Attachment D
Exhibit No. TRANSCO-200
Testimony of Adrien M. McKenzie

Exhibit No. Transco-200

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Transco, LLC	**)**	**Docket No. ER25-___-000**

PREPARED DIRECT TESTIMONY OF
ADRIEN M. MCKENZIE, CFA

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GLOSSARY OF ACRONYMS

Bloomberg	Bloomberg L.P.
CAPM	Capital Asset Pricing Model
Commission or FERC	Federal Energy Regulatory Commission
CPI	Consumer Price Index
D.C. Circuit	United States Court of Appeals for the District of Columbia Circuit
DCF	Discounted Cash Flow
EIA	Energy Information Administration
EPS	earnings per share
Fitch	Fitch Ratings, Inc.
FPA	Federal Power Act
FOMC	Federal Open Market Committee
GDP	Gross Domestic Product
IBES	Institutional Brokers' Estimate System, now Refinitiv I/B/E/S Estimates
MISO TOs	Transmission-owning members of the Midcontinent Independent System Operator, Inc.
Moody's	Moody's Investors Service, Inc.
NETOs	Transmission-owning members of ISO New England
NYSE	New York Stock Exchange
NYISO	New York Independent System Operator, Inc.
OATT	Open Access Transmission Tariff
PCE	Personal Consumption Expenditure Price Index
ROE	return on equity
RTO	regional transmission organization
S&P	S&P Global Ratings
SPP	Southwest Power Pool, Inc.
Transco or the Company	New York Transco, LLC
Value Line	The Value Line Investment Survey

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Adrien M. McKenzie. My business address is 3907 Red River St., Austin, Texas 78751.

Q. In what capacity are you employed?

A. I am President of FINCAP, Inc., a firm providing financial, economic, and policy consulting services to business and government.

Q. Please describe your qualifications and experience.

A. The details of my qualifications and experience are included in Exhibit No. Transco-201 attached to my testimony.

A. Overview

Q. What is the purpose of your testimony?

A. My purpose is to present to the Commission my independent analysis of a just and reasonable base ROE for Transco in connection with transmission formula rates under FERC jurisdiction.

Q. How is your testimony organized?

A. I first summarize my conclusions and recommendations regarding a just and reasonable base ROE for Transco. Next, I briefly review the Company's operations and finances. I then discuss current conditions in the capital markets and their implications in evaluating a just and reasonable ROE for Transco. With this as a background, I explain the development of the proxy group of electric utilities used to apply my quantitative analyses and present the details of the technical studies I rely on in reaching my

conclusions. Consistent with the Commission's use of multiple financial models,[1] my analysis includes applications of the DCF model, the CAPM, the Risk Premium method, and the Expected Earnings approach. Recognizing the Commission's recent Order on Remand in which it decided that there was insufficient evidence to include the Risk Premium model in the determination of an appropriate ROE in Opinion Nos. 569-A and 569-B, but invited future applicants to support the model's use,[2] my testimony also addresses and responds to the concerns identified by the Commission. Similarly, I address the specific concerns raised in Opinion Nos. 569 and 569-A regarding the Expected Earnings approach. The Risk Premium and Expected Earnings analyses are well-supported and relied upon to evaluate investors' required returns, and, as I demonstrate below, the determination of a just and reasonable base ROE for Transco should rely on these methodologies. Finally, I also provide a constant growth DCF analysis based on a proxy group of low risk non-utility firms, which serves as an additional reference point in evaluating a just and reasonable base ROE.

Q. What base ROE do you recommend for Transco?

A. Based on my evaluation, and in light of current capital market requirements, I conclude that an ROE of 10.9% is reasonable for Transco. Moreover, in light of the funding needs required to meet capital expenditure requirements, Transco's rate of return must be sufficient to preserve its financial integrity and access to capital.

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[1] *Coakley v. Bangor Hydro-Elec. Co.*, Order Directing Briefs, 165 FERC ¶ 61,030 (2018) ("Coakley Briefing Order"); *Ass'n of Buss. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Order Directing Briefs, 165 FERC ¶ 61,118 (2018) ("MISO Briefing Order"); *Ass'n of Buss. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (2019) ("Opinion No. 569").

[2] *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Order on Remand, 189 FERC ¶ 61,036 (2024) ("Order on Remand").

B. Regulatory Standards

Q. What is the role of the ROE in setting a utility's rates?

A. The ROE compensates shareholders for the use of their capital to finance the investment necessary to provide utility service. Investors commit capital only if they expect to earn a return on their investment commensurate with returns available from alternative investments with comparable risks. To be consistent with sound regulatory economics and the standards set forth by the U.S. Supreme Court in *Bluefield*[3] and *Hope*,[4] a utility's allowed ROE should be sufficient to: (1) fairly compensate capital invested in the utility; (2) enable the utility to offer a return adequate to attract new capital on reasonable terms; and (3) maintain the utility's financial integrity.

Q. What ultimately governs the selection of a fair ROE?

A. The Commission has recognized that a reasonable point estimate ROE should be determined based on the facts specific to each proceeding.[5] That point estimate must also meet the standards mandated by the U.S. Supreme Court.[6] As the Commission has reaffirmed, "[t]he Commission's ultimate task is to ensure that the resulting ROE

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[3] *Bluefield Waterworks & Improvement Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679 (1923) ("*Bluefield*").

[4] *FPC v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*").

[5] *See, e.g., Midwest Indep. Transmission Sys. Operator, Inc.*, 106 FERC ¶ 61,302 at P 8 (2004) ("*Midwest ISO*"), *aff'd in relevant part sub. nom.*, *Pub. Serv. Comm'n of Ky. v. FERC*, 397 F.3d 1004 (D.C. Cir. 2005).

[6] *See, e.g.*, *Midwest ISO.,* 106 FERC ¶ 61,302 at PP 13-14. The Commission observed that:

> [W]e are guided by the principle, enunciated by the Supreme Court, that an approved ROE should be "reasonably sufficient to assure confidence in the financial soundness of the utility [or, in this case, utilities] 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.

Id. at P 13 (quoting *Bluefield*, 262 U.S. at 693).

satisfies the requirements of Hope and Bluefield."[7] This determination requires the Commission to consider all of the available evidence and identify an ROE that is just, reasonable, and sufficient to support Transco's need to attract capital and earn a competitive return and, at the same time, promote the Commission's goal of encouraging investment in electric utility infrastructure.

Q. How does the evaluation of a just and reasonable ROE relate to attracting private capital to utility infrastructure investment?

A. Under the competitive market paradigm that serves as the foundation for investment choices, investors' expected ROE is the key economic signal that allocates finite capital among competing opportunities. The allowed ROE and a reasonable opportunity to earn it are key to ensuring the flow of investment capital for new utility facilities. Apart from the impact that economic and market turmoil can have on the availability of capital, electric utility facilities compete with alternative investments. Utilities and their investors must commit huge sums to expand the transmission grid with new and upgraded facilities and additional funding will be provided only if investors anticipate an opportunity to earn a return that is sufficient to compensate for the associated risks and commensurate with returns available from alternative investments of comparable risk.

Q. Is it important that investors have confidence that the regulatory environment is constructive?

A. Yes. Past challenges for the economy and capital markets highlight the benefits of a fair and balanced ROE, and any departure from the path of supporting utility financial

[7] *Coakley Mass. Attorney Gen. v. Bangor Hydro-Electric Co.*, Opinion No. 531, 147 FERC ¶ 61,234 at P 144 (2014) ("Opinion No. 531"), *order on paper hearing*, Opinion No. 531-A, 149 FERC ¶ 61,032 (2014), *order on reh'g*, Opinion No. 531-B, 150 FERC ¶ 61,165 (2015), *vacated & remanded sub nom. Emera Me. v. FERC*, 854 F.3d 9 (D.C. Cir. 2017).

strength through a sound and stable ROE policy would be extremely shortsighted. Uncertainty and volatility undermine investor confidence, and regulatory signals are the primary driver of investors' risk assessments for utilities. Securities analysts study FERC and state commission orders and regulatory policy statements closely to gauge the financial impact of regulatory actions and to advise investors accordingly. Nevertheless, with respect to ROE, the Commission has recognized the potential disincentive to investment stemming from uncertainties in the administrative process for determining a just and reasonable ROE. In Order No. 679-A, the Commission concluded that "our hearing procedures for determining ROE can create uncertainty for investors," and noted that:

> Although our processes are designed to provide a just and reasonable return, we recognize that there can be significant uncertainty as to the ultimate return because of the uncertainties associated with administrative determinations (*e.g.*, selection of the proxy group, changes in growth rates, etc.) This can itself constitute a substantial disincentive to new investment.[8]

If regulatory actions instill confidence that the regulatory environment is supportive, investors will provide the capital necessary to support needed investment to expand transmission infrastructure, reduce congestion, improve reliability, and secure access to new generation, including wind and other renewable resources. Alternatively, absent a commitment by regulators to promote a sound and stable environment for utility investment and follow through on expectations for ROEs that are competitive with alternative investment opportunities, the flow of capital into utility infrastructure may not continue. As a result, the need for a constructive regulatory

[8] *Promoting Transmission Investment Through Pricing Reform*, Order No. 679-A, 117 FERC ¶ 61,345 at P 69 (2006), *order on reh'g*, 119 FERC ¶ 61,062 (2007).

environment, as well as regulatory certainty in supporting utility infrastructure investment, is as relevant today as ever.

II. ROE FOR TRANSCO

Q. What is the purpose of this section of your testimony?

A. This section of my testimony reviews ROE policies at the Commission and examines conditions in the capital markets and the general economy. I then summarize the results of my analysis and present my independent evaluation of a just and reasonable base ROE for Transco.

A. ROE Methodology

Q. Please describe the ROE framework established by Opinion No. 569-A.

A. In Opinion No. 569-A, the Commission relied on three financial models to establish a just and reasonable ROE for the MISO TOs: (1) a two-step DCF model, (2) the CAPM, and (3) the Risk Premium approach. Under the methodology adopted in Opinion No. 569-A, the composite zone of reasonableness is computed by averaging the low and high boundaries of each model.[9] To administer Section 206 of the FPA, the Commission stratified the composite zone of reasonableness into three equal parts, which it characterized as "below average risk," "average risk," and "above average risk" ranges.[10] For a utility of average risk, the existing ROE is presumptively just and reasonable if it falls within the middle third of the composite zone. With the exception

[9] Because the Risk Premium approach produces a single point estimate and not a range, the Commission imputed a range around the point estimate based on the average spread between the low and high boundaries of the two-step DCF and CAPM ranges.

[10] Opinion No. 569-A at P 194.

of minor corrections to certain inputs to the Risk Premium approach, the Commission affirmed these findings in Opinion No. 569-B.[11]

On August 9, 2022, the D.C. Circuit vacated the ROE framework established in Opinion No. 569-A.[12] Specifically, the court found that the Commission had failed to offer a reasoned explanation for its decision to reintroduce the Risk Premium model in Opinion No. 569-A after initially rejecting it in Opinion No. 569. Ruling that the Commission's reliance on the Risk Premium approach was arbitrary and capricious, the D.C. Circuit vacated the underlying orders.

Q. Did the D.C. Circuit take issue with any other aspects of the Commission's ROE framework?

A. No. While a variety of challenges were raised to the two-step DCF and CAPM methodologies adopted by the Commission in Opinion No. 569-A, the court concluded that these arguments were unpersuasive.[13] Similarly, the D.C. Circuit also rejected an array of complaints to the Commission's policy that establishes presumptively reasonable ranges for purposes of administering FPA Section 206 by dividing the overall composite ROE range of reasonableness into thirds.

Q. Has the Commission responded to the D.C. Circuit's vacatur of Opinion Nos. 569, 569-A, and 569-B?

A. Yes. The Commission issued an Order on Remand on October 17, 2024. In its Order on Remand, the Commission based its ROE findings on the results of its two-step DCF model and an application of the CAPM using IBES growth rates to determine the

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[11] *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.,* Opinion No. 569-B, 173 FERC ¶ 61,159 (2020) ("Opinion No. 569-B"), *vacated & remanded sub nom. MISO Transmission Owners v. FERC*, No. 16-1325 (D.C. Cir. 2022).

[12] *MISO Transmission Owners v. FERC*, 45 F.4th 248 (D.C. Cir. 2022).

[13] *Id.*

market risk premium. The Commission determined that the record did not inlcude sufficient evidence that investors use the Risk Premium model in making investment decisions nor adequately respond to the "circulatrity" concerns with the model for it to be a reliable basis for determining the just and reasonable ROE.[14] I respond to these specific concerns later in my testimony.

Q. Can a mechanical application of any specific ROE methodology be expected to produce reasonable outcomes in every case and under all circumstances?

A. No. The Commission has previously recognized that a just and reasonable ROE should be determined based on the facts specific to each proceeding, and noted, "[a]s an initial matter, we emphasize that the primary question to be considered here is not what constitutes the best overall method for determining ROE generically. . . ."[15] Rather, the question involves a determination of what ROE is most appropriate in each specific case.[16] As the Commission has recognized, this evaluation should not be based on the mechanical application of a single quantitative methodology (or for that matter a mechanical application of a series of models); nor should it depend on a single statistical measure of central tendency. No single financial model predicts the required ROE with absolute precision and all financial models are based on a series of assumptions that are affected differently by market conditions.

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[14] Order on Remand at P 23.

[15] *Midwest ISO*, 106 FERC ¶ 61,302 at P 8.

[16] *Id.* This is consistent with *Emera Maine*, which noted that "[w]hether a rate . . . is unlawful depends on the particular circumstances of the case." *Emera Maine*, 854 F.3d at 19.

Q. Do you believe the Commission should continue to include the Risk Premium method in its ROE methodology?

A. Yes. While the Commission concluded in its Order on Remand that there was "insufficient record evidence to include the Risk premium model" in that proceeding,[17] the Commission noted that "we do not foreclose the use of a Risk Premium model in future proceedings if parties can demonstrate the concerns discussed above have been addressed."[18] Specifically, the Commission concluded that 1) "the record evidence does not contain any evidence suggesting that investors use the risk premium model adopted in Opinion No. 569-A,"[19] and 2) "the record does not contain any evidence that would resolve the circulatory concerns inherent in the Risk Premium model adopted in Opinion No. 569-A."[20] The Risk Premium method is a widely accepted and sound approach to estimating the cost of equity, and my testimony responds to each of these concerns.

Q. Is the use of multiple approaches to evaluate an ROE consistent with investor behavior and accepted regulatory practice?

A. Yes. The actual return that investors require is not directly observable. Different methodologies have been developed to estimate investors' required return on capital, but all such methodologies are simply theoretical tools and generally produce a range of estimates based on different assumptions and inputs. As the Commission has noted, "[t]he determination of rate of return on equity starts from the premise that there is no single approach or methodology for determining the correct rate of return."[21]

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[17] Order on Remand at P 1.

[18] *Id.* at P 24.

[19] *Id.* at P 23.

[20] *Id.*

[21] *Nw. Pipeline Co.*, Opinion No. 396-C, 81 FERC ¶ 61,036 at 61,188 (1997).

There is no failsafe method to estimate investors' required cost of equity and there is no basis to conclude that investors rely on any one single method in arriving at the prices they are willing to pay for utility common stock. A publication authored for the Society of Utility and Regulatory Financial Analysts confirmed this view, concluding that:

> Each model requires the exercise of judgment as to the reasonableness of the underlying assumptions of the methodology and on the reasonableness of the proxies used to validate the theory. Each model has its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each method proceeds from different fundamental premises, most of which cannot be validated empirically. Investors clearly do not subscribe to any singular method, nor does the stock price reflect the application of any one single method by investors.[22]

As this treatise succinctly observed, "no single model is so inherently precise that it can be relied on solely to the exclusion of other theoretically sound models."[23] Similarly, *New Regulatory Finance* concluded that:

> There is no single model that conclusively determines or estimates the expected return for an individual firm. Each methodology possesses its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each method proceeds from different fundamental premises that cannot be validated empirically. Investors do not necessarily subscribe to any one method, nor does the stock price reflect the application of any one single method by the price-setting investor. There is no monopoly as to which method is used by investors. In the absence of any hard evidence as to which method outdoes the other, all relevant evidence should be used and weighted equally, in order to minimize judgmental error, measurement error, and conceptual infirmities.[24]

This is congruent with the advice of a recognized financial researcher and educator:

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[22] David C. Parcell, *The Cost of Capital – A Practitioner's Guide*, Soc'y of Util. & Regulatory Fin. Analysts (2010) at 84.

[23] *Id*.

[24] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 429.

> Use more than one model when you can. Because estimating the opportunity cost of capital is difficult, only a fool throws away useful information. That means you should not use any one model or measure mechanically and exclusively.[25]

Referencing the results of multiple approaches provides greater insight into the expectations and requirements of investors.

B. Base ROE for Transco

Q. What financial models do you rely on to evaluate the base ROE for Transco?

A. My evaluation of a just and reasonable base ROE relies on the results of the two-step DCF model, the CAPM, and the Risk Premium method.

In addition, my testimony supports supplementing these methods to include the results of the Expected Earnings approach. The Expected Earnings approach serves as a direct measure of the expected returns on equity that investors associate with companies of comparable risk and provides a meaningful guide to the return the utility should be expected to earn on its book equity investment. Given that rates are established on the basis of the book value of a utility's investment, this is a relevant measure of the ROE that is consistent with regulatory standards of comparable earnings and capital attraction established in *Hope* and *Bluefield*.

Finally, I also apply the exact same methodology adopted in the Order on Remand; namely, restricting the analysis to consider only the two-step DCF and CAPM results.

Q. Do median values necessarily provide a superior basis to evaluate a just and reasonable base ROE for Transco in this case?

