Because the proxy companies all have mechanisms that improve the timeliness of cost recovery, the Company's regulatory mechanisms simply render it more comparable to its peers.

Q65. WHAT ARE YOUR CONCLUSIONS REGARDING THE COMPANY'S CAPITAL EXPENDITURE PLANS, ITS NEED TO MAINTAIN ACCESS TO CAPITAL, AND THE REGULATORY ENVIRONMENT ON THE COMPANY'S RISK PROFILE?

A. The Company's capital expenditure program is substantial and places increased pressure on its cash flows, making regulatory support critical to EPE's ability to finance and earn a reasonable return on its planned utility investments. The Company's capital expenditure plan emphasizes the importance of the Commission's decision in this proceeding, which will have a direct bearing on the Company's ability to maintain its financial profile and its access to the capital market at reasonable costs and terms.

The Company will need to rely on external sources for funding critical investments to expand and enhance its assets to support the growing demand in the WECC region. As further discussed in the testimonies of Ellen Lapson and Richard Gonzalez, the Company's

ability to efficiently access the capital markets at favorable terms will depend on the strength of its balance sheet and financial integrity.[69]

B. Nuclear Generation Operations

Q66. DOES THE COMPANY'S GENERATION PORTFOLIO INCLUDE NUCLEAR GENERATING ASSETS?

A. Yes. EPE's generation portfolio includes 665 megawatts ("MW") of owned nuclear generating capacity in its Palo Verde facility.[70] On a net generation basis, output from Palo Verde represented approximately 48.26 percent of EPE's total generation in 2023. As shown earlier in Figure 7 above, compared to the Proxy Group, EPE had the highest percentage of net generation from nuclear plants in 2023, more than 2.8 the average of the proxy group.[71]

Q67. PLEASE DESCRIBE THE RISKS ASSOCIATED WITH THE OWNERSHIP OF NUCLEAR GENERATING RESOURCES.

A. Nuclear generating resources are regulated by the U.S. Nuclear Regulatory Commission ("NRC"). As such, EPE is subject to NRC mandates to meet licensing and safety related standards that may require increased capital spending and incremental operating costs.

Additionally, increased oversight and regulatory requirements were put in place following the March 11, 2011 earthquake and tsunami, which caused significant damage to the Fukushima Daiichi nuclear complex and threatened the public health. After the Fukushima accident, the NRC assembled a task force to assess current regulations and determine if new measures were required to ensure safety. The task force issued a report in July 2011 that included a set of recommendations for NRC consideration. Those recommendations continue to be modified and expanded by the NRC staff, and the first related regulatory requirements were issued in March 2012 with implementation guidance

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69 *See*, Direct Testimony of Ellen Lapson and Direct Testimony of Richard Gonzalez.

70 Source: S&P Capital IQ. Nameplate capacity.

71 Source: S&P Capital IQ. As shown earlier in Figure 7, the proxy group average percentage of nuclear net generation in megawatt-hours ("MWh") was 17.12 percent. The average percentage of nuclear generation in 2023 for only the proxy companies that have nuclear generation was 28.53 percent, significantly less than EPE.

issued on August 30, 2012.[72] The evolving nature of these requirements from the NRC put nuclear operators at risk of incurring costly future capital expenditures.

Another example of nuclear risk is the ongoing and long-term uncertainty with regard to nuclear waste disposal. On June 8, 2012, the U.S. Court of Appeals vacated the NRC's rulemaking regarding storage and permanent disposal of nuclear waste. The Court of Appeals found the NRC rulemaking was deficient in that: (1) it "did not calculate the environmental effects of failing to secure permanent storage," and (2) "in determining that spent fuel can safely be stored on site at nuclear plants for sixty years after the expiration of a plant's license, the [NRC] failed to properly examine future dangers and key consequences."[73] Nuclear operators therefore face future capital expenditures related to expansion of nuclear waste storage, and may face additional costs to meet safety standards that may be required when the NRC addresses the Court of Appeal's ruling. To the extent further mandates are promulgated by the NRC, additional spending may be required. Absent full and timely recovery, increases in the Company's capital investment requirements will place additional pressure on its free cash flow and credit metrics.

Q68. HOW DOES THE INVESTMENT COMMUNITY PERCEIVE THE RISK ASSOCIATED WITH NUCLEAR GENERATION ASSETS?

A. Both equity analysts and credit rating agencies recognize that utilities with nuclear generation face operating, compliance, and safety risks. As Company witness Ellen Lapson explains, some major bond funds and investment managers consider exposure to nuclear generation to be a concentrated risk factor and avoid ownership of the bonds of utilities with nuclear exposure,[74] which limits the pool of potential investors from which EPE can raise capital.

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72 *See*, www.nrc.gov/reactors/operating/ops-experience/japan-info.html.

73 U.S. Court of Appeals For the District of Columbia Circuit, *On Petitions for Review of Orders of the Nuclear Regulatory Commission*, Case No. 11-1045, Decided June 8, 2012, at 3.

74 Direct Testimony of Ellen Lapson, at 20.

Additionally, the credit rating agencies also consider the risk of nuclear generation in their ratings analysis. For example, S&P Global Ratings discussed the following risks and challenges for nuclear operators:

> Nuclear energy has faced mounting criticism over security concerns, especially in the aftermath of the Fukushima disaster on March 11, 2011. Nuclear operators face unique risks of low-probability, but high-impact catastrophic events. As a consequence, operators face increasing political and social pressures on safety, waste disposal, and storage. While profitability remains a key pillar of our business risk assessment of nuclear operators, we equally take these other risks into account. Furthermore, nuclear-related long-term liabilities typically represent a large portion of nuclear operators' overall S&P-adjusted debt.[75]

C. Small Size Effect

Q69. PLEASE EXPLAIN THE RISK ASSOCIATED WITH SMALL SIZE.

A. Both the financial and academic communities have long accepted the proposition that the cost of equity for small firms is subject to a "size effect."[76] Although empirical evidence of the size effect is often based on studies of industries beyond regulated utilities, utility analysts also have noted the risks associated with small market capitalizations. Specifically, a senior consultant with Ibbotson Associates noted:

> For small utilities, investors face additional obstacles, such as a smaller customer base, limited financial resources, and a lack of diversification across customers, energy sources, and geography. These obstacles imply a higher investor return.[77]

Small size, therefore, leads to two categories of increased risk for investors: (1) liquidity risk (*i.e.*, the risk of not being able to sell one's shares in a timely manner due to the

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75 S&P Global Ratings, "The Energy Transition: Nuclear Dead And Alive," November 11, 2019, at 10.

76 *See*, Mario Levis, *The Record on Small Companies: A Review of the Evidence*, Journal of Asset Management at 368-397 (Mar. 2002) for a review of literature relating to the size effect.

77 Michael Annin, *Equity and the Small-Stock Effect*, Public Utilities Fortnightly (Oct. 15, 1995).

relatively thin market for the securities); and (2) fundamental business risks. As discussed below, relative to the proxy group, EPE's operations are both smaller in size and less diversified.

Q70. HOW DOES THE SMALLER SIZE OF EPE AFFECT ITS BUSINESS RISKS RELATIVE TO THE PROXY GROUP?

A. It is important to bear in mind that my ROE recommendation for EPE is developed based on market data applied to a risk-comparable proxy group. Consequently, an evaluation of the Company's risk associated with its small size is necessarily based on a comparison of its size relative to the proxy group. The Company's smaller size relative to the proxy group companies indicates greater relative business risk for the Company because, all else equal, size has a material bearing on risk.

In general, smaller companies are less able to withstand adverse events that affect their revenues and expenses. Any material changes to expected operations and maintenance expenses can have severe consequences on a company's level of operating leverage. Similarly, capital expenditures for non-revenue producing investments such as system maintenance and replacements will put proportionately greater pressure on customer costs, potentially leading to demand reduction. Taken together, these risks affect the return required by investors for smaller companies. As a significantly smaller company, unpredictable and adverse events may affect EPE's revenues or expenses more acutely. It is important that the Company has the financial strength to withstand such events with a margin of safety.

Q71. IS THERE SUPPORT IN THE FINANCIAL COMMUNITY FOR THE USE OF A SMALL SIZE PREMIUM?

A. Yes, there have been several studies that demonstrate the size premium. One of the earliest works in this area found that over a period of 40 years "the common stock of small firms had, on average, higher risk-adjusted returns than the common stock of large firms."[78] The

78 R. W. Banz, The Relationship Between Return and Market Value of Common Stocks, Journal of Financial Economics, 9, 1981 at 3-4.

author, who referred to that finding as the "size effect," suggested that the CAPM was mis-specified, in that on average, smaller firms had significantly larger risk-adjusted returns than larger firms. The author also concluded that the size effect was "most pronounced for the smallest firms in the sample."[79] Since then, additional empirical research has focused on explaining the size effect as a function of lower trading volume and other factors, but the proposition that Beta coefficients fail to reflect the risks of smaller firms persists.[80]

In 1994, Fama and French also focused on the issue of whether the CAPM adequately explained security returns and proposed a "three factor" model for expected security returns. Those factors include: (1) the covariance with the market, (2) size, and (3) financial risk as determined by the book/market ratio. As explained by Morningstar, Fama and French "found that the returns on stocks are better explained as a function of size and book-to-market value in addition to the single market factor of the CAPM, with the company's size capturing the size effect and its book-to-market ratio capturing the financial distress of a firm."[81]

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

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

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79 *Ibid.* at 16.

80 *See*, for example, Mario Levis, *The record on small companies: A review of the evidence*, Journal of Asset Management, March 2002.

81 Morningstar, Ibbotson SBBI 2013 Valuation Yearbook, at 109.

returns tend to increase, and vice versa. (footnote omitted) (emphasis in original)[82]

Q72. ARE YOU AWARE OF OTHER STUDIES REGARDING THE EXISTENCE OF SIZE PREMIUM FOR REGULATED UTILITIES?

A. Yes. A 2002 study by Thomas M. Zepp[83] concludes that size premia do exist for smaller utilities. Developed in response to a 1993 study by Annie Wong, the Zepp study focuses specifically on the utility industry and the effect of the size premium in a regulated environment. For example, one study reviewed by Zepp found that smaller water utilities had a cost of equity that, on average, was 99 basis points higher than the average cost of equity for the larger water utilities, and the result was statistically significant at the 90.00 percent level.[84] Zepp concludes that "to the extent water utilities are representative of all utilities, there is support for smaller utilities being more risky than larger ones."[85]

Additionally, a 2011 study by Stéphane Chrétien and Frank Coggins in the article "Cost of Equity for Energy Utilities: Beyond the CAPM",[86] considered the Fama-French three-factor model and a model similar to the Empirical CAPM I described earlier. In the article, the Fama-French three-factor model explicitly included an adjustment to the CAPM for risk associated with size. As Chrétien and Coggins show, the Beta coefficient on the size variable for a group of U.S. natural gas utilities was positive and statistically significant supporting the position that small size risk is relevant for regulated utilities.[87]

Q73. IS IT APPROPRIATE TO CONSIDER THE RISK ASSOCIATED WITH EPE'S SMALL

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82 Duff & Phelps Valuation Handbook – U.S. Guide to Cost of Capital, Wiley 2020, at 4-1.

83 Thomas M. Zepp, Utility stocks and the size effect – revisited, Quarterly Review of Economics and Finance, 43 (2003) 578-582.

84 Thomas M. Zepp, *Utility stocks and the size effect revisited*, The Quarterly Review of Economics and Finance, 43 (2003), at 580-581.

85 Thomas M. Zepp, *Utility stocks and the size effect – revisited*, The Quarterly Review of Economics and Finance, 43 (2003), at 582.

86 Chrétien, Stéphane, and Frank Coggins. *Cost Of Equity For Energy Utilities: Beyond The CAPM*. Energy Studies Review, vol. 18, no. 2, at 31.

87 Chrétien, Stéphane, and Frank Coggins. *Cost Of Equity For Energy Utilities: Beyond The CAPM*. Energy Studies Review, vol. 18, no. 2, at 31.

SIZE EVEN THOUGH IT IS A SUBSIDIARY OF LARGER ENTITIES?

A. Yes. The widely accepted "stand-alone" regulatory principle treats each utility subsidiary as its own company. Parent entities (whether publicly or privately owned) like other investors, have capital constraints and must look at the attractiveness of the expected risk-adjusted return of each investment alternative in their capital budgeting process. The opportunity cost concept applies regardless of the source of the funding. When funding is provided by a parent entity, the return still must be sufficient to provide an incentive to allocate equity capital to the subsidiary or business unit rather than other internal or external investment opportunities. That is, the regulated subsidiary competes for capital with the parent company's affiliates, and with other similarly situated utility companies. In that regard, investors value corporate entities on a sum-of-the-parts basis and expect each division within the parent company to provide an appropriate risk-adjusted return. It therefore is important that the authorized ROE reflects the risks and prospects of the utility's operations and supports the utility's financial integrity from a stand-alone perspective. From that perspective, the fact that EPE is a subsidiary of Sun Jupiter LLC is not relevant to the consideration of the risk associated with EPE's small size.

Q74. HOW DOES EPE COMPARE IN SIZE TO THE PROXY COMPANIES?

A. EPE is substantially smaller than the average of the proxy companies in terms of market capitalization, net utility plant, and number of electric customers (see Figure 7 above). As Exhibit JEN-8 shows, EPE's Texas-only jurisdictional-implied market capitalization is $2,841 million (or 13.22 percent of the proxy group median market capitalization).[88] On a total company basis including both EPE's Texas and New Mexico operations, the implied market capitalization is $3,580 million, or 16.66 percent of the proxy group median.[89]

Q75. HOW DID YOU ESTIMATE THE SIZE PREMIUM FOR EPE?

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88 The implied market capitalization is calculated by applying the median Market/Book ratio for the proxy group of 1.84 to EPE's Texas-jurisdictional implied total common equity of $1,449 million. EPE's Texas-jurisdictional implied common equity is estimated from the approximate value of its Texas-jurisdictional rate base and requested equity ratio. *See*, Exhibit JEN-8, page 1.

89 *See* Exhibit JEN-8, page 2.

A. In its *Cost of Capital Navigator*, Kroll presents its calculation of the size premium for deciles of market capitalizations relative to the S&P 500 Index. An additional estimate of the size premium associated with EPE, therefore, is the difference in the Kroll size risk premia for the proxy group median market capitalization relative to the Company's implied market capitalization.

As shown in Exhibit JEN-8, according to recent market data, the median market capitalization of the proxy group is $21,485 million, which corresponds to the second decile of Kroll's market capitalization data. Based on Kroll's analysis, that decile corresponds to a size premium of 0.46 percent (or 46 basis points). As noted above, EPE's Texas-only implied market capitalization is $2,841 million, which falls within the sixth decile and corresponds to a size premium of 1.21 percent (or 121 basis points). The difference between those size premia is 75 basis points (1.21 percent – 0.46 percent).[90]

I also performed the same analysis for EPE on a *total* company basis. The implied market capitalization for EPE's total company operations is approximately $3,580 million, which falls within the fifth decile and corresponds to a size premium of 0.95 percent (or 95 basis points). The difference between the second and fifth decile size premia is 49 basis points (0.95 percent – 0.46 percent).[91]

Q76. HAVE YOU CONSIDERED THE COMPARATIVELY SMALL SIZE OF EPE IN YOUR ESTIMATED RETURN ON COMMON EQUITY?

A. Yes. While I have quantified the small size effect, rather than proposing an explicit premium, I have considered the Company's small size in my assessment of business risks in determining the reasonableness of EPE's capital structure and my recommended ROE range.

D. Summary of Business Risks and Other Considerations

Q77. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE BUSINESS RISKS FACING EPE.

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90 Exhibit JEN-8, page 1.

91 Exhibit JEN-8, page 2.

A. In my opinion, there are additional factors that must be taken into consideration when determining EPE's cost of equity. These factors include (1) the relationship between the regulatory environment and the Company's need to access external capital necessary to execute its capital expenditure plan; (2) the Company's nuclear generation operations; and (3) its significantly smaller size.

The regulatory environment is one of the most important issues considered by both debt and equity investors in assessing the risks and prospects of utility companies. From the perspective of debt and equity investors, the authorized return should enable the Company to (1) generate the cash flow needed to meet its near-term financial obligations; (2) make the capital investments needed to maintain and expand its system; (3) maintain sufficient levels of liquidity to fund unexpected events; and (4) sustain confidence in Texas's regulatory environment among credit rating agencies and investors. In light of those risks and considering the current capital market environment and the Company's requested capital structure, an ROE of 10.70 percent, which is the midpoint of my range of 9.90 percent to 11.50 percent, is reasonable.

V. CAPITAL STRUCTURE

Q78. WHAT IS EPE'S REQUESTED CAPITAL STRUCTURE?

A. As explained in the direct testimony of Richard Gonzalez and Ellen Lapson, EPE requests its actual capital structure (adjusted for a dividend payment that was paid in October 2024) consisting of 56.40 percent common equity and 43.60 percent long-term debt.[92]

Q79. HOW DOES THE CAPITAL STRUCTURE AFFECT THE COST OF EQUITY?

A. A company's total risk consists of business risk and financial risk. Business risk includes operating, market, regulatory, and competitive uncertainties, whereas financial risk is the incremental risk associated with greater debt. As the percentage of debt in the capital structure increases, so do the fixed obligations for the repayment of that debt and the risk of financial distress. Therefore, the capital structure reflects the financial risk that a company may not have adequate cash flows to meet its financial obligations.

92 *See*, Direct Testimony of Ellen Lapson, Table EL-6.

Q80. PLEASE SUMMARIZE THE APPROACHES TO DETERMINING THE APPROPRIATE CAPITAL STRUCTURE FOR REGULATED UTILITIES.

A. There are two primary approaches regulators use to determine the appropriate capital structure for ratemaking purposes. The most common approach is to use the subject utility's actual capital structure. This approach is preferred when the subject utility (1) issues its own debt, (2) has its own credit rating, and (3) its actual capital structure is within industry standards and practice. When the subject utility does not issue its own debt and have its own credit rating, or when the actual capital structure deviates substantially from industry practice, a hypothetical capital structure may be imputed.

Q81. DOES EPE ISSUE ITS OWN DEBT AND HAVE ITS OWN CREDIT RATING?

A. Yes.

Q82. HOW DID YOU ASSESS THE REASONABLENESS OF EPE'S RECOMMENDED CAPITAL STRUCTURE WITH RESPECT TO THE PROXY GROUP?

A. In general, it is important to assess the capital structure relative to industry practice and investor requirements. Although an individual utility's financing requirements are unique, utilities adhere to common financing practices and principles due to the similar nature of the assets being financed. As such, the capital structure should be reasonably consistent with industry practice and support the subject utility's financial integrity, thereby enabling access to capital at competitive rates under a variety of economic and financial market conditions. To the extent a utility's actual capital structure deviates substantially from industry standards, the difference in financial risk should be considered when estimating its required ROE.

Q83. PLEASE DESCRIBE YOUR ANALYSIS OF THE CAPITAL STRUCTURES OF THE PROXY GROUP COMPANIES.

A. As a measure of industry practice, I calculated the capital structure for each of the electric utility operating companies held by the proxy companies over the last eight fiscal quarters. As shown in Exhibit JEN-10, the common equity ratios of the proxy group range from

43.22 percent to 62.65 percent. By comparison, the Company's proposed equity ratio of 56.40 percent is 6.25 percentage points (625 basis points) below the top of the proxy group range. Therefore, EPE's requested capital structure is within industry standards. More importantly, and as Ms. Lapson explains, the Company's requested capital structure supports its financial profile and enables it to raise external funding for its elevated capital expenditure program.

Q84. WHY IS IT IMPORTANT TO USE AVERAGE CAPITAL COMPONENTS RATHER THAN A POINT-IN-TIME MEASUREMENT?

A. Measuring the capital components at a single point in time can skew the capital structure by the specific circumstances of a particular period. For example, a utility may issue debt to fund an acquisition or to ensure liquidity during constrained capital market environments, which may not reflect the company's long-term capital structure objectives. Moreover, a utility's actual capital structure fluctuates over the course of the year due to the seasonality of earnings, the timing of capital investments, and the timing of debt and equity financings. Further, debt and equity issuances can be lumpy, and the timing of issuances may not coincide. Therefore, it is more appropriate to normalize the relative relationship between the components over a period of time.

Q85. WHAT IS YOUR CONCLUSION REGARDING EPE'S PROPOSED CAPITAL STRUCTURE?

A. The question of whether a given capital structure is "optimal" is extremely complex and depends on many company-specific issues. We can, however, view EPE's proposed capital structure in the context of those in place at similarly situated utility operating companies, and relative to rating agency criteria.[93] Because the Company's proposal is consistent with both, it is consistent with industry practice. In my opinion, that the Company's proposed capital structure is reasonable and appropriate for the purposes of determining its overall rate of return and compensates for EPE's elevated risk profile.

93 Company witness Lapson discusses the rating agencies' criteria and EPE's credit metrics.

VI. CAPITAL MARKET ENVIRONMENT

Q86. DO ECONOMIC CONDITIONS INFLUENCE THE REQUIRED COST OF CAPITAL AND REQUIRED RETURN ON COMMON EQUITY?

A. Yes. The required cost of capital, including the ROE, is a function of prevailing and expected economic and capital market conditions. Each of the analytical models used to estimate the required ROE is influenced by current and expected capital market conditions. Therefore, an evaluation of current and projected market conditions is integral to any ROE recommendation.

Q87. WHAT ARE THE KEY FACTORS AFFECTING THE COST OF EQUITY FOR REGULATED UTILITIES IN THE CURRENT AND PROSPECTIVE CAPITAL MARKETS?

A. The cost of equity for regulated utilities is currently affected by several key factors including (1) the interest rate environment and central bank monetary policy; (2) inflationary pressure and the longer-term outlook for inflation; and (3) uncertainty in the economic environment because of a change in administration at the federal level. As discussed below, although the Federal Reserve reduced the Federal Funds rate in September 2024 as inflation stabilized and moved closer to the central bank's two percent target, interest rates and inflation are expected to remain above the levels experienced prior to the COVID-19 pandemic. Further, the change in the federal administration presents significant uncertainties with respect to the near-term economic and capital market in which EPE will be raising external capital.

Q88. PLEASE SUMMARIZE THE CHANGES IN CAPITAL MARKET CONDITIONS SINCE EARLY 2020.

A. The COVID-19 pandemic had wide ranging impacts on markets, affecting all market sectors, including utilities. At the start of the pandemic, both the S&P 500 Index and the electric utility sector lost more than a third of its value.[94] At the same time, the Chicago

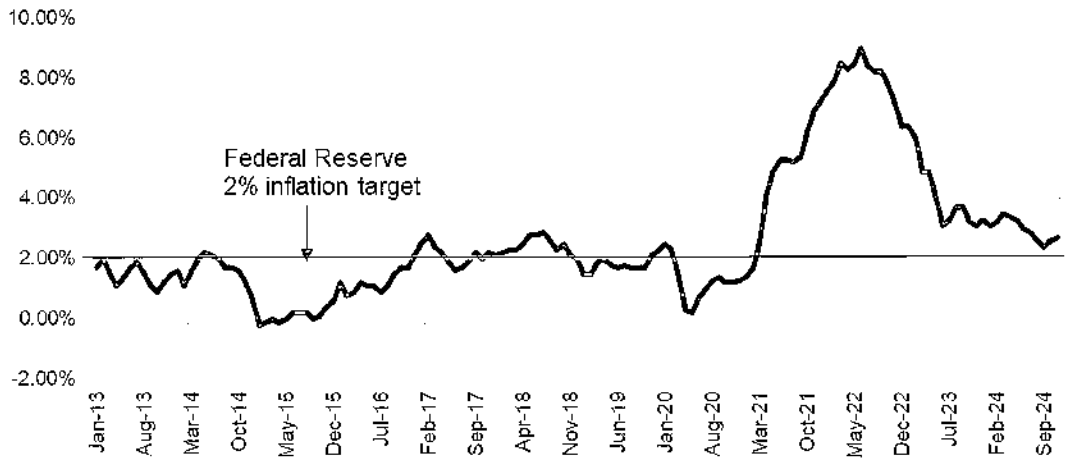
94 Source: Yahoo! Finance. Electric utility sector measured by the S&P 500 Electric Utilities Index.

Board Options Exchange ("CBOE") Volatility Index ("VIX", a measure of expected market volatility) tripled, from 25.03 on February 24, 2020, to 82.69 on March 16, 2020.[95]

Treasury bond yields declined rapidly as the stock market became extremely volatile and investors sought the relative safety of government bonds, combined with the Federal Reserve's reduction in the Federal Funds rate to a target range of 0 percent to 0.25 percent. Because bond yields and bond prices are inversely related, as demand for safer bonds increases, investors bid up the price of bonds and bid down the yields. Since the decline in bond yields was caused by investors' increased aversion to equity market risk, the cost of equity did not decline commensurately with the decline in bond yields.

As the U.S. economy opened from the COVID-19 lockdowns, economic activity quickly rebounded, causing inflation to reach the highest levels seen in the last 40 years (*see* Figure 18 below).

Figure 18: Year-Over-Year U.S. Consumer Price Index (2014-2024)[96]



In response, the Federal Reserve tightened monetary policy at the fastest pace since the 1980s by increasing the Federal Funds rate by 525 basis points over the course of 11 consecutive Federal Open Market Committee ("FOMC") meetings between March 2022 and July 2023. Although the pace of inflation subsided from its peak reached in June

95 Source: Federal Reserve Bank of St. Louis FRED Database.

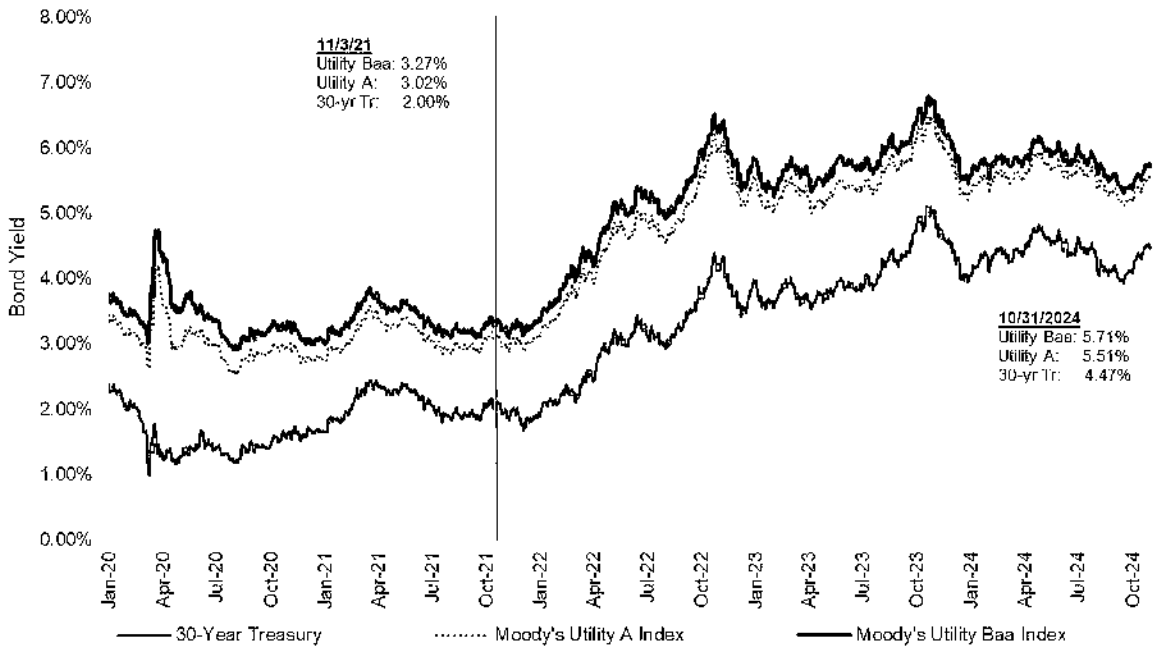
96 Source: Trading Economics and U.S. Bureau of Labor Statistics. https://tradingeconomics.com/united-states/inflation-cpi

2022, year-over-year inflation remained stubbornly above 3.0 percent through the first half of 2024. In October 2024, the CPI reversed its downward trend, increasing 0.2 percent on a year-over-year basis, a trend that continued in November 2024.

Q89. HOW HAVE GOVERNMENT AND UTILITY BOND YIELDS RESPONDED TO THE FEDERAL RESERVE'S MONETARY POLICY TIGHTENING?

A. As the U.S. economy improved in 2021 and the Federal Reserve moved aggressively to tighten monetary policy to fight stubbornly higher inflation, prevailing interest rates rose to their highest levels since 2010.[97] As shown in Figure 19 below, the 30-year Treasury yield has increased 247 basis points since November 3, 2021 when the Federal Reserve signaled it would begin tapering its asset purchases. Utility bond yields have increased by approximately 250 basis points over the same period.

Figure 19: 30-Year Treasury Bond and Utility Bond Yields (2021-2024)[98]



Q90. HOW HAVE ECONOMIC AND FINANCIAL MARKET CONDITIONS CHANGED IN

97 Source: Federal Reserve Bank of St. Louis, FRED Economic Database.

98 Source: Federal Reserve Bank of St. Louis, FRED Economic Database; Bloomberg Professional.

RECENT MONTHS?