A. No. The cost of capital is an opportunity cost based on the returns that investors could realize by putting their money in other alternatives. In comparing the risks and

[25] *Id.* at 430 (citing Stewart C. Myers, *On the Use of Modern Portfolio Theory in Public Utility Rate Cases: Comment*, Financial Management (Autumn, 1978) at 66-68).

prospects of Transco with other opportunities, there is no reason to believe that investors would distinguish between utilities where the ROE is established on a stand-alone basis and those that are subject to a single, RTO-wide ROE determination (e.g., the NETOs and the MISO TOs). Discriminating between single utilities and the NETOs or MISO TOs when evaluating a point estimate within the DCF range would violate the *Hope* and *Bluefield* standards governing the determination of a just and reasonable ROE in this case.

Capital markets are highly sophisticated and Transco must compete for capital with utilities across the nation, irrespective of any mechanical policies used by the Commission to establish a point estimate ROE from within a proxy group range. As a result, differentiating between a proceeding involving a single transmission utility and a joint filing of multiple RTO members ignores the requirements of investors, which are based on comparable-risk opportunities available in the capital markets. This is consistent with the Commission's prior findings. In approving the use of a national proxy group over a regional proxy group, the Commission observed that the determination "is a question of capital attraction and comparability of risk." As the Commission concluded:

> We agree that "the NETOs must compete for capital with other utilities (and companies in other sectors) throughout the nation," and that investors are not limited to investments in geographically adjacent states but instead participate in national or international capital markets. If the NETOs' ROE is significantly less than the returns of utilities in other parts of the nation, capital will more readily flow to areas other than New England and the NETOs may not be able to attract sufficient capital consistent with the *Hope* and *Bluefield* standards.[26]

Similarly, there is no basis to arbitrarily categorize ROE policies based on an artificial distinction between utilities that are subject to a unified, RTO-wide ROE and

[26] Opinion No. 531 at P 96 (footnotes omitted).

single utilities, such as Transco. Rather, in order to meet the *Hope* and *Bluefield* standards, the Commission's evaluation must be premised on the risk perceptions and requirements of actual investors in the capital markets who do not determine their required returns for utilities based solely on whether the company's FERC-jurisdictional ROE happens to be fixed as the result of a single-company proceeding, or on an RTO-wide basis. As a result, a mechanical policy of referencing the median is not supported.

Q. Is considering midpoint results consistent with the principles underlying a just and reasonable base ROE for Transco?

A. Yes. As noted earlier, the Commission has recognized that a just and reasonable ROE should be determined based on the facts specific to each proceeding. The paramount consideration that must be reflected in the choice of a just and reasonable ROE is the need to ensure that the end result meets the standards mandated by the Supreme Court in *Hope* and *Bluefield* to ensure that a utility can attract capital. This determination does not require the Commission to rely on a single statistical measure of central tendency. Rather, the Commission must consider the available evidence to make an informed evaluation of an ROE that is just, reasonable, and sufficient to support investment.

Q. What are the implications for the Commission's policy of encouraging continued investment in transmission infrastructure?

A. Investors commit capital only if they expect to earn a return on their investment commensurate with returns available from alternative investments with comparable risks. If the utility is unable to offer a return similar to that available from other opportunities, investors will become unwilling to supply the capital on reasonable terms. In evaluating an investment in the transmission sector of the electric power industry, investors will naturally seek to maximize their expected rate of return for a

given level of risk. Awarding a downward-biased ROE by mechanically applying a particular formula based on the median would put single transmission companies such as Transco at a disadvantage, relative to the NETOs and MISO TOs.

Q. What are the results of the financial models discussed in your testimony for the proxy group of electric utilities?

A. The mean and midpoint values produced by the two-step DCF, CAPM, Risk Premium, and Expected Earnings approaches are presented on Exhibit No. Transco-203 and summarized in Table Transco-1 below.

TABLE TRANSCO-1
BASE ROE – SUMMARY OF RESULTS

Method	Range			Median	Midpoint
Two-Step DCF	7.37%	--	11.44%	10.01%	9.41%
CAPM					
IBES	10.79%	--	13.99%	12.33%	12.39%
Value Line	10.13%	--	12.97%	11.47%	11.55%
Average	10.46%	--	13.48%	11.90%	11.97%
Risk Premium	7.95%	--	12.75%	10.35%	10.35%
Expected Earnings	7.63%	--	14.95%	10.88%	11.29%
Composite ROE	**8.35%**	--	**13.16%**	**10.79%**	**10.75%**

As shown above, the results of my analysis produce a composite zone of reasonableness of 8.35% to 13.16%, with median and midpoint values averaging 10.79% and 10.75%, respectively.

Q. What ROE results are produced for your proxy group using the same methodology adopted by the Commission in its Order on Remand?

A In its Order on Remand, the Commission based its ROE findings on the results of its two-step DCF model and an application of the CAPM using IBES growth rates to

determine the market risk premium. The results of this approach are shown in Table Transco-2 below.

TABLE TRANSCO-2
SUMMARY OF RESULTS – ORDER ON REMAND

Method	Range			Median	Midpoint
Two-Step DCF	7.37%	--	11.44%	10.01%	9.41%
CAPM	10.79%	--	13.99%	12.33%	12.39%
Composite ROE	**9.08%**	--	**12.72%**	**11.17%**	**10.90%**

As shown above, this two-model methodology results in a composite zone of reasonableness of 9.08% to 12.72%, with a median of 11.17% and a midpoint of 10.90%.

Q. What do you conclude with respect to a just and reasonable base ROE for Transco?

A. Based on my analyses, and giving consideration to the results of the approach adopted by the Commission in its recent Order on Remand, I conclude that an ROE of 10.9% is just and reasonable for Transco.

Q. What other evidence confirms the reasonableness the 10.9% ROE you recommend for Transco?

A. My ROE recommendation is also confirmed by the results of the constant growth DCF model applied to a group of low-risk, non-utility firms.[27] As shown in Exhibit No. Transco-212, the median and midpoint values produced by the non-utility DCF study range from 10.03% to 11.22%. These results support a finding that continued reliance on the two-step DCF model imparts a downward-bias to the results of the

[27] While my examination of ROE benchmarks in this testimony is limited to a DCF study for low-risk firms in the non-regulated sector, alternative methodologies such as the constant growth DCF method and Empirical CAPM approach can also provide meaningful guidance in assessing investors' required cost of equity.

Commission's ROE methodology and confirm the reasonableness of a 10.9% base ROE for Transco.

Q. Is a 10.9% base ROE consistent with Commission policies to support investment in electric transmission infrastructure?

A. Yes. The Commission's regulatory actions have been successful in supporting much needed investment in wholesale transmission infrastructure. Unresponsive, mechanical decision-making that leads to inadequate returns would undermine the Commission's goal and the legislative mandate to promote capital investment in new transmission projects. This potential adverse outcome has been highlighted by the investment community with respect to the transmission segment of the power industry:

> The degree to which a utility revises its transmission capital plan will depend on expected returns…. Material reductions in the base ROE could lower the quality of and divert capital away from the transmission business, given its generally riskier profile than that for state-regulated utility businesses, such as distribution and generation. Moreover, investors could deploy capital to infrastructure projects with higher allowed returns, such as FERC-regulated natural gas pipelines, or to other industries generally.[28]

The need for regulatory certainty in supporting transmission infrastructure investment is as relevant today as ever, particularly in light of climate and renewable energy goals. An ROE of 10.9% for Transco is appropriate in light of the continued need to attract capital to transmission infrastructure and the imperative of meeting the *Hope* and *Bluefield* standards.

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[28] Wolfe Research, Utils. & Power, *FERConomics: Risk to transmission base ROEs in focus* (June 11, 2013) at 11.

III. FUNDAMENTAL ANALYSES

Q. What is the purpose of this section?

A. This section briefly reviews the organization and operations of Transco. As a predicate to my quantitative analyses, it examines conditions in the capital markets and the general economy. An understanding of the fundamental factors driving the risks and prospects of electric utilities is essential in developing an informed opinion of investors' expectations and requirements that are the basis of a fair rate of return.

A. New York Transco, LLC

Q. Briefly describe Transco.

A. Transco is a New York-based developer, owner and operator of electric transmission facilities serving customers in New York. Transco was created to fund and develop transmission solutions identified in a 2012 report prepared by the New York State Transmission Assessment and Reliability Study Technical Working Group, which served as a blueprint for developing high-voltage electric transmission projects in New York State that are designed to replace aging infrastructure; ease congestion and reduce energy prices for the state's consumers; facilitate the growth and utilization of renewable generation resources; and, meet clean air and public policy goals while ensuring long-term grid reliability and resiliency. Transco will also be a joint developer of the Propel New York Energy Alternate Solution 5 Project ("Propel Project"). Transco is currently owned by Avangrid Networks New York Transco, LLC, Central Hudson Transmission LLC, Consolidated Edison Transmission, LLC, and Grid NY LLC,[29] and is a voluntary transmission-owning member of the NYISO.

[29] Transco's owners are affiliates of the four New York investor-owned utilities: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid and New York State Electric & Gas Corporation (collectively, the "NYTOs")

Q. Will Transco require access to additional capital?

A. Yes. Transco was established to propose electric transmission solutions to Public Policy Transmission Need ("PPTN") determinations and participate in NYISO competitive solicitations. These solicitations are expected to require transmission solutions that are extremely complex and require significant capital contributions. For example, capital expenditures associated with the development of the Propel Project alone are estimated to total approximately $2.8 billion,[30] at least 70% of which will be funded by Transco.[31] Transco's financial integrity and flexibility will be instrumental in attracting the necessary capital for it to pursue the development of these types of projects. It is also consistent with industry practice for a transmission developer such as Transco to establish a base ROE that applies to development of future transmission assets.

Q. What is Transco's capital structure?

A. Transco finances its investment in transmission projects through a combination of equity contributions from the NYTOs, as well as debt financing arranged by or on behalf of the Company. The Company's current capital structure consists of approximately 53% equity and 47% debt.

B. Outlook for Capital Costs

Q. Please summarize current economic and capital market conditions.

A. Following the economic contraction stemming from the COVID-19 pandemic in 2020, U.S. real GDP improved significantly in 2021, with GDP growing at a pace of 6.1%.[32]

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[30] This does not consider electric transmission upgrades that are the development responsibility of incumbent transmission owners.

[31] I understand that the ROE for the Propel Project is the subject of a settlement agreement in Docket No. ER24-232-000 and the ROE proposed here will not apply to that project.

[32] https://www.bea.gov/sites/default/files/2024-10/gdp3q24-adv.xlsx (last visited Nov. 20, 2024).

Growth in 2022 and 2023 was more subdued at 2.5% and 2.9%, respectively.[33] More recently, growth in real GDP declined to 1.6% in Q1 2024, before rising to 3.0% in Q2 2024 and 2.8% in Q3 2024.[34] Meanwhile, indicators of employment have been weakening somewhat, with the national unemployment rate being 4.1% in October 2024.[35]

The underlying risk and price pressures associated with the COVID-19 pandemic were overshadowed by a dramatic increase in geopolitical risks following Russia's invasion of Ukraine in February 2022. More recently, these risks have been compounded by heightened uncertainties prompted by the resurgence of conflict in the Middle East. Apart from disrupting global trade, the potential for further escalation has prompted concerns over constraints to crude oil supplies and resulting supply-side price shocks that could reignite inflation.

Stimulative monetary and fiscal policies, coupled with supply-chain disruptions and rapid price rises in the energy and commodities markets, led to increasing concern that inflation would remain significantly above the Federal Reserve's longer-run benchmark of 2%. CPI inflation peaked in June 2022 at 9.1%, its highest level since November 1981. Since then, CPI inflation has moderated significantly, but remained at 2.6% in October 2024, which exceeds the Federal Reserve's target.[36] The so-called "core" price index, which excludes more volatile energy and food costs, rose at an

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[33] *Id.*

[34] *Id.*

[35] Economic News Release, U.S. Dep't of Labor, Bureau of Labor Statistics, *Employment Situation Summary* (Nov. 1, 2024), https://www.bls.gov/news.release/empsit.nr0.htm (last visited Nov. 20, 2024).

[36] Economic News Release, U.S. Dep't of Labor, Bureau of Labor Statistics, *Consumer Price Index Summary* (Nov. 13, 2024), https://www.bls.gov/news.release/cpi.nr0.htm (last visited Nov. 20, 2024).

annual rate of 3.3% in October 2024.[37] PCE inflation rose 2.1% in September 2024, or 2.7% after excluding more volatile food and energy costs.[38]

Q. Have these developments impacted the risks faced by utilities and their investors?

A. Yes. S&P revised its outlook for the utility sector to "negative" in February 2024, noting that:

> Credit quality for North American investor-owned regulated utilities has weakened over the past four years, with downgrades outpacing upgrades by more than three times. We expect downgrades to again surpass upgrades in 2024 for the fifth consecutive year.[39]

S&P cited rising physical risks, as well as weakening financial measures due to rising capital spending and cash flow deficits, and observed that "much of the industry operates with minimal financial cushion from their downgrade threshold."[40]

Meanwhile, Fitch noted that the outlook for utilities is deteriorating and "reflects continuing macroeconomic headwinds and elevated capex that are putting pressure on credit metrics in the high-cost funding environment."[41]

Q. Do trends in bond yields indicate that the cost of equity has increased relative to the recent past?

A. Yes. While the cost of equity is unobservable, the Commission has noted that "prime interest rates and U.S. Treasury and public utility bond yields" may be considered as

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[37] *Id.*

[38] News Release, Bureau of Economic Analysis, *Personal Income and Outlays, September 2024*, BEA 24-49 (Oct. 31, 2024), https://www.bea.gov/news/2024/personal-income-and-outlays-september-2024 (last visited Nov. 20, 2024).

[39] Standard & Poor's, *Rising Risks: Outlook For North American Investor-Owned Regulated Utilities Weakens,* Criteria Corporates (Feb. 14, 2024).

[40] *Id.*

[41] Fitch Ratings, Inc., *North American Utilities, Power & Gas Outlook 2024* (Dec. 6, 2023).

"indications of a change in capital market conditions."[42] Table 2 below compares widely referenced capital market benchmarks during 2021 with those in October 2024.

TABLE TRANSCO-3
CAPITAL MARKET BENCHMARKS

Series	2021	October 2024[1]	Change (bps)
10-Year Treasury Bonds	1.44%	4.12%	268
30-Year Treasury Bonds	2.05%	4.35%	230
Baa Utility Bonds	3.35%	5.72%	237
Prime Loan Rate	3.25%	8.47%	522
Federal Funds Rate	0.13%	5.34%	521

Source: https://fred.stlouisfed.org; Moody's Credit Trends.

[1] Six-month average yields.

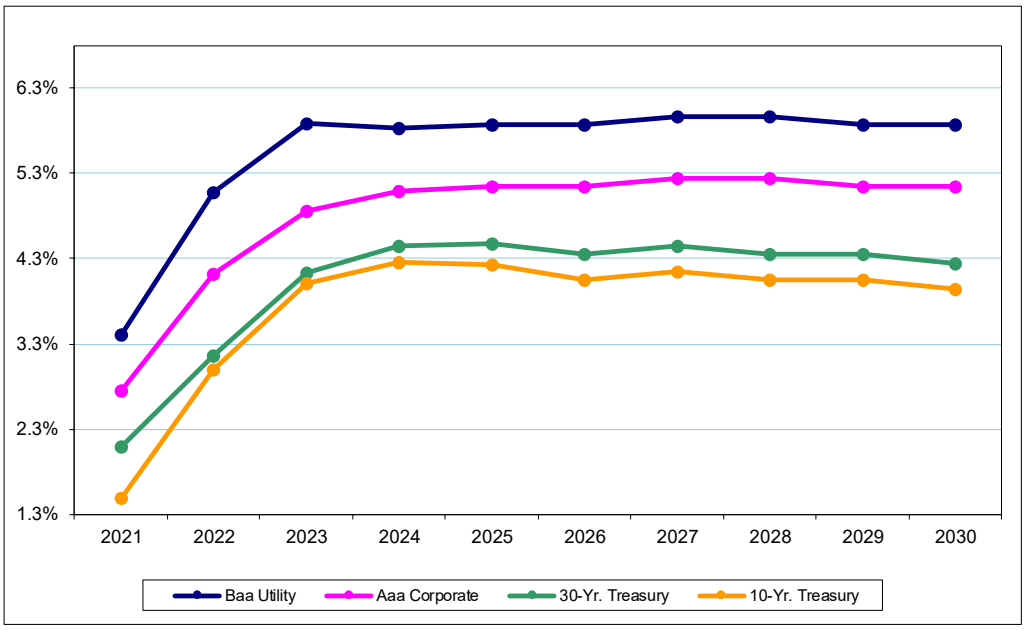
As shown above, trends in bond yields since 2021 document a substantial increase in the returns on long-term capital demanded by investors. With respect to utility bond yields—which are the most relevant indicator in gauging the implications for the Company's common equity investors—six-month average yields in October 2024 exceed 2021 levels by approximately 240 basis points.

Q. Do investors anticipate that these higher bond yields will be sustained?

A. Yes. As illustrated in Figure Transco-1 below, the most recent long-term consensus projections from top economists published by Blue Chip Financial Forecasts ("Blue Chip") document that long-term bond yields are expected to remain elevated when compared to recent historical levels.

[42] Coakley Briefing Order, 165 FERC ¶ 61,030 at P 29.

FIGURE TRANSCO-1
INTEREST RATE TRENDS



Source: Wolters Kluwer, Blue Chip Financial Forecasts (Nov. 27, 2024); Moody's Investors Service; https://fred.stlouisfed.org/.

This evidence shows that long-term capital costs—including the ROE—have increased substantially since 2021, and that investors expect these higher capital costs to be sustained at least through 2030.

Q. Do the Federal Reserve's recent decisions to lower the target range for the federal funds rate change your conclusion that the cost of equity is now significantly higher than it was in recent years?