A. Economic and financial data in recent months are providing more confidence that the Federal Reserve is closer to achieving its two percent inflation target and a soft landing for the economy. At the December 2023 Federal Open Market Committee ("FOMC") meeting, the Federal Reserve signaled that it was likely finished raising the Federal Funds rate. Capital markets interpreted this as an indication that the Fed would start cutting short-term interest rates sooner than expected. In August 2024, Chair Powell signaled that the economic data on inflation and unemployment was likely to lead to a reduction in the Federal Funds rate. During his speech at Jackson Hole, Wyoming, Chair Powell stated:

> Overall, the economy continues to grow at a solid pace. But the inflation and labor market data show an evolving situation. The upside risks to inflation have diminished. And the downside risks to employment have increased. As we highlighted in our last FOMC statement, we are attentive to the risks to both sides of our dual mandate.[99]

The Federal Funds rate was subsequently cut by 50 basis points in September as the FOMC gained greater confidence that inflation is moving sustainably toward its two percent target, and that risks to achieving employment and inflation goals are roughly in balance. However, the FOMC noted that "the economic outlook is uncertain, and the Committee is attentive to the risks to both sides of its dual mandate."[100] The FOMC further reduced the Federal Funds rate by 25 basis points in each of the November 2024 and December 2024 meetings. In its press release, the FOMC reiterated these points and noted that "inflation has made progress toward the Committee's 2-percent objective but remains

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99 Review and Outlook, Remarks by Jerome H. Powell, Chair, Board of Governors of the Federal Reserve System, at "Reassessing the Effectiveness and Transmission of Monetary Policy," a economic symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 23, 2024, at 3.

100 Federal Reserve FOMC Press Release, September 18, 2024.

somewhat elevated."[101] Moreover, the FOMC signaled that it would slow the pace of cuts in the Federal Funds rate in 2025.[102]

While inflation has subsided from the elevated levels experienced in the wake of the COVID-19 pandemic, the era of record low interest rates and inflation has likely ended. As noted above, long-term interest rates have increased considerably since the Federal Reserve began tightening monetary policy, and expectations for interest rates are markedly higher than in the five years prior to the pandemic. As Blue Chip Financial Forecasts explains:

> Of particular interest is that even though the economy is expected to grow at around its potential rate and that inflation is expected to stabilize near the Fed's target, these occur at markedly higher expected interest rate levels (both short- and long-term) than in the five years prior to the pandemic and marginally higher than the consensus envisaged last December. This points to a meaningfully higher neutral [Federal Funds Rate] and higher real interest rates over the longer term than experienced just prior to the pandemic.[103]

Furthermore, even though the pace of inflation has slowed, U.S. consumers continue to expect inflation to remain elevated. As the University of Michigan's October survey explains regarding consumer sentiment on inflation: [a]s of October 2024, long-run expectations remain slightly elevated relative to the two years pre-pandemic."[104] While inflation expectations have moderated since 2022, as of October 2024, they have not returned to pre-pandemic levels.[105]

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101 Federal Reserve FOMC Press Release, November 7, 2024; https://www.federalreserve.gov/newsevents/pressreleases/monetary20241107a.htm

102 Transcript of Chair Powell's Press Conference, December 18, 2024, at 2-6. https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20241218.pdf

103 Blue Chip Financial Forecasts, Vol. 43, No. 6, at 1 (June 1, 2024). Clarification added.

104 University of Michigan, Survey of Consumers, October 2024. https://data.sca.isr.umich.edu/fetchdoc.php?docid=77164

105 University of Michigan, Survey of Consumers, October 2024. https://data.sca.isr.umich.edu/fetchdoc.php?docid=77164

Lastly, recent cuts to the Federal Funds rate by the Federal Reserve have had little effect on long-term government and utility bond yields. Long-term bond yields are less sensitive to the Federal Reserve's monetary policy, and as such have not declined as much as short-term yields, even as the Fed has reduced the Federal Funds rate. As shown in Figure 20 below, since the end of June, the 1-year, 2-year, and 5-year Treasury yields have declined by 18 to 82 basis points, whereas the 30-year Treasury yield has declined by only 4 basis points.

Figure 20: U.S. Treasury Yields (June 2024 vs. October 2024)[106]

	1-year Treasury	2-year Treasury	5-yr Treasury	30-Year Treasury
June 28, 2024	5.09%	4.71%	4.33%	4.51%
October 31, 2024	4.27%	4.16%	4.15%	4.47%
Change	-0.82%	-0.55%	-0.18%	-0.04%

Therefore, current long-term yields incorporated market expectations for a rate cut by the Federal Reserve and have not declined commensurately with reductions in the Federal Funds rate. Since models used to estimate the just and reasonable ROE rely primarily on long-term yields, the market movement of short-term yields do not influence the ROE model results as the longer-term yields do.

Q91. HOW MIGHT THE CHANGE IN PRESIDENTIAL ADMINISTRATION AFFECT INFLATION AND BOND YIELDS?

A. President Trump campaigned on higher tariffs and, although the details have yet to be announced and the effect on the economy is uncertain, economists generally agree that higher tariffs increase inflation by increasing the cost of consumer goods. The proposed tariff of 10 percent on all imports and a 60 percent tariff on all Chinese goods could lead to higher inflation and reduce overall demand, as well as higher interest rates and a stronger dollar.[107] The Budget Lab at Yale estimates that these tariffs would raise consumer prices

106 Source: Spot yields reported by Federal Reserve Board of Governors, H15 Selected Interest Rates. https://www.federalreserve.gov/datadownload/Choose.aspx?rel=H15

107 J.P. Morgan Asset Management, Market Insights "2025 Year-Ahead Investment Outlook," November 21, 2024.

by 1.4 to 5.1 percent before substitution, which would be the equivalent to the cost of $1,900 to $7,600 in disposable income for the average household.[108]

Higher inflation could complicate the Federal Reserve's unwinding of restrictive monetary policies, as well as increase long-term bond yields like the 30-year Treasury yield. Longer-term bonds are more sensitive than shorter-term bonds to inflation expectations because their value is influenced more by inflation due to their longer maturity holding period and reinvestment rate implications. Thus, as the value (price) of bonds declines due to higher inflation expectations, the yield increases. Because utilities are capital intensive enterprises, higher inflation and interest rates tend to have a negative effect on utility stocks. If realized, all these factors would suggest that the cost of capital for utilities may increase in the future.

Q92. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR REVIEW OF THE CURRENT CAPITAL MARKET ENVIRONMENT AND ITS IMPLICATIONS ON THE COMPANY'S COST OF EQUITY?

A. Over the nearly five years, the economic and financial market environment has operated under heightened uncertainty associated with the COVID-19 pandemic, the war in Ukraine, stubborn inflation, and more recently, uncertainty surrounding the economy and in the timing of the Federal Reserve's monetary policy. Although the Federal Reserve responded to easing inflation by cutting rates in September, November, and December it is unlikely that interest rates and inflation will fall to the historically low levels seen in 2020 and 2021. Lastly, the effect of the new presidential administration on the economy is uncertain, and proposals for higher tariffs, for example, could complicate investor expectations for lower inflation and interest rates. These factors underscore the importance of using multiple models when determining EPE's cost of equity to gain a comprehensive perspective of the effect of fluid and evolving market conditions on the cost of equity.

108 Yale Budget Lab, "Fiscal, Macroeconomic, and Price Estimates of Tariffs Under Both Non-Retaliation and Retaliation Scenarios," October 16, 2024.

VII. CONCLUSION

Q93. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S COST OF EQUITY AND CAPITAL STRUCTURE?

A. As discussed throughout my Direct Testimony, it is important to consider a variety of quantitative and qualitative information in reviewing analytical results and arriving at ROE determinations. Based on my review of the results from three commonly used analytical approaches, I conclude an ROE in the range of 9.90 percent to 11.50 percent represents the range of equity investors' required return for investment in electric utilities comparable to EPE in today's capital market environment. Within that range, I recommend the midpoint, or 10.70 percent.

As to the capital structure, I believe that the Company's requested capital structure of 56.40 percent common equity and 43.60 percent long-term debt is within the range of capital structures that finance the regulated electric utility operations of the proxy group and, therefore, is reasonable and appropriate. Recognizing EPE's necessity to maintain a strong financial profile and financial viability during a time of elevated capital expenditure needs, I determined that an equity ratio above the proxy group average, but well within the range of the proxy group, compensates for the Company's elevated risk profile. That conclusion considers EPE's financial risk inherent in its capital structure, as well as its small size, nuclear generation, and ongoing need to access capital as it executes its capital investment plans.

Q94. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

JENNIFER E. NELSON
VICE PRESIDENT

Ms. Nelson is a Certified Rate of Return Analyst with more than fifteen years of experience in the energy industry. As an expert witness, she has testified to the cost of capital and alternative ratemaking proposals for electric, natural gas, and water utilities. In her time as a consultant, Ms. Nelson has provided consulting services on a variety of utility regulatory matters including ratemaking and regulatory policy, cost of service and revenue requirements, integrated resource planning, renewable power contracts, natural gas pipeline development, utility supply planning issues, and merger and acquisition transactions. Ms. Nelson has extensive experience performing statistical analyses, developing economic and financial models, and providing policy analyses and recommendations.

Prior to joining Concentric, Ms. Nelson was a Director at ScottMadden, Inc., and a managing consultant at Sussex Economic Advisors, LLC. Prior to consulting, she was a staff economist at the Massachusetts Department of Public Utilities and a petroleum economist for the State of Alaska. Ms. Nelson holds a Master of Science degree in Resource and Applied Economics from the University of Alaska and a Bachelor of Science degree in Business Economics from Bentley University.

AREAS OF EXPERTISE

Cost of Capital

- Submitted expert testimony on behalf of electric utilities before regulatory commissions in Arkansas, New Hampshire, New Mexico, North Carolina, South Carolina, and Texas regarding the cost of capital.
- Submitted expert testimony on behalf of natural gas utilities before regulatory commissions in Florida, North Carolina, Ohio, Oregon, South Carolina, Utah, West Virginia, and Wyoming regarding the cost of capital.
- Submitted expert testimony on behalf of a water utility before the Kentucky Public Service Commission regarding the appropriate capital structure and cost of debt.
- Supported expert testimony regarding the cost of capital before numerous state utility regulatory commissions and the FERC on behalf of electric and natural gas utilities through research, financial analysis and modeling, and testimony development.

Alternative Ratemaking Mechanisms

- Submitted expert testimony on behalf of electric utilities and a water utility before the Arkansas Public Service Commission regarding the utilities' proposed Formula Rate Plans.
- Submitted expert testimony on behalf of an electric utility before the Oklahoma Corporation Commission regarding the utility's proposed Formula Rate Plan.
- Submitted expert testimony on behalf of an electric and natural gas utility before the Delaware Public Service Commission regarding the utility's proposed pilot performance-based rate plan.

- Submitted expert testimony on behalf of an electric and natural gas utility before the Montana Public Service Commission regarding the utility's proposed alternative rate mechanisms.
- Co-sponsored expert testimony on behalf of a natural gas utility before the Maine Public Utilities Commission regarding the utility's proposed capital investment cost recovery mechanism.
- Supported expert testimony and performed research and analysis on alternative ratemaking frameworks.

Resource and Supply Planning

- Supported expert testimony on the reasonableness of utility resource supply portfolio decisions.
- Assisted in a benchmarking analysis on behalf of a Northeast U.S. natural gas utility regarding its supply planning standards and design day demand forecast process.
- Supported rebuttal testimony filed on behalf of an Alaska natural gas utility regarding the utility's gas supply planning standards.
- Supported the development of a New Hampshire electric utility's Integrated Resource Plan filed with the New Hampshire Public Utility Commission.
- Performed research and financial analysis to evaluate the benefits, costs, and policy options associated with natural gas expansion by Massachusetts natural gas utilities as part of a prepared report for the Massachusetts Department of Energy Resources.
- Developed a dynamic natural gas demand forecast model for in-state use for the State of Alaska, which included forecasting demand from both existing and anticipated natural gas utilities, power consumption, and large commercial operations.
- Conducted research and prepared analyses for a natural gas pipeline Open Season.

Other Regulatory Financial Issues

- Supported expert testimony on the appropriate level of remuneration associated with the Massachusetts electric utilities' long-term contracts for wind power through research, financial analysis and modeling, and testimony development.
- Provided research and analytical support estimating financial damages incurred as a result of construction delays for an electric transmission company.
- Prepared a Feasibility Study for an electric cooperative utility supporting a utility-owned solar project.

Mergers & Acquisitions

- Performed buy-side benchmarking and regulatory analysis for utility acquisitions.

RELEVANT PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2021-present)
Vice President
Assistant Vice President

ScottMadden, Inc. (2016-2021)
Director
Manager

Sussex Economic Advisors, LLC (2013-2016)
Managing Consultant

Massachusetts Department of Public Utilities (2011-2013)
Economist, Electric Power Division

State of Alaska Department of Revenue, Tax Division (2007-2010)
Petroleum Economist

Federal Reserve Bank of Boston (2000-2002)
Research Assistant, Economic Research Department

EDUCATION AND RELEVANT COURSEWORK

University of Alaska
Master of Science, Resource and Applied Economics

Bentley University (formerly Bentley College)
Bachelor of Science, Business Economics
Graduated *magna cum laude*

New Mexico State University
Center for Public Utilities, Regulatory Basics

ISO New England
Wholesale Energy Markets (WEM-101)

Colorado School of Mines
Petroleum Engineering SuperSchool

EUCI
Course Instructor – Performance-Based Ratemaking

DESIGNATIONS AND PROFESSIONAL AFFILIATIONS

Certified Rate of Return Analyst, Society of Utility and Regulatory Financial Analysts
Member, Society of Utility and Regulatory Financial Analysts

SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
Arkansas Public Service Commission				
Oklahoma Gas & Electric	10/21	Oklahoma Gas & Electric	21-087-U	Formula Rate Plan
Liberty Utilities (Pine Bluff Water)	10/18	Liberty Utilities (Pine Bluff Water)	18-027-U	Formula Rate Plan and tariff
Entergy Arkansas, LLC	11/20	Entergy Arkansas, LLC	16-036-FR	Sponsored testimony evaluating the Return on Equity included in Rider FRP
Delaware Public Service Commission				
Delmarva Power & Light Company	08/24	Delmarva Power & Light Company	24-0868	Alternative Ratemaking Proposal
Florida Public Service Commission				
Pivotal Utility Holdings, Inc. d/b/a Florida City Gas	05/22	Pivotal Utility Holdings, Inc. d/b/a Florida City Gas	20220069-GU	Cost of Capital
Kentucky Public Service Commission				
Bluegrass Water Utility Operating Company, LLC	09/20	Bluegrass Water Utility Operating Company, LLC	2020-290	Capital Structure and Cost of Long-Term Debt
Maine Public Utilities Commission				
Unitil Corporation	06/19	Northern Utilities, Inc.	19-00092	Co-sponsored testimony supporting a proposed CIRA capital tracking mechanism
Montana Public Utilities Commission				
NorthWestern Corporation	08/22	NorthWestern Corporation	2022-7-78 (elect.) 2022-7-78 (gas)	Alternative Ratemaking Proposals
New Hampshire Public Utilities Commission				
Unitil Energy Systems, Inc.	04/21	Unitil Energy Systems, Inc.	DE 21-030	Cost of Capital
New Mexico Public Regulation Commission				
El Paso Electric Company	07/20	El Paso Electric Company	20-00104-UT	Cost of Capital
North Carolina Utilities Commission				
Virginia Electric & Power Co., d/b/a Dominion Energy North Carolina	03/24	Virginia Electric & Power Co., d/b/a Dominion Energy North Carolina	E-22, Sub 694	Cost of Capital

SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
Public Service Company of North Carolina d/b/a Dominion Energy North Carolina	04/21	Public Service Company of North Carolina d/b/a Dominion Energy North Carolina	G-5, Sub 632	Cost of Capital
Public Utilities Commission of Ohio				
The East Ohio Gas Company d/b/a Dominion Energy Ohio	11/23	The East Ohio Gas Company d/b/a Dominion Energy Ohio	23-0894-GA-AIR	Cost of Capital
Oklahoma Corporation Commission				
Oklahoma Gas & Electric	12/21	Oklahoma Gas & Electric	PUD202100164	Formula Rate Plan
Public Utility Commission of Oregon				
Northwest Natural Gas Company dba NW Natural	12/23	Northwest Natural Gas Company dba NW Natural	UG 490	Cost of Capital
Northwest Natural Gas Company dba NW Natural	12/24	Northwest Natural Gas Company dba NW Natural	UG 520	Cost of Capital
Public Utilities Commission of South Carolina				
Dominion Energy South Carolina	03/24	Dominion Energy South Carolina	2024-34-E	Cost of Capital
Dominion Energy South Carolina	04/23	Dominion Energy South Carolina	2023-70-G	Cost of Capital
Public Utilities Commission of Texas				
Wind Energy Transmission Texas, LLC dba WETT	12/24	Wind Energy Transmission Texas, LLC dba WETT	52799	Cost of Capital
El Paso Electric Company	06/21	El Paso Electric Company	52195	Cost of Capital
Sharyland Utilities L.L.C.	12/20	Sharyland Utilities L.L.C.	51611	Cost of Capital
Utah Public Service Commission				
Dominion Energy Utah	05/22	Dominion Energy Utah	22-057-03	Cost of Capital
Public Service Commission of West Virginia				
Hope Gas, Inc. d/b/a Dominion Energy West Virginia	11/20	Hope Gas, Inc. d/b/a Dominion Energy West Virginia	20-0746-G-42T	Cost of Capital
Wyoming Public Service Commission				
Dominion Energy Wyoming	03/23	Dominion Energy Wyoming	30010-215-GR-23	Cost of Capital

Constant Growth Discounted Cash Flow Model with Half Year Growth Adjustment
30 Day Average Stock Price

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] S&P Capital IQ Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
Alliant Energy Corporation	LNT	$1.92	$59.09	3.25%	3.36%	6.80%	7.00%	6.00%	6.60%	9.35%	9.96%	10.36%
Ameren Corporation	AEE	$2.68	$83.98	3.19%	3.29%	6.60%	6.13%	6.50%	6.41%	9.42%	9.70%	9.90%
American Electric Power Company, Inc.	AEP	$3.52	$101.29	3.48%	3.59%	6.20%	6.50%	6.50%	6.40%	9.78%	9.99%	10.09%
Avista Corporation	AVA	$1.90	$38.56	4.93%	5.05%	4.80%	4.82%	5.00%	4.87%	9.85%	9.92%	10.05%
CMS Energy Corporation	CMS	$2.06	$68.84	2.99%	3.10%	7.60%	7.50%	6.00%	7.03%	9.08%	10.13%	10.71%
DTE Energy Company	DTE	$4.08	$124.89	3.27%	3.38%	8.10%	8.30%	4.50%	6.97%	7.84%	10.35%	11.70%
Duke Energy Corporation	DUK	$4.18	$115.15	3.63%	3.73%	6.10%	6.00%	5.00%	5.70%	8.72%	9.43%	9.84%
Edison International	EIX	$3.12	$85.63	3.64%	3.78%	8.70%	7.35%	6.00%	7.35%	9.75%	11.13%	12.50%
Entergy Corporation	ETR	$4.52	$124.10	3.64%	3.73%	7.30%	7.00%	0.50%	4.93%	4.15%	8.67%	11.08%
Evergy, Inc.	EVRG	$2.57	$60.27	4.26%	4.40%	5.80%	5.40%	7.50%	6.23%	9.78%	10.63%	11.92%
IDACORP, Inc.	IDA	$3.32	$102.86	3.23%	3.32%	5.50%	6.00%	5.50%	5.67%	8.82%	8.99%	9.32%
NextEra Energy, Inc.	NEE	$2.06	$81.94	2.51%	2.62%	8.10%	8.05%	8.00%	8.05%	10.61%	10.67%	10.72%
NorthWestern Corporation	NWE	$2.60	$55.16	4.71%	4.83%	6.10%	5.00%	4.00%	5.03%	8.81%	9.87%	10.96%
OGE Energy Corporation	OGE	$1.67	$40.10	4.17%	4.29%	5.20%	5.75%	6.50%	5.82%	9.48%	10.11%	10.81%
Pinnacle West Capital Corporation	PNW	$3.52	$88.53	3.98%	4.10%	8.20%	6.35%	4.50%	6.35%	8.57%	10.45%	12.34%
Portland General Electric Company	POR	$2.00	$47.92	4.17%	4.37%	11.50%	11.00%	6.00%	9.50%	10.30%	13.87%	15.91%
PPL Corporation	PPL	$1.03	$32.15	3.20%	3.32%	6.80%	6.91%	7.50%	7.07%	10.11%	10.39%	10.82%
Southern Company	SO	$2.88	$88.39	3.26%	3.37%	7.00%	6.55%	6.50%	6.68%	9.86%	10.05%	10.37%
TXNM Energy, Inc	TXNM	$1.55	$41.87	3.70%	3.78%	2.54%	4.30%	5.00%	3.95%	6.29%	7.72%	8.79%
Xcel Energy Inc.	XEL	$2.19	$62.82	3.49%	3.60%	6.40%	6.40%	7.00%	6.60%	9.99%	10.20%	10.61%
Proxy Group Mean				3.64%	3.75%	6.77%	6.62%	5.70%	6.36%	9.03%	10.11%	10.94%
Proxy Group Median				3.56%	3.67%	6.70%	6.45%	6.00%	6.40%	9.45%	10.08%	10.71%
Average of Mean and Median				3.60%	3.71%	6.73%	6.53%	5.85%	6.38%	9.24%	10.10%	10.83%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals indicated number of trading day average as of 09/30/2024
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [8])
[5] Source: Zacks
[6] Source: S&P Capital IQ
[7] Source: Value Line
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model with Half Year Growth Adjustment
90 Day Average Stock Price

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] S&P Capital IQ Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
Alliant Energy Corporation	LNT	$1.92	$54.95	3.49%	3.61%	6.80%	7.00%	6.00%	6.60%	9.60%	10.21%	10.62%
Ameren Corporation	AEE	$2.68	$77.57	3.45%	3.57%	6.60%	6.13%	6.50%	6.41%	9.69%	9.98%	10.17%
American Electric Power Company, Inc.	AEP	$3.52	$94.95	3.71%	3.83%	6.20%	6.50%	6.50%	6.40%	10.02%	10.23%	10.33%
Avista Corporation	AVA	$1.90	$37.08	5.12%	5.25%	4.80%	4.82%	5.00%	4.87%	10.05%	10.12%	10.25%
CMS Energy Corporation	CMS	$2.06	$64.17	3.21%	3.32%	7.60%	7.50%	6.00%	7.03%	9.31%	10.36%	10.93%
DTE Energy Company	DTE	$4.08	$118.28	3.45%	3.57%	8.10%	8.30%	4.50%	6.97%	8.03%	10.54%	11.89%
Duke Energy Corporation	DUK	$4.18	$108.52	3.85%	3.96%	6.10%	6.00%	5.00%	5.70%	8.95%	9.66%	10.07%
Edison International	EIX	$3.12	$79.03	3.95%	4.09%	8.70%	7.35%	6.00%	7.35%	10.07%	11.44%	12.82%
Entergy Corporation	ETR	$4.52	$115.09	3.93%	4.02%	7.30%	7.00%	0.50%	4.93%	4.44%	8.96%	11.37%
Evergy, Inc.	EVRG	$2.57	$56.77	4.53%	4.67%	5.80%	5.40%	7.50%	6.23%	10.05%	10.90%	12.20%
IDACORP, Inc.	IDA	$3.32	$97.88	3.39%	3.49%	5.50%	6.00%	5.50%	5.67%	8.99%	9.15%	9.49%
NextEra Energy, Inc.	NEE	$2.06	$77.11	2.67%	2.78%	8.10%	8.05%	8.00%	8.05%	10.78%	10.83%	10.88%
NorthWestern Corporation	NWE	$2.60	$52.56	4.95%	5.07%	6.10%	5.00%	4.00%	5.03%	9.05%	10.10%	11.20%
OGE Energy Corporation	OGE	$1.67	$37.88	4.42%	4.55%	5.20%	5.75%	6.50%	5.82%	9.73%	10.36%	11.06%
Pinnacle West Capital Corporation	PNW	$3.52	$82.78	4.25%	4.39%	8.20%	6.35%	4.50%	6.35%	8.85%	10.74%	12.63%
Portland General Electric Company	POR	$2.00	$45.76	4.37%	4.58%	11.50%	11.00%	6.00%	9.50%	10.50%	14.08%	16.12%
PPL Corporation	PPL	$1.03	$29.96	3.44%	3.56%	6.80%	6.91%	7.50%	7.07%	10.35%	10.63%	11.07%
Southern Company	SO	$2.88	$83.42	3.45%	3.57%	7.00%	6.55%	6.50%	6.68%	10.06%	10.25%	10.57%
TXNM Energy, Inc	TXNM	$1.55	$39.62	3.91%	3.99%	2.54%	4.30%	5.00%	3.95%	6.50%	7.94%	9.01%
Xcel Energy Inc.	XEL	$2.19	$57.86	3.78%	3.91%	6.40%	6.40%	7.00%	6.60%	10.30%	10.51%	10.92%
Proxy Group Mean				3.87%	3.99%	6.77%	6.62%	5.70%	6.36%	9.27%	10.35%	11.18%
Proxy Group Median				3.82%	3.94%	6.70%	6.45%	6.00%	6.40%	9.71%	10.30%	10.92%
Average of Mean and Median				3.84%	3.96%	6.73%	6.53%	5.85%	6.38%	9.49%	10.33%	11.05%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals indicated number of trading day average as of 09/30/2024
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [8])
[5] Source: Zacks
[6] Source: S&P Capital IQ
[7] Source: Value Line
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Constant Growth Discounted Cash Flow Model with Half Year Growth Adjustment
180 Day Average Stock Price

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] S&P Capital IQ Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Low ROE	[10] Mean ROE	[11] High ROE
Alliant Energy Corporation	LNT	$1.92	$52.09	3.69%	3.81%	6.80%	7.00%	6.00%	6.60%	9.80%	10.41%	10.81%
Ameren Corporation	AEE	$2.68	$74.76	3.58%	3.70%	6.60%	6.13%	6.50%	6.41%	9.82%	10.11%	10.30%
American Electric Power Company, Inc.	AEP	$3.52	$89.17	3.95%	4.07%	6.20%	6.50%	6.50%	6.40%	10.27%	10.47%	10.58%
Avista Corporation	AVA	$1.90	$35.89	5.29%	5.42%	4.80%	4.82%	5.00%	4.87%	10.22%	10.30%	10.43%
CMS Energy Corporation	CMS	$2.06	$61.53	3.35%	3.47%	7.60%	7.50%	6.00%	7.03%	9.45%	10.50%	11.08%
DTE Energy Company	DTE	$4.08	$113.64	3.59%	3.72%	8.10%	8.30%	4.50%	6.97%	8.17%	10.68%	12.04%
Duke Energy Corporation	DUK	$4.18	$102.35	4.08%	4.20%	6.10%	6.00%	5.00%	5.70%	9.19%	9.90%	10.31%
Edison International	EIX	$3.12	$74.20	4.20%	4.36%	8.70%	7.35%	6.00%	7.35%	10.33%	11.71%	13.09%
Entergy Corporation	ETR	$4.52	$109.39	4.13%	4.23%	7.30%	7.00%	0.50%	4.93%	4.64%	9.17%	11.58%
Evergy, Inc.	EVRG	$2.57	$54.23	4.74%	4.89%	5.80%	5.40%	7.50%	6.23%	10.27%	11.12%	12.42%
IDACORP, Inc.	IDA	$3.32	$95.04	3.49%	3.59%	5.50%	6.00%	5.50%	5.67%	9.09%	9.26%	9.60%
NextEra Energy, Inc.	NEE	$2.06	$69.68	2.96%	3.08%	8.10%	8.05%	8.00%	8.05%	11.07%	11.13%	11.18%
NorthWestern Corporation	NWE	$2.60	$50.94	5.10%	5.23%	6.10%	5.00%	4.00%	5.03%	9.21%	10.27%	11.36%
OGE Energy Corporation	OGE	$1.67	$35.89	4.66%	4.80%	5.20%	5.75%	6.50%	5.82%	9.98%	10.61%	11.31%
Pinnacle West Capital Corporation	PNW	$3.52	$77.37	4.55%	4.69%	8.20%	6.35%	4.50%	6.35%	9.15%	11.04%	12.94%
Portland General Electric Company	POR	$2.00	$43.73	4.57%	4.79%	11.50%	11.00%	6.00%	9.50%	10.71%	14.29%	16.34%
PPL Corporation	PPL	$1.03	$28.49	3.62%	3.74%	6.80%	6.91%	7.50%	7.07%	10.54%	10.81%	11.25%
Southern Company	SO	$2.88	$77.11	3.74%	3.86%	7.00%	6.55%	6.50%	6.68%	10.36%	10.54%	10.87%
TXNM Energy, Inc	TXNM	$1.55	$38.36	4.04%	4.12%	2.54%	4.30%	5.00%	3.95%	6.63%	8.07%	9.14%
Xcel Energy Inc.	XEL	$2.19	$56.67	3.86%	3.99%	6.40%	6.40%	7.00%	6.60%	10.38%	10.59%	11.00%
Proxy Group Mean				4.06%	4.19%	6.77%	6.62%	5.70%	6.36%	9.46%	10.55%	11.38%
Proxy Group Median				3.99%	4.10%	6.70%	6.45%	6.00%	6.40%	9.90%	10.52%	11.13%
Average of Mean and Median				4.03%	4.14%	6.73%	6.53%	5.85%	6.38%	9.68%	10.53%	11.25%

Notes:

[1] Source: Bloomberg Professional

[2] Source: Bloomberg Professional, equals indicated number of trading day average as of 09/30/2024

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: S&P Capital IQ

[7] Source: Value Line

[8] Equals Average ([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

Quarterly Growth Discounted Cash Flow Model
30 Day Average Stock Price

Company	Ticker	[1] Dividend 1	[2] Dividend 2	[3] Dividend 3	[4] Dividend 4	[5] Expected Dividend 1	[6] Expected Dividend 2	[7] Expected Dividend 3	[8] Expected Dividend 4	[9] Average Stock Price	[10] Zacks Earnings Growth	[11] S&P Capital IQ Growth	[12] Value Line Earnings Growth	[13] Average Earnings Growth	[14] Low ROE	[15] Mean ROE	[16] High ROE
Alliant Energy Corporation	LNT	$0.45	$0.48	$0.48	$0.48	$0.48	$0.51	$0.51	$0.51	$59.09	6.80%	7.00%	6.00%	6.60%	9.51%	10.14%	10.56%
Ameren Corporation	AEE	$0.63	$0.67	$0.67	$0.67	$0.67	$0.71	$0.71	$0.71	$83.98	6.60%	6.13%	6.50%	6.41%	9.58%	9.87%	10.07%
American Electric Power Company, Inc.	AEP	$0.88	$0.88	$0.88	$0.88	$0.94	$0.94	$0.94	$0.94	$101.29	6.20%	6.50%	6.50%	6.40%	10.03%	10.24%	10.34%
Avista Corporation	AVA	$0.46	$0.48	$0.48	$0.48	$0.48	$0.50	$0.50	$0.50	$38.56	4.80%	4.82%	5.00%	4.87%	10.11%	10.19%	10.33%
CMS Energy Corporation	CMS	$0.49	$0.52	$0.52	$0.52	$0.52	$0.55	$0.55	$0.55	$68.84	7.60%	7.50%	6.00%	7.03%	9.23%	10.31%	10.90%
DTE Energy Company	DTE	$1.02	$1.02	$1.02	$1.02	$1.09	$1.09	$1.09	$1.09	$124.89	8.10%	8.30%	4.50%	6.97%	8.01%	10.60%	11.99%
Duke Energy Corporation	DUK	$1.03	$1.03	$1.03	$1.05	$1.08	$1.08	$1.08	$1.10	$115.15	6.10%	6.00%	5.00%	5.70%	8.88%	9.61%	10.04%
Edison International	EIX	$0.74	$0.78	$0.78	$0.78	$0.79	$0.84	$0.84	$0.84	$85.63	8.70%	7.35%	6.00%	7.35%	9.95%	11.37%	12.79%
Entergy Corporation	ETR	$1.13	$1.13	$1.13	$1.13	$1.19	$1.19	$1.19	$1.19	$124.10	7.30%	7.00%	0.50%	4.93%	4.22%	8.88%	11.37%
Evergy, Inc.	EVRG	$0.64	$0.64	$0.64	$0.64	$0.68	$0.68	$0.68	$0.68	$60.27	5.80%	5.40%	7.50%	6.23%	10.06%	10.95%	12.29%
IDACORP, Inc.	IDA	$0.83	$0.83	$0.83	$0.83	$0.88	$0.88	$0.88	$0.88	$102.86	5.50%	6.00%	5.50%	5.67%	9.02%	9.19%	9.54%
NextEra Energy, Inc.	NEE	$0.47	$0.52	$0.52	$0.52	$0.51	$0.56	$0.56	$0.56	$81.94	8.10%	8.05%	8.00%	8.05%	10.75%	10.81%	10.86%
NorthWestern Corporation	NWE	$0.64	$0.65	$0.65	$0.65	$0.67	$0.68	$0.68	$0.68	$55.16	6.10%	5.00%	4.00%	5.03%	9.04%	10.15%	11.29%
OGE Energy Corporation	OGE	$0.42	$0.42	$0.42	$0.42	$0.44	$0.44	$0.44	$0.44	$40.10	5.20%	5.75%	6.50%	5.82%	9.75%	10.40%	11.12%
Pinnacle West Capital Corporation	PNW	$0.88	$0.88	$0.88	$0.88	$0.94	$0.94	$0.94	$0.94	$88.53	8.20%	6.35%	4.50%	6.35%	8.79%	10.75%	12.70%
Portland General Electric Company	POR	$0.48	$0.48	$0.50	$0.50	$0.52	$0.52	$0.55	$0.55	$47.92	11.50%	11.00%	6.00%	9.50%	10.48%	14.18%	16.30%
PPL Corporation	PPL	$0.24	$0.26	$0.26	$0.26	$0.26	$0.28	$0.28	$0.28	$32.15	6.80%	6.91%	7.50%	7.07%	10.29%	10.57%	11.02%
Southern Company	SO	$0.70	$0.70	$0.72	$0.72	$0.75	$0.75	$0.77	$0.77	$88.39	7.00%	6.55%	6.50%	6.68%	10.05%	10.24%	10.57%
TXNM Energy, Inc	TXNM	$0.37	$0.39	$0.39	$0.39	$0.38	$0.40	$0.40	$0.40	$41.87	2.54%	4.30%	5.00%	3.95%	6.37%	7.85%	8.96%
Xcel Energy Inc.	XEL	$0.52	$0.55	$0.55	$0.55	$0.55	$0.58	$0.58	$0.58	$62.82	6.40%	6.40%	7.00%	6.60%	10.19%	10.41%	10.83%
Proxy Group Mean											6.77%	6.62%	5.70%	6.36%	9.22%	10.34%	11.19%
Proxy Group Median											6.70%	6.45%	6.00%	6.40%	9.66%	10.28%	10.88%
Average of Mean and Median															9.44%	10.31%	11.04%

Notes:
[1] Source: Bloomberg Professional Service
[2] Source: Bloomberg Professional Service
[3] Source: Bloomberg Professional Service
[4] Source: Bloomberg Professional Service
[5] Equals Col. [1] x (1 + Col. [13])
[6] Equals Col. [2] x (1 + Col. [13])
[7] Equals Col. [3] x (1 + Col. [13])
[8] Equals Col. [4] x (1 + Col. [13])
[9] Source: Bloomberg Professional, equals indicated number of trading day average as of 09/30/2024
[10] Source: Zacks
[11] Source: S&P Capital IQ
[12] Source: Value Line
[13] Equals Average (Cols. [10], [11], [12])
[14] Implied Low DCF
[15] Implied Mean DCF
[16] Implied High DCF

Quarterly Growth Discounted Cash Flow Model
90 Day Average Stock Price

Company	Ticker	[1] Dividend 1	[2] Dividend 2	[3] Dividend 3	[4] Dividend 4	[5] Expected Dividend 1	[6] Expected Dividend 2	[7] Expected Dividend 3	[8] Expected Dividend 4	[9] Average Stock Price	[10] Zacks Earnings Growth	[11] S&P Capital IQ Growth	[12] Value Line Earnings Growth	[13] Average Earnings Growth	[14] Low ROE	[15] Mean ROE	[16] High ROE
Alliant Energy Corporation	LNT	$0.45	$0.48	$0.48	$0.48	$0.48	$0.51	$0.51	$0.51	$54.95	6.80%	7.00%	6.00%	6.60%	9.78%	10.41%	10.83%
Ameren Corporation	AEE	$0.63	$0.67	$0.67	$0.67	$0.67	$0.71	$0.71	$0.71	$77.57	6.60%	6.13%	6.50%	6.41%	9.87%	10.16%	10.36%
American Electric Power Company, Inc.	AEP	$0.88	$0.88	$0.88	$0.88	$0.94	$0.94	$0.94	$0.94	$94.95	6.20%	6.50%	6.50%	6.40%	10.29%	10.50%	10.60%
Avista Corporation	AVA	$0.46	$0.48	$0.48	$0.48	$0.48	$0.50	$0.50	$0.50	$37.08	4.80%	4.82%	5.00%	4.87%	10.33%	10.41%	10.54%
CMS Energy Corporation	CMS	$0.49	$0.52	$0.52	$0.52	$0.52	$0.55	$0.55	$0.55	$64.17	7.60%	7.50%	6.00%	7.03%	9.47%	10.55%	11.15%
DTE Energy Company	DTE	$1.02	$1.02	$1.02	$1.02	$1.09	$1.09	$1.09	$1.09	$118.28	8.10%	8.30%	4.50%	6.97%	8.21%	10.80%	12.20%
Duke Energy Corporation	DUK	$1.03	$1.03	$1.03	$1.05	$1.08	$1.08	$1.08	$1.10	$108.52	6.10%	6.00%	5.00%	5.70%	9.12%	9.86%	10.28%
Edison International	EIX	$0.74	$0.78	$0.78	$0.78	$0.79	$0.84	$0.84	$0.84	$79.03	8.70%	7.35%	6.00%	7.35%	10.28%	11.71%	13.13%
Entergy Corporation	ETR	$1.13	$1.13	$1.13	$1.13	$1.19	$1.19	$1.19	$1.19	$115.09	7.30%	7.00%	0.50%	4.93%	4.51%	9.19%	11.69%
Evergy, Inc.	EVRG	$0.64	$0.64	$0.64	$0.64	$0.68	$0.68	$0.68	$0.68	$56.77	5.80%	5.40%	7.50%	6.23%	10.35%	11.24%	12.59%
IDACORP, Inc.	IDA	$0.83	$0.83	$0.83	$0.83	$0.88	$0.88	$0.88	$0.88	$97.88	5.50%	6.00%	5.50%	5.67%	9.20%	9.37%	9.72%
NextEra Energy, Inc.	NEE	$0.47	$0.52	$0.52	$0.52	$0.51	$0.56	$0.56	$0.56	$77.11	8.10%	8.05%	8.00%	8.05%	10.93%	10.98%	11.03%
NorthWestern Corporation	NWE	$0.64	$0.65	$0.65	$0.65	$0.67	$0.68	$0.68	$0.68	$52.56	6.10%	5.00%	4.00%	5.03%	9.30%	10.41%	11.55%
OGE Energy Corporation	OGE	$0.42	$0.42	$0.42	$0.42	$0.44	$0.44	$0.44	$0.44	$37.88	5.20%	5.75%	6.50%	5.82%	10.02%	10.67%	11.40%
Pinnacle West Capital Corporation	PNW	$0.88	$0.88	$0.88	$0.88	$0.94	$0.94	$0.94	$0.94	$82.78	8.20%	6.35%	4.50%	6.35%	9.09%	11.06%	13.02%
Portland General Electric Company	POR	$0.48	$0.48	$0.50	$0.50	$0.52	$0.52	$0.55	$0.55	$45.76	11.50%	11.00%	6.00%	9.50%	10.69%	14.41%	16.53%
PPL Corporation	PPL	$0.24	$0.26	$0.26	$0.26	$0.26	$0.28	$0.28	$0.28	$29.96	6.80%	6.91%	7.50%	7.07%	10.55%	10.83%	11.28%
Southern Company	SO	$0.70	$0.70	$0.72	$0.72	$0.75	$0.75	$0.77	$0.77	$83.42	7.00%	6.55%	6.50%	6.68%	10.26%	10.45%	10.79%
TXNM Energy, Inc	TXNM	$0.37	$0.39	$0.39	$0.39	$0.38	$0.40	$0.40	$0.40	$39.62	2.54%	4.30%	5.00%	3.95%	6.59%	8.08%	9.19%
Xcel Energy Inc.	XEL	$0.52	$0.55	$0.55	$0.55	$0.55	$0.58	$0.58	$0.58	$57.86	6.40%	6.40%	7.00%	6.60%	10.52%	10.74%	11.16%
Proxy Group Mean											6.77%	6.62%	5.70%	6.36%	9.47%	10.59%	11.45%
Proxy Group Median											6.70%	6.45%	6.00%	6.40%	9.94%	10.52%	11.15%
Average of Mean and Median															9.71%	10.56%	11.30%

Notes:
[1] Source: Bloomberg Professional Service
[2] Source: Bloomberg Professional Service
[3] Source: Bloomberg Professional Service
[4] Source: Bloomberg Professional Service
[5] Equals Col. [1] x (1 + Col. [13])
[6] Equals Col. [2] x (1 + Col. [13])
[7] Equals Col. [3] x (1 + Col. [13])
[8] Equals Col. [4] x (1 + Col. [13])
[9] Source: Bloomberg Professional, equals indicated number of trading day average as of 09/30/2024
[10] Source: Zacks
[11] Source: S&P Capital IQ
[12] Source: Value Line
[13] Equals Average (Cols. [10], [11], [12])
[14] Implied Low DCF
[15] Implied Mean DCF
[16] Implied High DCF

Quarterly Growth Discounted Cash Flow Model
180 Day Average Stock Price

Company	Ticker	[1] Dividend 1	[2] Dividend 2	[3] Dividend 3	[4] Dividend 4	[5] Expected Dividend 1	[6] Expected Dividend 2	[7] Expected Dividend 3	[8] Expected Dividend 4	[9] Average Stock Price	[10] Zacks Earnings Growth	[11] S&P Capital IQ Growth	[12] Value Line Earnings Growth	[13] Average Earnings Growth	[14] Low ROE	[15] Mean ROE	[16] High ROE
Alliant Energy Corporation	LNT	$0.45	$0.48	$0.48	$0.48	$0.48	$0.51	$0.51	$0.51	$52.09	6.80%	7.00%	6.00%	6.60%	9.99%	10.62%	11.04%
Ameren Corporation	AEE	$0.63	$0.67	$0.67	$0.67	$0.67	$0.71	$0.71	$0.71	$74.76	6.60%	6.13%	6.50%	6.41%	10.01%	10.31%	10.51%
American Electric Power Company, Inc.	AEP	$0.88	$0.88	$0.88	$0.88	$0.94	$0.94	$0.94	$0.94	$89.17	6.20%	6.50%	6.50%	6.40%	10.55%	10.77%	10.87%
Avista Corporation	AVA	$0.46	$0.48	$0.48	$0.48	$0.48	$0.50	$0.50	$0.50	$35.89	4.80%	4.82%	5.00%	4.87%	10.52%	10.60%	10.73%
CMS Energy Corporation	CMS	$0.49	$0.52	$0.52	$0.52	$0.52	$0.55	$0.55	$0.55	$61.53	7.60%	7.50%	6.00%	7.03%	9.62%	10.71%	11.30%
DTE Energy Company	DTE	$1.02	$1.02	$1.02	$1.02	$1.09	$1.09	$1.09	$1.09	$113.64	8.10%	8.30%	4.50%	6.97%	8.37%	10.96%	12.36%
Duke Energy Corporation	DUK	$1.03	$1.03	$1.03	$1.05	$1.08	$1.08	$1.08	$1.10	$102.35	6.10%	6.00%	5.00%	5.70%	9.37%	10.11%	10.54%
Edison International	EIX	$0.74	$0.78	$0.78	$0.78	$0.79	$0.84	$0.84	$0.84	$74.20	8.70%	7.35%	6.00%	7.35%	10.56%	12.00%	13.43%
Entergy Corporation	ETR	$1.13	$1.13	$1.13	$1.13	$1.19	$1.19	$1.19	$1.19	$109.39	7.30%	7.00%	0.50%	4.93%	4.73%	9.42%	11.93%
Evergy, Inc.	EVRG	$0.64	$0.64	$0.64	$0.64	$0.68	$0.68	$0.68	$0.68	$54.23	5.80%	5.40%	7.50%	6.23%	10.59%	11.48%	12.83%
IDACORP, Inc.	IDA	$0.83	$0.83	$0.83	$0.83	$0.88	$0.88	$0.88	$0.88	$95.04	5.50%	6.00%	5.50%	5.67%	9.31%	9.49%	9.84%
NextEra Energy, Inc.	NEE	$0.47	$0.52	$0.52	$0.52	$0.51	$0.56	$0.56	$0.56	$69.68	8.10%	8.05%	8.00%	8.05%	11.24%	11.30%	11.35%
NorthWestern Corporation	NWE	$0.64	$0.65	$0.65	$0.65	$0.67	$0.68	$0.68	$0.68	$50.94	6.10%	5.00%	4.00%	5.03%	9.47%	10.58%	11.73%
OGE Energy Corporation	OGE	$0.42	$0.42	$0.42	$0.42	$0.44	$0.44	$0.44	$0.44	$35.89	5.20%	5.75%	6.50%	5.82%	10.29%	10.94%	11.68%
Pinnacle West Capital Corporation	PNW	$0.88	$0.88	$0.88	$0.88	$0.94	$0.94	$0.94	$0.94	$77.37	8.20%	6.35%	4.50%	6.35%	9.42%	11.39%	13.36%
Portland General Electric Company	POR	$0.48	$0.48	$0.50	$0.50	$0.52	$0.52	$0.55	$0.55	$43.73	11.50%	11.00%	6.00%	9.50%	10.91%	14.64%	16.77%
PPL Corporation	PPL	$0.24	$0.26	$0.26	$0.26	$0.26	$0.28	$0.28	$0.28	$28.49	6.80%	6.91%	7.50%	7.07%	10.74%	11.03%	11.48%
Southern Company	SO	$0.70	$0.70	$0.72	$0.72	$0.75	$0.75	$0.77	$0.77	$77.11	7.00%	6.55%	6.50%	6.68%	10.57%	10.77%	11.10%
TXNM Energy, Inc	TXNM	$0.37	$0.39	$0.39	$0.39	$0.38	$0.40	$0.40	$0.40	$38.36	2.54%	4.30%	5.00%	3.95%	6.73%	8.22%	9.33%
Xcel Energy Inc.	XEL	$0.52	$0.55	$0.55	$0.55	$0.55	$0.58	$0.58	$0.58	$56.67	6.40%	6.40%	7.00%	6.60%	10.61%	10.83%	11.25%
Proxy Group Mean											6.77%	6.62%	5.70%	6.36%	9.68%	10.81%	11.67%
Proxy Group Median											6.70%	6.45%	6.00%	6.40%	10.15%	10.77%	11.32%
Average of Mean and Median															9.92%	10.79%	11.50%

Notes:
[1] Source: Bloomberg Professional Service
[2] Source: Bloomberg Professional Service
[3] Source: Bloomberg Professional Service
[4] Source: Bloomberg Professional Service
[5] Equals Col. [1] x (1 + Col. [13])
[6] Equals Col. [2] x (1 + Col. [13])
[7] Equals Col. [3] x (1 + Col. [13])
[8] Equals Col. [4] x (1 + Col. [13])
[9] Source: Bloomberg Professional, equals indicated number of trading day average as of 09/30/2024
[10] Source: Zacks
[11] Source: S&P Capital IQ
[12] Source: Value Line
[13] Equals Average (Cols. [10], [11], [12])
[14] Implied Low DCF
[15] Implied Mean DCF
[16] Implied High DCF

Expected Market Return
Market DCF Based Method - Bloomberg EPS Growth

[1] Market Cap. Weighted Estimate of the S&P 500 Dividend Yield	1.31%
[2] Market Cap. Weighted Estimate of the S&P 500 Growth Rate	14.84%
[3] Market Cap. Weighted Estimated Required Market Return	16.25%

Notes:
[1] Equals Sum of Col. [8]
[2] Equals Sum of Col. [9]
[3] Equals ([1] x (1 + (0.5 x [2]))) + [2]