A. No. Bond yields embody the market's expectations of future events, including Federal Reserve monetary policy and inflation trends, and there is substantial evidence that the Federal Reserve's recent rate cuts were expected. For example, a Forbes.com article from several weeks before the rate cut characterized the market's expectations:

> Fixed income markets expect the Federal Open Market Committee to cut interest rates at its next meeting on September 18. There is a lot of

> evidence for this view based on both the FOMC's own minutes and public statements.[43]

Meanwhile, a Reuters.com article on the day of the Federal Reserve's September 2024 rate action confirmed that it, along with future cuts to the federal funds rate, were anticipated:

> The U.S. central bank on Wednesday kicked off an anticipated series of interest rate cuts with a larger-than-usual half-percentage-point reduction that Federal Reserve Chair Jerome Powell said was meant to show policymakers' commitment to sustaining a low unemployment rate now that inflation has eased.[44]

Consistent with the expectations documented in the reporting above, bond yields showed no signs of substantial movement around the time of the rate cuts, as would otherwise be expected if the Federal Reserve's actions were not anticipated. For example, Figure Transco-2 below shows trends in utility and Treasury yields at the time of the Federal Reserve's announced rate cuts on September 18, 2024 and November 7, 2024.

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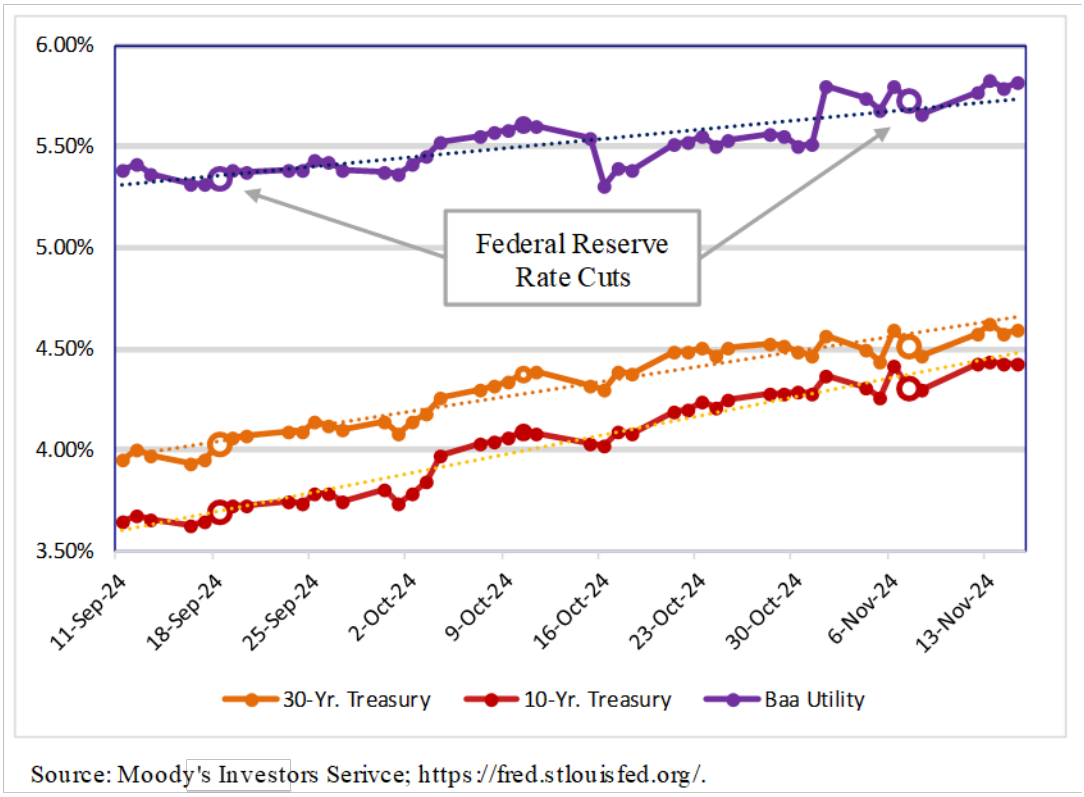
[43] Forbes.com, *Markets Firmly Expect The Fed To Cut Interest Rates On September 18* (Aug. 18, 2024), https://www.forbes.com/sites/simonmoore/2024/08/27/markets-firmly-expect-the-fed-to-cut-rates-on-september-18/ (last visited Oct. 12, 2024).

[44] Reuters.com, *Fed unveils oversized rate cut as it gains 'greater confidence' about inflation* (Sep. 18, 2024), https://www.reuters.com/markets/rates-bonds/with-feds-rate-cut-hand-debate-swirls-over-how-big-move-2024-09-18/ (last visited Oct. 12, 2024) (emphasis added).

FIGURE TRANSCO-2
BOND YIELDS AND ANNOUNCED RATE CUTS



Source: Moody's Investors Serivce; https://fred.stlouisfed.org/.

As evidenced above, bond yields actually trended higher after the Federal Reserve's policy announcements on September 18, 2024 and November 7, 2023 and made no obvious downward moves before or after the Federal Reserve's rate actions.

This evidence supports the conclusion that the Federal Reserve's rate cuts were anticipated by the bond markets. It follows that current bond yields, such as the October 2024 yield averages referenced in Table Transco-3, already reflect expectations of future Federal Reserve actions. Similarly, Figure Transco-1 demonstrates that recent forecasts of leading economists employed by large U.S. banks, insurance companies, brokerage firms, and manufacturers—which consider their expectations for future Federal Reserve actions—do not support a conclusion that long-term bond yields are expected to decrease significantly.

The CEO of Blackrock, whose firm oversees $10 trillion in assets, recently remarked, "[t]oday, I think we have governmental policies that are embedded inflationary, and, with that being said, we're not gonna see interest rates as low as people are forecasting."[45] CNBC reported that a group of CEOs speaking on a subsequent panel at the same event on October 29, which included the CEOs of Goldman Sachs, Carlyle, Morgan Stanley, Standard Chartered and State Street, "were asked to raise their hand if they thought two additional rate cuts would be implemented by the Fed this year. No one put their hand up."[46]

Figure Transco-2 documents that since the Federal Reserve's initial rate cut in September 2024, long-term bond yields have actually increased. This trend has also been impacted by investors' expectations concerning the likely economic, fiscal, and other policy changes of the incoming administration. Moody's concluded that higher broad-based tariffs on imports, deficit-financed tax cuts, and increasingly restrictive immigration policies "will thus result in some combination of higher inflation and interest rates."[47]

Moreover, the impact of the Federal Reserve's moves to a more accommodative monetary policy is likely to have a more pronounced effect on yields for shorter duration instruments, as the yield curve normalizes from the inverted pattern that has characterized financial markets. Morningstar advised investors that while "yields on cash and shorter-maturity products will drop rapidly" in response to the Federal Reserve's policy change, "a stronger-than-expected economy could push longer-term

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[45] Natasha Turak, *Larry Fink says the Fed won't cut interest rates as much as markets expect this year*, CNBC (Oct. 29, 2024), https://www.cnbc.com/2024/10/29/larry-fink-says-the-fed-wont-cut-interest-rates-as-much-as-markets-expect-this-year.html.

[46] *Id.*

[47] Moody's Investors Service, *Trump Take Two (Take Two)*, Economic View (Nov. 19, 2024).

bond yields higher and pose a risk to investors in those assets."[48] Blue Chip recently confirmed this view, noting that:

> Market interest rates have continued to diverge. With the Fed cutting its fed funds rate (FFR) target another 25bps at the November 6-7 FOMC meeting, shorter-term market rates are continuing to follow the FFR lower. Longer-term rates have continued to edge up, likely reflecting an anticipated boost to economic growth from looser fiscal policy ahead and renewed concern over the inflation outlook. Recent inflation reading have been sticky, and market-based five-year inflation expectations have risen about 50bps since mid-September.[49]

This is consistent with the forecasts of leading economists illustrated in Figure Transco-1 above.

Q. What implications do these trends have in evaluating a just and reasonable base ROE for Transco?

A. The upward move in interest rates suggests that long-term capital costs—including the cost of equity—have increased significantly in recent years. Current capital market conditions reflect the reality of the situation in which Transco must attract and retain capital. The standards underlying a fair rate of return require an authorized ROE for the Company that is competitive with other investments of comparable risk and sufficient to preserve its ability to maintain access to capital on reasonable terms. These standards can only be met by considering the current requirements of investors. If the upward shift in investors' risk perceptions and required rates of return for long-term capital is not incorporated in the allowed ROE, the results will fail to meet the comparable earnings standard that is fundamental in determining the cost of capital. From a more practical perspective, failing to provide investors with the opportunity to

[48] Sarah Hansen, *What the Fed's Rate Cut Means for Bond Investors*, Morningstar (Sep. 20, 2024).

[49] Wolters Kluwer, Blue Chip Financial Forecasts (Nov. 27, 2024).

earn a rate of return commensurate with Transco's risks will weaken its financial integrity and undermine its ability to attract necessary capital.

IV. DEVELOPMENT AND SELECTION OF THE PROXY GROUP

Q. What is the purpose of this section of your testimony?

A. This section describes how I identify the proxy group of publicly traded electric utilities used to apply the financial models described in my testimony.

Q. How do you implement quantitative methods to estimate the cost of common equity for Transco?

A. Application of quantitative methods to estimate the cost of common equity requires observable capital market data, such as stock prices and beta values, that is not available for Transco. Moreover, even for a firm with publicly traded stock, the cost of common equity can only be estimated. As a result, applying quantitative models using observable market data only produces an estimate that inherently includes some degree of observation error. Thus, the accepted approach to increase confidence in the results is to apply alternative quantitative methods to a proxy group of publicly traded companies that investors regard as risk comparable. The results of the analysis for the sample of companies are relied upon to establish a range of reasonableness for the cost of equity for the specific company at issue.

Q. What specific criteria do you initially examine to identify a proxy group of regulated electric utilities?

A. Consistent with the Commission's accepted approach, I begin with the following criteria to identify a proxy group of electric utilities:

1. Companies that are included in the Electric Utility Industry groups compiled by Value Line.
2. Electric utilities that paid common dividends over the last six months and have not announced a dividend cut since that time.

3. Electric utilities with no ongoing involvement in a major merger or acquisition that would distort quantitative results.

In addition, the Commission has determined that credit ratings from both major agencies—Moody's and S&P—should be considered independently as screening criteria when evaluating comparable risk. In evaluating credit ratings to identify a proxy group of utilities with comparable risks, the Commission has adopted a "comparable risk band," interpreted as one "notch" higher or lower than the corporate credit ratings of the utility at issue and within the investment grade ratings scale.

Q. How did you apply the Commission's credit ratings criteria to Transco?

A. Neither Moody's or S&P currently publishes an overall corporate or issuer credit rating for Transco. Accordingly, the criteria used to identify my risk-comparable proxy group assume that Transco would qualify for ratings equivalent to the average Baa2 Moody's issuer rating and BBB+ S&P corporate credit rating maintained by the firms in Value Line's Electric Utility industry groups. These ratings benchmarks are also supported by the credit profiles of the NYTOs. Consistent with the Commission's determination that a triple-B rating is a "minimum investment rating for an electric utility,"[50] other new entrant, stand-alone transmission companies have also adopted a similar approach based on industry credit metrics.[51] Applying the one notch higher or lower band under the Commission's guidelines results in screening criteria of Baa1 to Baa3 based on Moody's credit ratings and A- to BBB when referencing S&P's ratings.

Q. Please identify the proxy group used in your analyses.

A. As shown on Exhibit No. Transco-202, applying the criteria outlined above results in a proxy group of thirty-one utilities, which I refer to as the "Electric Group."

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[50] *Duquesne Power & Light Co.*, 118 FERC ¶ 61,087 at P 53 (2007).

[51] *See, e.g., Northern Pass Transmission Co,* Docket No. ER11-2377 at Exh. NPT-600 (Dec. 15, 2010), and *Trans-Allegheny Interstate Line Co.,* Docket No. ER07-562 at Exh. TRC-100 (Feb. 21, 2007).

V. APPLICATION OF FINANCIAL MODELS

Q. What is the purpose of this section of your testimony?

A. This section explains my application of the two-step DCF, CAPM, Risk Premium, and Expected Earnings methods.

A. Two-Step DCF Model

Q. What market valuation process underlies DCF models?

A. DCF models assume that the price of a share of common stock is equal to the present value of the expected cash flows (*i.e.*, future dividends and stock price appreciation) that will be received while holding the stock, discounted at investors' required rate of return. Thus, the cost of equity is the discount rate that equates the current price of a share of stock with the present value of all expected cash flows from the stock.

Q. What form of the DCF model is customarily used to estimate the cost of equity?

A. Rather than developing annual estimates of cash flows into perpetuity, the DCF model can be simplified to a "constant growth" form:[52]

$$P_0 = \frac{D_1}{k_e - g}$$

[52] The constant growth DCF model is dependent on a number of strict assumptions, which in practice are never entirely met. These include a constant growth rate for both dividends and earnings; a stable dividend payout ratio; the discount rate exceeds the growth rate; a constant growth rate for book value and price; a constant earned rate of return on book value; no sales of stock at a price above or below book value; a constant price-earnings ratio; a constant discount rate (*i.e.*, no changes in risk or interest rate levels and a flat yield curve); and all of the above extend to infinity. (As discussed in the text below, the Commission's two-stage DCF model also depends on these assumptions, with the sole exception of the constant earnings growth rate.) Nevertheless, the constant growth DCF method provides a workable and practical approach to estimate investors' required return that is widely referenced in utility ratemaking.

where: P_0 = Current price per share;
D_1 = Expected dividend per share in the coming year;
k_e = Cost of equity; and
g = Investors' long-term growth expectations.

The cost of common equity (k_e) can be isolated by rearranging terms within the equation:

$$k_e = \frac{D_1}{P_0} + g$$

This constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: (1) dividend yield (D_1/P_0) and (2) growth (g). In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through stock price appreciation.

Q. What is the distinction between the two-step DCF method for electric utilities and the constant growth DCF model outlined above?

A. The Commission's two-step DCF method for electric utilities assumes that investors differentiate between near-term growth forecasts, such as the EPS growth rates published by securities analysts, and some notion of longer-term growth extending into the distant future. Under the Commission's two-step DCF method, the first growth rate is represented by analysts' consensus EPS growth projections specific to each individual utility in the proxy group, while the second growth rate is based on long-term forecasts of growth in nominal GDP. Based on this assumption of disparate growth expectations, the two-step DCF method employs two separate growth rates for each company, which are weighted to arrive at a single value for the "g" component.[53]

[53] While I apply the Commission's two-step DCF method, the assumptions about investor expectations and reliance on GDP growth that underly this approach are not substantiated by evidence.

Q. How do you determine the dividend yield for the utilities in your proxy group?

A. An average dividend yield is developed for each utility in the Electric Group during the six months from May to October 2024. This calculation is made by dividing the indicated dividend in each month by the corresponding average of the monthly low and high stock prices. The resulting six-month average historical dividend yields are presented on page 1 of Exhibit No. Transco-204.

Q. What growth rate do you use to adjust this historical dividend yield?

A. Consistent with the Commission's guidance, I adjust the historical dividend yield using only the analysts' EPS growth estimate.[54]

Q. What is the source of the analysts' consensus EPS growth rates used in your application of the Commission's two-step DCF method?

A. I obtain IBES earnings growth rates for the utilities in the Electric Group from *Yahoo! Finance*.

Q. How do you arrive at your projected growth rate in nominal GDP, representing the second stage of the Commission's DCF model?

A. I rely on long-term projections published by S&P Global Market Intelligence[55] and the EIA, as well as the Social Security Administration forecast over the next 50 years. This resulted in an average GDP growth rate of 4.10%. The calculation of the long-term growth rate in nominal GDP used in my application of the Commission's two-step DCF model is presented on page 2 of Exhibit No. Transco-204.

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[54] Opinion No. 569 at P 98.

[55] IHS Markit, an economic information service previously referenced by the Commission for this purpose, was acquired by S&P Global in February 2022.

Q. What weighting do you assign these respective growth rates to arrive at the single *"g"* component of the two-step DCF model?

A. Following the practice adopted in Opinion No. 569-A, I weight the individual analysts' EPS growth rates by 80% and the GDP growth projection by 20% to compute a single, two-step growth rate for each of the utilities in the proxy group.

Q. Where do you present the results of your two-step DCF analyses?

A. After combining the dividend yields and the weighted average of the respective analysts' projections and GDP growth forecast for each utility, the resulting cost of common equity estimates for the Electric Group are shown on page 1 of Exhibit No. Transco-204.

Q. In evaluating the results of the DCF model, is it appropriate to eliminate illogical cost of equity estimates?

A. Yes. Consistent with Opinion No. 569-A, in applying quantitative methods to estimate the cost of equity, it is essential that the resulting values pass fundamental tests of reasonableness and economic logic. Accordingly, DCF estimates that are implausibly high or low should be eliminated when evaluating the results of this method.

Q. What is the Commission's current position with respect to evaluating DCF values at the high end of the range?

A. With respect to the evaluation of individual cost of equity estimates, the Commission has established a high-end test based on 200% of the median value from each financial model before eliminating estimates at the low or high end of the range.[56]

[56] Opinion No. 569-A at P 154.

Q. What is your conclusion with respect to an evaluation of two-step DCF values at the high end of the range?

A. As shown on page 1 of Exhibit No. Transco-204, the upper end of the two-step DCF results for the Electric Group is set by a cost of equity estimate of 22.59%. This value exceeds the Commission's high-end test of 19.87% and is properly excluded.

Q. What low-end threshold has the Commission adopted?

A. Starting with the average yield on Baa-rated public utility bonds for the six-month study period, the Commission adds an increment equal to 20% of the market risk premium used to apply the CAPM.[57] Combining an average yield on Baa utility bonds of 5.72% for the six months ending October 2024 with 20% of the 7.54% average CAPM market risk premium[58] results in a low-end threshold of 7.23%.