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Agilent Technologies Inc	A	$42,662	0.088%	0.64%	5.74%	0.0006%	0.0051%
Apple Inc	AAPL	$3,542,564	7.344%	0.43%	8.04%	0.0315%	0.5901%
AbbVie Inc	ABBV	$348,818	0.723%	3.14%	8.80%	0.0227%	0.0637%
Airbnb Inc	ABNB	$55,797	0.116%	N/A	19.84%	N/A	0.0229%
Abbott Laboratories	ABT	$198,366	0.411%	1.93%	8.12%	0.0079%	0.0334%
Arch Capital Group Ltd	ACGL	$42,073	0.087%	N/A	6.13%	N/A	0.0053%
Accenture PLC	ACN	$221,414	0.459%	1.67%	8.18%	0.0077%	0.0375%
Adobe Inc	ADBE	$227,927	0.473%	N/A	16.34%	N/A	0.0772%
Analog Devices Inc	ADI	$114,278	0.237%	1.60%	-5.82%	0.0038%	-0.0138%
Archer-Daniels-Midland Co	ADM	$28,564	0.059%	3.35%	-3.62%	0.0020%	-0.0021%
Automatic Data Processing Inc	ADP	n/a	N/A	2.02%	N/A	N/A	N/A
Autodesk Inc	ADSK	$59,228	0.123%	N/A	10.23%	N/A	0.0126%
Ameren Corp	AEE	$23,309	0.048%	3.06%	6.08%	0.0015%	0.0029%
American Electric Power Co Inc	AEP	$54,596	0.113%	3.43%	6.25%	0.0039%	0.0071%
AES Corp/The	AES	n/a	N/A	3.44%	N/A	N/A	N/A
Aflac Inc	AFL	$62,611	0.130%	1.79%	9.37%	0.0023%	0.0122%
American International Group Inc	AIG	$47,157	0.098%	2.18%	12.42%	0.0021%	0.0121%
Assurant Inc	AIZ	$10,300	0.021%	1.45%	7.14%	0.0003%	0.0015%
Arthur J Gallagher & Co	AJG	$61,648	0.128%	0.85%	12.78%	0.0011%	0.0163%
Akamai Technologies Inc	AKAM	$15,297	0.032%	N/A	6.12%	N/A	0.0019%
Albemarle Corp	ALB	$11,132	0.023%	1.71%	35.42%	0.0004%	0.0082%
Align Technology Inc	ALGN	$18,997	0.039%	N/A	9.53%	N/A	0.0038%
Allstate Corp/The	ALL	$50,075	0.104%	1.94%	168.00%	0.0020%	0.1744%
Allegion plc	ALLE	$12,698	0.026%	1.32%	7.73%	0.0003%	0.0020%
Applied Materials Inc	AMAT	$166,571	0.345%	0.79%	9.28%	0.0027%	0.0320%
Amcor PLC	AMCR	$16,376	0.034%	4.41%	3.71%	0.0015%	0.0013%
Advanced Micro Devices Inc	AMD	$265,561	0.551%	N/A	25.66%	N/A	0.1412%
AMETEK Inc	AME	$39,757	0.082%	0.65%	7.02%	0.0005%	0.0058%
Amgen Inc	AMGN	$173,133	0.359%	2.79%	3.52%	0.0100%	0.0126%
Ameriprise Financial Inc	AMP	$46,130	0.096%	1.26%	16.59%	0.0012%	0.0159%
American Tower Corp	AMT	$108,625	0.225%	2.79%	12.31%	0.0063%	0.0277%
Amentum Holdings Inc	AMTM	n/a	N/A	N/A	N/A	N/A	N/A
Amazon.com Inc	AMZN	$1,955,639	4.054%	N/A	34.66%	N/A	1.4053%
Arista Networks Inc	ANET	$120,578	0.250%	N/A	18.60%	N/A	0.0465%
ANSYS Inc	ANSS	n/a	N/A	N/A	N/A	N/A	N/A
Aon PLC	AON	$75,164	0.156%	0.78%	11.10%	0.0012%	0.0173%
A O Smith Corp	AOS	n/a	N/A	1.42%	N/A	N/A	N/A
APA Corp	APA	$9,048	0.019%	4.09%	-7.60%	0.0008%	-0.0014%
Air Products and Chemicals Inc	APD	$66,192	0.137%	2.38%	9.52%	0.0033%	0.0131%
Amphenol Corp	APH	$78,471	0.163%	1.01%	16.86%	0.0016%	0.0274%
Aptiv PLC	APTV	$19,137	0.040%	N/A	16.91%	N/A	0.0067%
Alexandria Real Estate Equities Inc	ARE	$20,772	0.043%	4.38%	3.03%	0.0019%	0.0013%
Atmos Energy Corp	ATO	n/a	N/A	2.32%	N/A	N/A	N/A
AvalonBay Communities Inc	AVB	$32,034	0.066%	3.02%	4.93%	0.0020%	0.0033%
Broadcom Inc	AVGO	$805,674	1.670%	1.23%	16.94%	0.0205%	0.2830%
Avery Dennison Corp	AVY	$17,775	0.037%	1.59%	12.84%	0.0006%	0.0047%
American Water Works Co Inc	AWK	$28,497	0.059%	2.09%	7.89%	0.0012%	0.0047%
Axon Enterprise Inc	AXON	$30,199	0.063%	N/A	20.81%	N/A	0.0130%
American Express Co	AXP	$192,799	0.400%	1.03%	15.62%	0.0041%	0.0624%
AutoZone Inc	AZO	$53,812	0.112%	N/A	13.50%	N/A	0.0151%
Boeing Co/The	BA	$93,682	0.194%	N/A	38.60%	N/A	0.0750%
Bank of America Corp	BAC	n/a	N/A	2.62%	N/A	N/A	N/A
Ball Corp	BALL	$20,615	0.043%	1.18%	13.35%	0.0005%	0.0057%
Baxter International Inc	BAX	$19,371	0.040%	3.06%	3.50%	0.0012%	0.0014%
Bath & Body Works Inc	BBWI	$6,994	0.014%	2.51%	14.74%	0.0004%	0.0021%
Best Buy Co Inc	BBY	$22,181	0.046%	3.64%	4.17%	0.0017%	0.0019%
Becton Dickinson & Co	BDX	$69,688	0.144%	1.58%	8.34%	0.0023%	0.0120%
Franklin Resources Inc	BEN	$10,538	0.022%	6.15%	3.00%	0.0013%	0.0007%
Brown-Forman Corp	BF/B	$14,934	0.031%	1.77%	-2.38%	0.0005%	-0.0007%
Bunge Global SA	BG	$13,689	0.028%	2.81%	-8.59%	0.0008%	-0.0024%
Biogen Inc	BIIB	$28,235	0.059%	N/A	6.10%	N/A	0.0036%
Bank of New York Mellon Corp/The	BK	$53,030	0.110%	2.62%	10.55%	0.0029%	0.0116%
Booking Holdings Inc	BKNG	$141,207	0.293%	0.83%	14.59%	0.0024%	0.0427%
Baker Hughes Co	BKR	$35,912	0.074%	2.32%	27.42%	0.0017%	0.0204%
Builders FirstSource Inc	BLDR	$22,576	0.047%	N/A	1.45%	N/A	0.0007%
Blackrock Finance Inc	BLK	$140,649	0.292%	2.15%	9.76%	0.0063%	0.0285%
Bristol-Myers Squibb Co	BMY	$104,897	0.217%	4.64%	-2.61%	0.0101%	-0.0057%
Broadridge Financial Solutions Inc	BR	n/a	N/A	1.64%	N/A	N/A	N/A
Berkshire Hathaway Inc	BRK/B	n/a	N/A	N/A	N/A	N/A	N/A
Brown & Brown Inc	BRO	$29,553	0.061%	0.50%	10.85%	0.0003%	0.0066%
Boston Scientific Corp	BSX	$123,406	0.256%	N/A	12.58%	N/A	0.0322%
BorgWarner Inc	BWA	$8,266	0.017%	1.21%	4.40%	0.0002%	0.0008%
Blackstone Inc	BX	$110,265	0.229%	2.14%	22.74%	0.0049%	0.0520%
BXP Inc	BXP	$12,707	0.026%	4.87%	0.90%	0.0013%	0.0002%
Citigroup Inc	C	$119,428	0.248%	3.58%	27.26%	0.0089%	0.0675%
Conagra Brands Inc	CAG	$15,579	0.032%	4.31%	1.81%	0.0014%	0.0006%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Cardinal Health Inc	CAH	$26,742	0.055%	1.83%	9.84%	0.0010%	0.0055%
Carrier Global Corp	CARR	$72,663	0.151%	0.94%	6.74%	0.0014%	0.0102%
Caterpillar Inc	CAT	$189,653	0.393%	1.44%	8.38%	0.0057%	0.0329%
Chubb Ltd	CB	$116,491	0.242%	1.26%	2.20%	0.0030%	0.0053%
Cboe Global Markets Inc	CBOE	$21,436	0.044%	1.23%	13.78%	0.0005%	0.0061%
CBRE Group Inc	CBRE	n/a	N/A	N/A	N/A	N/A	N/A
Crown Castle Inc	CCI	$51,553	0.107%	5.28%	1.13%	0.0056%	0.0012%
Carnival Corp	CCL	n/a	N/A	N/A	N/A	N/A	N/A
Cadence Design Systems Inc	CDNS	$74,213	0.154%	N/A	16.20%	N/A	0.0249%
CDW Corp/DE	CDW	$30,228	0.063%	1.10%	7.02%	0.0007%	0.0044%
Celanese Corp	CE	$14,856	0.031%	2.06%	0.56%	0.0006%	0.0002%
Constellation Energy Corp	CEG	$81,938	0.170%	0.54%	24.22%	0.0009%	0.0411%
CF Industries Holdings Inc	CF	$15,479	0.032%	2.33%	-9.54%	0.0007%	-0.0031%
Citizens Financial Group Inc	CFG	n/a	N/A	4.09%	N/A	N/A	N/A
Church & Dwight Co Inc	CHD	$25,637	0.053%	1.08%	7.35%	0.0006%	0.0039%
CH Robinson Worldwide Inc	CHRW	$12,945	0.027%	2.25%	17.48%	0.0006%	0.0047%
Charter Communications Inc	CHTR	$46,260	0.096%	N/A	7.07%	N/A	0.0068%
Cigna Group/The	CI	$96,847	0.201%	1.62%	11.65%	0.0032%	0.0234%
Cincinnati Financial Corp	CINF	$21,267	0.044%	2.38%	7.83%	0.0010%	0.0035%
Colgate-Palmolive Co	CL	$84,822	0.176%	1.93%	8.73%	0.0034%	0.0153%
Clorox Co/The	CLX	$20,178	0.042%	3.00%	11.33%	0.0013%	0.0047%
Comcast Corp	CMCSA	$161,360	0.335%	2.97%	8.16%	0.0099%	0.0273%
CME Group Inc	CME	$79,455	0.165%	2.08%	2.96%	0.0034%	0.0049%
Chipotle Mexican Grill Inc	CMG	$78,909	0.164%	N/A	22.64%	N/A	0.0370%
Cummins Inc	CMI	$44,375	0.092%	2.25%	8.28%	0.0021%	0.0076%
CMS Energy Corp	CMS	$21,093	0.044%	2.92%	7.28%	0.0013%	0.0032%
Centene Corp	CNC	$39,600	0.082%	N/A	4.40%	N/A	0.0036%
CenterPoint Energy Inc	CNP	$19,174	0.040%	2.86%	7.62%	0.0011%	0.0030%
Capital One Financial Corp	COF	$57,175	0.119%	1.60%	12.30%	0.0019%	0.0146%
Cooper Cos Inc/The	COO	$21,975	0.046%	N/A	12.43%	N/A	0.0057%
ConocoPhillips	COP	$122,256	0.253%	2.96%	13.00%	0.0075%	0.0329%
Cencora Inc	COR	$44,117	0.091%	0.91%	9.84%	0.0008%	0.0090%
Costco Wholesale Corp	COST	$393,025	0.815%	0.52%	9.88%	0.0043%	0.0805%
Corpay Inc	CPAY	$21,716	0.045%	N/A	14.87%	N/A	0.0067%
Campbell Soup Co	CPB	$14,583	0.030%	3.03%	5.71%	0.0009%	0.0017%
Copart Inc	CPRT	n/a	N/A	N/A	N/A	N/A	N/A
Camden Property Trust	CPT	$13,173	0.027%	3.34%	1.87%	0.0009%	0.0005%
Charles River Laboratories Internatio	CRL	$10,170	0.021%	N/A	5.20%	N/A	0.0011%
Salesforce Inc	CRM	$261,667	0.542%	0.58%	17.52%	0.0032%	0.0950%
Crowdstrike Holdings Inc	CRWD	$65,270	0.135%	N/A	35.70%	N/A	0.0483%
Cisco Systems Inc	CSCO	$212,387	0.440%	3.01%	3.40%	0.0132%	0.0149%
CoStar Group Inc	CSGP	n/a	N/A	N/A	N/A	N/A	N/A
CSX Corp	CSX	$66,945	0.139%	1.39%	8.83%	0.0019%	0.0123%
Cintas Corp	CTAS	$83,023	0.172%	0.76%	12.00%	0.0013%	0.0207%
Catalent Inc	CTLT	n/a	N/A	N/A	N/A	N/A	N/A
Coterra Energy Inc	CTRA	$17,706	0.037%	3.51%	10.06%	0.0013%	0.0037%
Cognizant Technology Solutions Cor	CTSH	$38,255	0.079%	1.55%	6.20%	0.0012%	0.0049%
Corteva Inc	CTVA	$40,436	0.084%	1.16%	9.85%	0.0010%	0.0083%
CVS Health Corp	CVS	$79,102	0.164%	4.23%	1.82%	0.0069%	0.0030%
Chevron Corp	CVX	$269,345	0.558%	4.43%	7.00%	0.0247%	0.0391%
Caesars Entertainment Inc	CZR	$9,030	0.019%	N/A	-28.25%	N/A	-0.0053%
Dominion Energy Inc	D	$48,482	0.101%	4.62%	21.64%	0.0046%	0.0217%
Delta Air Lines Inc	DAL	$32,781	0.068%	1.18%	8.44%	0.0008%	0.0057%
Dayforce Inc	DAY	n/a	N/A	N/A	N/A	N/A	N/A
DuPont de Nemours Inc	DD	$37,203	0.077%	1.71%	2.50%	0.0013%	0.0019%
Deere & Co	DE	$114,181	0.237%	1.41%	-9.99%	0.0033%	-0.0236%
Deckers Outdoor Corp	DECK	$24,310	0.050%	N/A	10.80%	N/A	0.0054%
Dell Technologies Inc	DELL	$39,577	0.082%	1.50%	9.83%	0.0012%	0.0081%
Discover Financial Services	DFS	$35,223	0.073%	2.00%	11.62%	0.0015%	0.0085%
Dollar General Corp	DG	$18,598	0.039%	2.79%	-7.74%	0.0011%	-0.0030%
Quest Diagnostics Inc	DGX	$17,282	0.036%	1.93%	6.05%	0.0007%	0.0022%
DR Horton Inc	DHI	$62,199	0.129%	0.63%	8.27%	0.0008%	0.0107%
Danaher Corp	DHR	$200,790	0.416%	0.39%	1.89%	0.0016%	0.0079%
Walt Disney Co/The	DIS	$174,449	0.362%	0.94%	15.77%	0.0034%	0.0570%
Digital Realty Trust Inc	DLR	$52,985	0.110%	3.02%	3.21%	0.0033%	0.0035%
Dollar Tree Inc	DLTR	$15,118	0.031%	N/A	6.86%	N/A	0.0022%
Healthpeak Properties Inc	DOC	$15,993	0.033%	5.25%	5.33%	0.0017%	0.0018%
Dover Corp	DOV	$26,356	0.055%	1.07%	7.72%	0.0006%	0.0042%
Dow Inc	DOW	$38,420	0.080%	5.13%	-2.67%	0.0041%	-0.0021%
Domino's Pizza Inc	DPZ	$15,043	0.031%	1.40%	12.56%	0.0004%	0.0039%
Darden Restaurants Inc	DRI	$19,285	0.040%	3.41%	9.75%	0.0014%	0.0039%
DTE Energy Co	DTE	$26,571	0.055%	3.18%	10.27%	0.0018%	0.0057%
Duke Energy Corp	DUK	$88,896	0.184%	3.63%	6.78%	0.0067%	0.0125%
DaVita Inc	DVA	$13,754	0.029%	N/A	20.00%	N/A	0.0057%
Devon Energy Corp	DVN	$24,497	0.051%	2.25%	6.60%	0.0011%	0.0034%
Dexcom Inc	DXCM	$26,865	0.056%	N/A	21.07%	N/A	0.0117%
Electronic Arts Inc	EA	$37,897	0.079%	0.53%	12.97%	0.0004%	0.0102%
eBay Inc	EBAY	$31,839	0.066%	1.66%	10.12%	0.0011%	0.0067%
Ecolab Inc	ECL	$72,651	0.151%	0.89%	15.76%	0.0013%	0.0237%
Consolidated Edison Inc	ED	$36,044	0.075%	3.19%	5.58%	0.0024%	0.0042%
Equifax Inc	EFX	n/a	N/A	0.53%	N/A	N/A	N/A
Everest Group Ltd	EG	$16,956	0.035%	2.04%	2.33%	0.0007%	0.0008%
Edison International	EIX	$33,436	0.069%	3.58%	7.36%	0.0025%	0.0051%
Estee Lauder Cos Inc/The	EL	$23,271	0.048%	2.65%	14.58%	0.0013%	0.0070%
Elevance Health Inc	ELV	$120,581	0.250%	1.25%	11.79%	0.0031%	0.0295%
Eastman Chemical Co	EMN	$13,082	0.027%	2.89%	6.10%	0.0008%	0.0017%
Emerson Electric Co	EMR	$62,636	0.130%	1.92%	15.10%	0.0025%	0.0196%
Enphase Energy Inc	ENPH	$15,305	0.032%	N/A	7.45%	N/A	0.0024%
EOG Resources Inc	EOG	$69,898	0.145%	2.96%	3.28%	0.0043%	0.0048%
EPAM Systems Inc	EPAM	$11,332	0.023%	N/A	5.29%	N/A	0.0012%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Equinix Inc	EQIX	$84,276	0.175%	1.92%	14.03%	0.0034%	0.0245%
Equity Residential	EQR	$28,230	0.059%	3.63%	2.83%	0.0021%	0.0017%
EQT Corp	EQT	n/a	N/A	1.72%	N/A	N/A	N/A
Erie Indemnity Co	ERIE	n/a	N/A	0.94%	N/A	N/A	N/A
Eversource Energy	ES	$24,320	0.050%	4.20%	5.46%	0.0021%	0.0028%
Essex Property Trust Inc	ESS	$18,971	0.039%	3.32%	3.49%	0.0013%	0.0014%
Eaton Corp PLC	ETN	$131,946	0.274%	1.13%	14.60%	0.0031%	0.0399%
Entergy Corp	ETR	$28,142	0.058%	3.43%	7.17%	0.0020%	0.0042%
Evergy Inc	EVRG	$14,247	0.030%	4.14%	5.35%	0.0012%	0.0016%
Edwards Lifesciences Corp	EW	$39,752	0.082%	N/A	8.56%	N/A	0.0071%
Exelon Corp	EXC	$40,539	0.084%	3.75%	5.31%	0.0032%	0.0045%
Expeditors International of Washingtc	EXPD	$18,544	0.038%	1.11%	4.39%	0.0004%	0.0017%
Expedia Group Inc	EXPE	$18,452	0.038%	N/A	19.59%	N/A	0.0075%
Extra Space Storage Inc	EXR	$38,187	0.079%	3.60%	-0.20%	0.0028%	-0.0002%
Ford Motor Co	F	$41,230	0.085%	5.68%	1.34%	0.0049%	0.0011%
Diamondback Energy Inc	FANG	$50,978	0.106%	5.43%	8.34%	0.0057%	0.0088%
Fastenal Co	FAST	n/a	N/A	2.18%	N/A	N/A	N/A
Freeport-McMoRan Inc	FCX	$71,728	0.149%	1.20%	17.59%	0.0018%	0.0262%
FactSet Research Systems Inc	FDS	$17,493	0.036%	0.90%	9.00%	0.0003%	0.0033%
FedEx Corp	FDX	$66,866	0.139%	2.02%	12.33%	0.0028%	0.0171%
FirstEnergy Corp	FE	$25,542	0.053%	3.83%	7.02%	0.0020%	0.0037%
F5 Inc	FFIV	$12,834	0.027%	N/A	7.83%	N/A	0.0021%
Fiserv Inc	FI	$103,429	0.214%	N/A	11.52%	N/A	0.0247%
Fair Isaac Corp	FICO	$47,653	0.099%	N/A	23.00%	N/A	0.0227%
Fidelity National Information Services	FIS	$45,691	0.095%	1.72%	22.20%	0.0016%	0.0210%
Fifth Third Bancorp	FITB	$28,994	0.060%	3.45%	25.00%	0.0021%	0.0150%
FMC Corp	FMC	$8,231	0.017%	3.52%	15.67%	0.0006%	0.0027%
Fox Corp	FOX	$9,141	0.019%	1.39%	8.68%	0.0003%	0.0016%
Fox Corp	FOXA	$9,509	0.020%	1.28%	8.68%	0.0003%	0.0017%
Federal Realty Investment Trust	FRT	$9,620	0.020%	3.83%	4.97%	0.0008%	0.0010%
First Solar Inc	FSLR	$26,702	0.055%	N/A	41.25%	N/A	0.0228%
Fortinet Inc	FTNT	$59,319	0.123%	N/A	8.66%	N/A	0.0106%
Fortive Corp	FTV	$27,652	0.057%	0.41%	10.49%	0.0002%	0.0060%
General Dynamics Corp	GD	$83,038	0.172%	1.88%	15.55%	0.0032%	0.0268%
GoDaddy Inc	GDDY	n/a	N/A	N/A	N/A	N/A	N/A
General Electric Co	GE	$204,479	0.424%	0.59%	29.30%	0.0025%	0.1242%
GE HealthCare Technologies Inc	GEHC	$42,858	0.089%	0.13%	10.92%	0.0001%	0.0097%
Gen Digital Inc	GEN	$16,884	0.035%	1.82%	10.49%	0.0006%	0.0037%
GE Vernova Inc	GEV	$70,069	0.145%	N/A	80.76%	N/A	0.1173%
Gilead Sciences Inc	GILD	$104,380	0.216%	3.67%	15.38%	0.0079%	0.0333%
General Mills Inc	GIS	$40,998	0.085%	3.25%	2.45%	0.0028%	0.0021%
Globe Life Inc	GL	$9,513	0.020%	0.91%	6.00%	0.0002%	0.0012%
Corning Inc	GLW	$38,635	0.080%	2.48%	13.57%	0.0020%	0.0109%
General Motors Co	GM	$50,397	0.104%	1.07%	11.02%	0.0011%	0.0115%
Generac Holdings Inc	GNRC	$9,557	0.020%	N/A	7.00%	N/A	0.0014%
Alphabet Inc	GOOG	$933,756	1.936%	0.48%	15.01%	0.0093%	0.2906%
Alphabet Inc	GOOGL	$971,715	2.015%	0.48%	15.01%	0.0097%	0.3024%
Genuine Parts Co	GPC	n/a	N/A	2.86%	N/A	N/A	N/A
Global Payments Inc	GPN	$26,059	0.054%	0.98%	8.80%	0.0005%	0.0048%
Garmin Ltd	GRMN	$33,835	0.070%	1.70%	9.55%	0.0012%	0.0067%
Goldman Sachs Group Inc/The	GS	$156,356	0.324%	2.42%	14.20%	0.0079%	0.0460%
WW Grainger Inc	GWW	n/a	N/A	0.79%	N/A	N/A	N/A
Halliburton Co	HAL	$25,646	0.053%	2.34%	8.17%	0.0012%	0.0043%
Hasbro Inc	HAS	$10,082	0.021%	3.87%	34.01%	0.0008%	0.0071%
Huntington Bancshares Inc/OH	HBAN	$21,351	0.044%	4.22%	3.32%	0.0019%	0.0015%
HCA Healthcare Inc	HCA	$104,889	0.217%	0.65%	10.81%	0.0014%	0.0235%
Home Depot Inc/The	HD	$402,482	0.834%	2.22%	3.87%	0.0185%	0.0323%
Hess Corp	HES	$41,842	0.087%	1.47%	16.00%	0.0013%	0.0139%
Hartford Financial Services Group In	HIG	$34,461	0.071%	1.60%	12.37%	0.0011%	0.0088%
Huntington Ingalls Industries Inc	HII	$10,368	0.021%	1.97%	7.62%	0.0004%	0.0016%
Hilton Worldwide Holdings Inc	HLT	$56,801	0.118%	0.26%	14.97%	0.0003%	0.0176%
Hologic Inc	HOLX	$18,921	0.039%	N/A	8.86%	N/A	0.0035%
Honeywell International Inc	HON	$134,293	0.278%	2.19%	8.65%	0.0061%	0.0241%
Hewlett Packard Enterprise Co	HPE	$26,571	0.055%	2.54%	2.42%	0.0014%	0.0013%
HP Inc	HPQ	$34,569	0.072%	3.07%	1.05%	0.0022%	0.0008%
Hormel Foods Corp	HRL	$17,383	0.036%	3.56%	6.23%	0.0013%	0.0022%
Henry Schein Inc	HSIC	$9,237	0.019%	N/A	9.01%	N/A	0.0017%
Host Hotels & Resorts Inc	HST	$12,363	0.026%	4.55%	-1.83%	0.0012%	-0.0005%
Hershey Co/The	HSY	$28,321	0.059%	2.86%	2.21%	0.0017%	0.0013%
Hubbell Inc	HUBB	n/a	N/A	1.14%	N/A	N/A	N/A
Humana Inc	HUM	$38,136	0.079%	1.12%	-1.30%	0.0009%	-0.0010%
Howmet Aerospace Inc	HWM	$40,917	0.085%	0.32%	22.11%	0.0003%	0.0188%
International Business Machines Cor	IBM	$203,647	0.422%	3.02%	3.90%	0.0128%	0.0165%
Intercontinental Exchange Inc	ICE	$92,230	0.191%	1.12%	10.58%	0.0021%	0.0202%
IDEXX Laboratories Inc	IDXX	$41,583	0.086%	N/A	11.25%	N/A	0.0097%
IDEX Corp	IEX	n/a	N/A	1.29%	N/A	N/A	N/A
International Flavors & Fragrances Ir	IFF	$26,826	0.056%	1.52%	2.12%	0.0008%	0.0012%
Incyte Corp	INCY	$12,731	0.026%	N/A	33.16%	N/A	0.0088%
Intel Corp	INTC	$100,315	0.208%	N/A	4.26%	N/A	0.0089%
Intuit Inc	INTU	$174,061	0.361%	0.67%	18.79%	0.0024%	0.0678%
Invitation Homes Inc	INVH	$21,600	0.045%	3.18%	4.16%	0.0014%	0.0019%
International Paper Co	IP	$16,969	0.035%	3.79%	-2.00%	0.0013%	-0.0007%
Interpublic Group of Cos Inc/The	IPG	$11,880	0.025%	4.17%	2.12%	0.0010%	0.0005%
IQVIA Holdings Inc	IQV	$43,200	0.090%	N/A	9.92%	N/A	0.0089%
Ingersoll Rand Inc	IR	n/a	N/A	0.08%	N/A	N/A	N/A
Iron Mountain Inc	IRM	n/a	N/A	2.41%	N/A	N/A	N/A
Intuitive Surgical Inc	ISRG	$174,575	0.362%	N/A	17.51%	N/A	0.0634%
Gartner Inc	IT	$39,051	0.081%	N/A	7.00%	N/A	0.0057%
Illinois Tool Works Inc	ITW	$77,809	0.161%	2.29%	6.90%	0.0037%	0.0111%
Invesco Ltd	IVZ	$7,903	0.016%	4.67%	9.64%	0.0008%	0.0016%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Jacobs Solutions Inc	J	$16,264	0.034%	0.89%	10.87%	0.0003%	0.0037%
JB Hunt Transport Services Inc	JBHT	$17,575	0.036%	1.00%	9.73%	0.0004%	0.0035%
Jabil Inc	JBL	$13,594	0.028%	0.27%	10.82%	0.0001%	0.0030%
Johnson Controls International plc	JCI	$51,845	0.107%	1.91%	9.26%	0.0020%	0.0100%
Jack Henry & Associates Inc	JKHY	$12,873	0.027%	1.25%	9.73%	0.0003%	0.0026%
Johnson & Johnson	JNJ	$390,118	0.809%	3.06%	3.73%	0.0248%	0.0302%
Juniper Networks Inc	JNPR	$12,831	0.027%	2.26%	6.00%	0.0006%	0.0016%
JPMorgan Chase & Co	JPM	$599,931	1.244%	2.37%	3.55%	0.0295%	0.0442%
Kellanova	K	$27,820	0.058%	2.82%	9.29%	0.0016%	0.0054%
Keurig Dr Pepper Inc	KDP	$50,826	0.105%	2.45%	6.90%	0.0026%	0.0073%
KeyCorp	KEY	$15,546	0.032%	4.90%	20.00%	0.0016%	0.0064%
Keysight Technologies Inc	KEYS	$27,581	0.057%	N/A	-1.19%	N/A	-0.0007%
Kraft Heinz Co/The	KHC	$42,451	0.088%	4.56%	2.51%	0.0040%	0.0022%
Kimco Realty Corp	KIM	$15,653	0.032%	4.13%	3.63%	0.0013%	0.0012%
KKR & Co Inc	KKR	$115,882	0.240%	0.54%	29.00%	0.0013%	0.0697%
KLA Corp	KLAC	$103,752	0.215%	0.75%	14.10%	0.0016%	0.0303%
Kimberly-Clark Corp	KMB	$47,920	0.099%	3.43%	8.36%	0.0034%	0.0083%
Kinder Morgan Inc	KMI	$49,028	0.102%	5.21%	6.52%	0.0053%	0.0066%
CarMax Inc	KMX	$11,988	0.025%	N/A	17.91%	N/A	0.0045%
Coca-Cola Co/The	KO	$309,707	0.642%	2.70%	6.36%	0.0173%	0.0408%
Kroger Co/The	KR	$41,456	0.086%	2.23%	3.11%	0.0019%	0.0027%
Kenvue Inc	KVUE	$44,298	0.092%	3.55%	13.58%	0.0033%	0.0125%
Loews Corp	L	n/a	N/A	0.32%	N/A	N/A	N/A
Leidos Holdings Inc	LDOS	$21,958	0.046%	0.93%	11.76%	0.0004%	0.0054%
Lennar Corp	LEN	$45,314	0.094%	1.07%	9.07%	0.0010%	0.0085%
Labcorp Holdings Inc	LH	$18,764	0.039%	1.29%	8.45%	0.0005%	0.0033%
L3Harris Technologies Inc	LHX	$45,125	0.094%	1.95%	8.77%	0.0018%	0.0082%
Linde PLC	LIN	$227,702	0.472%	1.17%	11.76%	0.0055%	0.0555%
LKQ Corp	LKQ	n/a	N/A	3.01%	N/A	N/A	N/A
Eli Lilly & Co	LLY	$842,020	1.746%	0.59%	33.00%	0.0102%	0.5761%
Lockheed Martin Corp	LMT	$139,335	0.289%	2.16%	2.11%	0.0062%	0.0061%
Alliant Energy Corp	LNT	$15,567	0.032%	3.16%	7.34%	0.0010%	0.0024%
Lowe's Cos Inc	LOW	$153,652	0.319%	1.70%	-0.19%	0.0054%	-0.0006%
Lam Research Corp	LRCX	$105,773	0.219%	1.13%	16.29%	0.0025%	0.0357%
Lululemon Athletica Inc	LULU	$31,927	0.066%	N/A	7.00%	N/A	0.0046%
Southwest Airlines Co	LUV	n/a	N/A	2.43%	N/A	N/A	N/A
Las Vegas Sands Corp	LVS	n/a	N/A	1.59%	N/A	N/A	N/A
Lamb Weston Holdings Inc	LW	$9,301	0.019%	2.22%	2.16%	0.0004%	0.0004%
LyondellBasell Industries NV	LYB	$31,176	0.065%	5.59%	-8.57%	0.0036%	-0.0055%
Live Nation Entertainment Inc	LYV	$25,414	0.053%	N/A	32.64%	N/A	0.0171%
Mastercard Inc	MA	$452,672	0.938%	0.53%	15.18%	0.0050%	0.1424%
Mid-America Apartment Communities	MAA	$18,572	0.039%	3.70%	0.65%	0.0014%	0.0003%
Marriott International Inc/MD	MAR	$69,987	0.145%	1.01%	4.25%	0.0015%	0.0062%
Masco Corp	MAS	$18,320	0.038%	1.38%	7.76%	0.0005%	0.0029%
McDonald's Corp	MCD	$218,438	0.453%	2.33%	5.15%	0.0105%	0.0233%
Microchip Technology Inc	MCHP	$43,076	0.089%	2.26%	-10.99%	0.0020%	-0.0098%
McKesson Corp	MCK	$64,115	0.133%	0.57%	11.18%	0.0008%	0.0149%
Moody's Corp	MCO	$86,423	0.179%	0.72%	13.00%	0.0013%	0.0233%
Mondelez International Inc	MDLZ	$98,408	0.204%	2.55%	6.93%	0.0052%	0.0141%
Medtronic PLC	MDT	$115,463	0.239%	3.11%	5.66%	0.0074%	0.0135%
MetLife Inc	MET	$57,763	0.120%	2.64%	14.21%	0.0032%	0.0170%
Meta Platforms Inc	META	$1,250,626	2.593%	0.35%	19.80%	0.0091%	0.5132%
MGM Resorts International	MGM	$11,874	0.025%	N/A	20.60%	N/A	0.0051%
Mohawk Industries Inc	MHK	$10,142	0.021%	N/A	4.45%	N/A	0.0009%
McCormick & Co Inc/MD	MKC	$20,741	0.043%	2.04%	5.83%	0.0009%	0.0025%
MarketAxess Holdings Inc	MKTX	$9,672	0.020%	1.16%	4.02%	0.0002%	0.0008%
Martin Marietta Materials Inc	MLM	$32,896	0.068%	0.59%	7.47%	0.0004%	0.0051%
Marsh & McLennan Cos Inc	MMC	$109,706	0.227%	1.46%	9.10%	0.0033%	0.0207%
3M Co	MMM	$75,097	0.156%	2.05%	-5.37%	0.0032%	-0.0084%
Monster Beverage Corp	MNST	$51,103	0.106%	N/A	10.18%	N/A	0.0108%
Altria Group Inc	MO	$87,086	0.181%	7.99%	4.20%	0.0144%	0.0076%
Molina Healthcare Inc	MOH	$20,191	0.042%	N/A	11.98%	N/A	0.0050%
Mosaic Co/The	MOS	$8,533	0.018%	3.14%	-21.74%	0.0006%	-0.0038%
Marathon Petroleum Corp	MPC	$54,523	0.113%	2.03%	-13.00%	0.0023%	-0.0147%
Monolithic Power Systems Inc	MPWR	n/a	N/A	0.54%	N/A	N/A	N/A
Merck & Co Inc	MRK	$287,853	0.597%	2.71%	53.04%	0.0162%	0.3165%
Moderna Inc	MRNA	$25,689	0.053%	N/A	16.57%	N/A	0.0088%
Marathon Oil Corp	MRO	$14,896	0.031%	1.65%	-5.00%	0.0005%	-0.0015%
Morgan Stanley	MS	$168,961	0.350%	3.55%	9.60%	0.0124%	0.0336%
MSCI Inc	MSCI	$45,847	0.095%	1.10%	12.00%	0.0010%	0.0114%
Microsoft Corp	MSFT	$3,198,436	6.631%	0.77%	16.10%	0.0512%	1.0676%
Motorola Solutions Inc	MSI	$75,017	0.156%	0.87%	9.36%	0.0014%	0.0146%
M&T Bank Corp	MTB	$29,746	0.062%	3.03%	3.87%	0.0019%	0.0024%
Match Group Inc	MTCH	$9,759	0.020%	N/A	36.15%	N/A	0.0073%
Mettler-Toledo International Inc	MTD	$32,029	0.066%	N/A	9.15%	N/A	0.0061%
Micron Technology Inc	MU	$114,998	0.238%	0.44%	53.55%	0.0011%	0.1277%
Norwegian Cruise Line Holdings Ltd	NCLH	$9,018	0.019%	N/A	50.58%	N/A	0.0095%
Nasdaq Inc	NDAQ	$42,049	0.087%	1.31%	10.76%	0.0011%	0.0094%
Nordson Corp	NDSN	n/a	N/A	1.19%	N/A	N/A	N/A
NextEra Energy Inc	NEE	$173,709	0.360%	2.44%	8.78%	0.0088%	0.0316%
Newmont Corp	NEM	$61,600	0.128%	1.87%	40.36%	0.0024%	0.0515%
Netflix Inc	NFLX	$304,394	0.631%	N/A	35.72%	N/A	0.2254%
NiSource Inc	NI	$15,541	0.032%	3.06%	7.90%	0.0010%	0.0025%
NIKE Inc	NKE	$106,209	0.220%	1.67%	4.53%	0.0037%	0.0100%
Northrop Grumman Corp	NOC	$77,228	0.160%	1.56%	8.68%	0.0025%	0.0139%
ServiceNow Inc	NOW	n/a	N/A	N/A	N/A	N/A	N/A
NRG Energy Inc	NRG	$18,801	0.039%	1.79%	4.00%	0.0007%	0.0016%
Norfolk Southern Corp	NSC	$56,185	0.116%	2.17%	9.92%	0.0025%	0.0116%
NetApp Inc	NTAP	$25,293	0.052%	1.68%	5.34%	0.0009%	0.0028%
Northern Trust Corp	NTRS	$18,153	0.038%	3.33%	10.11%	0.0013%	0.0038%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Nucor Corp	NUE	$35,681	0.074%	1.44%	-1.63%	0.0011%	-0.0012%
NVIDIA Corp	NVDA	$2,978,923	6.176%	0.03%	44.35%	0.0020%	2.7390%
NVR Inc	NVR	$30,201	0.063%	N/A	7.60%	N/A	0.0048%
News Corp	NWS	n/a	N/A	0.72%	N/A	N/A	N/A
News Corp	NWSA	n/a	N/A	0.75%	N/A	N/A	N/A
NXP Semiconductors NV	NXPI	$61,138	0.127%	1.69%	5.89%	0.0021%	0.0075%
Realty Income Corp	O	$55,230	0.115%	4.99%	3.85%	0.0057%	0.0044%
Old Dominion Freight Line Inc	ODFL	$42,568	0.088%	0.52%	2.77%	0.0005%	0.0024%
ONEOK Inc	OKE	$53,227	0.110%	4.35%	2.95%	0.0048%	0.0033%
Omnicom Group Inc	OMC	$20,228	0.042%	2.71%	5.45%	0.0011%	0.0023%
ON Semiconductor Corp	ON	$31,103	0.064%	N/A	1.28%	N/A	0.0008%
Oracle Corp	ORCL	$472,189	0.979%	0.94%	11.95%	0.0092%	0.1170%
O'Reilly Automotive Inc	ORLY	$66,800	0.138%	N/A	10.21%	N/A	0.0141%
Otis Worldwide Corp	OTIS	$41,634	0.086%	1.50%	10.00%	0.0013%	0.0086%
Occidental Petroleum Corp	OXY	$47,221	0.098%	1.71%	24.00%	0.0017%	0.0235%
Palo Alto Networks Inc	PANW	$111,290	0.231%	N/A	11.52%	N/A	0.0266%
Paramount Global	PARA	$6,648	0.014%	1.88%	49.00%	0.0003%	0.0068%
Paycom Software Inc	PAYC	$9,566	0.020%	0.90%	9.41%	0.0002%	0.0019%
Paychex Inc	PAYX	$48,274	0.100%	2.92%	7.54%	0.0029%	0.0075%
PACCAR Inc	PCAR	$51,730	0.107%	1.22%	0.48%	0.0013%	0.0005%
PG&E Corp	PCG	$42,258	0.088%	0.20%	9.84%	0.0002%	0.0086%
Public Service Enterprise Group Inc	PEG	$44,441	0.092%	2.69%	7.47%	0.0025%	0.0069%
PepsiCo Inc	PEP	$233,576	0.484%	3.19%	6.97%	0.0154%	0.0338%
Pfizer Inc	PFE	$163,994	0.340%	5.81%	6.39%	0.0197%	0.0217%
Principal Financial Group Inc	PFG	$19,893	0.041%	3.35%	13.00%	0.0014%	0.0054%
Procter & Gamble Co/The	PG	$406,969	0.844%	2.32%	7.37%	0.0196%	0.0621%
Progressive Corp/The	PGR	$148,619	0.308%	0.16%	39.61%	0.0005%	0.1220%
Parker-Hannifin Corp	PH	$81,296	0.169%	1.03%	13.44%	0.0017%	0.0227%
PulteGroup Inc	PHM	$29,786	0.062%	0.56%	8.99%	0.0003%	0.0055%
Packaging Corp of America	PKG	$19,346	0.040%	2.32%	5.83%	0.0009%	0.0023%
Prologis Inc	PLD	$116,924	0.242%	3.04%	5.36%	0.0074%	0.0130%
Palantir Technologies Inc	PLTR	$79,694	0.165%	N/A	30.06%	N/A	0.0497%
Philip Morris International Inc	PM	$188,753	0.391%	4.45%	9.36%	0.0174%	0.0366%
PNC Financial Services Group Inc/Th	PNC	$73,477	0.152%	3.46%	18.04%	0.0053%	0.0275%
Pentair PLC	PNR	$16,184	0.034%	0.94%	12.50%	0.0003%	0.0042%
Pinnacle West Capital Corp	PNW	$10,065	0.021%	3.97%	8.22%	0.0008%	0.0017%
Insulet Corp	PODD	$16,319	0.034%	N/A	20.81%	N/A	0.0070%
Pool Corp	POOL	$14,416	0.030%	1.27%	-0.04%	0.0004%	0.0000%
PPG Industries Inc	PPG	$30,903	0.064%	2.05%	8.33%	0.0013%	0.0053%
PPL Corp	PPL	$24,406	0.051%	3.11%	7.01%	0.0016%	0.0035%
Prudential Financial Inc	PRU	$43,233	0.090%	4.29%	9.48%	0.0038%	0.0085%
Public Storage	PSA	$63,933	0.133%	3.30%	2.48%	0.0044%	0.0033%
Phillips 66	PSX	$55,021	0.114%	3.50%	-9.00%	0.0040%	-0.0103%
PTC Inc	PTC	$21,704	0.045%	N/A	14.76%	N/A	0.0066%
Quanta Services Inc	PWR	n/a	N/A	0.12%	N/A	N/A	N/A
PayPal Holdings Inc	PYPL	$79,773	0.165%	N/A	12.03%	N/A	0.0199%
QUALCOMM Inc	QCOM	$189,436	0.393%	2.00%	10.64%	0.0079%	0.0418%
Qorvo Inc	QRVO	$9,799	0.020%	N/A	17.09%	N/A	0.0035%
Royal Caribbean Cruises Ltd	RCL	$45,656	0.095%	0.90%	30.00%	0.0009%	0.0284%
Regency Centers Corp	REG	$13,110	0.027%	3.71%	3.79%	0.0010%	0.0010%
Regeneron Pharmaceuticals Inc	REGN	$113,972	0.236%	N/A	8.67%	N/A	0.0205%
Regions Financial Corp	RF	$21,350	0.044%	4.29%	4.68%	0.0019%	0.0021%
Raymond James Financial Inc	RJF	$25,220	0.052%	1.47%	13.70%	0.0008%	0.0072%
Ralph Lauren Corp	RL	$7,766	0.016%	1.70%	11.05%	0.0003%	0.0018%
ResMed Inc	RMD	$35,869	0.074%	0.87%	11.48%	0.0006%	0.0085%
Rockwell Automation Inc	ROK	$30,461	0.063%	1.86%	1.73%	0.0012%	0.0011%
Rollins Inc	ROL	$24,497	0.051%	1.19%	14.00%	0.0006%	0.0071%
Roper Technologies Inc	ROP	n/a	N/A	0.54%	N/A	N/A	N/A
Ross Stores Inc	ROST	$49,934	0.104%	0.98%	8.85%	0.0010%	0.0092%
Republic Services Inc	RSG	$63,077	0.131%	1.16%	10.33%	0.0015%	0.0135%
RTX Corp	RTX	$161,172	0.334%	2.08%	10.23%	0.0069%	0.0342%
Revvity Inc	RVTY	$15,756	0.033%	0.22%	9.44%	0.0001%	0.0031%
SBA Communications Corp	SBAC	$25,869	0.054%	1.63%	15.96%	0.0009%	0.0086%
Starbucks Corp	SBUX	$110,476	0.229%	2.34%	9.67%	0.0054%	0.0221%
Charles Schwab Corp/The	SCHW	$115,261	0.239%	1.54%	14.04%	0.0037%	0.0335%
Sherwin-Williams Co/The	SHW	$96,279	0.200%	0.75%	9.88%	0.0015%	0.0197%
J M Smucker Co/The	SJM	$12,886	0.027%	3.57%	6.07%	0.0010%	0.0016%
Schlumberger NV	SLB	$59,562	0.123%	2.62%	12.22%	0.0032%	0.0151%
Super Micro Computer Inc	SMCI	$24,383	0.051%	N/A	69.00%	N/A	0.0349%
Snap-on Inc	SNA	$15,263	0.032%	2.57%	3.83%	0.0008%	0.0012%
Synopsys Inc	SNPS	$77,789	0.161%	N/A	16.33%	N/A	0.0263%
Southern Co/The	SO	$98,714	0.205%	3.19%	7.23%	0.0065%	0.0148%
Solventum Corp	SOLV	$12,041	0.025%	N/A	-2.00%	N/A	-0.0005%
Simon Property Group Inc	SPG	$55,106	0.114%	4.85%	1.42%	0.0055%	0.0016%
S&P Global Inc	SPGI	$165,422	0.343%	0.70%	14.00%	0.0024%	0.0480%
Sempra	SRE	$52,950	0.110%	2.97%	5.35%	0.0033%	0.0059%
STERIS PLC	STE	n/a	N/A	0.94%	N/A	N/A	N/A
Steel Dynamics Inc	STLD	$19,455	0.040%	1.46%	-4.43%	0.0006%	-0.0018%
State Street Corp	STT	$26,419	0.055%	3.44%	8.82%	0.0019%	0.0048%
Seagate Technology Holdings PLC	STX	n/a	N/A	2.56%	N/A	N/A	N/A
Constellation Brands Inc	STZ	$46,949	0.097%	1.57%	11.27%	0.0015%	0.0110%
Smurfit WestRock PLC	SW	$25,696	0.053%	2.45%	1.00%	0.0013%	0.0005%
Stanley Black & Decker Inc	SWK	n/a	N/A	2.98%	N/A	N/A	N/A
Skyworks Solutions Inc	SWKS	$15,775	0.033%	2.83%	-2.57%	0.0009%	-0.0008%
Synchrony Financial	SYF	$19,714	0.041%	2.00%	64.00%	0.0008%	0.0262%
Stryker Corp	SYK	$137,667	0.285%	0.89%	8.60%	0.0025%	0.0245%
Sysco Corp	SYY	$38,368	0.080%	2.61%	7.00%	0.0021%	0.0056%
AT&T Inc	T	$157,745	0.327%	5.05%	1.84%	0.0165%	0.0060%
Molson Coors Beverage Co	TAP	$11,078	0.023%	3.06%	5.29%	0.0007%	0.0012%
TransDigm Group Inc	TDG	$80,078	0.166%	N/A	19.57%	N/A	0.0325%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Teledyne Technologies Inc	TDY	$20,475	0.042%	N/A	7.34%	N/A	0.0031%
Bio-Techne Corp	TECH	$12,682	0.026%	0.40%	5.00%	0.0001%	0.0013%
TE Connectivity PLC	TEL	$45,889	0.095%	1.72%	7.43%	0.0016%	0.0071%
Teradyne Inc	TER	$21,854	0.045%	0.36%	16.14%	0.0002%	0.0073%
Truist Financial Corp	TFC	$57,275	0.119%	4.86%	10.91%	0.0058%	0.0129%
Teleflex Inc	TFX	$11,653	0.024%	0.55%	7.95%	0.0001%	0.0019%
Target Corp	TGT	$71,801	0.149%	2.87%	14.38%	0.0043%	0.0214%
TJX Cos Inc/The	TJX	$132,570	0.275%	1.28%	8.20%	0.0035%	0.0225%
Thermo Fisher Scientific Inc	TMO	$236,291	0.490%	0.25%	8.74%	0.0012%	0.0428%
T-Mobile US Inc	TMUS	$240,778	0.499%	1.71%	5.00%	0.0085%	0.0250%
Tapestry Inc	TPR	$10,928	0.023%	2.98%	5.52%	0.0007%	0.0012%
Targa Resources Corp	TRGP	$32,426	0.067%	2.03%	16.74%	0.0014%	0.0113%
Trimble Inc	TRMB	n/a	N/A	N/A	N/A	N/A	N/A
T Rowe Price Group Inc	TROW	$24,248	0.050%	4.55%	7.30%	0.0023%	0.0037%
Travelers Cos Inc/The	TRV	$53,363	0.111%	1.79%	18.11%	0.0020%	0.0200%
Tractor Supply Co	TSCO	$31,382	0.065%	1.51%	5.68%	0.0010%	0.0037%
Tesla Inc	TSLA	$835,814	1.733%	N/A	-11.00%	N/A	-0.1906%
Tyson Foods Inc	TSN	n/a	N/A	3.29%	N/A	N/A	N/A
Trane Technologies PLC	TT	$87,725	0.182%	0.86%	15.56%	0.0016%	0.0283%
Take-Two Interactive Software Inc	TTWO	$26,943	0.056%	N/A	60.49%	N/A	0.0338%
Texas Instruments Inc	TXN	$188,608	0.391%	2.63%	-2.86%	0.0103%	-0.0112%
Textron Inc	TXT	$16,597	0.034%	0.09%	10.05%	0.0000%	0.0035%
Tyler Technologies Inc	TYL	n/a	N/A	N/A	N/A	N/A	N/A
United Airlines Holdings Inc	UAL	$18,761	0.039%	N/A	2.27%	N/A	0.0009%
Uber Technologies Inc	UBER	$157,906	0.327%	N/A	60.59%	N/A	0.1983%
UDR Inc	UDR	$14,954	0.031%	3.75%	1.85%	0.0012%	0.0006%
Universal Health Services Inc	UHS	$13,617	0.028%	0.35%	15.50%	0.0001%	0.0044%
Ulta Beauty Inc	ULTA	$18,333	0.038%	N/A	1.64%	N/A	0.0006%
UnitedHealth Group Inc	UNH	$539,904	1.119%	1.44%	10.44%	0.0161%	0.1169%
Union Pacific Corp	UNP	$150,155	0.311%	2.17%	10.27%	0.0068%	0.0320%
United Parcel Service Inc	UPS	$99,870	0.207%	4.78%	0.60%	0.0099%	0.0012%
United Rentals Inc	URI	$53,552	0.111%	0.81%	7.45%	0.0009%	0.0083%
US Bancorp	USB	$71,362	0.148%	4.37%	5.00%	0.0065%	0.0074%
Visa Inc	V	$459,289	0.952%	0.76%	12.33%	0.0072%	0.1174%
VICI Properties Inc	VICI	$34,747	0.072%	5.19%	1.83%	0.0037%	0.0013%
Valero Energy Corp	VLO	$43,261	0.090%	3.17%	-24.00%	0.0028%	-0.0215%
Veralto Corp	VLTO	n/a	N/A	0.32%	N/A	N/A	N/A
Vulcan Materials Co	VMC	$33,072	0.069%	0.73%	19.00%	0.0005%	0.0130%
Verisk Analytics Inc	VRSK	$38,164	0.079%	0.58%	13.00%	0.0005%	0.0103%
VeriSign Inc	VRSN	n/a	N/A	N/A	N/A	N/A	N/A
Vertex Pharmaceuticals Inc	VRTX	$120,038	0.249%	N/A	11.00%	N/A	0.0274%
Vistra Corp	VST	n/a	N/A	0.74%	N/A	N/A	N/A
Ventas Inc	VTR	$26,496	0.055%	2.81%	8.22%	0.0015%	0.0045%
Viatris Inc	VTRS	$13,857	0.029%	4.13%	-3.41%	0.0012%	-0.0010%
Verizon Communications Inc	VZ	$189,050	0.392%	6.03%	3.00%	0.0237%	0.0118%
Westinghouse Air Brake Technologie	WAB	$31,843	0.066%	0.44%	16.12%	0.0003%	0.0106%
Waters Corp	WAT	$21,364	0.044%	N/A	7.80%	N/A	0.0035%
Walgreens Boots Alliance Inc	WBA	$7,735	0.016%	11.16%	-24.69%	0.0018%	-0.0040%
Warner Bros Discovery Inc	WBD	$20,228	0.042%	N/A	28.63%	N/A	0.0120%
Western Digital Corp	WDC	$23,454	0.049%	N/A	-10.00%	N/A	-0.0049%
WEC Energy Group Inc	WEC	$30,400	0.063%	3.47%	7.82%	0.0022%	0.0049%
Welltower Inc	WELL	$77,989	0.162%	2.09%	15.65%	0.0034%	0.0253%
Wells Fargo & Co	WFC	$192,279	0.399%	2.83%	7.95%	0.0113%	0.0317%
Waste Management Inc	WM	$83,313	0.173%	1.45%	13.29%	0.0025%	0.0230%
Williams Cos Inc/The	WMB	$55,644	0.115%	4.16%	4.28%	0.0048%	0.0049%
Walmart Inc	WMT	$649,089	1.346%	1.03%	9.24%	0.0138%	0.1243%
W R Berkley Corp	WRB	$21,589	0.045%	0.56%	13.27%	0.0003%	0.0059%
West Pharmaceutical Services Inc	WST	$21,774	0.045%	0.27%	2.89%	0.0001%	0.0013%
Willis Towers Watson PLC	WTW	$29,911	0.062%	1.20%	11.69%	0.0007%	0.0072%
Weyerhaeuser Co	WY	$24,627	0.051%	2.36%	-11.50%	0.0012%	-0.0059%
Wynn Resorts Ltd	WYNN	$10,642	0.022%	1.04%	-12.14%	0.0002%	-0.0027%
Xcel Energy Inc	XEL	$36,405	0.075%	3.35%	7.10%	0.0025%	0.0054%
Exxon Mobil Corp	XOM	$520,788	1.080%	3.24%	5.00%	0.0350%	0.0540%
Xylem Inc/NY	XYL	n/a	N/A	1.07%	N/A	N/A	N/A
Yum! Brands Inc	YUM	$39,282	0.081%	1.92%	11.41%	0.0016%	0.0093%
Zimmer Biomet Holdings Inc	ZBH	$21,984	0.046%	0.89%	6.46%	0.0004%	0.0029%
Zebra Technologies Corp	ZBRA	n/a	N/A	N/A	N/A	N/A	N/A
Zoetis Inc	ZTS	$88,517	0.184%	0.88%	10.36%	0.0016%	0.0190%
		$48,234,942					