Q. Do you exclude any low-end DCF estimates from your analyses?

A. Yes. As shown on page 1 of Exhibit No. Transco-204, I exclude two DCF values of -4.92% and 7.06%, which fall below the Commission's low-end threshold.

Q. What other consideration has the Commission raised in evaluating cost of equity estimates?

A. The Commission has also suggested that cost of equity estimates should be subject to a "natural break" analysis, based on the difference between individual values and the next-lowest or next-highest estimate.[59]

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[57] Opinion No. 569 at P 387; Opinion No. 569-A at P 161.

[58] Computed as the average of the 7.98% IBES-based CAPM market risk premium (Exhibit No. Transco-205) and the 7.10% Value Line-based CAPM market risk premium (Exhibit No. Transco-207).

[59] Opinion No. 569 at P 395; Opinion No. 569-A at P 153.

Q. Do you agree that the difference between individual cost of equity estimates can be used as a gauge of reasonableness?

A. No. The dispersion between a particular cost of equity result and the next lowest value provides no relevant information in evaluating the reasonableness of estimates at the upper end of the range. The key fallacy underlying the natural break analysis is the implicit assumption that estimating the cost of equity involves a process of sampling. On the contrary, through application of proxy group criteria, the Commission has identified all of the utilities deemed to be of comparable risk. In other words, the array of cost of equity estimates produced by the ROE analyses represents the entire population, not a sample of the population. We are not drawing 20 colored marbles from an urn containing hundreds and seeking to make inferences regarding the makeup of the unobserved remainder. Rather, we are analyzing all of the marbles (or all of the relevant, comparable-risk companies). As a result, the dispersion of individual values is not a valid test of how well a specific cost of equity estimate reflects investors' expectations and required returns.

If there is any statistical observation to be made regarding the cost of equity estimates produced by any single financial model, it is that the relatively small size of the population (the proxy group) makes it more likely that there will be a "break" in the data set relative to an analysis for a larger population. That is not evidence of a flaw in the results. Rather, it is a predictable function of the size of the proxy group of comparable-risk utilities. Trimming so-called "outliers" on this basis has the unreasonable effect of arbitrarily making that small population even smaller and thereby skewing the results.

Moreover, the goal in evaluating the results of financial models, such as the DCF and CAPM approaches, is not to identify "outliers," it is to remove estimates that

are clearly illogical for purposes of identifying the "broad range of potentially lawful ROEs" that constitutes the zone of reasonableness. The identification of clearly illogical results should be a case-specific determination relying on the specific evidence at hand. The notion of an "outlier" in the context of statistics and sampling theory is an entirely separate concept from the evaluation of cost of equity estimates for the population of comparable risk utilities. Apart from the fact that the arithmetic difference between two individual cost of equity estimates does not provide a sound basis to evaluate the economic validity of either value, the magnitude of the "break" that might be suggestive of an "outlier" is arbitrary and without empirical foundation.

Q. This notwithstanding, would there be any arguable basis to exclude the 11.44% high-end value from your two-step DCF analysis based on a natural break analysis?

A. No. The Commission has clarified that in applying a natural break analysis to evaluate results at the high end of the range, the purpose is "to screen out companies whose growth rates are unsustainably high and therefore fail a threshold test of economic logic."[60] As shown on page 1 of Exhibit No. Transco-204, the IBES growth rate underling the 11.44% DCF estimate is 8.15%. This falls significantly below other IBES growth rates that the Commission has previously accepted as reasonable.[61] It is also less than growth rates for other firms in the Electric Group.[62]

Moreover, the "break" between the 11.44% value and the next lowest result is 42 basis points, which is not materially higher than the dispersion between other

[60] Opinion No. 569-B at P 79.

[61] For example, the Commission's DCF results in Docket No. EL14-12 incorporated an IBES growth rate of 11.66%. Opinion No. 569-A at p. 125 ("MISO I DCF Results").

[62] As shown on page 1 of Exhibit No. Transco-204, for example, the IBES EPS growth rate for NextEra Energy, Inc. is 8.80%, while Otter Tail Corporation's EPS growth forecast is 9.00%.

observations in the array of two-step DCF estimates. Thus, not only is a natural break analysis misguided and lacking any objective basis, a differential of 42 basis points provides no evidence that the 11.44% value at the top end of the two-step DCF range is "truly irrational or anomalously high."[63] Beyond this, remaining low-end values in the 7% to 8% range are assuredly far below investors' required rate of return.

Q. What is the range resulting from your two-step DCF analysis?

A. As shown on page 1 of Exhibit No. Transco-204, the two-step DCF analysis for the Electric Group results in a range of 7.37% to 11.44%. The median and midpoint values are 10.01% and 9.41%, respectively.

B. Capital Asset Pricing Model

Q. Please describe the CAPM.

A. The CAPM approach is generally considered to be the most widely referenced method for estimating the cost of equity among academicians and professional practitioners, with the pioneering researchers of this method receiving the Nobel Prize in 1990. The CAPM is a theory of market equilibrium that measures risk using the beta coefficient. Assuming investors are fully diversified, the relevant risk of an individual asset (*e.g.*, common stock) is its volatility relative to the market as a whole, with beta reflecting the tendency of a stock's price to follow changes in the market. A stock that tends to respond less to market movements has a beta less than 1.00, while stocks that tend to move more than the market have betas greater than 1.00. The CAPM is mathematically expressed as:

[63] Opinion No. 569-A at P 154.

$$R_j = R_f + \beta_j(R_m - R_f)$$

where: R_j = required rate of return for stock j;
R_f = risk-free rate;
R_m = expected return on the market portfolio; and
B_j = beta, or systematic risk, for stock j.

Like the DCF model, the CAPM is an *ex-ante*, or forward-looking, model based on expectations of the future. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using estimates that reflect the expectations of actual investors in the market, not with backward-looking, historical data.

Q. What market rate of return was adopted by the Commission to apply the CAPM in Opinion No. 569-A?

A. Under the approach considered by the Commission in Opinion No. 569-A, the expected market rate of return was estimated by conducting a DCF analysis on the dividend paying firms in the S&P 500.[64]

Q. What beta values did the Commission adopt to apply the CAPM in Opinion No. 569-A?

A. The Commission relied on the beta values reported by Value Line, which, in my experience, is the most widely referenced source for beta in regulatory proceedings and is widely relied upon by investors. As noted in *New Regulatory Finance*:

> Value Line is the largest and most widely circulated independent investment advisory service, and influences the expectations of a large number of institutional and individual investors . . . Value Line betas are computed on a theoretically sound basis using a broadly based market index, and they are adjusted for the regression tendency of betas to converge to 1.00.[65]

[64] Opinion No. 569-A at P 513 (*citing*, Opinion No. 551, 156 FERC ¶ 61,234 at PP 169, 172).

[65] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 71.

The fact that investors rely on Value Line betas in evaluating expected returns for utility common stocks provides strong support for this approach.

Q. The Commission has suggested that it may be theoretically incorrect to apply the CAPM using Value Line betas and a market return based on the S&P 500.[66] What is the crux of this argument?

A. Opinion No. 569-A stated that there is an "imperfect correspondence" between a market risk premium based on the dividend-paying firms in the S&P 500 and Value Line betas, which are determined based on a comparison of each stock's volatility relative to the stocks in the NYSE, rather than the S&P 500. While observing that there is substantial evidence that investors rely on Value Line betas,[67] in its decision in *Mystic*, the Commission accepted FERC Trial Staff's proposal to use Bloomberg-based, alternative betas derived from the returns to the S&P 500 Index.[68]

Q. Do you agree that there is a lack of correspondence between a market return based on the S&P 500 and Value Line beta values?

A. No. Under the CAPM, the volatility at issue theoretically relates the market price of the stock with the market price of every other possible investment opportunity in the "market," including collectible cars and gold bullion. Just as it is not possible to precisely define investors' growth expectations when applying the DCF model, the forward-looking market return and beta values are unobservable and must be estimated. Application of the DCF approach to the dividend-paying firms in the S&P 500 provides a sound proxy for investors' expected return on the "market." Similarly, Value Line's

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[66] Opinion No. 569-A at P 75.

[67] *See, e.g.,* Opinion No. 569-A at P 61.

[68] *Constellation Mystic Power, LLC,* 176 FERC ¶ 61,019 at PP 77, 85 (2021) ("*Mystic*"). *See also, DATC Path 15, LLC,* 177 FERC ¶ 61,115 at P 111 (2021) ("*DATC*").

published beta values offer an objective proxy for an unobservable, forward-looking beta. There is no "mismatch," as Opinion No. 569-A and *Mystic* seem to imply.

The contention that there is an "imperfect correspondence" between a market return that references the S&P 500 and beta values estimated against the NYSE is further disproved by reference to studies in the financial research. *Marston & Harris* noted that it derived an estimate of the market rate of return for a sample of approximately 400 companies selected from the S&P 500, while the beta values used in the study were calculated "against . . . all NYSE securities."[69] This approach, used by recognized researchers in a peer-reviewed journal sponsored by the Eastern Finance Association, mirrors the CAPM approach adopted in Opinion No. 569-A. Similarly, in applying a market rate of return based on the dividend paying firms in the S&P 500, the Staff of the Illinois Commerce Commission also relied on published betas from Value Line.[70]

Q. Is there other evidence that undercuts the argument of a lack of correspondence between a market return for the S&P 500 and Value Line betas?

A. Yes. Beta measures the variability of the price of a common stock relative to the broader market. While it is possible to calculate this measure of relative price volatility using alternative market benchmarks (*i.e.*, NYSE or S&P 500), to the extent that movements in market indices are driven by the stock prices of very large capitalization companies and thus move in tandem, the beta values using similar time periods would be indistinguishable. If there is no systemic difference in the relative movements of the NYSE and the S&P 500, then there is no basis to suggest that a beta calculated

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[69] Felicia Marston and Robert S. Harris, *Risk and Return: A Revisit Using Expected Returns*, Fin. Review (Feb. 1993) ("*Marston & Harris*"). Value Line betas are also derived based on weekly percentage changes in the NYSE.

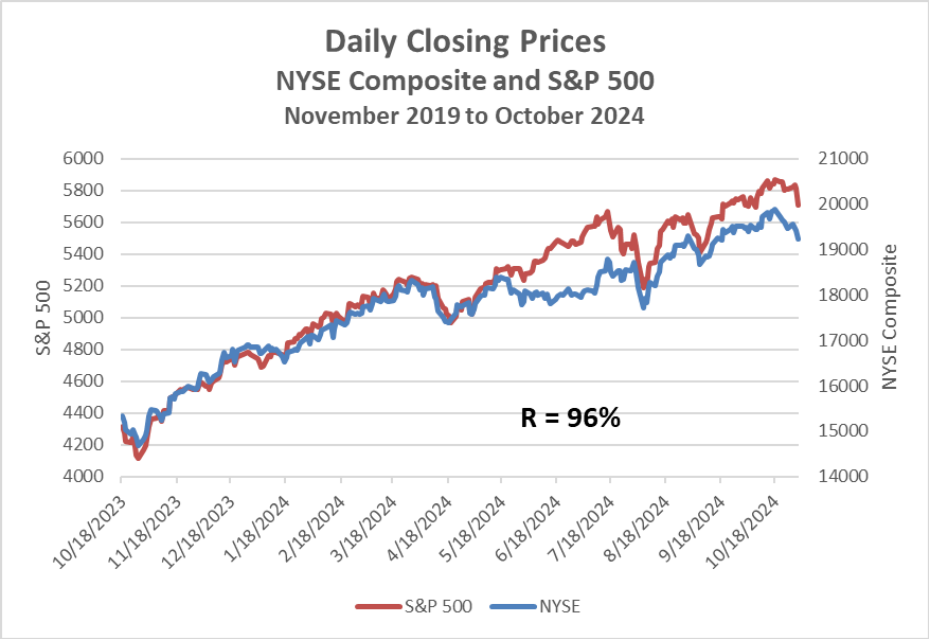
[70] *Direct Testimony of Rochelle Langfeldt*, Illinois Commerce Commission, Docket No. 01-0432 (2001) at 27 (citing "[t]he average Value Line adjusted beta for the Electric sample.").

against the NYSE would not apply equally to a market rate of return estimated by reference to the S&P 500.

The degree to which movements in the NYSE and S&P 500 are synchronized can be tested through correlation analysis. The correlation coefficient measures the degree that two variables move together. A correlation coefficient of 0.0 would indicate that there is no consistent co-movement between two variables, while a correlation coefficient of 1.0 would indicate perfect correlation, *i.e.*, that 100% of the change in one variable is reflected in the other variable.

Figure Transco-3 displays the percentage changes in the NYSE and the S&P 500 over the five-year period ending October 31, 2024:

FIGURE TRANSCO-3



As indicated on the chart, this analysis results in a correlation coefficient of 0.96, meaning that weekly changes for the NYSE are almost perfectly matched by similar movements in the S&P 500. The high degree of correlation between movements in the

NYSE and movements in the S&P 500 undercuts any notion of a "mismatch" between Value Line betas and a market return predicated on a subset of the S&P 500.

Q. Are there other factors that also weigh in favor of continued reference to Value Line betas, versus those derived from Bloomberg?

A. Yes. Value Line is recognized as being the most widely available source of investment information to investors, and citations in many textbooks and other sources support its usefulness as a guide to investors' expectations.[71] Value Line is available at nominal prices for paper subscription or internet access, as well as being freely available to investors in libraries and through many brokerage offices. Importantly, the beta values reported by Value Line are updated on a weekly basis and calculated using a consistent methodology.

This contrasts with Bloomberg-derived betas, which are dependent on criteria specified by each individual user and subject to the potential for subjective manipulation to produce a desired end-result. Meanwhile, Bloomberg is available only to a select subset of investors that can afford substantial annual subscription fees to obtain the proprietary terminal required to access Bloomberg data. The administrative benefits associated with reliance on beta values from Value Line, including a consistent methodology by an independent third-party and immunity to selective changes in assumptions, support continued reference to Value Line betas in applying the CAPM approach.

[71] *See, e.g.*, Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 71 ("Value Line is the largest and most widely circulated independent investment advisory service, and influences the expectations of a large number of institutional and individual investors.").

Q. How then do you calculate the market rate of return required to apply the CAPM?

A. I use the same approach considered by the Commission in Opinion No. 569-A.[72] In order to capture the expectations of today's investors in current capital markets, the expected market rate of return is estimated by conducting a DCF analysis on the dividend paying firms in the S&P 500.

I obtain the dividend yield for each company from Value Line and the IBES EPS growth projections for each firm published by Refinitiv. As shown on Exhibit No. Transco-206, after removing companies with growth rates that were negative or greater than 20%,[73] the weighted average of the projections for the individual firms implies an average growth rate of 10.64%. Combining this average growth rate with a weighted average dividend yield of 1.69% results in a current cost of common equity estimate for the market as a whole (R_m) of 12.33%.

Q. Does the Commission also recognize that it is appropriate to consider Value Line growth rates in developing the market risk premium used to apply the CAPM?

A. Yes. The Commission has recognized that "diversifying data sources may better reflect the data sources that investors consider in making investment decisions."[74] Opinion No. 569-A concluded that Value Line growth rates "incorporate the input of multiple analysts" and that Value Line's growth rates "are updated on a more predictable basis," which "provides certainty about updates to key model inputs."[75]

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[72] Opinion No. 569-A at P 210.

[73] My use of the growth rate screen adopted in Opinion No. 569-A should not be considered an endorsement of this approach, which is based on an incorrect notion that using the DCF model to estimate the market return requires an assumption of constant growth for each of the specific firms in the S&P 500. The S&P 500 includes a broad sample of companies at all stages of growth, and the use of all of those companies to estimate the required return on common stocks reasonably reflects investors' consensus expectations about the S&P 500 as a whole.

[74] Opinion No. 569-A at P 78.

[75] *Id.* at PP 80, 81.

Q. Do you agree with the Commission's proposal to consider Value Line's EPS growth projections in addition to data from IBES?

A. Yes. Value Line's growth projections provide a meaningful guide to investors' expectations. As noted earlier, Value Line is recognized as being the most widely available source of investment information that shapes the expectations of investors.[76] Value Line's detailed quarterly reports provide extensive analyses that underpin its individual EPS growth rate projections. As a result, Value Line EPS growth rates are immune from any potential errors involved in the compilation of survey data and avoid uncertainties as to the veracity of the assumptions underlying the projected values.

As the Commission noted, the reports supporting Value Line's projected EPS growth rates are updated on a scheduled basis, which avoids the potential problem of "staleness" of the underlying data. Moreover, Value Line's sole business is to provide independent and unbiased investment guidance to its subscribers. Because Value Line does not engage in securities trading or investment banking activities, there is no risk of conflicts of interest that could arguably influence growth estimates.

Evaluating IBES growth rates alongside qualified alternatives acknowledges the importance of using multiple data sources to estimate investors' growth expectations. For example, *New Regulatory Finance* endorsed a similar approach, noting that one way to assess the concern that consensus analysts' forecasts such as

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[76] *See, e.g.*, Opinion No. 531 at P 102 ("We accept the *Value Line* industry classifications because *Value Line* is a widely-followed, independent investor service . . . ."); *Kern River Gas Transmission Co.*, Opinion No. 486-C, 129 FERC ¶ 61,240, at PP 50, 91 (2009) ("Because Value Line is a publication relied on by many investors, its statements concerning the relative risks of different energy-related investments is highly probative of the views of investors generally.") (prior and subsequent history omitted); *Sw. Pub. Serv. Co.*, 83 FERC ¶ 61,138, at 61,636 n.63 (1998) ("The Commission did not, however, intend to preclude consideration of contemporaneous growth estimates made by the various investor services companies (*e.g.*, Value Line, Zack's Investment Research, Inc. (Zack's), Institutional Brokers Estimate System (IBES)), as investors rely on these estimates in their decision-making process.").