[4] Source: Bloomberg Professional as of September 30, 2024
[5] Equals weight in S&P 500 based on market capitalization
[6] Source: Bloomberg Professional as of September 30, 2024
[7] Source: Bloomberg Professional as of September 30, 2024
[8] Equals [5] x [6]
[9] Equals [5] x [7]

Expected Market Return
Market DCF Based Method - Value Line EPS Growth

[1] Market Cap. Weighted Estimate of the S&P 500 Dividend Yield	1.32%
[2] Market Cap. Weighted Estimate of the S&P 500 Growth Rate	13.35%
[3] Market Cap. Weighted Estimated Required Market Return	14.77%

Notes:
[1] Equals Sum of Col. [8]
[2] Equals Sum of Col. [9]
[3] Equals ([1] x (1 + (0.5 x [2]))) + [2]

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate ($ mill)	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Agilent Technologies Inc	A	$42,662	0.09%	0.64%	8.00%	0.0006%	0.0071%
Apple Inc	AAPL	$3,542,564	7.35%	0.43%	8.00%	0.0315%	0.5878%
AbbVie Inc	ABBV	$348,818	0.72%	3.14%	4.00%	0.0227%	0.0289%
Airbnb Inc	ABNB	$55,797	0.12%	N/A	23.00%	N/A	0.0266%
Abbott Laboratories	ABT	$198,366	0.41%	1.93%	4.00%	0.0079%	0.0165%
Arch Capital Group Ltd	ACGL	$42,073	0.09%	N/A	17.00%	N/A	0.0148%
Accenture PLC	ACN	$221,414	0.46%	1.67%	12.50%	0.0077%	0.0574%
Adobe Inc	ADBE	$227,927	0.47%	N/A	13.50%	N/A	0.0638%
Analog Devices Inc	ADI	$114,278	0.24%	1.60%	7.50%	0.0038%	0.0178%
Archer-Daniels-Midland Co	ADM	$28,564	0.06%	3.35%	3.00%	0.0020%	0.0018%
Automatic Data Processing Inc	ADP	$112,858	0.23%	2.02%	11.00%	0.0047%	0.0257%
Autodesk Inc	ADSK	$59,228	0.12%	N/A	14.00%	N/A	0.0172%
Ameren Corp	AEE	$23,309	0.05%	3.06%	6.50%	0.0015%	0.0031%
American Electric Power Co Inc	AEP	$54,596	0.11%	3.43%	6.50%	0.0039%	0.0074%
AES Corp/The	AES	$14,261	0.03%	3.44%	14.00%	0.0010%	0.0041%
Aflac Inc	AFL	$62,611	0.13%	1.79%	7.50%	0.0023%	0.0097%
American International Group Inc	AIG	$47,157	0.10%	2.18%	13.00%	0.0021%	0.0127%
Assurant Inc	AIZ	$10,300	0.02%	1.45%	9.50%	0.0003%	0.0020%
Arthur J Gallagher & Co	AJG	$61,648	0.13%	0.85%	15.50%	0.0011%	0.0198%
Akamai Technologies Inc	AKAM	$15,297	0.03%	N/A	6.00%	N/A	0.0019%
Albemarle Corp	ALB	$11,132	0.02%	1.71%	-3.50%	0.0004%	-0.0008%
Align Technology Inc	ALGN	$18,997	0.04%	N/A	17.00%	N/A	0.0067%
Allstate Corp/The	ALL	$50,075	0.10%	1.94%	30.00%	0.0020%	0.0312%
Allegion plc	ALLE	$12,698	0.03%	1.32%	8.50%	0.0003%	0.0022%
Applied Materials Inc	AMAT	$166,571	0.35%	0.79%	9.50%	0.0027%	0.0328%
Amcor PLC	AMCR	$16,376	0.03%	4.41%	11.50%	0.0015%	0.0039%
Advanced Micro Devices Inc	AMD	$265,561	0.55%	N/A	17.00%	N/A	0.0936%
AMETEK Inc	AME	$39,757	0.08%	0.65%	10.00%	0.0005%	0.0082%
Amgen Inc	AMGN	$173,133	0.36%	2.79%	4.50%	0.0100%	0.0162%
Ameriprise Financial Inc	AMP	$46,130	0.10%	1.26%	10.00%	0.0012%	0.0096%
American Tower Corp	AMT	$108,625	0.23%	2.79%	11.00%	0.0063%	0.0248%
Amentum Holdings Inc	AMTM	n/a	N/A	N/A	N/A	N/A	N/A
Amazon.com Inc	AMZN	$1,955,639	4.06%	N/A	24.50%	N/A	0.9938%
Arista Networks Inc	ANET	$120,578	0.25%	N/A	19.50%	N/A	0.0488%
ANSYS Inc	ANSS	$27,844	0.06%	N/A	9.50%	N/A	0.0055%
Aon PLC	AON	$75,164	0.16%	0.78%	12.00%	0.0012%	0.0187%
A O Smith Corp	AOS	$10,776	0.02%	1.42%	9.00%	0.0003%	0.0020%
APA Corp	APA	$9,048	0.02%	4.09%	6.00%	0.0008%	0.0011%
Air Products and Chemicals Inc	APD	$66,192	0.14%	2.38%	10.50%	0.0033%	0.0144%
Amphenol Corp	APH	$78,471	0.16%	1.01%	13.50%	0.0016%	0.0220%
Aptiv PLC	APTV	$19,137	0.04%	N/A	28.50%	N/A	0.0113%
Alexandria Real Estate Equities Inc	ARE	$20,772	0.04%	4.38%	9.50%	0.0019%	0.0041%
Atmos Energy Corp	ATO	$21,532	0.04%	2.32%	7.00%	0.0010%	0.0031%
AvalonBay Communities Inc	AVB	$32,034	0.07%	3.02%	5.50%	0.0020%	0.0037%
Broadcom Inc	AVGO	$805,674	1.67%	1.23%	30.00%	0.0205%	0.5013%
Avery Dennison Corp	AVY	$17,775	0.04%	1.59%	2.00%	0.0006%	0.0007%
American Water Works Co Inc	AWK	$28,497	0.06%	2.09%	4.50%	0.0012%	0.0027%
Axon Enterprise Inc	AXON	$30,199	0.06%	N/A	25.00%	N/A	0.0157%
American Express Co	AXP	$192,799	0.40%	1.03%	9.00%	0.0041%	0.0360%
AutoZone Inc	AZO	$53,812	0.11%	N/A	12.50%	N/A	0.0140%
Boeing Co/The	BA	n/a	N/A	N/A	N/A	N/A	N/A
Bank of America Corp	BAC	$307,900	0.64%	2.62%	6.50%	0.0167%	0.0415%
Ball Corp	BALL	$20,615	0.04%	1.18%	10.50%	0.0005%	0.0045%
Baxter International Inc	BAX	$19,371	0.04%	3.06%	3.00%	0.0012%	0.0012%
Bath & Body Works Inc	BBWI	$6,994	0.01%	2.51%	26.50%	0.0004%	0.0038%
Best Buy Co Inc	BBY	$22,181	0.05%	3.64%	1.00%	0.0017%	0.0005%
Becton Dickinson & Co	BDX	$69,688	0.14%	1.58%	6.00%	0.0023%	0.0087%
Franklin Resources Inc	BEN	$10,538	0.02%	6.15%	4.00%	0.0013%	0.0009%
Brown-Forman Corp	BF/B	$14,934	0.03%	1.77%	15.00%	0.0005%	0.0046%
Bunge Global SA	BG	$13,689	0.03%	2.81%	0.00%	0.0008%	0.0000%
Biogen Inc	BIIB	$28,235	0.06%	N/A	0.50%	N/A	0.0003%
Bank of New York Mellon Corp/The	BK	$53,030	0.11%	2.62%	12.00%	0.0029%	0.0132%
Booking Holdings Inc	BKNG	$141,207	0.29%	0.83%	22.00%	0.0024%	0.0644%
Baker Hughes Co	BKR	$35,912	0.07%	2.32%	28.00%	0.0017%	0.0209%
Builders FirstSource Inc	BLDR	$22,576	0.05%	N/A	6.50%	N/A	0.0030%
Blackrock Finance Inc	BLK	$140,649	0.29%	2.15%	8.00%	0.0063%	0.0233%
Bristol-Myers Squibb Co	BMY	$104,897	0.22%	4.64%	1.00%	0.0101%	0.0022%
Broadridge Financial Solutions Inc	BR	$25,096	0.05%	1.64%	9.50%	0.0009%	0.0049%
Berkshire Hathaway Inc	BRK/B	$609,933	1.27%	N/A	9.00%	N/A	0.1139%
Brown & Brown Inc	BRO	$29,553	0.06%	0.50%	12.50%	0.0003%	0.0077%
Boston Scientific Corp	BSX	$123,406	0.26%	N/A	13.00%	N/A	0.0333%
BorgWarner Inc	BWA	$8,266	0.02%	1.21%	5.50%	0.0002%	0.0009%
Blackstone Inc	BX	$110,265	0.23%	2.14%	16.00%	0.0049%	0.0366%
BXP Inc	BXP	$12,707	0.03%	4.87%	0.50%	0.0013%	0.0001%
Citigroup Inc	C	$119,428	0.25%	3.58%	3.00%	0.0089%	0.0074%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate ($ mill)	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Conagra Brands Inc	CAG	$15,579	0.03%	4.31%	3.50%	0.0014%	0.0011%
Cardinal Health Inc	CAH	$26,742	0.06%	1.83%	6.50%	0.0010%	0.0036%
Carrier Global Corp	CARR	$72,663	0.15%	0.94%	12.00%	0.0014%	0.0181%
Caterpillar Inc	CAT	$189,653	0.39%	1.44%	11.50%	0.0057%	0.0452%
Chubb Ltd	CB	$116,491	0.24%	1.26%	13.00%	0.0030%	0.0314%
Cboe Global Markets Inc	CBOE	$21,436	0.04%	1.23%	14.00%	0.0005%	0.0062%
CBRE Group Inc	CBRE	$38,145	0.08%	N/A	5.00%	N/A	0.0040%
Crown Castle Inc	CCI	$51,553	0.11%	5.28%	-0.50%	0.0056%	-0.0005%
Carnival Corp	CCL	n/a	N/A	N/A	N/A	N/A	N/A
Cadence Design Systems Inc	CDNS	$74,213	0.15%	N/A	12.00%	N/A	0.0185%
CDW Corp/DE	CDW	$30,228	0.06%	1.10%	7.00%	0.0007%	0.0044%
Celanese Corp	CE	$14,856	0.03%	2.06%	4.50%	0.0006%	0.0014%
Constellation Energy Corp	CEG	n/a	N/A	0.54%	N/A	N/A	N/A
CF Industries Holdings Inc	CF	$15,479	0.03%	2.33%	-1.50%	0.0007%	-0.0005%
Citizens Financial Group Inc	CFG	$18,412	0.04%	4.09%	7.50%	0.0016%	0.0029%
Church & Dwight Co Inc	CHD	$25,637	0.05%	1.08%	6.50%	0.0006%	0.0035%
CH Robinson Worldwide Inc	CHRW	$12,945	0.03%	2.25%	5.50%	0.0006%	0.0015%
Charter Communications Inc	CHTR	$46,260	0.10%	N/A	6.50%	N/A	0.0062%
Cigna Group/The	CI	$96,847	0.20%	1.62%	12.00%	0.0032%	0.0241%
Cincinnati Financial Corp	CINF	$21,267	0.04%	2.38%	10.50%	0.0010%	0.0046%
Colgate-Palmolive Co	CL	$84,822	0.18%	1.93%	11.50%	0.0034%	0.0202%
Clorox Co/The	CLX	$20,178	0.04%	3.00%	7.00%	0.0013%	0.0029%
Comcast Corp	CMCSA	$161,360	0.33%	2.97%	7.50%	0.0099%	0.0251%
CME Group Inc	CME	$79,455	0.16%	2.08%	5.50%	0.0034%	0.0091%
Chipotle Mexican Grill Inc	CMG	$78,909	0.16%	N/A	20.00%	N/A	0.0327%
Cummins Inc	CMI	$44,375	0.09%	2.25%	6.00%	0.0021%	0.0055%
CMS Energy Corp	CMS	$21,093	0.04%	2.92%	6.00%	0.0013%	0.0026%
Centene Corp	CNC	$39,600	0.08%	N/A	10.00%	N/A	0.0082%
CenterPoint Energy Inc	CNP	$19,174	0.04%	2.86%	6.50%	0.0011%	0.0026%
Capital One Financial Corp	COF	$57,175	0.12%	1.60%	2.50%	0.0019%	0.0030%
Cooper Cos Inc/The	COO	$21,975	0.05%	N/A	7.50%	N/A	0.0034%
ConocoPhillips	COP	$122,256	0.25%	2.96%	4.00%	0.0075%	0.0101%
Cencora Inc	COR	$44,117	0.09%	0.91%	6.50%	0.0008%	0.0059%
Costco Wholesale Corp	COST	$393,025	0.82%	0.52%	10.00%	0.0043%	0.0815%
Corpay Inc	CPAY	$21,716	0.05%	N/A	13.50%	N/A	0.0061%
Campbell Soup Co	CPB	$14,583	0.03%	3.03%	5.00%	0.0009%	0.0015%
Copart Inc	CPRT	$50,476	0.10%	N/A	9.00%	N/A	0.0094%
Camden Property Trust	CPT	$13,173	0.03%	3.34%	-6.50%	0.0009%	-0.0018%
Charles River Laboratories Internatio	CRL	$10,170	0.02%	N/A	7.00%	N/A	0.0015%
Salesforce Inc	CRM	$261,667	0.54%	0.58%	24.00%	0.0032%	0.1303%
Crowdstrike Holdings Inc	CRWD	n/a	N/A	N/A	N/A	N/A	N/A
Cisco Systems Inc	CSCO	$212,387	0.44%	3.01%	3.50%	0.0132%	0.0154%
CoStar Group Inc	CSGP	$30,917	0.06%	N/A	16.50%	N/A	0.0106%
CSX Corp	CSX	$66,945	0.14%	1.39%	9.00%	0.0019%	0.0125%
Cintas Corp	CTAS	$83,023	0.17%	0.76%	14.00%	0.0013%	0.0241%
Catalent Inc	CTLT	$10,991	0.02%	N/A	21.00%	N/A	0.0048%
Coterra Energy Inc	CTRA	$17,706	0.04%	3.51%	4.50%	0.0013%	0.0017%
Cognizant Technology Solutions Cor	CTSH	$38,255	0.08%	1.55%	8.00%	0.0012%	0.0063%
Corteva Inc	CTVA	$40,436	0.08%	1.16%	9.50%	0.0010%	0.0080%
CVS Health Corp	CVS	$79,102	0.16%	4.23%	2.50%	0.0069%	0.0041%
Chevron Corp	CVX	$269,345	0.56%	4.43%	5.00%	0.0247%	0.0279%
Caesars Entertainment Inc	CZR	n/a	N/A	N/A	N/A	N/A	N/A
Dominion Energy Inc	D	$48,482	0.10%	4.62%	3.00%	0.0046%	0.0030%
Delta Air Lines Inc	DAL	n/a	N/A	1.18%	N/A	N/A	N/A
Dayforce Inc	DAY	n/a	N/A	N/A	N/A	N/A	N/A
DuPont de Nemours Inc	DD	$37,203	0.08%	1.71%	9.00%	0.0013%	0.0069%
Deere & Co	DE	$114,181	0.24%	1.41%	4.00%	0.0033%	0.0095%
Deckers Outdoor Corp	DECK	$24,310	0.05%	N/A	17.00%	N/A	0.0086%
Dell Technologies Inc	DELL	$39,577	0.08%	1.50%	2.50%	0.0012%	0.0021%
Discover Financial Services	DFS	$35,223	0.07%	2.00%	4.00%	0.0015%	0.0029%
Dollar General Corp	DG	$18,598	0.04%	2.79%	3.50%	0.0011%	0.0014%
Quest Diagnostics Inc	DGX	$17,282	0.04%	1.93%	3.00%	0.0007%	0.0011%
DR Horton Inc	DHI	$62,199	0.13%	0.63%	5.00%	0.0008%	0.0065%
Danaher Corp	DHR	$200,790	0.42%	0.39%	5.50%	0.0016%	0.0229%
Walt Disney Co/The	DIS	$174,449	0.36%	0.94%	21.50%	0.0034%	0.0778%
Digital Realty Trust Inc	DLR	$52,985	0.11%	3.02%	-5.00%	0.0033%	-0.0055%
Dollar Tree Inc	DLTR	$15,118	0.03%	N/A	24.00%	N/A	0.0075%
Healthpeak Properties Inc	DOC	$15,993	0.03%	5.25%	7.00%	0.0017%	0.0023%
Dover Corp	DOV	$26,356	0.05%	1.07%	6.00%	0.0006%	0.0033%
Dow Inc	DOW	$38,420	0.08%	5.13%	0.50%	0.0041%	0.0004%
Domino's Pizza Inc	DPZ	$15,043	0.03%	1.40%	12.50%	0.0004%	0.0039%
Darden Restaurants Inc	DRI	$19,285	0.04%	3.41%	10.00%	0.0014%	0.0040%
DTE Energy Co	DTE	$26,571	0.06%	3.18%	4.50%	0.0018%	0.0025%
Duke Energy Corp	DUK	$88,896	0.18%	3.63%	5.00%	0.0067%	0.0092%
DaVita Inc	DVA	$13,754	0.03%	N/A	9.50%	N/A	0.0027%
Devon Energy Corp	DVN	$24,497	0.05%	2.25%	3.00%	0.0011%	0.0015%
Dexcom Inc	DXCM	n/a	N/A	N/A	N/A	N/A	N/A
Electronic Arts Inc	EA	$37,897	0.08%	0.53%	14.50%	0.0004%	0.0114%
eBay Inc	EBAY	$31,839	0.07%	1.66%	6.00%	0.0011%	0.0040%
Ecolab Inc	ECL	$72,651	0.15%	0.89%	11.00%	0.0013%	0.0166%
Consolidated Edison Inc	ED	$36,044	0.07%	3.19%	6.00%	0.0024%	0.0045%
Equifax Inc	EFX	$36,361	0.08%	0.53%	7.00%	0.0004%	0.0053%
Everest Group Ltd	EG	$16,956	0.04%	2.04%	10.50%	0.0007%	0.0037%
Edison International	EIX	$33,436	0.07%	3.58%	6.00%	0.0025%	0.0042%
Estee Lauder Cos Inc/The	EL	$23,271	0.05%	2.65%	3.50%	0.0013%	0.0017%
Elevance Health Inc	ELV	$120,581	0.25%	1.25%	11.00%	0.0031%	0.0275%
Eastman Chemical Co	EMN	$13,082	0.03%	2.89%	3.50%	0.0008%	0.0009%
Emerson Electric Co	EMR	$62,636	0.13%	1.92%	7.00%	0.0025%	0.0091%
Enphase Energy Inc	ENPH	$15,305	0.03%	N/A	14.00%	N/A	0.0044%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate ($ mill)	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
EOG Resources Inc	EOG	$69,898	0.14%	2.96%	8.00%	0.0043%	0.0116%
EPAM Systems Inc	EPAM	$11,332	0.02%	N/A	20.50%	N/A	0.0048%
Equinix Inc	EQIX	$84,276	0.17%	1.92%	15.00%	0.0034%	0.0262%
Equity Residential	EQR	$28,230	0.06%	3.63%	-4.00%	0.0021%	-0.0023%
EQT Corp	EQT	n/a	N/A	1.72%	N/A	N/A	N/A
Erie Indemnity Co	ERIE	$24,934	0.05%	0.94%	20.00%	0.0005%	0.0103%
Eversource Energy	ES	$24,320	0.05%	4.20%	6.00%	0.0021%	0.0030%
Essex Property Trust Inc	ESS	$18,971	0.04%	3.32%	4.50%	0.0013%	0.0018%
Eaton Corp PLC	ETN	$131,946	0.27%	1.13%	11.00%	0.0031%	0.0301%
Entergy Corp	ETR	$28,142	0.06%	3.43%	0.50%	0.0020%	0.0003%
Evergy Inc	EVRG	$14,247	0.03%	4.14%	7.50%	0.0012%	0.0022%
Edwards Lifesciences Corp	EW	$39,752	0.08%	N/A	10.00%	N/A	0.0082%
Exelon Corp	EXC	n/a	N/A	3.75%	N/A	N/A	N/A
Expeditors International of Washingt	EXPD	$18,544	0.04%	1.11%	-1.00%	0.0004%	-0.0004%
Expedia Group Inc	EXPE	$18,452	0.04%	N/A	39.00%	N/A	0.0149%
Extra Space Storage Inc	EXR	$38,187	0.08%	3.60%	5.00%	0.0028%	0.0040%
Ford Motor Co	F	$41,230	0.09%	5.68%	35.00%	0.0049%	0.0299%
Diamondback Energy Inc	FANG	$50,978	0.11%	5.43%	2.50%	0.0057%	0.0026%
Fastenal Co	FAST	$40,898	0.08%	2.18%	9.00%	0.0019%	0.0076%
Freeport-McMoRan Inc	FCX	$71,728	0.15%	1.20%	11.00%	0.0018%	0.0164%
FactSet Research Systems Inc	FDS	$17,493	0.04%	0.90%	11.00%	0.0003%	0.0040%
FedEx Corp	FDX	$66,866	0.14%	2.02%	3.50%	0.0028%	0.0049%
FirstEnergy Corp	FE	$25,542	0.05%	3.83%	5.50%	0.0020%	0.0029%
F5 Inc	FFIV	$12,834	0.03%	N/A	10.00%	N/A	0.0027%
Fiserv Inc	FI	$103,429	0.21%	N/A	9.50%	N/A	0.0204%
Fair Isaac Corp	FICO	$47,653	0.10%	N/A	16.50%	N/A	0.0163%
Fidelity National Information Services	FIS	$45,691	0.09%	1.72%	4.00%	0.0016%	0.0038%
Fifth Third Bancorp	FITB	$28,994	0.06%	3.45%	4.50%	0.0021%	0.0027%
FMC Corp	FMC	$8,231	0.02%	3.52%	4.00%	0.0006%	0.0007%
Fox Corp	FOX	n/a	N/A	1.39%	N/A	N/A	N/A
Fox Corp	FOXA	$9,509	0.02%	1.28%	13.50%	0.0003%	0.0027%
Federal Realty Investment Trust	FRT	$9,620	0.02%	3.83%	2.50%	0.0008%	0.0005%
First Solar Inc	FSLR	$26,702	0.06%	N/A	34.50%	N/A	0.0191%
Fortinet Inc	FTNT	$59,319	0.12%	N/A	24.00%	N/A	0.0295%
Fortive Corp	FTV	$27,652	0.06%	0.41%	15.00%	0.0002%	0.0086%
General Dynamics Corp	GD	$83,038	0.17%	1.88%	10.00%	0.0032%	0.0172%
GoDaddy Inc	GDDY	$22,102	0.05%	N/A	27.00%	N/A	0.0124%
General Electric Co	GE	$204,479	0.42%	0.59%	22.00%	0.0025%	0.0933%
GE HealthCare Technologies Inc	GEHC	n/a	N/A	0.13%	N/A	N/A	N/A
Gen Digital Inc	GEN	$16,884	0.04%	1.82%	10.50%	0.0006%	0.0037%
GE Vernova Inc	GEV	n/a	N/A	N/A	N/A	N/A	N/A
Gilead Sciences Inc	GILD	$104,380	0.22%	3.67%	2.50%	0.0080%	0.0054%
General Mills Inc	GIS	$40,998	0.09%	3.25%	5.00%	0.0028%	0.0043%
Globe Life Inc	GL	$9,513	0.02%	0.91%	8.50%	0.0002%	0.0017%
Corning Inc	GLW	$38,635	0.08%	2.48%	17.50%	0.0020%	0.0140%
General Motors Co	GM	$50,397	0.10%	1.07%	6.50%	0.0011%	0.0068%
Generac Holdings Inc	GNRC	$9,557	0.02%	N/A	12.50%	N/A	0.0025%
Alphabet Inc	GOOG	$933,756	1.94%	0.48%	13.00%	0.0093%	0.2518%
Alphabet Inc	GOOGL	n/a	N/A	0.48%	N/A	N/A	N/A
Genuine Parts Co	GPC	$19,460	0.04%	2.86%	8.50%	0.0012%	0.0034%
Global Payments Inc	GPN	$26,059	0.05%	0.98%	12.00%	0.0005%	0.0065%
Garmin Ltd	GRMN	$33,835	0.07%	1.70%	5.00%	0.0012%	0.0035%
Goldman Sachs Group Inc/The	GS	$156,356	0.32%	2.42%	7.50%	0.0079%	0.0243%
WW Grainger Inc	GWW	$50,721	0.11%	0.79%	7.00%	0.0008%	0.0074%
Halliburton Co	HAL	$25,646	0.05%	2.34%	20.00%	0.0012%	0.0106%
Hasbro Inc	HAS	$10,082	0.02%	3.87%	8.50%	0.0008%	0.0018%
Huntington Bancshares Inc/OH	HBAN	$21,351	0.04%	4.22%	7.50%	0.0019%	0.0033%
HCA Healthcare Inc	HCA	$104,889	0.22%	0.65%	10.50%	0.0014%	0.0228%
Home Depot Inc/The	HD	$402,482	0.83%	2.22%	6.50%	0.0185%	0.0543%
Hess Corp	HES	$41,842	0.09%	1.47%	8.00%	0.0013%	0.0069%
Hartford Financial Services Group Inc	HIG	$34,461	0.07%	1.60%	7.00%	0.0011%	0.0050%
Huntington Ingalls Industries Inc	HII	$10,368	0.02%	1.97%	10.00%	0.0004%	0.0022%
Hilton Worldwide Holdings Inc	HLT	n/a	N/A	0.26%	N/A	N/A	N/A
Hologic Inc	HOLX	$18,921	0.04%	N/A	-2.00%	N/A	-0.0008%
Honeywell International Inc	HON	$134,293	0.28%	2.19%	10.00%	0.0061%	0.0279%
Hewlett Packard Enterprise Co	HPE	$26,571	0.06%	2.54%	7.50%	0.0014%	0.0041%
HP Inc	HPQ	$34,569	0.07%	3.07%	12.50%	0.0022%	0.0090%
Hormel Foods Corp	HRL	$17,383	0.04%	3.56%	7.50%	0.0013%	0.0027%
Henry Schein Inc	HSIC	$9,237	0.02%	N/A	8.50%	N/A	0.0016%
Host Hotels & Resorts Inc	HST	$12,363	0.03%	4.55%	51.00%	0.0012%	0.0131%
Hershey Co/The	HSY	$28,321	0.06%	2.86%	7.00%	0.0017%	0.0041%
Hubbell Inc	HUBB	$22,994	0.05%	1.14%	9.00%	0.0005%	0.0043%
Humana Inc	HUM	$38,136	0.08%	1.12%	4.50%	0.0009%	0.0036%
Howmet Aerospace Inc	HWM	$40,917	0.08%	0.32%	12.00%	0.0003%	0.0102%
International Business Machines Cor	IBM	$203,647	0.42%	3.02%	3.00%	0.0128%	0.0127%
Intercontinental Exchange Inc	ICE	$92,230	0.19%	1.12%	7.50%	0.0021%	0.0143%
IDEXX Laboratories Inc	IDXX	$41,583	0.09%	N/A	10.50%	N/A	0.0091%
IDEX Corp	IEX	$16,238	0.03%	1.29%	5.00%	0.0004%	0.0017%
International Flavors & Fragrances In	IFF	$26,826	0.06%	1.52%	0.50%	0.0008%	0.0003%
Incyte Corp	INCY	$12,731	0.03%	N/A	18.50%	N/A	0.0049%
Intel Corp	INTC	$100,315	0.21%	N/A	-2.00%	N/A	-0.0042%
Intuit Inc	INTU	$174,061	0.36%	0.67%	13.50%	0.0024%	0.0487%
Invitation Homes Inc	INVH	$21,600	0.04%	3.18%	13.50%	0.0014%	0.0060%
International Paper Co	IP	$16,969	0.04%	3.79%	5.50%	0.0013%	0.0019%
Interpublic Group of Cos Inc/The	IPG	$11,880	0.02%	4.17%	8.50%	0.0010%	0.0021%
IQVIA Holdings Inc	IQV	$43,200	0.09%	N/A	11.00%	N/A	0.0099%
Ingersoll Rand Inc	IR	$39,606	0.08%	0.08%	10.50%	0.0001%	0.0086%
Iron Mountain Inc	IRM	$34,857	0.07%	2.41%	5.50%	0.0017%	0.0040%
Intuitive Surgical Inc	ISRG	$174,575	0.36%	N/A	13.50%	N/A	0.0489%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate ($ mill)	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Gartner Inc	IT	$39,051	0.08%	N/A	8.00%	N/A	0.0065%
Illinois Tool Works Inc	ITW	$77,809	0.16%	2.29%	9.00%	0.0037%	0.0145%
Invesco Ltd	IVZ	$7,903	0.02%	4.67%	10.00%	0.0008%	0.0016%
Jacobs Solutions Inc	J	$16,264	0.03%	0.89%	11.00%	0.0003%	0.0037%
JB Hunt Transport Services Inc	JBHT	$17,575	0.04%	1.00%	7.50%	0.0004%	0.0027%
Jabil Inc	JBL	$13,594	0.03%	0.27%	13.50%	0.0001%	0.0038%
Johnson Controls International plc	JCI	$51,845	0.11%	1.91%	9.50%	0.0021%	0.0102%
Jack Henry & Associates Inc	JKHY	$12,873	0.03%	1.25%	6.50%	0.0003%	0.0017%
Johnson & Johnson	JNJ	$390,118	0.81%	3.06%	3.00%	0.0248%	0.0243%
Juniper Networks Inc	JNPR	$12,831	0.03%	2.26%	7.50%	0.0006%	0.0020%
JPMorgan Chase & Co	JPM	$599,931	1.24%	2.37%	7.00%	0.0295%	0.0871%
Kellanova	K	n/a	N/A	2.82%	N/A	N/A	N/A
Keurig Dr Pepper Inc	KDP	$50,826	0.11%	2.45%	10.00%	0.0026%	0.0105%
KeyCorp	KEY	n/a	N/A	4.90%	N/A	N/A	N/A
Keysight Technologies Inc	KEYS	$27,581	0.06%	N/A	8.00%	N/A	0.0046%
Kraft Heinz Co/The	KHC	$42,451	0.09%	4.56%	4.50%	0.0040%	0.0040%
Kimco Realty Corp	KIM	$15,653	0.03%	4.13%	18.00%	0.0013%	0.0058%
KKR & Co Inc	KKR	$115,882	0.24%	0.54%	5.00%	0.0013%	0.0120%
KLA Corp	KLAC	$103,752	0.22%	0.75%	13.00%	0.0016%	0.0280%
Kimberly-Clark Corp	KMB	$47,920	0.10%	3.43%	7.50%	0.0034%	0.0075%
Kinder Morgan Inc	KMI	$49,028	0.10%	5.21%	10.00%	0.0053%	0.0102%
CarMax Inc	KMX	$11,988	0.02%	N/A	3.50%	N/A	0.0009%
Coca-Cola Co/The	KO	$309,707	0.64%	2.70%	7.00%	0.0173%	0.0450%
Kroger Co/The	KR	$41,456	0.09%	2.23%	5.00%	0.0019%	0.0043%
Kenvue Inc	KVUE	n/a	N/A	3.55%	N/A	N/A	N/A
Loews Corp	L	$17,353	0.04%	0.32%	15.50%	0.0001%	0.0056%
Leidos Holdings Inc	LDOS	$21,958	0.05%	0.93%	9.50%	0.0004%	0.0043%
Lennar Corp	LEN	$45,314	0.09%	1.07%	6.00%	0.0010%	0.0056%
Labcorp Holdings Inc	LH	$18,764	0.04%	1.29%	1.00%	0.0005%	0.0004%
L3Harris Technologies Inc	LHX	$45,125	0.09%	1.95%	11.50%	0.0018%	0.0108%
Linde PLC	LIN	$227,702	0.47%	1.17%	7.00%	0.0055%	0.0331%
LKQ Corp	LKQ	$10,509	0.02%	3.01%	7.00%	0.0007%	0.0015%
Eli Lilly & Co	LLY	$842,020	1.75%	0.59%	28.50%	0.0103%	0.4978%
Lockheed Martin Corp	LMT	$139,335	0.29%	2.16%	9.50%	0.0062%	0.0275%
Alliant Energy Corp	LNT	$15,567	0.03%	3.16%	6.00%	0.0010%	0.0019%
Lowe's Cos Inc	LOW	$153,652	0.32%	1.70%	5.50%	0.0054%	0.0175%
Lam Research Corp	LRCX	$105,773	0.22%	1.13%	12.50%	0.0025%	0.0274%
Lululemon Athletica Inc	LULU	$31,927	0.07%	N/A	16.00%	N/A	0.0106%
Southwest Airlines Co	LUV	n/a	N/A	2.43%	N/A	N/A	N/A
Las Vegas Sands Corp	LVS	n/a	N/A	1.59%	N/A	N/A	N/A
Lamb Weston Holdings Inc	LW	$9,301	0.02%	2.22%	14.50%	0.0004%	0.0028%
LyondellBasell Industries NV	LYB	$31,176	0.06%	5.59%	-1.00%	0.0036%	-0.0006%
Live Nation Entertainment Inc	LYV	n/a	N/A	N/A	N/A	N/A	N/A
Mastercard Inc	MA	$452,672	0.94%	0.53%	14.50%	0.0050%	0.1361%
Mid-America Apartment Communities	MAA	$18,572	0.04%	3.70%	-15.00%	0.0014%	-0.0058%
Marriott International Inc/MD	MAR	$69,987	0.15%	1.01%	11.00%	0.0015%	0.0160%
Masco Corp	MAS	$18,320	0.04%	1.38%	9.50%	0.0005%	0.0036%
McDonald's Corp	MCD	$218,438	0.45%	2.33%	8.00%	0.0105%	0.0362%
Microchip Technology Inc	MCHP	$43,076	0.09%	2.26%	6.00%	0.0020%	0.0054%
McKesson Corp	MCK	$64,115	0.13%	0.57%	10.00%	0.0008%	0.0133%
Moody's Corp	MCO	$86,423	0.18%	0.72%	9.00%	0.0013%	0.0161%
Mondelez International Inc	MDLZ	$98,408	0.20%	2.55%	10.00%	0.0052%	0.0204%
Medtronic PLC	MDT	$115,463	0.24%	3.11%	6.50%	0.0074%	0.0156%
MetLife Inc	MET	$57,763	0.12%	2.64%	7.50%	0.0032%	0.0090%
Meta Platforms Inc	META	$1,250,626	2.59%	0.35%	17.00%	0.0091%	0.4410%
MGM Resorts International	MGM	$11,874	0.02%	N/A	25.00%	N/A	0.0062%
Mohawk Industries Inc	MHK	$10,142	0.02%	N/A	1.00%	N/A	0.0002%
McCormick & Co Inc/MD	MKC	$20,741	0.04%	2.04%	4.50%	0.0009%	0.0019%
MarketAxess Holdings Inc	MKTX	$9,672	0.02%	1.16%	9.00%	0.0002%	0.0018%
Martin Marietta Materials Inc	MLM	$32,896	0.07%	0.59%	11.00%	0.0004%	0.0075%
Marsh & McLennan Cos Inc	MMC	$109,706	0.23%	1.46%	12.00%	0.0033%	0.0273%
3M Co	MMM	$75,097	0.16%	2.05%	30.50%	0.0032%	0.0475%
Monster Beverage Corp	MNST	$51,103	0.11%	N/A	12.00%	N/A	0.0127%
Altria Group Inc	MO	$87,086	0.18%	7.99%	6.00%	0.0144%	0.0108%
Molina Healthcare Inc	MOH	$20,191	0.04%	N/A	11.50%	N/A	0.0048%
Mosaic Co/The	MOS	$8,533	0.02%	3.14%	-9.50%	0.0006%	-0.0017%
Marathon Petroleum Corp	MPC	$54,523	0.11%	2.03%	-6.50%	0.0023%	-0.0074%
Monolithic Power Systems Inc	MPWR	$45,071	0.09%	0.54%	10.50%	0.0005%	0.0098%
Merck & Co Inc	MRK	$287,853	0.60%	2.71%	15.50%	0.0162%	0.0925%
Moderna Inc	MRNA	$25,689	0.05%	N/A	-18.50%	N/A	-0.0099%
Marathon Oil Corp	MRO	$14,896	0.03%	1.65%	12.50%	0.0005%	0.0039%
Morgan Stanley	MS	$168,961	0.35%	3.55%	9.50%	0.0124%	0.0333%
MSCI Inc	MSCI	$45,847	0.10%	1.10%	9.50%	0.0010%	0.0090%
Microsoft Corp	MSFT	$3,198,436	6.63%	0.77%	14.00%	0.0512%	0.9288%
Motorola Solutions Inc	MSI	$75,017	0.16%	0.87%	10.00%	0.0014%	0.0156%
M&T Bank Corp	MTB	$29,746	0.06%	3.03%	4.50%	0.0019%	0.0028%
Match Group Inc	MTCH	$9,759	0.02%	N/A	12.50%	N/A	0.0025%
Mettler-Toledo International Inc	MTD	$32,029	0.07%	N/A	8.50%	N/A	0.0056%
Micron Technology Inc	MU	$114,998	0.24%	0.44%	24.00%	0.0011%	0.0572%
Norwegian Cruise Line Holdings Ltd	NCLH	n/a	N/A	N/A	N/A	N/A	N/A
Nasdaq Inc	NDAQ	$42,049	0.09%	1.31%	3.50%	0.0011%	0.0031%
Nordson Corp	NDSN	$15,018	0.03%	1.19%	10.00%	0.0004%	0.0031%
NextEra Energy Inc	NEE	$173,709	0.36%	2.44%	8.00%	0.0088%	0.0288%
Newmont Corp	NEM	$61,600	0.13%	1.87%	13.00%	0.0024%	0.0166%
Netflix Inc	NFLX	$304,394	0.63%	N/A	16.50%	N/A	0.1042%
NiSource Inc	NI	$15,541	0.03%	3.06%	9.50%	0.0010%	0.0031%
NIKE Inc	NKE	$106,209	0.22%	1.67%	12.00%	0.0037%	0.0264%
Northrop Grumman Corp	NOC	$77,228	0.16%	1.56%	8.00%	0.0025%	0.0128%
ServiceNow Inc	NOW	$184,244	0.38%	N/A	32.50%	N/A	0.1242%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate ($ mill)	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
NRG Energy Inc	NRG	$18,801	0.04%	1.79%	11.00%	0.0007%	0.0043%
Norfolk Southern Corp	NSC	$56,185	0.12%	2.17%	9.50%	0.0025%	0.0111%
NetApp Inc	NTAP	$25,293	0.05%	1.68%	7.50%	0.0009%	0.0039%
Northern Trust Corp	NTRS	$18,153	0.04%	3.33%	4.00%	0.0013%	0.0015%
Nucor Corp	NUE	n/a	N/A	1.44%	N/A	N/A	N/A
NVIDIA Corp	NVDA	$2,978,923	6.18%	0.03%	41.00%	0.0020%	2.5333%
NVR Inc	NVR	$30,201	0.06%	N/A	1.50%	N/A	0.0009%
News Corp	NWS	n/a	N/A	0.72%	N/A	N/A	N/A
News Corp	NWSA	$10,107	0.02%	0.75%	13.50%	0.0002%	0.0028%
NXP Semiconductors NV	NXPI	$61,138	0.13%	1.69%	7.50%	0.0021%	0.0095%
Realty Income Corp	O	$55,230	0.11%	4.99%	5.00%	0.0057%	0.0057%
Old Dominion Freight Line Inc	ODFL	$42,568	0.09%	0.52%	7.50%	0.0005%	0.0066%
ONEOK Inc	OKE	$53,227	0.11%	4.35%	12.00%	0.0048%	0.0132%
Omnicom Group Inc	OMC	$20,228	0.04%	2.71%	7.00%	0.0011%	0.0029%
ON Semiconductor Corp	ON	$31,103	0.06%	N/A	8.00%	N/A	0.0052%
Oracle Corp	ORCL	$472,189	0.98%	0.94%	10.00%	0.0092%	0.0979%
O'Reilly Automotive Inc	ORLY	$66,800	0.14%	N/A	10.50%	N/A	0.0145%
Otis Worldwide Corp	OTIS	$41,634	0.09%	1.50%	11.00%	0.0013%	0.0095%
Occidental Petroleum Corp	OXY	$47,221	0.10%	1.71%	6.00%	0.0017%	0.0059%
Palo Alto Networks Inc	PANW	n/a	N/A	N/A	N/A	N/A	N/A
Paramount Global	PARA	$6,648	0.01%	1.88%	-2.50%	0.0003%	-0.0003%
Paycom Software Inc	PAYC	$9,566	0.02%	0.90%	21.00%	0.0002%	0.0042%
Paychex Inc	PAYX	$48,274	0.10%	2.92%	8.00%	0.0029%	0.0080%
PACCAR Inc	PCAR	$51,730	0.11%	1.22%	14.50%	0.0013%	0.0156%
PG&E Corp	PCG	$42,258	0.09%	0.20%	9.00%	0.0002%	0.0079%
Public Service Enterprise Group Inc	PEG	$44,441	0.09%	2.69%	5.00%	0.0025%	0.0046%
PepsiCo Inc	PEP	$233,576	0.48%	3.19%	7.50%	0.0154%	0.0363%
Pfizer Inc	PFE	$163,994	0.34%	5.81%	2.50%	0.0197%	0.0085%
Principal Financial Group Inc	PFG	$19,893	0.04%	3.35%	4.00%	0.0014%	0.0017%
Procter & Gamble Co/The	PG	$406,969	0.84%	2.32%	5.00%	0.0196%	0.0422%
Progressive Corp/The	PGR	$148,619	0.31%	0.16%	22.50%	0.0005%	0.0694%
Parker-Hannifin Corp	PH	$81,296	0.17%	1.03%	12.50%	0.0017%	0.0211%
PulteGroup Inc	PHM	$29,786	0.06%	0.56%	8.00%	0.0003%	0.0049%
Packaging Corp of America	PKG	$19,346	0.04%	2.32%	9.00%	0.0009%	0.0036%
Prologis Inc	PLD	$116,924	0.24%	3.04%	0.50%	0.0074%	0.0012%
Palantir Technologies Inc	PLTR	n/a	N/A	N/A	N/A	N/A	N/A
Philip Morris International Inc	PM	$188,753	0.39%	4.45%	5.00%	0.0174%	0.0196%
PNC Financial Services Group Inc/Th	PNC	$73,477	0.15%	3.46%	10.00%	0.0053%	0.0152%
Pentair PLC	PNR	$16,184	0.03%	0.94%	12.00%	0.0003%	0.0040%
Pinnacle West Capital Corp	PNW	$10,065	0.02%	3.97%	4.50%	0.0008%	0.0009%
Insulet Corp	PODD	n/a	N/A	N/A	N/A	N/A	N/A
Pool Corp	POOL	$14,416	0.03%	1.27%	14.00%	0.0004%	0.0042%
PPG Industries Inc	PPG	$30,903	0.06%	2.05%	7.00%	0.0013%	0.0045%
PPL Corp	PPL	$24,406	0.05%	3.11%	7.50%	0.0016%	0.0038%
Prudential Financial Inc	PRU	$43,233	0.09%	4.29%	4.00%	0.0039%	0.0036%
Public Storage	PSA	$63,933	0.13%	3.30%	7.00%	0.0044%	0.0093%
Phillips 66	PSX	$55,021	0.11%	3.50%	0.50%	0.0040%	0.0006%
PTC Inc	PTC	$21,704	0.05%	N/A	29.00%	N/A	0.0131%
Quanta Services Inc	PWR	$43,926	0.09%	0.12%	16.50%	0.0001%	0.0150%
PayPal Holdings Inc	PYPL	$79,773	0.17%	N/A	11.50%	N/A	0.0190%
QUALCOMM Inc	QCOM	$189,436	0.39%	2.00%	6.00%	0.0079%	0.0236%
Qorvo Inc	QRVO	$9,799	0.02%	N/A	5.50%	N/A	0.0011%
Royal Caribbean Cruises Ltd	RCL	n/a	N/A	0.90%	N/A	N/A	N/A
Regency Centers Corp	REG	$13,110	0.03%	3.71%	11.50%	0.0010%	0.0031%
Regeneron Pharmaceuticals Inc	REGN	$113,972	0.24%	N/A	1.50%	N/A	0.0035%
Regions Financial Corp	RF	$21,350	0.04%	4.29%	4.50%	0.0019%	0.0020%
Raymond James Financial Inc	RJF	$25,220	0.05%	1.47%	10.00%	0.0008%	0.0052%
Ralph Lauren Corp	RL	$7,766	0.02%	1.70%	11.00%	0.0003%	0.0018%
ResMed Inc	RMD	$35,869	0.07%	0.87%	10.00%	0.0006%	0.0074%
Rockwell Automation Inc	ROK	$30,461	0.06%	1.86%	9.50%	0.0012%	0.0060%
Rollins Inc	ROL	$24,497	0.05%	1.19%	9.00%	0.0006%	0.0046%
Roper Technologies Inc	ROP	$59,650	0.12%	0.54%	9.00%	0.0007%	0.0111%
Ross Stores Inc	ROST	$49,934	0.10%	0.98%	14.00%	0.0010%	0.0145%
Republic Services Inc	RSG	$63,077	0.13%	1.16%	11.00%	0.0015%	0.0144%
RTX Corp	RTX	$161,172	0.33%	2.08%	12.00%	0.0070%	0.0401%
Revvity Inc	RVTY	$15,756	0.03%	0.22%	-2.50%	0.0001%	-0.0008%
SBA Communications Corp	SBAC	$25,869	0.05%	1.63%	16.50%	0.0009%	0.0089%
Starbucks Corp	SBUX	$110,476	0.23%	2.34%	9.00%	0.0054%	0.0206%
Charles Schwab Corp/The	SCHW	$115,261	0.24%	1.54%	10.50%	0.0037%	0.0251%
Sherwin-Williams Co/The	SHW	$86,279	0.20%	0.75%	11.00%	0.0015%	0.0220%
J M Smucker Co/The	SJM	$12,886	0.03%	3.57%	7.00%	0.0010%	0.0019%
Schlumberger NV	SLB	$59,562	0.12%	2.62%	21.50%	0.0032%	0.0266%
Super Micro Computer Inc	SMCI	$24,383	0.05%	N/A	39.00%	N/A	0.0197%
Snap-on Inc	SNA	$15,263	0.03%	2.57%	5.50%	0.0008%	0.0017%
Synopsys Inc	SNPS	$77,789	0.16%	N/A	12.50%	N/A	0.0202%
Southern Co/The	SO	$98,714	0.20%	3.19%	6.50%	0.0065%	0.0133%
Solventum Corp	SOLV	n/a	N/A	N/A	N/A	N/A	N/A
Simon Property Group Inc	SPG	$55,106	0.11%	4.85%	3.50%	0.0055%	0.0040%
S&P Global Inc	SPGI	$165,422	0.34%	0.70%	8.00%	0.0024%	0.0274%
Sempra	SRE	$52,950	0.11%	2.97%	7.00%	0.0033%	0.0077%
STERIS PLC	STE	$23,919	0.05%	0.94%	8.00%	0.0005%	0.0040%
Steel Dynamics Inc	STLD	$19,455	0.04%	1.46%	2.00%	0.0006%	0.0008%
State Street Corp	STT	n/a	N/A	3.44%	N/A	N/A	N/A
Seagate Technology Holdings PLC	STX	$23,055	0.05%	2.56%	32.00%	0.0012%	0.0153%
Constellation Brands Inc	STZ	$46,949	0.10%	1.57%	6.00%	0.0015%	0.0058%
Smurfit WestRock PLC	SW	n/a	N/A	2.45%	N/A	N/A	N/A
Stanley Black & Decker Inc	SWK	$16,956	0.04%	2.98%	11.00%	0.0010%	0.0039%
Skyworks Solutions Inc	SWKS	n/a	N/A	2.83%	N/A	N/A	N/A
Synchrony Financial	SYF	$19,714	0.04%	2.00%	47.00%	0.0008%	0.0192%

Company	Ticker	[4] Market Capitalization Excluding No Growth Rate ($ mill)	[5] Weight in Index	[6] Dividend Yield	[7] Long-Term Growth Est.	[8] Weighted Dividend Yield	[9] Weighted Long-Term Growth Rate
Stryker Corp	SYK	$137,667	0.29%	0.89%	9.50%	0.0025%	0.0271%
Sysco Corp	SYY	$38,368	0.08%	2.61%	13.50%	0.0021%	0.0107%
AT&T Inc	T	$157,745	0.33%	5.05%	4.00%	0.0165%	0.0131%
Molson Coors Beverage Co	TAP	$11,078	0.02%	3.06%	11.50%	0.0007%	0.0026%
TransDigm Group Inc	TDG	$80,078	0.17%	N/A	22.00%	N/A	0.0365%
Teledyne Technologies Inc	TDY	$20,475	0.04%	N/A	7.00%	N/A	0.0030%
Bio-Techne Corp	TECH	$12,682	0.03%	0.40%	10.00%	0.0001%	0.0026%
TE Connectivity PLC	TEL	$45,889	0.10%	1.72%	10.50%	0.0016%	0.0100%
Teradyne Inc	TER	$21,854	0.05%	0.36%	9.50%	0.0002%	0.0043%
Truist Financial Corp	TFC	$57,275	0.12%	4.86%	1.50%	0.0058%	0.0018%
Teleflex Inc	TFX	$11,653	0.02%	0.55%	8.50%	0.0001%	0.0021%
Target Corp	TGT	$71,801	0.15%	2.87%	10.00%	0.0043%	0.0149%
TJX Cos Inc/The	TJX	$132,570	0.27%	1.28%	17.00%	0.0035%	0.0467%
Thermo Fisher Scientific Inc	TMO	$236,291	0.49%	0.25%	6.00%	0.0012%	0.0294%
T-Mobile US Inc	TMUS	$240,778	0.50%	1.71%	20.00%	0.0085%	0.0999%
Tapestry Inc	TPR	$10,928	0.02%	2.98%	9.00%	0.0007%	0.0020%
Targa Resources Corp	TRGP	$32,426	0.07%	2.03%	20.00%	0.0014%	0.0135%
Trimble Inc	TRMB	$15,163	0.03%	N/A	5.50%	N/A	0.0017%
T Rowe Price Group Inc	TROW	$24,248	0.05%	4.55%	4.50%	0.0023%	0.0023%
Travelers Cos Inc/The	TRV	$53,363	0.11%	1.79%	12.00%	0.0020%	0.0133%
Tractor Supply Co	TSCO	$31,382	0.07%	1.51%	11.50%	0.0010%	0.0075%
Tesla Inc	TSLA	$835,814	1.73%	N/A	19.00%	N/A	0.3294%
Tyson Foods Inc	TSN	$17,023	0.04%	3.29%	6.00%	0.0012%	0.0021%
Trane Technologies PLC	TT	$87,725	0.18%	0.86%	14.00%	0.0016%	0.0255%
Take-Two Interactive Software Inc	TTWO	n/a	N/A	N/A	N/A	N/A	N/A
Texas Instruments Inc	TXN	$188,608	0.39%	2.63%	3.00%	0.0103%	0.0117%
Textron Inc	TXT	$16,597	0.03%	0.09%	13.00%	0.0000%	0.0045%
Tyler Technologies Inc	TYL	$24,909	0.05%	N/A	8.00%	N/A	0.0041%
United Airlines Holdings Inc	UAL	n/a	N/A	N/A	N/A	N/A	N/A
Uber Technologies Inc	UBER	n/a	N/A	N/A	N/A	N/A	N/A
UDR Inc	UDR	$14,954	0.03%	3.75%	2.50%	0.0012%	0.0008%
Universal Health Services Inc	UHS	$13,617	0.03%	0.35%	9.00%	0.0001%	0.0025%
Ulta Beauty Inc	ULTA	$18,333	0.04%	N/A	8.00%	N/A	0.0030%
UnitedHealth Group Inc	UNH	$539,904	1.12%	1.44%	12.00%	0.0161%	0.1344%
Union Pacific Corp	UNP	$150,155	0.31%	2.17%	8.00%	0.0068%	0.0249%
United Parcel Service Inc	UPS	$99,870	0.21%	4.78%	3.50%	0.0099%	0.0073%
United Rentals Inc	URI	$53,552	0.11%	0.81%	19.00%	0.0009%	0.0211%
US Bancorp	USB	$71,362	0.15%	4.37%	4.00%	0.0065%	0.0059%
Visa Inc	V	$459,289	0.95%	0.76%	13.50%	0.0072%	0.1286%
VICI Properties Inc	VICI	$34,747	0.07%	5.19%	10.50%	0.0037%	0.0076%
Valero Energy Corp	VLO	$43,261	0.09%	3.17%	9.50%	0.0028%	0.0085%
Veralto Corp	VLTO	$27,641	0.06%	0.32%	6.00%	0.0002%	0.0034%
Vulcan Materials Co	VMC	$33,072	0.07%	0.73%	8.00%	0.0005%	0.0055%
Verisk Analytics Inc	VRSK	$38,164	0.08%	0.58%	8.50%	0.0005%	0.0067%
VeriSign Inc	VRSN	$18,540	0.04%	N/A	12.50%	N/A	0.0048%
Vertex Pharmaceuticals Inc	VRTX	$120,038	0.25%	N/A	11.00%	N/A	0.0274%
Vistra Corp	VST	n/a	N/A	0.74%	N/A	N/A	N/A
Ventas Inc	VTR	$26,496	0.05%	2.81%	23.00%	0.0015%	0.0126%
Viatris Inc	VTRS	$13,857	0.03%	4.13%	-1.50%	0.0012%	-0.0004%
Verizon Communications Inc	VZ	$189,050	0.39%	6.03%	0.50%	0.0237%	0.0020%
Westinghouse Air Brake Technologie	WAB	$31,843	0.07%	0.44%	16.00%	0.0003%	0.0106%
Waters Corp	WAT	$21,364	0.04%	N/A	6.50%	N/A	0.0029%
Walgreens Boots Alliance Inc	WBA	$7,735	0.02%	11.16%	-7.00%	0.0018%	-0.0011%
Warner Bros Discovery Inc	WBD	n/a	N/A	N/A	N/A	N/A	N/A
Western Digital Corp	WDC	$23,454	0.05%	N/A	22.50%	N/A	0.0109%
WEC Energy Group Inc	WEC	$30,400	0.06%	3.47%	6.00%	0.0022%	0.0038%
Welltower Inc	WELL	$77,989	0.16%	2.09%	26.50%	0.0034%	0.0429%
Wells Fargo & Co	WFC	$192,279	0.40%	2.83%	9.50%	0.0113%	0.0379%
Waste Management Inc	WM	$83,313	0.17%	1.45%	6.00%	0.0025%	0.0104%
Williams Cos Inc/The	WMB	$55,644	0.12%	4.16%	11.00%	0.0048%	0.0127%
Walmart Inc	WMT	$649,089	1.35%	1.03%	8.00%	0.0138%	0.1077%
W R Berkley Corp	WRB	$21,589	0.04%	0.56%	13.00%	0.0003%	0.0058%
West Pharmaceutical Services Inc	WST	$21,774	0.05%	0.27%	7.50%	0.0001%	0.0034%
Willis Towers Watson PLC	WTW	$29,911	0.06%	1.20%	10.50%	0.0007%	0.0065%
Weyerhaeuser Co	WY	$24,627	0.05%	2.36%	-2.00%	0.0012%	-0.0010%
Wynn Resorts Ltd	WYNN	$10,642	0.02%	1.04%	27.00%	0.0002%	0.0060%
Xcel Energy Inc	XEL	$36,405	0.08%	3.35%	7.00%	0.0025%	0.0053%
Exxon Mobil Corp	XOM	$520,788	1.08%	3.24%	-3.00%	0.0350%	-0.0324%
Xylem Inc/NY	XYL	$32,798	0.07%	1.07%	12.00%	0.0007%	0.0082%
Yum! Brands Inc	YUM	$39,282	0.08%	1.92%	10.00%	0.0016%	0.0081%
Zimmer Biomet Holdings Inc	ZBH	$21,984	0.05%	0.89%	6.50%	0.0004%	0.0030%
Zebra Technologies Corp	ZBRA	$19,101	0.04%	N/A	1.00%	N/A	0.0004%
Zoetis Inc	ZTS	$88,517	0.18%	0.88%	7.50%	0.0016%	0.0138%
		$48,212,041					

[4] Source: Bloomberg Professional as of September 30, 2024
[5] Equals weight in S&P 500 based on market capitalization
[6] Source: Bloomberg Professional as of September 30, 2024
[7] Source: Value Line as of September 30, 2024
[8] Equals [5] x [6]
[9] Equals [5] x [7]

Ex Ante Capital Asset Pricing Model and Empirical Capital Asset Pricing Model Results
Using Long-Term Historical Market Return

Company	Ticker	[1] Current 30-Year Treasury Yield	[2] Bloomberg Beta Coefficient	[3] Value Line Beta Coefficient	[4] Average Beta Coefficient	[5] Long-Term Average Historical Market Return (1926-2023)	[6] Market Risk Premium	[7] Traditional CAPM	[8] Empirical CAPM
Alliant Energy Corporation	LNT	4.07%	0.87	0.90	0.88	12.04%	7.97%	11.12%	11.35%
Ameren Corporation	AEE	4.07%	0.82	0.90	0.86	12.04%	7.97%	10.93%	11.21%
American Electric Power Company, Inc.	AEP	4.07%	0.83	0.85	0.84	12.04%	7.97%	10.75%	11.07%
Avista Corporation	AVA	4.07%	0.82	0.95	0.89	12.04%	7.97%	11.13%	11.36%
CMS Energy Corporation	CMS	4.07%	0.83	0.85	0.84	12.04%	7.97%	10.77%	11.09%
DTE Energy Company	DTE	4.07%	0.92	1.00	0.96	12.04%	7.97%	11.74%	11.81%
Duke Energy Corporation	DUK	4.07%	0.81	0.90	0.85	12.04%	7.97%	10.87%	11.17%
Edison International	EIX	4.07%	0.95	1.00	0.98	12.04%	7.97%	11.86%	11.91%
Entergy Corporation	ETR	4.07%	0.96	1.00	0.98	12.04%	7.97%	11.90%	11.93%
Evergy, Inc.	EVRG	4.07%	0.88	0.95	0.92	12.04%	7.97%	11.37%	11.53%
IDACORP, Inc.	IDA	4.07%	0.85	0.85	0.85	12.04%	7.97%	10.84%	11.14%
NextEra Energy, Inc.	NEE	4.07%	0.92	1.05	0.98	12.04%	7.97%	11.90%	11.94%
NorthWestern Corporation	NWE	4.07%	0.99	0.95	0.97	12.04%	7.97%	11.78%	11.85%
OGE Energy Corporation	OGE	4.07%	1.00	1.05	1.03	12.04%	7.97%	12.25%	12.20%
Pinnacle West Capital Corporation	PNW	4.07%	0.93	0.95	0.94	12.04%	7.97%	11.55%	11.67%
Portland General Electric Company	POR	4.07%	0.90	0.90	0.90	12.04%	7.97%	11.25%	11.45%
PPL Corporation	PPL	4.07%	0.87	0.95	0.91	12.04%	7.97%	11.31%	11.49%
Southern Company	SO	4.07%	1.05	1.15	1.10	12.04%	7.97%	12.83%	12.63%
TXNM Energy, Inc	TXNM	4.07%	0.88	0.95	0.91	12.04%	7.97%	11.36%	11.53%
Xcel Energy Inc.	XEL	4.07%	0.81	0.85	0.83	12.04%	7.97%	10.70%	11.03%
							Mean:	11.41%	11.57%
							Median:	11.33%	11.51%
							Average of the Mean and Median:	11.37%	11.54%

Company	Ticker	[9] Projected 30-Year Treasury Yield	[10] Bloomberg Beta Coefficient	[11] Value Line Beta Coefficient	[12] Average Beta Coefficient	[13] Long-Term Average Historical Market Return (1926-2023)	[14] Market Risk Premium	[15] Traditional CAPM	[16] Empirical CAPM
Alliant Energy Corporation	LNT	$ 0	0.87	0.90	0.88	12.04%	7.85%	11.13%	11.36%
Ameren Corporation	AEE	$ 0	0.82	0.90	0.86	12.04%	7.85%	10.95%	11.22%
American Electric Power Company, Inc.	AEP	$ 0	0.83	0.85	0.84	12.04%	7.85%	10.77%	11.09%
Avista Corporation	AVA	$ 0	0.82	0.95	0.89	12.04%	7.85%	11.15%	11.37%
CMS Energy Corporation	CMS	$ 0	0.83	0.85	0.84	12.04%	7.85%	10.79%	11.10%
DTE Energy Company	DTE	$ 0	0.92	1.00	0.96	12.04%	7.85%	11.74%	11.82%
Duke Energy Corporation	DUK	$ 0	0.81	0.90	0.85	12.04%	7.85%	10.89%	11.18%
Edison International	EIX	$ 0	0.95	1.00	0.98	12.04%	7.85%	11.86%	11.91%
Entergy Corporation	ETR	$ 0	0.96	1.00	0.98	12.04%	7.85%	11.90%	11.93%
Evergy, Inc.	EVRG	$ 0	0.88	0.95	0.92	12.04%	7.85%	11.38%	11.54%
IDACORP, Inc.	IDA	$ 0	0.85	0.85	0.85	12.04%	7.85%	10.86%	11.16%
NextEra Energy, Inc.	NEE	$ 0	0.92	1.05	0.98	12.04%	7.85%	11.90%	11.94%
NorthWestern Corporation	NWE	$ 0	0.99	0.95	0.97	12.04%	7.85%	11.79%	11.85%
OGE Energy Corporation	OGE	$ 0	1.00	1.05	1.03	12.04%	7.85%	12.25%	12.20%
Pinnacle West Capital Corporation	PNW	$ 0	0.93	0.95	0.94	12.04%	7.85%	11.56%	11.68%
Portland General Electric Company	POR	$ 0	0.90	0.90	0.90	12.04%	7.85%	11.26%	11.46%
PPL Corporation	PPL	$ 0	0.87	0.95	0.91	12.04%	7.85%	11.32%	11.50%
Southern Company	SO	$ 0	1.05	1.15	1.10	12.04%	7.85%	12.82%	12.62%
TXNM Energy, Inc	TXNM	$ 0	0.88	0.95	0.91	12.04%	7.85%	11.37%	11.54%
Xcel Energy Inc.	XEL	$ 0	0.81	0.85	0.83	12.04%	7.85%	10.72%	11.05%
							Mean:	11.42%	11.58%
							Median:	11.34%	11.52%
							Average of the Mean and Median:	11.38%	11.55%

[1] Source: Bloomberg Professional Service; 30-day average
[2] Source: Bloomberg Professional Service
[3] Source: Value Line
[4] Equals Average of Col. [2] and Col. [3]
[5] Kroll, 2023 SBBI Yearbook Appendix A-1.
[6] Equals Col. [5] - Col. [1]
[7] Equals Col. [1] + (Col. [4] x Col. [6])
[8] Equals Col. [1] + (0.75 x Col. [4] x Col. [6]) + (0.25 x Col. [6])
[9] Source: Blue Chip Financial Forecasts, Vol. 43, No. 10, October 1, 2024 at 2; Vol. 43, No. 6, June 1, 2024 at 14
[10] See Note [2]
[11] See Note [3]
[12] Equals Average of Col. [10] and Col. [11]
[13] See Note [5]
[14] Equals Col. [13] - Col. [9]
[15] Equals Col. [9] + (Col. [12] x Col. [14])
[16] Equals Col. [9] + (0.75 x Col. [12] x Col. [14]) + (0.25 x Col. [14])

Ex Ante Capital Asset Pricing Model and Empirical Capital Asset Pricing Model Results
Using DCF-derived Expected Market Return

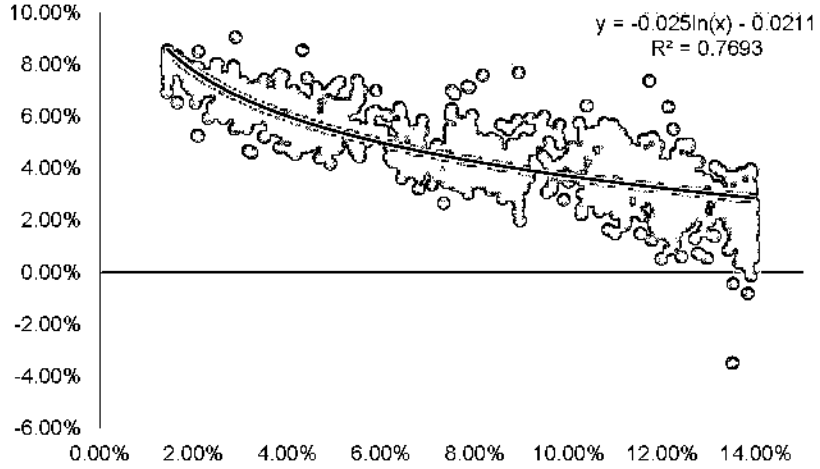
Company	Ticker	[1] Current 30-Year Treasury Yield	[2] Bloomberg Beta Coefficient	[3] Value Line Beta Coefficient	[4] Average Beta Coefficient	[5] DCF Expected Market Return	[6] Market Risk Premium	[7] Traditional CAPM	[8] Empirical CAPM
Alliant Energy Corporation	LNT	4.07%	0.87	0.90	0.88	14.77%	10.70%	13.53%	13.84%
Ameren Corporation	AEE	4.07%	0.82	0.90	0.86	14.77%	10.70%	13.28%	13.65%
American Electric Power Company, Inc.	AEP	4.07%	0.83	0.85	0.84	14.77%	10.70%	13.03%	13.47%
Avista Corporation	AVA	4.07%	0.82	0.95	0.89	14.77%	10.70%	13.55%	13.85%
CMS Energy Corporation	CMS	4.07%	0.83	0.85	0.84	14.77%	10.70%	13.06%	13.49%
DTE Energy Company	DTE	4.07%	0.92	1.00	0.96	14.77%	10.70%	14.36%	14.46%
Duke Energy Corporation	DUK	4.07%	0.81	0.90	0.85	14.77%	10.70%	13.20%	13.59%
Edison International	EIX	4.07%	0.95	1.00	0.98	14.77%	10.70%	14.52%	14.59%
Entergy Corporation	ETR	4.07%	0.96	1.00	0.98	14.77%	10.70%	14.57%	14.62%
Evergy, Inc.	EVRG	4.07%	0.88	0.95	0.92	14.77%	10.70%	13.86%	14.09%
IDACORP, Inc.	IDA	4.07%	0.85	0.85	0.85	14.77%	10.70%	13.16%	13.56%
NextEra Energy, Inc.	NEE	4.07%	0.92	1.05	0.98	14.77%	10.70%	14.58%	14.63%
NorthWestern Corporation	NWE	4.07%	0.99	0.95	0.97	14.77%	10.70%	14.42%	14.51%
OGE Energy Corporation	OGE	4.07%	1.00	1.05	1.03	14.77%	10.70%	15.05%	14.98%
Pinnacle West Capital Corporation	PNW	4.07%	0.93	0.95	0.94	14.77%	10.70%	14.11%	14.27%
Portland General Electric Company	POR	4.07%	0.90	0.90	0.90	14.77%	10.70%	13.70%	13.97%
PPL Corporation	PPL	4.07%	0.87	0.95	0.91	14.77%	10.70%	13.78%	14.03%
Southern Company	SO	4.07%	1.05	1.15	1.10	14.77%	10.70%	15.83%	15.56%
TXNM Energy, Inc	TXNM	4.07%	0.88	0.95	0.91	14.77%	10.70%	13.85%	14.08%
Xcel Energy Inc.	XEL	4.07%	0.81	0.85	0.83	14.77%	10.70%	12.96%	13.41%
							Mean:	13.92%	14.13%
							Median:	13.82%	14.05%
						Average of the Mean and Median:		13.87%	14.09%

Company	Ticker	[9] Projected 30-Year Treasury Yield	[10] Bloomberg Beta Coefficient	[11] Value Line Beta Coefficient	[12] Average Beta Coefficient	[13] DCF Expected Market Return	[14] Market Risk Premium	[15] Traditional CAPM	[16] Empirical CAPM
Alliant Energy Corporation	LNT	4.19%	0.87	0.90	0.88	14.77%	10.57%	13.55%	13.85%
Ameren Corporation	AEE	4.19%	0.82	0.90	0.86	14.77%	10.57%	13.30%	13.67%
American Electric Power Company, Inc.	AEP	4.19%	0.83	0.85	0.84	14.77%	10.57%	13.05%	13.48%
Avista Corporation	AVA	4.19%	0.82	0.95	0.89	14.77%	10.57%	13.56%	13.86%
CMS Energy Corporation	CMS	4.19%	0.83	0.85	0.84	14.77%	10.57%	13.08%	13.50%
DTE Energy Company	DTE	4.19%	0.92	1.00	0.96	14.77%	10.57%	14.37%	14.47%
Duke Energy Corporation	DUK	4.19%	0.81	0.90	0.85	14.77%	10.57%	13.22%	13.61%
Edison International	EIX	4.19%	0.95	1.00	0.98	14.77%	10.57%	14.53%	14.59%
Entergy Corporation	ETR	4.19%	0.96	1.00	0.98	14.77%	10.57%	14.58%	14.62%
Evergy, Inc.	EVRG	4.19%	0.88	0.95	0.92	14.77%	10.57%	13.87%	14.09%
IDACORP, Inc.	IDA	4.19%	0.85	0.85	0.85	14.77%	10.57%	13.18%	13.57%
NextEra Energy, Inc.	NEE	4.19%	0.92	1.05	0.98	14.77%	10.57%	14.58%	14.63%
NorthWestern Corporation	NWE	4.19%	0.99	0.95	0.97	14.77%	10.57%	14.42%	14.51%
OGE Energy Corporation	OGE	4.19%	1.00	1.05	1.03	14.77%	10.57%	15.05%	14.98%
Pinnacle West Capital Corporation	PNW	4.19%	0.93	0.95	0.94	14.77%	10.57%	14.11%	14.28%
Portland General Electric Company	POR	4.19%	0.90	0.90	0.90	14.77%	10.57%	13.72%	13.98%
PPL Corporation	PPL	4.19%	0.87	0.95	0.91	14.77%	10.57%	13.79%	14.04%
Southern Company	SO	4.19%	1.05	1.15	1.10	14.77%	10.57%	15.81%	15.55%
TXNM Energy, Inc	TXNM	4.19%	0.88	0.95	0.91	14.77%	10.57%	13.86%	14.09%
Xcel Energy Inc.	XEL	4.19%	0.81	0.85	0.83	14.77%	10.57%	12.98%	13.43%
							Mean:	13.93%	14.14%
							Median:	13.83%	14.06%
						Average of the Mean and Median:		13.88%	14.10%