IBES may be biased "is to incorporate into the analysis the growth forecasts of independent research firms, such as Value Line, in addition to the analyst consensus forecast."[77]

Value Line's growth rate projections provide a sound basis on which to evaluate investors' expectations when applying the DCF model and there are many citations to Value Line in textbooks and other sources supporting its usefulness as a guide to investors' expectations. For example, *Cost of Capital – A Practitioners' Guide*, published by the Society of Utility and Regulatory Financial Analysts, noted that:

> [A] number of studies have commented on the relative accuracy of various analysts' forecasts. Brown and Rozeff (1978) found that Value Line was superior to other forecasts. Chatfield, Hein and Moyer (1990, 438) found, further "Value Line to be more accurate than alternative forecasting methods" and that "investors place the greatest weight on the forecasts provided by Value Line."[78]

Value Line is clearly a "widely-followed, independent investor service,"[79] and Value Line's EPS growth projections provide a credible guide to investors' expectations. The use of Value Line's EPS growth projections, in conjunction with IBES, enhances the reliability of the resulting CAPM cost of equity estimates.

Q. What is the implied market rate of return based on Value Line EPS growth rates?

A. As shown on Exhibit No. Transco-208, after removing companies with growth rates that were negative or greater than 20%, the weighted average of the Value Line EPS growth projections for the individual firms implies an average growth rate of 9.72%.

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[77] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 300.

[78] David C. Parcell, *The Cost of Capital – A Practitioner's Guide*, Soc'y of Util. & Regulatory Fin. Analysts (2010) at 143. *See also,* Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 71.

[79] Opinion No. 531 at P 102. *See also Kern River Gas Transmission Co.*, Opinion No. 486-C, 129 FERC ¶ 61,240 at P 50 (2009) (noting that "Value Line is a publication relied on by many investors. . . .").

Combining this average growth rate with a weighted average dividend yield of 1.73% results in a current cost of common equity estimate for the market as a whole (R_m) of 11.45%.

Q. Do you include a size adjustment in applying the CAPM?

A. Yes. Because financial research indicates that the CAPM does not fully account for observed differences in rates of return attributable to firm size, a modification is required to account for this size effect. As explained by Morningstar:

> One of the most remarkable discoveries of modern finance is the finding of a relationship between firm size and return. On average, small companies have higher returns than large ones…. The relationship between firm size and return cuts across the entire size spectrum; it is not restricted to the smallest stocks.[80]

According to the CAPM, the expected return on a security should consist of the riskless rate, plus a premium to compensate for the systematic risk of the particular security. The degree of systematic risk is represented by the beta coefficient. The need for the size adjustment arises because differences in investors' required rates of return that are related to firm size are not fully captured by beta. To account for this, my CAPM analysis incorporates an adjustment to recognize the impact of size distinctions, as measured by the market capitalization for the companies in the Electric Group.

Q. What is the basis for the size adjustment?

A. The size adjustment required in applying the CAPM is based on the finding that *after controlling for risk differences reflected in beta*, the CAPM overstates returns to companies with larger market capitalizations and understates returns for relatively smaller firms. The size adjustments utilized in my analysis are sourced from Kroll, who now publish the well-known compilation of capital market series originally developed by Professor Roger G. Ibbotson of the Yale School of Management, and

[80] Morningstar, *2015 Ibbotson SBBI Classic Yearbook* at 99 (2015).

most recently published by Kroll. Calculation of the size adjustments involve the following steps:

1. Divide all stocks traded on the NYSE, NYSE MKT, and NASDAQ indices into deciles based on their market capitalization.
2. Using the average beta value for each decile, calculate the implied excess return over the risk-free rate using the CAPM.
3. Compare the calculated excess returns based on the CAPM to the actual excess returns for each decile, with the difference being the increment of return that is related to firm size, or "size adjustment."

New Regulatory Finance observed that "small market-cap stocks experience higher returns than large market-cap stocks with equivalent betas," and concluded that "the CAPM understates the risk of smaller utilities, and a cost of equity based purely on a CAPM beta will therefore produce too low an estimate."[81] As the Commission has recognized, "[t]his type of size adjustment is a generally accepted approach to CAPM analyses."[82]

Q. What ROE range is implied for the Electric Group using the IBES-based CAPM approach?

A. As detailed on Exhibit No. Transco-205, referencing a 4.35% risk-free rate based on the six-month average yield on 30-year Treasury bonds in October 2024, the IBES-based CAPM implies a cost of equity range of 10.79% to 13.99% for the Electric Group. The median is 12.33% and the midpoint is 12.39%.

[81] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 187.

[82] Opinion No. 531-B at P 117.

Q. What ROE range is implied for the Electric Group using the Value Line-based CAPM approach?

A. As shown on Exhibit No. Transco-207, the Value Line-based CAPM approach implies a cost of equity range of 10.13% to 12.97% for the Electric Group, with a median of 11.47% and a midpoint of 11.55%.

C. Risk Premium Approach

Q. Briefly describe the Risk Premium approach.

A. The Risk Premium approach extends the risk-return tradeoff observed with bonds to estimate investors' required rate of return on common stocks. The cost of equity is estimated by first determining the additional return investors require to forgo the relative safety of bonds and to bear the greater risks associated with common stock, and then adding this equity Risk Premium to the current yield on bonds.

Q. Is the Risk Premium approach a widely accepted method for estimating the cost of equity?

A. Yes. The Risk Premium approach is based on the fundamental risk-return principle that is central to finance. This method is routinely referenced by the investment community, by academics, and in regulatory proceedings, and provides an important tool in estimating a fair ROE.

Q. The Commission's Order on Remand concluded that "the record fails to support the inclusion of the Risk Premium Model in the Commission's ROE methodology."[83] What reasoning did the Commission cite in support of this finding?

A. The Order on Remand advanced two criticisms of the Risk Premium method: 1) "that the record does not contain any evidence suggesting that investors use the Risk

[83] Order on Remand at P 23.

Premium model adopted in Opinion No. 569-A,"[84] and 2) "that the record does not contain any evidence that would resolve the circularity concerns inherent in the Risk Premium model adopted in Opinion No. 569-A."[85] Neither of these rationales is justified.

Q. Is there any logical basis to exclude the Risk Premium method adopted in Opinion No. 569-A due to a lack of evidence that investors rely directly on this approach?

A. No. The merit of any specific financial model is not premised on a demonstration that individual investors rely directly on that method to determine their required returns. In fact, it is precisely because it is impossible to know the valuation process that gives rise to investors' opportunity costs that such methods have been developed.

Consider the DCF model or the CAPM approach, for example. While each of these methodologies is premised on widely accepted theoretical concepts, there is no evidence to support a finding that either the DCF or the CAPM is used directly by investors in establishing observable stock prices or other market-based parameters for electric utilities. In fact, approximately 60% to 80% of all trading on U.S. stock exchanges is generated by automatic trading systems. Under the Commission's logic, the DCF and CAPM approaches could also be rejected because of insufficient proof that the algorithms underlying such automated trading systems rely on these methods.

Similarly, there is no evidence to support a finding that investors rely directly on a two-step DCF model when evaluating an investment in electric utility common stocks. The assumption that investors consider long-term GDP forecasts to be relevant in evaluating future growth expectations for electric utilities is unsupported. Nor is there any evidence whatsoever demonstrating that investors employ the specific

[84] *Id.*
[85] *Id.*

80%/20% weighting scheme adopted by the Commission to determine the DCF growth rate. Accordingly, by the Commission's reasoning, its own two-stage DCF model "does not reflect how an investor would make an investment decision"[86] and should be rejected.

It is because we cannot determine the process by which investors arrive at their required return that theoretical models of investor behavior have been developed. Just as with the DCF and CAPM, the Risk Premium approach provides a sound basis to consider and represent an unobservable artifact of investors' decision-making (*i.e.*, their required ROE). But the relevance of the model is not tied to the assumption that any individual investor actually depends on that specific approach, much less on the Commission's preferred application of each methodology.

Product marketing provides a similar example of this principle. Companies invest heavily to develop models of consumer behavior as a means to guide product development, marketing, and promotional campaigns. The goal of these efforts is to better understand the process underlying consumer choice, including product attributes and pricing considerations that ultimately drive purchasing decisions. Just as with the marginal investor's willingness to provide capital through the purchase of common stock, the exact process by which consumers arrive at a decision to exchange their hard-earned money for a particular good is unobservable. The relevance of behavioral models is not contingent on the idea that consumers themselves use such models when making purchasing decisions. Similarly, the value of the Risk Premium method—like the DCF and CAPM approaches—is not contingent on a demonstration that investors' behavior is directly premised on this analysis.

[86] Opinion No. 569 at P 217.

The purpose of all ROE models is to better understand investor return requirements, and those requirements cannot be directly observed. While real world investors might not apply the models in exactly the same way as theory dictates, the inputs to the models (*e.g.*, beta, growth rates, dividend yields, allowed ROEs) are widely published in investment advisory reports discussing utility stocks and industry prospects. Given the importance of allowed ROEs to utility investors and the demonstrated relationship between allowed ROEs and bond yields, the Risk Premium method provides a useful approach to evaluate a just and reasonable ROE.

Q. Is there any validity to the argument that the Risk Premium approach is undermined by "circularity?"

A. No. While the Commission raised this criticism in Opinion No. 569,[87] concerns over "circularity" are misplaced. In establishing authorized ROEs, regulators (including the Commission) typically consider a broad range of evidence, including the results of alternative market-based models, such as the DCF and CAPM approaches. Because allowed ROEs consider market inputs and are not based strictly on past regulatory findings, this mitigates concerns over any potential for circularity. As *New Regulatory Finance* concluded:

> It is sometimes alleged that reliance on allowed risk premiums is circular. This is a dubious argument to the extent that allowed risk premiums are presumably based on objective market data (dividends, interest rates, beta, stock prices, etc.) and not strictly on the decisions of other regulators.[88]

Further, given that the Risk Premium approach is one method among others and is not being relied on solely to establish the ROE, there is no justification for the claim that consideration of the Risk Premium approach somehow results in circularity.

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[87] *Id.* P 343.

[88] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 124.

Moreover, given the central role of the ROE in determining a utility's revenue requirements, virtually every measure of future financial performance—including earnings growth, cash flow measures, and dividend policies—is impacted by the ROE established by regulators. As a result, the Risk Premium approach is no more susceptible to concerns over circularity than the analysts' EPS growth rates reported by IBES. As one respected treatise observed, "[s]ince regulation establishes a level of authorized earnings, which in turn implicitly influences dividends per share, estimation of the growth rate from such data is an inherently circular process."[89] If analysts' growth estimates are rendered unusable because they are, in part, a function of expectations regarding future allowed ROEs, then, under the reasoning of Opinion No. 569, the DCF model must be rejected as well. Such reasoning is misguided and the Commission was justified in reversing its stance in Opinion No. 569-A and including the Risk Premium approach.

Q. Did Opinion No. 569 advance other criticisms of the Risk Premium approach that were not cited by the Commission in its Order on Remand?

A. Yes. In addition to the two specific concerns highlighted by the Commission in the Order on Remand, Opinion No. 569 suggested that (1) the Risk Premium approach is "largely redundant" with the CAPM methodology,[90] and (2) that it "requires methodological decisions that would likely undermine transparency and predictability in Commission outcomes."[91]

Q. Are the Risk Premium and CAPM methodologies "redundant" of each other?

A. No. The Risk Premium approach is recognized as a distinct financial model that is separate and apart from the CAPM. In the recognized treatise, Principles of Public

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[89] Charles F. Phillips, Jr., *The Regulation of Public Utilities,* Pub. Utils. Reports, Inc. (1993) at 396.
[90] Opinion No. 569, 169 FERC ¶ 61,129 at P 341.
[91] *Id.* P 340.

Utility Rates, Bonbright noted that "[t]he risk premium approach is probably the second most popular approach to estimating the cost of equity."[92] Similarly, the Risk Premium approach is cited as one of the preeminent cost of capital methodologies by the primary reference text prepared for the Society of Utility and Regulatory Financial Analysts,[93] as well as by *New Regulatory Finance*,[94] which the Commission has cited as an authoritative source.

Apart from the fundamental notion that investors demand a higher return for bearing greater risk, there is no overlap whatsoever in the CAPM and Risk Premium methods, which approach the task of estimating investors' required rate of return from their own distinct premises. Not only do these methods evaluate the cost of equity from fundamentally different foundations, each approach also uses widely different inputs, none of which are congruent. The fact that the results of the CAPM and Risk Premium approaches are not equal further demonstrates that these methods are not redundant.

Q. Opinion No. 569 also stated that a need for "methodological decisions" justified disregarding the Risk Premium method.[95] Is this a reasonable assertion?

A. No. This observation is true of any financial model used to estimate the cost of equity (*e.g.*, source of DCF growth rates, estimation of CAPM market risk premium) and provides no justification for ignoring an approach that has been classified among the key financial models in estimating the cost of equity. With respect to the DCF model,

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[92] James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, Principles of Public Utility Rates, Pub. Utils. Reports, Inc., at 322 (1988).

[93] David C. Parcell, *The Cost of Capital – A Practitioner's Guide*, Society of Utility and Regulatory Financial Analysts, at 164 (2010).

[94] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc., at 28, 107-30 (2006). Opinion No. 569 cited Professor Eugene Brigham, who also recognized that the Risk Premium method is typically used when estimating a company's cost of equity. Opinion No. 569, 169 FERC 61,129 at P 218.

[95] Opinion No. 569, 169 FERC ¶ 61,129 at P 340.

even after decades of use and Commission precedent, methodological issues are still commonly litigated, and the Commission continues to modify its approach. Similarly, the Commission is free to provide further guidance on the implementation of the Risk Premium method, which it undertook in Opinion No. 569-A. The Risk Premium approach is no "less predictable and transparent than other models"[96] in this respect.

Q. What changes to the Risk Premium method did the Commission direct in Opinion No. 569-A?

A. To address specific concerns regarding the implementation of the Risk Premium approach, Opinion No. 569-A directed certain refinements in its application. Specifically, the Commission:

- developed a separate risk premium for each individual case, rather than using annual averages;[97]
- adopted the six-month period preceding the filing date of the offer of settlement as the basis for establishing the six-month average bond yield used to calculate risk premiums attributable to ROEs approved through settled proceedings;[98]
- adopted the six-month study period as the basis for establishing the six-month average bond yield used to calculate risk premiums attributable to ROEs approved through litigated proceedings;[99] and
- extended the sample period for the Risk Premium study through the conclusion of the study period, rather than the calendar year.[100]

As documented in Appendix I to Opinion No. 569-A, the Commission removed cases from the Risk Premium study where:

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[96] *Id.* P 346.

[97] Opinion No. 569-A at P 108.

[98] *Id.* at P 111.

[99] *Id.*

[100] *Id.*

- the utility was merely adopting an existing ROE without consideration of whether that ROE would be determined to be just and reasonable under fresh analysis;
- the ROE was clearly not under consideration;
- there were duplicative findings from a previous case;
- the ROE was set for a definite future date, and the Commission could not have evaluated a risk premium for a future date; and
- the test period predated 2006.

More recently, in Opinion No. 569-B, the Commission corrected a limited number of typographical and other minor errors to the Risk Premium data set used in Opinion No. 569-A.[101] The Commission further refined this case set in *DATC*.[102]

Q. Do you add any observations to the Risk Premium case set relied on by the Commission in *DATC*?

A. Yes. Apart from updating the observations to reflect ROEs approved by the Commission through October 31, 2024 (including the 9.98% ROE recently approved for the MISO TOs in the Order on Remand), I also make several corrections to the model inputs listed in *DATC*. Specifically, I identified three cases the Commission either mistakenly omitted using the criteria listed above or failed to consider altogether. These cases are listed on page 7 of Exhibit No. Transco-209.

The first of these additions was to reflect the 11.18% ROE approved by the Commission in 2008 for Public Service Electric and Gas Company in connection with that company's proposed implementation of a formula rate for transmission service.[103] This 11.18% ROE was based on a contemporaneous DCF analysis employing a six-month study period ending May 2008.[104]

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[101] Opinion No. 569-B at PP 127-28, Appendix I.

[102] *DATC* at PP 126-131.

[103] *Public Service Electric and Gas Company*, Order on Formula Rate Proposal, 124 FERC ¶ 61,303 (2008).

[104] *See* Docket No. ER08-1233, Direct Testimony of Michael J. Vilbert, Exhibit No. PEG-6 at 19-20.

The second correction reflects the addition of the 11.18% going-forward ROE for PPL Electric Utilities Corporation specified in the May 1, 2009 settlement of Docket No. ER08-1457. The settlement provided for ROEs of 11.10% and 11.14% corresponding to the periods November 1, 2008 through May 31, 2008 and June 1, 2009 through May 31, 2010, respectively, while also providing that, "On June 1 2010 and thereafter, the Base ROE shall be 11.18 percent."[105] While *DATC* includes both the 11.10% and 11.14% ROEs established in this settlement agreement, it excluded the going-forward ROE of 11.18%. As the Commission determined in Opinion No. 569-B, "Use of multiple ROEs may be appropriate where the ROEs apply to distinct periods."[106] The 11.18% ROE specificed in the settlement of Docket No. ER08-1457 is comparable to other ROEs routinely approved by the Commission for future application of formula rates, and there is no credible basis to exclude this observation.