Notes:
[1] Source: Bloomberg Professional Service; 30-day average
[2] Source: Bloomberg Professional Service
[3] Source: Value Line
[4] Equals Average of Col. [2] and Col. [3]
[5] Source: JEN-4; Value Line DCF-based expected market return
[6] Equals Col. [5] - Col. [1]
[7] Equals Col. [1] + (Col. [4] x Col. [6])
[8] Equals Col. [1] + (0.75 x Col. [4] x Col. [6]) + (0.25 x Col. [6])
[9] Source: Blue Chip Financial Forecasts, Vol. 43, No. 10, October 1, 2024 at 2; Vol. 43, No. 6, June 1, 2024 at 14
[10] See Note [2]
[11] See Note [3]
[12] Equals Average of Col. [10] and Col. [11]
[13] See Note [5]
[14] Equals Col. [13] - Col. [9]
[15] Equals Col. [9] + (Col. [12] x Col. [14])
[16] Equals Col. [9] + (0.75 x Col. [12] x Col. [14]) + (0.25 x Col. [14])

Bond Yield Plus Risk Premium

[1]	[2]	[3]	[4]	[5]
Constant	Slope	30-Year Treasury Yield	Risk Premium	Return on Equity
-2.11%	-2.53%			
Current 30-Year Treasury		4.07%	5.98%	10.05%
Projected 30-Year Treasury		4.19%	5.90%	10.10%



Notes:
[1] Constant of regression equation
[2] Slope of regression equation
[3] Sources: Current = Bloomberg Professional,
Projected = Average of near-term and long-term projected 30-year Treasury yield from
Blue Chip Financial Forecasts, Vol. 43, No. 10, October 1, 2024 at 2 and Vol. 43, No. 6, June 1, 2024 at 14
[4] Equals [1] + ln([3]) x [2]
[5] Equals [3] + [4]
[6] Source: S&P Capital IQ, Date of Rate Case Decision
[7] Source: S&P Capital IQ, Authorized Return on Equity
[8] Source: Bloomberg Professional, equals 200-trading day average (i.e. lag period)
[9] Equals [7] - [8]

Bond Yield Plus Risk Premium

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
1/1/1980	14.50%	9.36%	5.14%
1/7/1980	14.39%	9.39%	5.00%
1/9/1980	15.00%	9.40%	5.60%
1/14/1980	15.17%	9.42%	5.75%
1/17/1980	13.93%	9.44%	4.49%
1/23/1980	15.50%	9.47%	6.03%
1/30/1980	13.86%	9.52%	4.34%
1/31/1980	12.61%	9.53%	3.08%
2/6/1980	13.71%	9.58%	4.13%
2/13/1980	12.80%	9.64%	3.16%
2/14/1980	13.00%	9.65%	3.35%
2/19/1980	13.50%	9.68%	3.82%
2/27/1980	13.75%	9.78%	3.97%
2/29/1980	13.75%	9.81%	3.94%
2/29/1980	14.00%	9.81%	4.19%
2/29/1980	14.77%	9.81%	4.96%
3/7/1980	12.70%	9.90%	2.80%
3/14/1980	13.50%	9.97%	3.53%
3/26/1980	14.16%	10.11%	4.05%
3/27/1980	14.24%	10.12%	4.12%
3/28/1980	14.50%	10.14%	4.36%
4/11/1980	12.75%	10.28%	2.47%
4/14/1980	13.85%	10.29%	3.56%
4/16/1980	15.50%	10.32%	5.18%
4/22/1980	13.25%	10.36%	2.89%
4/22/1980	13.90%	10.36%	3.54%
4/24/1980	16.80%	10.38%	6.42%
4/29/1980	15.50%	10.41%	5.09%
5/6/1980	13.70%	10.45%	3.25%
5/7/1980	15.00%	10.46%	4.54%
5/8/1980	13.75%	10.47%	3.28%
5/9/1980	14.35%	10.47%	3.88%
5/13/1980	13.60%	10.49%	3.11%
5/15/1980	13.25%	10.50%	2.75%
5/19/1980	13.75%	10.52%	3.23%
5/27/1980	13.62%	10.55%	3.07%
5/27/1980	14.60%	10.55%	4.05%
5/29/1980	16.00%	10.56%	5.44%
5/30/1980	13.80%	10.57%	3.23%
6/2/1980	15.63%	10.58%	5.05%
6/9/1980	15.90%	10.61%	5.29%
6/10/1980	13.78%	10.61%	3.17%
6/12/1980	14.25%	10.62%	3.63%
6/19/1980	13.40%	10.63%	2.77%
6/30/1980	13.00%	10.65%	2.35%
6/30/1980	13.40%	10.65%	2.75%
7/9/1980	14.75%	10.68%	4.07%
7/10/1980	15.00%	10.69%	4.31%
7/15/1980	15.80%	10.70%	5.10%
7/18/1980	13.80%	10.72%	3.08%
7/22/1980	14.10%	10.73%	3.37%
7/24/1980	15.00%	10.73%	4.27%
7/25/1980	13.48%	10.74%	2.74%
7/31/1980	14.58%	10.76%	3.82%
8/8/1980	13.50%	10.78%	2.72%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
8/8/1980	14.00%	10.78%	3.22%
8/8/1980	15.45%	10.78%	4.67%
8/11/1980	14.85%	10.78%	4.07%
8/14/1980	14.00%	10.79%	3.21%
8/14/1980	16.25%	10.79%	5.46%
8/25/1980	13.75%	10.82%	2.93%
8/27/1980	13.80%	10.83%	2.97%
8/29/1980	12.50%	10.84%	1.66%
9/15/1980	13.50%	10.88%	2.62%
9/15/1980	15.80%	10.88%	4.92%
9/15/1980	13.93%	10.88%	3.05%
9/24/1980	12.50%	10.93%	1.57%
9/24/1980	15.00%	10.93%	4.07%
9/26/1980	13.75%	10.95%	2.80%
9/30/1980	14.10%	10.96%	3.14%
9/30/1980	14.20%	10.96%	3.24%
10/1/1980	13.90%	10.97%	2.93%
10/3/1980	15.50%	10.99%	4.51%
10/7/1980	12.50%	11.00%	1.50%
10/9/1980	13.25%	11.01%	2.24%
10/9/1980	14.50%	11.01%	3.49%
10/9/1980	14.50%	11.01%	3.49%
10/16/1980	16.10%	11.03%	5.07%
10/17/1980	14.50%	11.03%	3.47%
10/31/1980	13.75%	11.11%	2.64%
10/31/1980	14.25%	11.11%	3.14%
11/4/1980	15.00%	11.12%	3.88%
11/5/1980	14.00%	11.13%	2.87%
11/5/1980	13.75%	11.13%	2.62%
11/8/1980	13.75%	11.15%	2.60%
11/10/1980	14.85%	11.15%	3.70%
11/17/1980	14.00%	11.18%	2.82%
11/18/1980	14.00%	11.19%	2.81%
11/19/1980	13.00%	11.19%	1.81%
11/24/1980	14.00%	11.20%	2.80%
11/26/1980	14.00%	11.21%	2.79%
12/8/1980	14.15%	11.22%	2.93%
12/8/1980	15.10%	11.22%	3.88%
12/9/1980	15.35%	11.22%	4.13%
12/12/1980	15.45%	11.22%	4.23%
12/17/1980	13.25%	11.23%	2.02%
12/18/1980	15.80%	11.23%	4.57%
12/19/1980	14.50%	11.23%	3.27%
12/19/1980	14.64%	11.23%	3.41%
12/22/1980	13.45%	11.22%	2.23%
12/22/1980	15.00%	11.22%	3.78%
12/30/1980	14.95%	11.21%	3.74%
12/30/1980	14.50%	11.21%	3.29%
12/31/1980	13.39%	11.21%	2.18%
1/2/1981	15.25%	11.21%	4.04%
1/7/1981	14.30%	11.21%	3.09%
1/19/1981	15.25%	11.19%	4.06%
1/23/1981	14.40%	11.20%	3.20%
1/23/1981	13.10%	11.20%	1.90%
1/26/1981	15.25%	11.20%	4.05%
1/27/1981	15.00%	11.20%	3.80%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
1/31/1981	13.47%	11.21%	2.26%
2/3/1981	15.25%	11.23%	4.02%
2/5/1981	15.75%	11.25%	4.50%
2/11/1981	15.60%	11.28%	4.32%
2/20/1981	15.25%	11.34%	3.91%
3/11/1981	15.40%	11.50%	3.90%
3/12/1981	14.51%	11.51%	3.00%
3/12/1981	16.00%	11.51%	4.49%
3/13/1981	13.02%	11.52%	1.50%
3/18/1981	16.19%	11.55%	4.64%
3/19/1981	13.75%	11.56%	2.19%
3/23/1981	14.30%	11.58%	2.72%
3/25/1981	15.30%	11.61%	3.69%
4/1/1981	14.53%	11.69%	2.84%
4/3/1981	19.10%	11.72%	7.38%
4/9/1981	15.00%	11.79%	3.21%
4/9/1981	15.30%	11.79%	3.51%
4/9/1981	17.00%	11.79%	5.21%
4/9/1981	16.50%	11.79%	4.71%
4/10/1981	13.75%	11.81%	1.94%
4/13/1981	13.57%	11.83%	1.74%
4/15/1981	15.30%	11.86%	3.44%
4/16/1981	13.50%	11.88%	1.62%
4/17/1981	14.10%	11.88%	2.22%
4/21/1981	14.00%	11.91%	2.09%
4/21/1981	16.80%	11.91%	4.89%
4/24/1981	16.00%	11.96%	4.04%
4/27/1981	12.50%	11.98%	0.52%
4/27/1981	13.61%	11.98%	1.63%
4/29/1981	13.65%	12.01%	1.64%
4/30/1981	13.50%	12.02%	1.48%
5/4/1981	16.22%	12.06%	4.16%
5/5/1981	14.40%	12.08%	2.32%
5/7/1981	16.25%	12.12%	4.13%
5/7/1981	16.27%	12.12%	4.15%
5/8/1981	13.00%	12.14%	0.86%
5/8/1981	16.00%	12.14%	3.86%
5/12/1981	13.50%	12.17%	1.33%
5/15/1981	15.75%	12.23%	3.52%
5/18/1981	14.88%	12.24%	2.64%
5/20/1981	16.00%	12.27%	3.73%
5/21/1981	14.00%	12.28%	1.72%
5/26/1981	14.90%	12.31%	2.59%
5/27/1981	15.00%	12.32%	2.68%
5/29/1981	15.50%	12.34%	3.16%
6/1/1981	16.50%	12.35%	4.15%
6/3/1981	14.67%	12.38%	2.29%
6/5/1981	13.00%	12.40%	0.60%
6/10/1981	16.75%	12.42%	4.33%
6/17/1981	14.40%	12.46%	1.94%
6/18/1981	16.33%	12.47%	3.86%
6/25/1981	14.75%	12.52%	2.23%
6/26/1981	16.00%	12.53%	3.47%
6/30/1981	15.25%	12.55%	2.70%
7/1/1981	15.50%	12.56%	2.94%
7/1/1981	17.50%	12.56%	4.94%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
7/10/1981	16.00%	12.62%	3.38%
7/14/1981	16.90%	12.64%	4.26%
7/15/1981	16.00%	12.65%	3.35%
7/17/1981	15.00%	12.67%	2.33%
7/20/1981	15.00%	12.68%	2.32%
7/21/1981	14.00%	12.69%	1.31%
7/28/1981	13.48%	12.75%	0.73%
7/31/1981	13.50%	12.79%	0.71%
7/31/1981	15.00%	12.79%	2.21%
7/31/1981	16.00%	12.79%	3.21%
8/5/1981	15.71%	12.83%	2.88%
8/10/1981	14.50%	12.87%	1.63%
8/11/1981	15.00%	12.88%	2.12%
8/20/1981	13.50%	12.95%	0.55%
8/20/1981	16.50%	12.95%	3.55%
8/24/1981	15.00%	12.97%	2.03%
8/28/1981	15.00%	13.01%	1.99%
9/3/1981	14.50%	13.06%	1.44%
9/10/1981	14.50%	13.11%	1.39%
9/11/1981	16.00%	13.12%	2.88%
9/16/1981	16.00%	13.15%	2.85%
9/17/1981	16.50%	13.16%	3.34%
9/23/1981	15.85%	13.20%	2.65%
9/28/1981	15.50%	13.23%	2.27%
10/9/1981	15.75%	13.34%	2.41%
10/15/1981	16.25%	13.37%	2.88%
10/16/1981	15.50%	13.39%	2.11%
10/16/1981	16.50%	13.39%	3.11%
10/19/1981	14.25%	13.40%	0.85%
10/20/1981	17.00%	13.41%	3.59%
10/20/1981	15.25%	13.41%	1.84%
10/23/1981	16.00%	13.46%	2.54%
10/27/1981	10.00%	13.49%	-3.49%
10/29/1981	16.50%	13.52%	2.98%
10/29/1981	14.75%	13.52%	1.23%
11/3/1981	15.17%	13.54%	1.63%
11/5/1981	16.60%	13.56%	3.04%
11/6/1981	15.17%	13.57%	1.60%
11/24/1981	15.50%	13.61%	1.89%
11/25/1981	15.35%	13.61%	1.74%
11/25/1981	15.25%	13.61%	1.64%
11/25/1981	16.10%	13.61%	2.49%
11/25/1981	16.10%	13.61%	2.49%
12/1/1981	16.00%	13.61%	2.39%
12/1/1981	16.50%	13.61%	2.89%
12/1/1981	16.49%	13.61%	2.88%
12/1/1981	15.70%	13.61%	2.09%
12/4/1981	16.00%	13.61%	2.39%
12/11/1981	16.25%	13.63%	2.62%
12/14/1981	14.00%	13.63%	0.37%
12/15/1981	15.81%	13.63%	2.18%
12/15/1981	16.00%	13.63%	2.37%
12/16/1981	15.25%	13.63%	1.62%
12/17/1981	16.50%	13.64%	2.86%
12/18/1981	15.45%	13.64%	1.81%
12/30/1981	14.25%	13.67%	0.58%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
12/30/1981	16.25%	13.67%	2.58%
12/30/1981	16.00%	13.67%	2.33%
12/31/1981	16.15%	13.68%	2.47%
1/4/1982	15.50%	13.68%	1.82%
1/11/1982	17.00%	13.73%	3.27%
1/11/1982	14.50%	13.73%	0.77%
1/13/1982	14.75%	13.74%	1.01%
1/14/1982	15.75%	13.75%	2.00%
1/15/1982	16.50%	13.76%	2.74%
1/15/1982	15.00%	13.76%	1.24%
1/22/1982	16.25%	13.80%	2.45%
1/27/1982	16.84%	13.81%	3.03%
1/28/1982	13.00%	13.82%	-0.82%
1/29/1982	15.50%	13.82%	1.68%
2/1/1982	15.85%	13.83%	2.02%
2/3/1982	16.44%	13.84%	2.60%
2/8/1982	15.50%	13.86%	1.64%
2/11/1982	16.00%	13.88%	2.12%
2/11/1982	16.20%	13.88%	2.32%
2/17/1982	15.00%	13.89%	1.11%
2/19/1982	15.17%	13.89%	1.28%
2/26/1982	15.25%	13.89%	1.36%
3/1/1982	15.03%	13.89%	1.14%
3/1/1982	16.00%	13.89%	2.11%
3/3/1982	15.00%	13.88%	1.12%
3/8/1982	17.10%	13.88%	3.22%
3/12/1982	16.25%	13.88%	2.37%
3/17/1982	17.30%	13.88%	3.42%
3/22/1982	15.10%	13.89%	1.21%
3/27/1982	15.40%	13.90%	1.50%
3/30/1982	15.50%	13.91%	1.59%
3/31/1982	17.00%	13.91%	3.09%
4/1/1982	14.70%	13.92%	0.78%
4/1/1982	16.50%	13.92%	2.58%
4/2/1982	15.50%	13.92%	1.58%
4/5/1982	15.50%	13.93%	1.57%
4/8/1982	16.40%	13.94%	2.46%
4/13/1982	14.50%	13.94%	0.56%
4/23/1982	15.75%	13.94%	1.81%
4/27/1982	15.00%	13.94%	1.06%
4/28/1982	15.75%	13.94%	1.81%
4/30/1982	14.70%	13.94%	0.76%
4/30/1982	15.50%	13.94%	1.56%
5/3/1982	16.60%	13.94%	2.66%
5/4/1982	16.00%	13.94%	2.06%
5/14/1982	15.50%	13.92%	1.58%
5/18/1982	15.42%	13.92%	1.50%
5/19/1982	14.69%	13.92%	0.77%
5/20/1982	15.10%	13.91%	1.19%
5/20/1982	15.50%	13.91%	1.59%
5/20/1982	15.00%	13.91%	1.09%
5/20/1982	16.30%	13.91%	2.39%
5/21/1982	17.75%	13.91%	3.84%
5/27/1982	15.00%	13.89%	1.11%
5/28/1982	17.00%	13.89%	3.11%
5/28/1982	15.50%	13.89%	1.61%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
6/1/1982	13.75%	13.89%	-0.14%
6/1/1982	16.60%	13.89%	2.71%
6/9/1982	17.86%	13.88%	3.98%
6/14/1982	15.75%	13.88%	1.87%
6/15/1982	14.85%	13.87%	0.98%
6/18/1982	15.50%	13.86%	1.64%
6/21/1982	14.90%	13.86%	1.04%
6/23/1982	16.00%	13.86%	2.14%
6/23/1982	16.17%	13.86%	2.31%
6/24/1982	14.85%	13.86%	0.99%
6/25/1982	14.70%	13.85%	0.85%
7/1/1982	16.00%	13.84%	2.16%
7/2/1982	15.62%	13.83%	1.79%
7/2/1982	17.00%	13.83%	3.17%
7/13/1982	16.80%	13.82%	2.98%
7/13/1982	14.00%	13.82%	0.18%
7/14/1982	15.76%	13.81%	1.95%
7/14/1982	16.02%	13.81%	2.21%
7/19/1982	16.50%	13.79%	2.71%
7/22/1982	17.00%	13.76%	3.24%
7/22/1982	14.50%	13.76%	0.74%
7/27/1982	16.75%	13.74%	3.01%
7/29/1982	16.50%	13.73%	2.77%
8/11/1982	17.50%	13.68%	3.82%
8/18/1982	17.07%	13.62%	3.45%
8/20/1982	15.73%	13.60%	2.13%
8/25/1982	16.00%	13.57%	2.43%
8/26/1982	15.50%	13.56%	1.94%
8/30/1982	15.00%	13.55%	1.45%
9/3/1982	16.20%	13.53%	2.67%
9/8/1982	15.00%	13.52%	1.48%
9/15/1982	16.25%	13.51%	2.74%
9/15/1982	13.08%	13.51%	-0.43%
9/16/1982	16.00%	13.50%	2.50%
9/17/1982	15.25%	13.50%	1.75%
9/23/1982	17.17%	13.47%	3.70%
9/24/1982	14.50%	13.47%	1.03%
9/27/1982	15.25%	13.46%	1.79%
10/1/1982	15.50%	13.42%	2.08%
10/15/1982	15.90%	13.32%	2.58%
10/22/1982	15.75%	13.24%	2.51%
10/22/1982	17.15%	13.24%	3.91%
10/29/1982	15.54%	13.16%	2.38%
11/1/1982	15.50%	13.14%	2.36%
11/3/1982	17.20%	13.12%	4.08%
11/4/1982	16.25%	13.10%	3.15%
11/5/1982	16.20%	13.09%	3.11%
11/9/1982	16.00%	13.05%	2.95%
11/23/1982	15.50%	12.88%	2.62%
11/23/1982	15.85%	12.88%	2.97%
11/30/1982	16.50%	12.80%	3.70%
12/1/1982	17.04%	12.78%	4.26%
12/6/1982	15.00%	12.72%	2.28%
12/6/1982	16.35%	12.72%	3.63%
12/10/1982	15.50%	12.66%	2.84%
12/13/1982	16.00%	12.64%	3.36%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
12/14/1982	15.30%	12.62%	2.68%
12/14/1982	16.40%	12.62%	3.78%
12/20/1982	16.00%	12.57%	3.43%
12/21/1982	14.75%	12.55%	2.20%
12/21/1982	15.85%	12.55%	3.30%
12/22/1982	16.58%	12.54%	4.04%
12/22/1982	16.75%	12.54%	4.21%
12/22/1982	16.25%	12.54%	3.71%
12/29/1982	14.90%	12.48%	2.42%
12/29/1982	16.25%	12.48%	3.77%
12/30/1982	16.35%	12.46%	3.89%
12/30/1982	16.00%	12.46%	3.54%
12/30/1982	16.77%	12.46%	4.31%
1/5/1983	17.33%	12.40%	4.93%
1/11/1983	15.90%	12.34%	3.56%
1/12/1983	15.50%	12.32%	3.18%
1/12/1983	14.63%	12.32%	2.31%
1/20/1983	17.75%	12.23%	5.52%
1/21/1983	15.00%	12.21%	2.79%
1/24/1983	15.50%	12.20%	3.30%
1/24/1983	14.50%	12.20%	2.30%
1/25/1983	15.85%	12.19%	3.66%
1/27/1983	16.14%	12.16%	3.98%
2/1/1983	18.50%	12.13%	6.37%
2/4/1983	14.00%	12.09%	1.91%
2/10/1983	15.00%	12.05%	2.95%
2/21/1983	15.50%	11.98%	3.52%
2/22/1983	15.50%	11.96%	3.54%
2/23/1983	16.00%	11.95%	4.05%
2/23/1983	15.10%	11.95%	3.15%
3/2/1983	15.25%	11.89%	3.36%
3/9/1983	15.20%	11.82%	3.38%
3/15/1983	13.00%	11.76%	1.24%
3/18/1983	15.25%	11.72%	3.53%
3/23/1983	15.40%	11.68%	3.72%
3/24/1983	15.00%	11.66%	3.34%
3/29/1983	15.50%	11.62%	3.88%
3/30/1983	16.71%	11.60%	5.11%
3/31/1983	15.00%	11.58%	3.42%
4/4/1983	15.20%	11.57%	3.63%
4/8/1983	15.50%	11.49%	4.01%
4/11/1983	14.81%	11.48%	3.33%
4/19/1983	14.50%	11.36%	3.14%
4/20/1983	16.00%	11.35%	4.65%
4/29/1983	16.00%	11.23%	4.77%
5/1/1983	14.50%	11.23%	3.27%
5/9/1983	15.50%	11.14%	4.36%
5/11/1983	16.46%	11.11%	5.35%
5/12/1983	14.14%	11.10%	3.04%
5/18/1983	15.00%	11.04%	3.96%
5/23/1983	14.90%	11.00%	3.90%
5/23/1983	15.50%	11.00%	4.50%
5/25/1983	15.50%	10.97%	4.53%
5/27/1983	15.00%	10.95%	4.05%
5/31/1983	14.00%	10.94%	3.06%
5/31/1983	15.50%	10.94%	4.56%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
6/2/1983	14.50%	10.92%	3.58%
6/17/1983	15.03%	10.83%	4.20%
7/1/1983	14.90%	10.77%	4.13%
7/1/1983	14.80%	10.77%	4.03%
7/8/1983	16.25%	10.75%	5.50%
7/13/1983	13.20%	10.75%	2.45%
7/19/1983	15.00%	10.74%	4.26%
7/19/1983	15.10%	10.74%	4.36%
7/25/1983	16.25%	10.73%	5.52%
7/28/1983	15.90%	10.74%	5.16%
8/3/1983	16.34%	10.75%	5.59%
8/3/1983	16.50%	10.75%	5.75%
8/19/1983	15.00%	10.80%	4.20%
8/22/1983	15.50%	10.80%	4.70%
8/22/1983	16.40%	10.80%	5.60%
8/31/1983	14.75%	10.85%	3.90%
9/7/1983	15.00%	10.87%	4.13%
9/14/1983	15.78%	10.89%	4.89%
9/16/1983	15.00%	10.90%	4.10%
9/19/1983	14.50%	10.91%	3.59%
9/20/1983	16.50%	10.91%	5.59%
9/28/1983	14.50%	10.94%	3.56%
9/29/1983	15.50%	10.95%	4.55%
9/30/1983	16.15%	10.95%	5.20%
9/30/1983	15.25%	10.95%	4.30%
10/4/1983	14.80%	10.96%	3.84%
10/7/1983	16.00%	10.97%	5.03%
10/13/1983	15.52%	10.99%	4.53%
10/17/1983	15.50%	11.00%	4.50%
10/18/1983	14.50%	11.00%	3.50%
10/19/1983	16.50%	11.01%	5.49%
10/19/1983	16.25%	11.01%	5.24%
10/26/1983	15.00%	11.04%	3.96%
10/27/1983	15.20%	11.04%	4.16%
11/1/1983	16.00%	11.06%	4.94%
11/9/1983	14.90%	11.09%	3.81%
11/10/1983	14.35%	11.10%	3.25%
11/23/1983	16.15%	11.13%	5.02%
11/23/1983	16.00%	11.13%	4.87%
11/30/1983	15.00%	11.14%	3.86%
12/5/1983	15.25%	11.15%	4.10%
12/6/1983	15.07%	11.16%	3.91%
12/8/1983	15.90%	11.16%	4.74%
12/9/1983	14.75%	11.17%	3.58%
12/12/1983	14.50%	11.18%	3.32%
12/15/1983	15.56%	11.20%	4.36%
12/19/1983	14.80%	11.21%	3.59%
12/20/1983	16.00%	11.22%	4.78%
12/20/1983	14.69%	11.22%	3.47%
12/20/1983	16.25%	11.22%	5.03%
12/22/1983	15.75%	11.23%	4.52%
12/22/1983	14.75%	11.23%	3.52%
1/3/1984	14.75%	11.27%	3.48%
1/10/1984	15.90%	11.30%	4.60%
1/12/1984	15.60%	11.31%	4.29%
1/18/1984	13.75%	11.33%	2.42%

[6] Date of Electric Rate Case	[7] Return on Equity	[8] 30-Year Treasury Yield	[9] Risk Premium
1/19/1984	15.90%	11.33%	4.57%
1/30/1984	16.10%	11.37%	4.73%
1/31/1984	15.25%	11.38%	3.87%
2/1/1984	14.80%	11.39%	3.41%
2/6/1984	14.75%	11.41%	3.34%
2/6/1984	13.75%	11.41%	2.34%
2/9/1984	15.25%	11.43%	3.82%
2/15/1984	15.70%	11.45%	4.25%
2/20/1984	15.00%	11.46%	3.54%
2/20/1984	15.00%	11.46%	3.54%
2/22/1984	14.75%	11.48%	3.27%
2/28/1984	14.50%	11.52%	2.98%
3/2/1984	14.25%	11.54%	2.71%
3/20/1984	16.00%	11.65%	4.35%
3/23/1984	15.50%	11.67%	3.83%
3/26/1984	14.71%	11.68%	3.03%
4/2/1984	15.50%	11.72%	3.78%
4/6/1984	14.74%	11.76%	2.98%
4/11/1984	15.72%	11.78%	3.94%
4/17/1984	15.00%	11.81%	3.19%
4/18/1984	16.20%	11.82%	4.38%
4/25/1984	14.64%	11.85%	2.79%
4/30/1984	14.40%	11.88%	2.52%
5/16/1984	14.69%	11.99%	2.70%
5/16/1984	15.00%	11.99%	3.01%
5/22/1984	14.40%	12.02%	2.38%
5/29/1984	15.10%	12.06%	3.04%
6/13/1984	15.25%	12.16%	3.09%
6/15/1984	15.60%	12.17%	3.43%
6/22/1984	16.25%	12.21%	4.04%
6/29/1984	15.25%	12.26%	2.99%
7/2/1984	13.35%	12.27%	1.08%
7/10/1984	16.00%	12.31%	3.69%
7/12/1984	16.50%	12.33%	4.17%
7/13/1984	16.25%	12.34%	3.91%
7/17/1984	14.14%	12.35%	1.79%
7/18/1984	15.50%	12.36%	3.14%
7/18/1984	15.30%	12.36%	2.94%
7/19/1984	14.30%	12.37%	1.93%
7/24/1984	16.79%	12.40%	4.39%
7/31/1984	16.00%	12.43%	3.57%
8/3/1984	14.25%	12.45%	1.80%
8/17/1984	14.30%	12.49%	1.81%
8/20/1984	15.00%	12.49%	2.51%
8/27/1984	16.30%	12.51%	3.79%
8/31/1984	15.55%	12.53%	3.02%
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9/10/1984	14.75%	12.55%	2.20%
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9/28/1984	16.25%	12.57%	3.68%
10/9/1984	14.75%	12.58%	2.17%
10/12/1984	15.60%	12.59%	3.01%
10/22/1984	15.00%	12.59%	2.41%