The third addition to the *DATC* case set is necessary to include the ROE specified in the settlement approved for Xcel Energy Southwest Transmission Company, LLC ("XEST") in Docket No. ER14-2751 associated with Zone 11 under the SPP OATT. As the administrative law judge specified in certifying the settlement, "XEST will have two ROEs. One for calculating XEST's revenue requirement associated with Zone 11 under the SPP OATT (Zone 11 ROE) and one for all other purposes (General ROE.)" [107] As the administrative law judge noted, "The Zone 11 ROE shall equal the then-effective Commission-approved ROE used to calculate the Southwestern Public Service Company's (SPS) revenue requirement pursuant to the

[105] *PPL Electric Utils. Corp.*, Order Approving Uncontested Settlement, 128 FERC ¶ 61,178 at P 4 (2009).

[106] Opinion No. 569-B at P 131.

[107] *See*, *Xcel Energy Southwest Trans. Co.*, Certification of Uncontested Offer of Settlement, 153 FERC ¶ 63,019 (2015).

SPP OATT,"[108] which was 10.00%.[109] While *DATC* included the "General ROE" established under XEST's settlement, it failed to include the 10.00% base ROE applicable to Zone 11 service. There is no basis to ignore this data point.[110]

Q. Do you remove any observations from the Risk Premium case set adopted in *DATC*?

A. Yes. As shown on page 8 of Exhibit No. Transco-209, I remove the 10.02% ROE established in Opinion No. 569-A as that decision was vacated by the D.C. Circuit. I also remove a 10.05% ROE attributed to Docket No. EL15-45, which was a pancaked FPA Section 206 complaint proceeding for the MISO TOs. The Commission dismissed that complaint, and no ROE was approved or established in that proceeding. In addition, I also remove a duplicative ROE observation corresponding to Docket No. ER19-1396.

In applying the Risk Premium approach in *DATC*, the Commission also incorporated ten ROEs stemming from settlements of cases involving publicly owned entities. In contrast to the revenue requirements and underlying capital costs for investor-owned utilities, revenue requirements and underlying capital costs for publicly owned utilities are primarily driven by debt service requirements, and there is no relevant equivalent to the market cost of equity for an investor-owned utility. Accordingly, ROE determinations for municipals and cooperatives should not be

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[108] *Id.* at P 13.

[109] *Golden Spread Elec. Coop., Inc., et al.,* Order Approving Uncontested Settlement, 153 FERC ¶ 61,103 at P 13 (2015).

[110] The Commission concluded in *Pacific Gas & Elec. Co.* that approval of separate ROEs in the same order involves "unique circumstances." *Pacific Gas & Elec. Co.*, 178 FERC ¶ 61,175 at P 227 (2022). In fact, however, the Risk Premium case set includes several instances where multiple ROEs were approved in the same proceeding based on distinguishing circumstances. *See, e.g.,* Docket Nos. ER08-1457, ER10-355, and ER11-2853.

included in applying the Risk Premium method to estimate the ROE for investor-owned electric utilities, such as Transco.

Q. Is this critical distinction regarding publicly owned utilities recognized by the investment community?

A. Yes. For example, S&P observed that "[c]ash available from current operating revenues to pay debt service is the principal focus" of its financial analysis of cooperative utilities.[111] As S&P concluded:

> We believe that fixed costs and imputed charge coverage best gauges a retail utility's total financial capacity. It measures the ability of the retail utility to service both its total debt and debt-like obligations, which together we refer to as fixed costs and imputed charges.[112]

Moody's identified the "[l]ack of a profit motive or need to generate a return on equity" as key characteristics typifying public power utilities.[113] Meanwhile, Fitch concluded that:

> Public power systems are unique from their investor-owned counterparts. In nearly all cases, public power systems operate on a not-for-profit basis and with the fundamental mission of providing safe, reliable and affordable electric service. Excess cash flow is typically retained and used to build financial cushion, fund capital investment or reduce borrowings.[114]

Similarly, the Presiding Judge in *Missouri River Energy Services* noted that:

> Municipally-owned utilities do not answer to stockholders seeking a return on their investments. They pay no dividends . . . .The governing members of municipal-owned utilities are their own customers . . .

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[111] S&P Global Ratings, *U.S. Public Finance: Applying Key Rating Factors to U.S. Cooperative Utilities*, Criteria | Governments (Nov. 21, 2007).

[112] S&P Global Ratings, *U.S. Municipal Retail Electric and Gas Utilities: Methodology and Assumptions* (Sep. 27, 2018).

[113] Moody's Investors Service, *U.S. Public Power Electric Utilities With Generation Ownership Exposure*, Rating Methodology (Nov. 28, 2017).

[114] Fitch Ratings, Inc., *Exposure Draft: U.S. Public Power Rating Criteria*, Public Finance (Jun. 14, 2018).

> Publicly-owned utilities pay no income taxes . . . . By contrast, investor-owned utilities are profit-making and profit-maximizing private entities that strive to attain the greatest possible ROE for their shareholders. They do so in order to attract investors to their stock in the stock market . . . . In short, unlike investor-owned utilities, it is not the purpose of a municipally-owned utility to earn a profit. Quite the opposite, it is a *non*-profit institution that is set up that way in order to achieve lower rates for ratepayers.[115]

Publicly owned (cooperative or municipal) utilities do not raise equity in the capital markets and do not seek to make a profit. Consequently, ROE determinations for publicly owned electric systems provide no information relevant to a determination of a just and reasonable ROE for an investor-owned electric utility, such as Transco. Similarly, the ROE witness in Docket Nos. ER17-426 and ER17-428 (identified as *Denison* and *Vermillion* on the Commission's Risk Premium case list in *DATC*) observed that the DCF method "is not the best method to determine ROE for non-jurisdictional utilities which . . . are municipally owned, have no stock price, and issue no dividends."[116] In both of these cases, the requested ROE was based on an average of previously allowed ROEs by state regulatory commissions.[117] In fact, of the ten proceedings for publicly-owned entities included by the Commission, eight failed to include a DCF study or the results of any other financial model, with the ROE request being based solely on an average of previously allowed ROEs.[118] This evidence

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[115] *Missouri River Energy Services,* Initial Decision, 130 FERC ¶ 63,014 at PP 228-229, 231 (2010) (emphasis in original).

[116] *Sw. Power Pool, Inc.*, Docket No. ER17-426, Exh. SPP-6, Prepared Direct Testimony of James Pardikes, at 11 (filed Nov. 29, 2016); *Sw. Power Pool, Inc.*, Docket No. ER17-428, Exh. SPP-6, Prepared Direct Testimony of James Pardikes, at 11 (filed Nov. 30, 2016).

[117] *Id.* at 9.

[118] *Sw. Power Pool, Inc.*, Docket No. ER15-1976, Exh. SPP-5, Direct Testimony of Robert C. Smith, at 5-6 (filed Jun. 24, 2015); *Sw. Power Pool, Inc.*, Docket No. ER15-1775, Exh. SPP-1, Direct Testimony of Alan C. Heintz, at 11 (filed May 22, 2015); *Sw. Power Pool, Inc.*, Docket No. ER16-209, Exh. SPP-12, Direct Testimony of Robert C. Smith, at 5-6 (filed Oct. 30, 2015); *Sw. Power Pool, Inc.*, Docket No. ER16-1774, Exh. SPP-13, Direct Testimony of Robert C. Smith, at 5-6 (filed

(continued . . .)

contradicts the conclusion in *Pacific Gas & Elec. Co.* that there is nothing to distinguish the determination of an ROE in proceedings involving publicly owned entities and investor-owned utilities.[119]

Q. What other adjustment do you make to the *DATC* case set?

A. The bottom panel on page 8 of Exhibit No. Transco-209 identifies one other minor correction to remove the impact of a post-record period adjustment for changes in bond yields that is necessary to match the ROE to the study period interest rate.[120] The revised inputs to the Risk Premium approach are shown on pages 2 through 5 of Exhibit No. Transco-209.

Q. What cost of equity is implied by the Risk Premium method?

A. As illustrated on page 1 of Exhibit No. Transco-209, with an average six-month historical yield on Baa public utility bonds at October 2024 of 5.72%, the Risk Premium method implies a current equity risk premium of 4.63% for electric utilities. Adding this equity risk premium to the average six-month historical yield on Baa utility bonds implies a current cost of equity of 10.35%.

Q. How do you impute a range around this Risk Premium cost of equity estimate?

A. I impute a range around the 10.35% Risk Premium result based on the average difference between the high and low boundaries of the two-step DCF, CAPM, and

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Oct. 30, 2015); *Arkansas Elec. Cooperative Corp.*, Docket No. ER16-1546, Exh. SPP-2, Prepared Direct Testimony and Exhibits of Alfred W. Busbee, at 12 (filed Apr. 29, 2016); *Sw. Power Pool, Inc.*, Docket No. ER17-426, Exh. SPP-6, Prepared Direct Testimony of James Pardikes, at 11 (filed Nov. 29, 2016); Docket No. ER17-1610, Exh. SPP-17, Direct Testimony of Robert C. Smith, at 5-6 (filed May 15, 2017); *Sw. Power Pool, Inc.*, Docket No. ER17-428, Exh. SPP-6, Prepared Direct Testimony of James Pardikes, at 11 (filed Nov. 30, 2016).

[119] *Pac. Gas & Elec. Co.*, 178 FERC ¶ 61,175, at P 221 (2022).

[120] The allowed ROE of 10.04% includes a 49 basis point downward adjustment that was made to reflect changes in interest rates between the study period and the date of the Commission's order. Because the Commission references the average bond yield for the six-month study period to compute the Risk Premium, this adjustment must be reversed.

Expected Earnings ranges. As shown on page 1 of Exhibit No. Transco-209, this results in an implied cost of equity range of 7.95% to 12.75%.

D. Expected Earnings Approach

Q. Please explain your Expected Earnings study.

A. Analysis of rates of return available from alternative investments of comparable risk can provide an important benchmark in assessing the return necessary for a firm to maintain financial integrity and attract capital. This approach is consistent with the economic underpinnings for a fair rate of return, as reflected in the comparable earnings test established by the Supreme Court in *Hope* and *Bluefield.* Moreover, it avoids the complexities and limitations of capital market methods and instead focuses on the returns earned on book equity, which are readily available to investors. As the Commission recognized in Opinion No. 531:

> [T]he . . . expected earnings analysis, given its close relationship to the comparable earnings standard that originated in *Hope*, and the fact that it is used by investors to estimate the ROE that a utility will earn in the future can be useful in validating our ROE Recommendation.[121]

Q. Did the Commission rely on the Expected Earnings approach in Opinion No. 569-A?

A. No. However, the Commission noted that "we do not necessarily foreclose its use in future proceedings," so long as concerns expressed in Opinion No. 569 and reiterated in Opinion No. 569-A are addressed.[122] Specifically, the Commission raised the following principal concerns in explaining its decision not to rely on this method:

- The Expected Earnings approach is not based on market values.
- Differences between market values and book values undermine the relevance of the Expected Earnings approach.

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[121] Opinion No. 531 at P 147.

[122] Opinion No. 569-A at P 132.

- There is a lack of data demonstrating that investors use the Expected Earnings approach directly to value utility common stocks.[123]

My subsequent testimony briefly addresses the misguided nature of these concerns.

Q. Opinion No. 569-A concluded that, because investors cannot buy stock in the market at book value, the expected earnings approach should be rejected.[124] Does this finding undermine the relevance of the Expected Earnings approach?

A. No. I agree that the Expected Earnings method is not market-based in that it is not dependent directly or indirectly on stock prices or other data from the capital markets. But this does not discount its usefulness as a meaningful approach for investors and regulators to compare expected returns in one utility versus another. Specifically, it is reasonable to expect that investors compare stock investments based on securities analysts' projections of the expected return on common equity, which is analogous to the return on the equity component of a utility's rate base.

As detailed below, this comparison is relevant to investors because it directly measures the returns on book investment that the investment community expects from comparable-risk investments, without the need to make the subjective evaluations inherent in market-based models, such as how to best estimate investors' growth expectations or the market required return. Thus, it provides regulators with a meaningful guide to the return the utility should be expected to earn on its book equity investment. And given that rates are established on the basis of the book value of a utility's investment, this is a relevant measure of the ROE that is consistent with regulatory standards of comparable earnings and capital attraction established in *Hope* and *Bluefield*.

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[123] *Id.*

[124] *Id.* at PP 201, 204-205, 210, 216-217, 219, 221-222.

Q. Has the Expected Earnings approach been recognized as a meaningful methodology in evaluating a just and reasonable ROE?

A. Yes. The Expected Earnings approach is analogous to the comparable earnings method, which predominated before the advent of the DCF and other financial models. While the traditional comparable earnings test is often implemented using historical accounting data, it is also common to use projections of returns on book investment. Because these returns on book value equity are analogous to the allowed return on a utility's rate base, this measure of opportunity costs results in a direct, "apples-to-apples" comparison, and it has long been referenced and relied on in regulatory proceedings.[125] For example, in approving an ROE for electric utility operations, the North Carolina Utilities Commission recently concluded that:

> In prior cases, the Commission has given significant weight to the results of the Expected Earnings methodology, which stands separate and apart from the market-based methodologies (e.g., the DCF or CAPM) also used by ROE experts . . . The Commission chooses to do so again in this case.[126]

As S&P observed, "[h]istorically, there have been two approaches in calculating ROE in regulatory proceedings, a comparable earnings approach and a market analysis. In a comparable earnings approach, similar investments with similar risks are analyzed to determine an appropriate ROE."[127]

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[125] *See, e.g.,* Nat'l Ass'n of Regulatory Util. Comm'rs, *Utility Regulatory Policy in the U.S. and Canada, 1995-1996* (Dec. 1996). The Ohio Public Utilities Commission also considers prospective earned rates of return in evaluating the impact of electric security plans. Ohio R.C. 4928.143(E).

[126] *In the Matter of Application of Duke Energy Carolinas, LLC for An Accounting Order to Defer Incremental Storm Damage Expenses Incurred as a Result of Hurricanes Florence and Michael and Winter Storm Diego*, Docket No. E-7, SUB 1187, *et al.*, *Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Customer Notice*, at 94 (North Carolina Utilities Commission Mar. 31, 2021).

[127] S&P Global Market Intelligence, *The rate case process: establishing a fair return for regulated utilities*, RRA Regulatory Focus (Jun. 29, 2020).

Q. Is reference to returns on book value consistent with how utility rates are evaluated?

A. Yes. Regulators do not set the returns that investors earn in the capital markets—they can only establish the allowed return on the book value of a utility's investment. The expected earnings approach provides a direct guide to ensure that the allowed ROE is similar to what other utilities of comparable risk are expected to earn on invested capital. This opportunity cost test does not require theoretical models to indirectly infer investors' perceptions from stock prices or other market data. As long as the proxy companies are similar in risk, their expected earned returns on invested capital provide a direct benchmark for investors' opportunity costs, independent of fluctuating stock prices, market-to-book ratios, debates over DCF growth rates, or theoretical assumptions about investor behavior.

A textbook prepared for the Society of Utility and Regulatory Financial Analysts concludes that the comparable earnings method is firmly anchored in the regulatory economics underlying the *Bluefield* and *Hope* cases.[128] It also notes that it requires less subjective judgment to implement than either the DCF or CAPM methods.[129] *New Regulatory Finance* concluded that "because the investment base for ratemaking purposes is expressed in book value terms, a rate of return on book value, as is the case with Comparable Earnings, is highly meaningful."[130]

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[128] David C. Parcell, *The Cost of Capital – A Practitioner's Guide*, Society of Utility and Regulatory Financial Analysts (2010) at 115-116.

[129] *Id.*

[130] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 395.

Q. Does the investment community reference earned returns on book value in their evaluation of electric utilities?

A. Yes. Book value accounting measures, including earned and expected returns on book equity, are instrumental to the financial analysis underpinning investors' evaluation of electric utilities, including credit ratings. S&P cited the relevance of earned returns on book value in highlighting the primary credit considerations in the utility industry, noting that "required rate of return on equity investment is closely linked to a utility company's profitability."[131] S&P indicated that "[f]or regulated utilities subject to full cost-of-service regulation and return-on-investment requirements, we normally measure profitability using ROE, the ratio of net income available for common stockholders to average common equity."[132] While recognizing that "the regulator ultimately bases its decision on an authorized ROE," S&P observed that "different factors such as variances in costs and usage may influence the return a utility is actually able to earn, and consequently our analysis of profitability for cost-of-service-based utilities centers on the utility's ability to consistently earn the authorized ROE."[133] In S&P's view, the earned return on book value may provide better insight into the financial health of the utility because it reflects the actual impact of regulation, not the theoretical outcome implied by an authorized ROE. Consistent with this paradigm, S&P examines trends in utility returns on book equity, as compared with authorized ROEs, in evaluating financial performance for the electric utility industry.[134] Similarly, in a review of financial quality measures for utilities, S&P noted that "[t]he earned

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[131] Standard & Poor's Corporation, *Utilities: Key Credit Factors For The Regulated Utilities Industry,* Criteria Corporates (Nov. 19, 2013).

[132] *Id.*

[133] *Id.*

[134] *See, e.g.,* S&P, *Utility-earned ROEs exceeded authorized since 2016, but 2019 may not match 2018*, Financial Focus (Jun. 10, 2019).

return on equity . . . is one of the most widely followed measures of the industry's financial performance."[135]

Moody's also recognizes the relevance of returns on book value in its assessment of a utility's prospects. While noting that "[t]he authorized ROE is a popular focal point in many regulatory rate case proceedings," Moody's recognized that "earned ROEs, as reported by utilities and adjusted by Moody's," are a key gauge of financial performance.[136] As Moody's concluded, "utilities are closer to earning their authorized equity returns, which is positive from an equity market valuation perspective."[137] In explaining its scorecard analysis for a Baa-rated utility, Moody's Investors' Service noted that regulatory outcomes should be "sufficient to attract capital without difficulty," and that this "will translate to returns (measured in relation to equity, total assets, rate base, or regulatory asset value, as applicable) that are average relative to global peers."[138]

Q. Do Opinion Nos. 569 or 569-A undermine the relevance of this evidence?

A. No. The Commission examined some of this evidence in Opinion No. 569 but, nevertheless, suggested that investors "may not" use the information from the Expected Earnings analysis to inform their investment decisions.[139] But these investment services would not provide this information if investors did not rely upon it to inform their decisions. The Commission also posited that investors may not use this

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[135] S&P Global Market Intelligence, *Utility operating company financials mixed: ROE slips*, Financial Focus (Dec. 11, 2019).

[136] Moody's, *Lower Authorized Equity Returns Will Not Hurt Near-Term Credit Profiles*, Sector In-Depth (Mar. 10, 2015).

[137] *Id*.

[138] Moody's, *Regulated Electric and Gas Utilities,* Rating Methodology (Jun. 23, 2017).

[139] Opinion No. 569 at P 212.

information specifically to "determine the applicable cost of capital,"[140] but this supposition again hinges on the notion that only market-based evidence is relevant in evaluating a just and reasonable ROE.

Q. What other evidence supports a finding that returns on book value influence investors' valuation decisions?

A. In addition to the materials cited above, a research paper by Dr. Aswath Damodaran emphasized the importance of considering returns on book value in evaluating performance and alternative investments.[141] Contradicting Opinion No. 569's conclusion that returns on book value are unrelated to an evaluation of investors' expected return on investment,[142] Dr. Damodaran noted that, "[w]hile returns on equity and capital are based upon accounting earnings and capital, and are designed to measure the quality of a firm's existing investments, they are correlated with returns you would make investing in the publicly traded equity of the firm."[143]

As Dr. Damodaran stated, "we can safely conclude that the key number in a valuation is not the cost of capital that we assign a firm but the return earned on capital that we attribute to it."[144] This is exactly what the Expected Earnings method seeks to measure. If the allowed ROE is insufficient to provide a return on the book value of a utility's investment as compared with what investors expect other utilities of comparable risk to earn, the utility's ability to compete for capital will be undermined.

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[140] *Id.* at P 217.

[141] Aswath Damodaran, *Return on Capital (ROC), Return on Invested Capital (ROIC) and Return on Equity (ROE): Measurement and Implications*, New York University, Stern School of Business (July 2007).

[142] Opinion No. 569 at PP 204-205.

[143] Damodaran, *supra* n.133 at 49.

[144] *Id.* at 6.

The Expected Earnings approach provides a measure of this necessary return as one component of the evaluation of a just and reasonable ROE.

Q. What other considerations support reference to returns on book value, as a complement to market-based methods?

A. Opinion No. 569 contends that because investors can only purchase common stocks at market value, expected returns on book value are irrelevant unless the market-to-book ratio is equal to 1.0.[145] However, this ignores the fact that existing shareholders are continuously investing in a firm's equity *at book value* every time earnings are retained for reinvestment, rather than being paid as dividends. Retained earnings are reflected on the balance sheet as an increase in the book value of shareholders' equity. When a firm retains that portion of earnings not paid out as common dividends, its shareholders effectively invest in the firm's equity, and those investments are made at book value.

Moreover, as the Commission has recognized, in most instances "the public utility companies for which the Commission sets rates are not publicly traded and thus do not have any market-determined stock values."[146] This was the case in the Supreme Court's *Hope* decision, where the financial integrity standards were directly related to the book value of a utility's equity and expected earnings. Similarly, one key gauge of a utility's financial integrity is credit metrics, which depend on the book value of equity and earnings on that book value of investment. The Expected Earnings method is directly related to ensuring that the standards underlying a just and reasonable ROE are met.

[145] Opinion No. 569 at P 201.

[146] *Id.* at P 208.

Q. Does a difference between book and market values also raise concerns for market-based methods?

A. Yes. Differences between market realities and the theoretical constructs underlying market-based methods support the use, rather than rejection, of the Expected Earnings approach. As one researcher summarized in the early days before the DCF became a regulatory mainstay:

> We conclude that the [DCF] formula is logically incorrect for public utility regulation whenever stocks are selling at a price in excess of their book equity per share. . . . Although it purports to satisfy investor expectations, it is in fact designed to defeat the expectations of any investor who pays a market price in excess of book. It satisfies the expectations only of the investor who buys at book and expects market prices to remain at book.[147]

This is not to say that the DCF model is not a useful methodology when considered along with other methods. But as this discussion makes clear, arguments based on "truisms" inherent in the mathematical tautology of DCF theory do not support abandoning the Expected Earnings approach, which focuses on the projected earned returns on book equity supporting the investors' expectations underlying the market price of the stock.

Q. Opinion No. 569 presents a numerical example purporting to illustrate that expected book returns are not germane to the evaluation of a just and reasonable ROE.[148] Is that example persuasive?

A. No. Opinion No. 569 posits a comparison between two firms, both with a book value of $100 and an expected return on book value of 10%, but with the market price of the companies' stocks being $20 (Firm A) and $40 (Firm B), respectively. The problem

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[147] Walter A. Morton, *The Investor Capitalization Theory of the Cost of Equity Capital*, Land Econ. 248-63 (Aug. 1970).

[148] Opinion No. 569 at P 205.

with the example is that the assumptions are completely divorced from reality for electric utilities. For example, based on a stock price of $20, the illustration implies a market-to-book ratio of 0.25 times ($20/$100) and a price/earnings multiple of 2.0 ($20/$10), versus comparable averages for the electric utilities covered by Value Line on the order of 1.86 and 17.7, respectively.[149] Under an approach where assumptions are simply contrived to "demonstrate" a hypothesis, Opinion No. 569 could have just as easily "invalidated" the DCF model.

For example, extending the illustration to assume that each firm pays a dividend of $1.00 and both are expected to grow at 5%, the DCF cost of equity for Firm A would be 10%, versus only 5% for Firm B. Because the Opinion No. 569 example implicitly presumes that both stocks are of equal risk,[150] the differential between the implied DCF cost of equity estimates makes no sense. As with Opinion No. 569's contrived assumptions, the problem is with the example, not the underlying model.

Q. Opinion No. 569 also asserted that reliance on data from Value Line undermines the reliability of the Expected Earnings approach.[151] Is this consistent with the underlying facts?

A. No. The Commission reversed this finding in Opinion No. 569-A, concluding that Value Line's projections "incorporate the input of multiple analysts."[152] The Commission also concluded that considering Value Line projections "may better reflect

[149] www.valueline.com (Sep. 6, 2024).

[150] This assumption is unstated in Opinion No. 569, but without this assumption, the difference in stock prices between Firm A and Firm B is easily explained. If the risks of Firm A are considerably higher than those of Firm B, the price investors are willing to pay to receive the same expected stream of cash flows will be significantly lower.

[151] Opinion No. 569 at P 225.

[152] Opinion No. 569-A at P 80.

the data sources that investors consider in making investor decisions."[153] This provides additional support for the relevance of the Expected Earnings approach in evaluating investors' expectations and requirements.

Q. Opinion No. 569-A suggested that the relative amount of common equity or accumulated depreciation on a utility's balance sheet could distort the results of the Expected Earnings approach.[154] Is this accurate?

A. No. The absolute amount of equity in a utility's capital structure, or the fact that a utility may have a higher or lower equity ratio, does not lead to an "illogical result" under the Expected Earnings approach, as Opinion No. 569 posits. The Expected Earnings method is based on the ratio of earnings available to common stockholders to the outstanding balance of common equity investment. While a higher equity ratio would imply that the numerator would be higher relative to a utility with a lower equity ratio, the denominator would also increase. In other words, assuming a constant allowed ROE, differences in equity ratios between one utility and another would have no impact at all on the resulting earned return on book value.[155]

Opinion No. 569's contention that the degree to which a utility's plant in service is depreciated on its books would distort the Expected Earnings results is equally misguided. Consider the simple example in the table below, which assumes that the only difference between the two utilities is the relative age of their respective utility systems and the degree to which their plant investment is depreciated.

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[153] *Id.* at P 78.

[154] Opinion No. 569-A at P 131 (citing Opinion No. 569 at P 223).

[155] Consider two utilities, both with a rate base of $1,000 and an authorized ROE of 10%. If Utility A's common equity ratio were 60%, the Expected Earnings result would be calculated as ($1,000 x 60% x 10%) / ($1,000 x 60%) = 10%. For Utility B with a common equity ratio of 40%, the Expected Earnings result would be calculated as ($1,000 x 40% x 10%) / ($1,000 x 40%) = 10%. To the extent that the risk associated with Utility B's greater financial leverage were found to justify a ROE higher than that of Utility A, Utility B's Expected Earnings result would also be higher.

TABLE TRANSCO-4
IMPACT OF DEPRECIATION

	Utility A	Utility B
Plant	$1,000	$1,000
Accumulated Depreciation	$ 800	$ 100
Net Plant	$ 200	$ 900
Equity Ratio	50%	50%
Common Equity	$ 100	$ 450
ROE	10%	10%
Equity Return	$ 10	$ 45

This example shows that, just as with the utility's equity ratio, the degree to which the utility's plant is depreciated affects the amount of common equity investment that earns at the allowed ROE. However, the ratio of equity return to book common equity is the same in both cases (i.e., $10/$100 = 10% = $45/$450 = 10%). There are no "illogical results" in either instance.[156]

Q. What other primary misconception underlies the rejection of the Expected Earnings approach in Opinion Nos. 569 and 569-A?

A. Opinion No. 569-A argues that the Expected Earnings method should be excluded because of a lack of evidence "that investors use such data to directly value equities, determine the cost of equity, or make investment decisions."[157] Similarly, Opinion No. 569 concluded that "there is insufficient record evidence to demonstrate that investors

[156] Further, Opinion No. 569's suggestion (P 224) that the relative age of a utility's plant alone can be viewed as a key determinant of its risk is incorrect. Risk is a function of numerous factors that might affect the investors' ability to earn a fair ROE. While the relative age of a utility's facilities might arguably be a consideration, it is just as likely that older facilities could be viewed as riskier due to the presumptively greater potential for unplanned outages or catastrophic failure.

[157] Opinion No. 569-A at P 126.

rely on the Expected Earnings model," or that investors "use the Expected Earnings model to determine their required returns on investments in public utilities."[158]

Q. Does this line of argument support excluding the Expected Earnings approach?

A. No. As my testimony demonstrates, returns on book value are a key consideration in evaluating investment alternatives, particularly in the regulated sector where book values play a fundamental role in establishing future earnings and cash flows. But in any event, as discussed earlier in the context of the Risk Premium approach, the merit of any specific financial model is not premised on whether individual investors rely directly on that method to "determine their required returns" or "to inform their investment decisions."[159] Given the importance of both expected earnings and book value investment for utility investors, and the direct link to the *Hope* and *Bluefield* regulatory standards, the Expected Earnings approach provides a useful perspective in evaluating a just and reasonable ROE.

Q. Does the prospect of continued uncertainty in the economy and capital markets provide additional support for alternatives to the DCF and CAPM approaches?

A. Yes. Since the onset of the COVID-19 pandemic and military conflict in Ukraine, investors have confronted heightened market volatility and uncertainty. At the same time, the Federal Reserve's monetary policy stance has undergone significant shifts in response to spikes in price inflation and concerns over a potential economic slowdown, and investors face significant uncertainties regarding the future economic and fiscal policies of the incoming administration. Such tumultuous and highly aberrant conditions violate the general assumptions of market equilibrium and stability

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[158] Opinion No. 569 at PP 210, 213. Similarly, Opinion No. 569 also concluded that there is "insufficient evidence that investors rely on risk premium analyses utilizing historic Commission ROE determinations or settlement approvals to determine the cost of capital and make investment decisions." Opinion No. 569 at P 345. My discussion applies equally to the fallacy of this contention as well.

[159] *See, e.g.,* Opinion No. 569 at PP 212, 213.

underlying market-based financial models. The Risk Premium and Expected Earnings approaches are largely insulated from such concerns and including them in the set of ROE models used by the Commission helps to ensure that the *Hope* and *Bluefield* standards are met.

Q. What ROEs are indicated for electric utilities based on the Expected Earnings approach?

A. The year-end returns on common equity projected by Value Line over its forecast horizon for each of the utilities in the proxy group are shown on Exhibit No. Transco-210. In *Southern California Edison Co.*, the Commission correctly recognized that, if the rate of return were based on year-end book values, such as those reported by Value Line, it would understate actual returns because of growth in common equity over the year.[160] Accordingly, consistent with the Commission's findings and the theory underlying this approach, I made an adjustment to compute an average rate of return.[161]

As shown on Exhibit No. Transco-210, Value Line's projections for the Electric Group resulted in a range of expected rates of return from 7.63% to 14.95%. The median and midpoint values are 10.88% and 11.29%, respectively.

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[160] *So. Cal. Edison Co.*, 92 FERC ¶ 61,070 at 61,263 & n. 38 (2000).

[161] Use of an average return in developing the rate of return is well supported. *See, e.g.*, Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 305-06, which discusses the need to adjust Value Line's end-of-year data, consistent with the Commission's prior findings.

VI. LOW-RISK NON-UTILITY DCF MODEL

Q. What other ROE benchmark do you consider in evaluating a just and reasonable base ROE for Transco?

A. Consistent with underlying economic and regulatory standards, I also apply the constant growth DCF model to a select group of low-risk companies in the non-utility sectors of the economy. I refer to this group as the "Non-Utility Group."

Q. Has the Commission acknowledged the potential relevance of evidence beyond the results of any particular set of financial models?

A. Yes. The Commission has noted that the ultimate determination of a just and reasonable end result depends "on the particular circumstances of the case," and noted that a broad range of additional evidence may be pertinent in evaluating investors' required return.[162] Observing that "any methodology has the potential for errors or inaccuracies,"[163] the Commission has concluded that "[t]here is significant evidence indicating that combining estimates from different models is more accurate than relying on a single model."[164] There is no sound reason why such evidence would not be equally relevant in evaluating a just and reasonable base ROE for Transco.

Q. Why do you include a DCF analysis for this non-utility group?

A. The primary reason I have examined DCF results for this Non-Utility Group is that utilities, such as Transco, need to compete with non-regulated firms for capital. The cost of capital is an opportunity cost based on the returns that investors could realize by putting their money in other alternatives. The total capital invested in utility stocks

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[162] Opinion No. 569 at P 68 (footnote omitted); Opinion No. 569-A at P 175 (footnote omitted). For example, the Commission noted that evidence concerning "ROEs of non-utility companies, . . . non-utility stock prices, [and] investor expectations for non-utility stocks" may be relevant. Opinion No. 569 at P 522; Opinion No. 569-A at P 217.

[163] Opinion No. 569 at P 38.

[164] *Id.*

is only a small fraction of total common stock investment and there is a wide range of other alternatives available to investors. Utilities must compete for capital, not just against firms in their own industry, but with other investment opportunities of comparable risk.[165] This understanding is consistent with modern portfolio theory, which is built on the assumption that rational investors will hold a diverse portfolio of stocks and not just companies in a single industry.

Q. Is it consistent with the *Bluefield* and *Hope* cases to consider investors' required ROE for non-utility companies?

A. Yes. The cost of equity capital in the competitive sector of the economy forms the very underpinning for utility ROEs because regulation purports to serve as a substitute for the actions of competitive markets. The Supreme Court has recognized that it is the degree of risk, not the nature of the business, which is relevant in evaluating an allowed ROE for a utility. The *Bluefield* case refers to "business undertakings attended with comparable risks and uncertainties." It does not restrict consideration to other utilities. Similarly, the *Hope* case states that, "the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks."[166] As in the *Bluefield* decision, there is nothing to restrict "other enterprises" solely to the utility industry.

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[165] Even for a single utility, capital will be allocated between competing uses in part based on opportunity costs. Where the utility has no regulatory obligation to undertake a particular project, an anemic return may foreclose investment altogether.

[166] *Hope*, 320 U.S. at 603.

Q. Has the Commission acknowledged the potential relevance of investors' required returns for firms in the competitive sector?

A. Yes. The Commission has noted that utilities "must compete for capital with other utilities (*and companies in other sectors*) throughout the nation."[167] Opinion No. 569-A noted that "evidence regarding non-utility stock prices . . . [and] investor expectations for non-utility stocks" could influence its evaluation of a just and reasonable ROE for electric utilities.[168] Similarly, the Commission noted that evidence concerning "ROEs of non-utility companies, . . . non-utility stock prices, [and] investor expectations for non-utility stocks" could be considered in tandem with results for a proxy group of electric utilities.[169] The Commission made this statement in the context of applying the first prong of Section 206 of the FPA, *i.e.*, whether a utility's existing ROE remains just and reasonable. There is no sound reason why expected returns on non-utility stocks would not be equally relevant to whether a utility's proposed ROE in a Section 205 rate change is just and reasonable.

Investors have many investment opportunities for their capital and electric utilities must compete for funds with firms outside their own industry. The investment community has recognized the interrelationship between ROEs for FERC-jurisdictional utilities and other regulated utility sectors in the allocation of capital. For example, Wolfe Research has noted that lower ROEs at the Commission could cause investors to divert capital to "other industries generally."[170] This was affirmed by Bank

[167] Opinion No. 531 at P 96 (emphasis added).

[168] Opinion No. 569-A at P 175.

[169] Opinion No. 569 at P 522.

[170] Wolfe Research, *FERConomics: Risk to transmission base ROEs in focus*, Utils. & Power (Jun. 11, 2013) at 11.

of America Merrill Lynch, which highlighted the fact that unsupportive ROE determinations could "result in a shift away of capital to other businesses."[171]

Q. Does consideration of the results for the Non-Utility Group improve the reliability of DCF results?

A. Yes. Growth estimates used in the DCF model depend on analysts' forecasts. It is possible for utility growth rates to be distorted by short-term trends in the industry, or by the industry falling into favor or disfavor by analysts. Such distortions could result in biased DCF estimates for utilities. Because the Non-Utility Group includes low risk companies from many industries, it diversifies away any distortion related to a particular sector.

Q. What criteria do you apply to develop the Non-Utility Group?

A. My comparable risk proxy group was composed of those United States companies followed by Value Line that:

1) pay common dividends;

2) have a Safety Rank of "1";

3) have a Financial Strength Rating of "A" or greater;

4) have a beta of 0.95 or less; and

5) have investment grade credit ratings from S&P and Moody's.

Q. How do you evaluate the risks of the Non-Utility Group relative to your proxy group of electric utilities?

A. My evaluation of relative risk considers five published benchmarks that are widely relied on by investors—credit ratings from Moody's and S&P, along with Value Line's Safety Rank, Financial Strength Rating, and beta values. Value Line's primary risk

[171] Bank of America Merrill Lynch, *Where is FERC? ROE Transmission Challenges on First Street*, Industry Overview (Dec. 5, 2019).

indicator is its Safety Rank, which ranges from "1" (Safest) to "5" (Riskiest). This overall risk measure is intended to capture the total risk of a stock, and incorporates elements of stock price stability and financial strength. The Financial Strength Rating is designed as a guide to overall financial strength and creditworthiness, with the key inputs including financial leverage, business volatility measures, and company size. Value Line's Financial Strength Ratings range from "A++" (strongest) down to "C" (weakest) in nine steps. Value Line is one of the most widely available sources of investment advisory information and these objective, published indicators provide useful guidance regarding the risk perceptions of investors. As noted earlier, beta measures a utility's stock price volatility relative to the market as a whole, and reflects the tendency of a stock's price to follow changes in the market. A stock that tends to respond less to market movements has a beta less than 1.00, while stocks that tend to move more than the market have betas greater than 1.00. Beta is the only relevant measure of investment risk under modern capital market theory, and is widely cited in academics and in the investment industry as a guide to investors' risk perceptions.

Q. How do the overall risks of this non-utility group compare with the Electric Group?

A. Table Transco-5 compares the Non-Utility Group with my electric utility proxy group across the five indicators of investment risk discussed above:

TABLE TRANSCO-5
COMPARISON OF RISK INDICATORS

	Credit Rating		Value Line		
			Safety	Financial	
Proxy Group	S&P	Moody's	Rank	Strength	Beta
Non-Utility Group	A-	A2	1	A+	0.80
Electric Group	BBB+	Baa2	2	A	0.95

As shown above, the risk indicators for the Non-Utility Group suggest less risk than for the Electric Group.

The companies that make up the Non-Utility Group are representative of the pinnacle of corporate America. These firms, which include household names such as General Mills, Procter & Gamble, and Walmart, have long corporate histories, well-established track records, and exceedingly conservative risk profiles. Many of these companies pay dividends on par with utilities, with the average dividend yield for the group being 2.1%. Moreover, because of their significance and name recognition, these companies receive intense scrutiny by the investment community, which increases confidence that published growth estimates are representative of the consensus expectations reflected in common stock prices.

Q. What are the results of your constant growth DCF analysis for the Non-Utility Group?

A. As shown on Exhibit No. Transco-212, I calculated the dividend yield component of the DCF model in exactly the same manner described earlier for the Electric Group. With respect to growth, my application of the DCF model to the Non-Utility Group relied on projected EPS growth rates from IBES, Value Line, and Zacks. As indicated on pages 1-3 of Exhibit No. Transco-212, my DCF analyses for the Non-Utility Group resulted in median cost of equity estimates ranging from 10.03% to 10.37%, with the midpoint values ranging from 10.90% to 11.22%.

Q. Does this conclude your testimony?

A. Yes, it does.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Transco, LLC	)	**Docket No. ER25-___-000**

DECLARATION OF ADRIEN M. MCKENZIE

I depose and state under penalty of perjury that the foregoing testimony was prepared or assembled by me or under my direction, and that I have read the questions and answers labeled as my testimony; that if asked the same questions, my answers in response would be as shown; and that the facts contained in my answers are true to the best of my knowledge, information, and belief.

Executed on January 7, 2025

/s/ Adrien M. McKenzie
Adrien M. McKenzie

Exhibit No. TRANSCO-201

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Adrien M. McKenzie. My business address is 3907 Red River Street, Austin, Texas 78751.

Q. PLEASE STATE YOUR OCCUPATION.

A. I am a principal in FINCAP, Inc., a firm engaged primarily in financial, economic, and policy consulting in the field of public utility regulation.

Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I received B.A. and M.B.A. degrees with a major in finance from The University of Texas at Austin and hold the Chartered Financial Analyst (CFA®) designation. Since joining FINCAP in 1984, I have participated in consulting assignments involving a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation. I have extensive experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before courts, regulatory agencies, and legislative committees throughout the U.S. and Canada. I have personally sponsored direct and rebuttal testimony in more than 200 proceedings filed with the Federal Energy Regulatory Commission ("FERC") and regulatory agencies in Alaska, Arkansas, Colorado, District of Columbia, Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming. My testimony addressed the establishment of risk-comparable proxy groups, the application of alternative quantitative methods, and the consideration of regulatory standards and policy objectives in establishing a fair rate

of return on equity for regulated electric, gas, and water utility operations. In connection with these assignments, my responsibilities have included critically evaluating the positions of other parties and preparation of rebuttal testimony, representing clients in settlement negotiations and hearings, and assisting in the preparation of legal briefs.

FINCAP was formed in 1979 as an economic and financial consulting firm serving clients in both the regulated and competitive sectors. FINCAP conducts assignments ranging from broad qualitative analyses and policy consulting to technical analyses and research. The firm's experience is in the areas of public utilities, valuation of closely-held businesses, and economic evaluations (e.g., damage and cost/benefit analyses). Prior to joining FINCAP, I was employed by an oil and gas firm and was responsible for operations and accounting. I am a member of the CFA Institute. A resume containing the details of my qualifications and experience is attached below.

ADRIEN M. McKENZIE

FINCAP, INC.
Financial Concepts and Applications
Economic and Financial Counsel

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Summary of Qualifications

Adrien McKenzie has over 35 years of experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before regulatory agencies, courts, and legislative committees throughout the U.S. and Canada. Assignments have included a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation. Mr. McKenzie holds the Chartered Financial Analyst (CFA®) designation and earned an MBA in finance from the University of Texas at Austin.

Employment

President FINCAP, Inc. (June 1984 to June 1987) (April 1988 to present)	Economic consulting firm specializing in regulated industries and valuation of closely-held businesses. Assignments have involved electric, gas, telecommunication, and water/sewer utilities, with clients including utilities, consumer groups, municipalities, regulatory agencies, and cogenerators. Areas of participation have included rate of return, revenue requirements, rate design, tariff analysis, avoided cost, forecasting, and negotiations. Develop cost of capital analyses using alternative market models for electric, gas, and telephone utilities. Prepare pre-filed direct and rebuttal testimony, participate in settlement negotiations, respond to interrogatories, evaluate opposition testimony, and assist in the areas of cross-examination and the preparations of legal briefs. Other assignments have involved preparation of technical reports, valuations, estimation of damages, industry studies, and various economic analyses in support of litigation.
Manager, McKenzie Energy Company (Jan. 1981 to May. 1984)	Responsible for operations and accounting for firm engaged in the management of working interests in oil and gas properties.

Education

M.B.A., Finance, University of Texas at Austin (Sep. 1982 to May. 1984)	Program included coursework in corporate finance, accounting, financial modeling, and statistics. Received Dean's Award for Academic Excellence and Good Neighbor Scholarship. Professional Report: *The Impact of Construction Expenditures on Investor-Owned Electric Utilities*
B.B.A., Finance, University of Texas at Austin (Jan. 1981 to May 1982)	Electives included capital market theory, portfolio management, and international economics and finance. Elected to Beta Gamma Sigma business honor society. Dean's List 1981-1982.
Simon Fraser University, Vancouver, Canada and University of Hawaii at Manoa, Honolulu, Hawaii (Jan. 1979 to Dec 1980)	Coursework in accounting, finance, economics, and liberal arts.

Professional Associations

Received Chartered Financial Analyst (CFA®) designation in 1990.

Member – CFA Institute.

Bibliography

"A Profile of State Regulatory Commissions," A Special Report by the Electricity Consumers Resource Council (ELCON), Summer 1991.

"The Impact of Regulatory Climate on Utility Capital Costs: An Alternative Test," with Bruce H. Fairchild, *Public Utilities Fortnightly* (May 25, 1989).

Presentations

"ROE at FERC: Issues and Methods," *Expert Briefing on Parallels in ROE Issues between AER, ERA, and FERC*, Jones Day (Sydney, Melbourne, and Perth, Australia) (April 15, 2014).

Cost of Capital Working Group eforum, Edison Electric Institute (April 24, 2012).

"Cost-of-Service Studies and Rate Design," General Management of Electric Utilities (A Training Program for Electric Utility Managers from Developing Countries), Austin, Texas (October 1989 and November 1990 and 1991).

Representative Assignments

- Mr. McKenzie has prepared and sponsored prefiled testimony submitted in over 200 regulatory proceedings.
- In addition to filings before regulatory agencies in Alaska, Arkansas, Colorado, District of Columbia, Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming, Mr. McKenzie has considerable expertise in preparing expert analyses and testimony before the Federal Energy Regulatory Commission.
- Evaluation of fair rate of return on equity for electric, gas, water, sewer, and telephone utilities, as well as natural gas pipelines.
- Analysis of capital structure issues for regulated utilities.
- Developing cost of service, cost allocation, and rate design studies.
- Design and development of explanatory models for nuclear plant capital costs in connection with prudency reviews.
- Analysis of avoided cost pricing for cogenerated power.
- Application of econometric models to analyze the impact of anti-competitive behavior, theft of trade secrets, and estimate lost profits.
- Valuation of closely-held businesses.

Exhibit No. TRANSCO-202

ELECTRIC GROUP

	Company	SYM	(a) S&P Corporate Rating	(b) Moody's Long-term Rating	(c) Value Line Safety Rank	(c) Value Line Financial Strength	(c) Value Line Beta	(c) Market Cap ($M)
1	Alliant Energy	LNT	A-	Baa2	1	A+	0.90	$14,900
2	Ameren Corp.	AEE	BBB+	Baa1	1	A+	0.90	$22,000
3	American Elec Pwr	AEP	BBB+	Baa2	1	A	0.85	$52,700
4	Avista Corp.	AVA	BBB	Baa2	3	A	0.95	$2,900
5	Black Hills Corp.	BKH	BBB+	Baa2	2	A	1.05	$4,100
6	CenterPoint Energy	CNP	BBB+	Baa2	3	A	1.15	$17,400
7	CMS Energy Corp.	CMS	BBB+	Baa2	2	B++	0.85	$20,200
8	Consolidated Edison	ED	A-	Baa1	1	A+	0.80	$33,500
9	Dominion Energy	D	BBB+	Baa2	3	B++	0.90	$44,300
10	DTE Energy Co.	DTE	BBB+	Baa2	2	B++	1.00	$25,800
11	Duke Energy Corp.	DUK	BBB+	Baa2	2	A	0.90	$83,900
12	Edison International	EIX	BBB	Baa2	2	A	1.05	$32,700
13	Entergy Corp.	ETR	BBB+	Baa2	1	A+	1.00	$25,600
14	Evergy Inc.	EVRG	BBB+	Baa2	2	B++	0.95	$13,600
15	Eversource Energy	ES	A-	Baa2	2	A	0.95	$22,900
16	Exelon Corp.	EXC	BBB+	Baa2	2	B++	n/a	$36,900
17	FirstEnergy Corp.	FE	BBB	Baa3	3	B++	0.90	$23,900
18	Fortis Inc.	FTS	A-	Baa3	1	A	0.75	$29,300
19	IDACORP, Inc.	IDA	BBB	Baa2	1	A	0.85	$5,400
20	NextEra Energy, Inc.	NEE	A-	Baa1	3	A	1.05	$153,000
21	NorthWestern Corp.	NWE	BBB	Baa2	2	B++	1.00	$3,400
22	OGE Energy Corp.	OGE	BBB+	Baa1	3	B++	1.10	$8,000
23	Otter Tail Corp.	OTTR	BBB	Baa2	2	A	0.95	$3,800
24	Pinnacle West Capital	PNW	BBB+	Baa2	2	A	0.95	$9,900
25	PPL Corp.	PPL	A-	Baa1	2	A+	1.15	$21,900
26	Pub Sv Enterprise Grp.	PEG	BBB+	Baa2	1	A	0.95	$38,300
27	Sempra Energy	SRE	BBB+	Baa2	2	A	1.00	$51,600
28	Southern Company	SO	A-	Baa1	2	A	0.95	$90,800
29	TXNM Energy	TXNM	BBB	Baa3	3	B+	0.90	$3,900
30	WEC Energy Group	WEC	A-	Baa1	1	A+	0.85	$29,400
31	Xcel Energy Inc.	XEL	BBB+	Baa1	2	A	0.85	$35,100
			BBB+	**Baa2**	**2**	**A**	**0.95**	**$31,003**

(a) www.spglobal.com (retrieved Oct. 31, 2024).
(b) www.moodys.com (retrieved Oct. 31, 2024).
(c) The Value Line Investment Survey (Aug. 9, Sep. 6 and Oct. 18, 2024).

Exhibit No. TRANSCO-203

I. FOUR-MODEL METHODOLOGY

Method	Range	Median	Midpoint
Two-Step DCF	7.37% -- 11.44%	10.01%	9.41%
CAPM			
IBES	10.79% -- 13.99%	12.33%	12.39%
Value Line	10.13% -- 12.97%	11.47%	11.55%
Average	10.46% -- 13.48%	11.90%	11.97%
Risk Premium	7.95% -- 12.75%	10.35%	10.35%
Expected Earnings	7.63% -- 14.95%	10.88%	11.29%
Composite ROE	**8.35% -- 13.16%**	**10.79%**	**10.75%**

II. ORDER ON REMAND METHODOLOGY

Method	Range	Median	Midpoint
Two-Step DCF	7.37% -- 11.44%	10.01%	9.41%
CAPM	10.79% -- 13.99%	12.33%	12.39%
Composite ROE	**9.08% -- 12.72%**	**11.17%**	**10.90%**

Exhibit No. TRANSCO-204

ELECTRIC GROUP

		(a)	(b)	(c)	(d)	(e)	(f)	
	Company	**6-mo. Avg Dividend Yield**	**EPS Growth**	**GDP**	**Weighted**	**Adjusted Dividend Yield**	**DCF Result**	**Break (b Pts)**
1	Dominion Energy	4.94%	20.40%	4.10%	17.14%	5.45%	22.59%	1115
2	Edison International	3.94%	8.15%	4.10%	7.34%	4.10%	11.44%	42
3	Avista Corp.	5.08%	6.20%	4.10%	5.78%	5.24%	11.02%	2
4	Pinnacle West Capital	4.26%	7.20%	4.10%	6.58%	4.42%	11.00%	23
5	NorthWestern Corp.	4.92%	6.10%	4.10%	5.70%	5.07%	10.77%	17
6	Alliant Energy	3.49%	7.70%	4.10%	6.98%	3.62%	10.60%	16
7	Entergy Corp.	3.82%	7.08%	4.10%	6.48%	3.95%	10.44%	2
8	Evergy Inc.	4.50%	6.20%	4.10%	5.78%	4.64%	10.42%	13
9	Otter Tail Corp.	2.17%	9.00%	4.10%	8.02%	2.27%	10.29%	5
10	Southern Company	3.45%	7.30%	4.10%	6.66%	3.58%	10.24%	5
11	CMS Energy Corp.	3.17%	7.60%	4.10%	6.90%	3.29%	10.19%	5
12	Duke Energy Corp.	3.83%	6.71%	4.10%	6.19%	3.96%	10.15%	1
13	NextEra Energy, Inc.	2.67%	8.17%	4.10%	7.36%	2.78%	10.13%	3
14	FirstEnergy Corp.	4.11%	6.30%	4.10%	5.86%	4.24%	10.10%	2
15	Xcel Energy Inc.	3.75%	6.73%	4.10%	6.20%	3.87%	10.08%	15
16	American Elec Pwr	3.70%	6.62%	4.10%	6.12%	3.82%	9.93%	--
17	PPL Corp.	3.42%	6.80%	4.10%	6.26%	3.53%	9.79%	14
18	CenterPoint Energy	2.78%	7.37%	4.10%	6.72%	2.88%	9.60%	19
19	WEC Energy Group	3.83%	5.86%	4.10%	5.51%	3.94%	9.45%	15
20	Ameren Corp.	3.41%	6.20%	4.10%	5.78%	3.52%	9.30%	15
21	Consolidated Edison	3.39%	5.70%	4.10%	5.38%	3.48%	8.86%	44
22	Eversource Energy	4.54%	4.20%	4.10%	4.18%	4.64%	8.82%	4
23	Exelon Corp.	4.02%	4.80%	4.10%	4.66%	4.12%	8.78%	4
24	Sempra Energy	3.14%	5.90%	4.10%	5.54%	3.23%	8.77%	1
25	IDACORP, Inc.	3.37%	5.50%	4.10%	5.22%	3.46%	8.68%	9
26	DTE Energy Co.	3.42%	5.10%	4.10%	4.90%	3.51%	8.41%	27
27	TXNM Energy	3.88%	4.42%	4.10%	4.36%	3.96%	8.32%	9
28	Black Hills Corp.	4.52%	3.50%	4.10%	3.62%	4.60%	8.22%	10
29	Pub Sv Enterprise Grp.	3.05%	4.30%	4.10%	4.26%	3.11%	7.37%	84
30	Fortis Inc.	4.15%	2.55%	4.10%	2.86%	4.20%	7.06%	31
31	OGE Energy Corp.	4.41%	-12.34%	4.10%	-9.05%	4.13%	-4.92%	1198
	Lower End (g)						**7.37%**	
	Upper End (g)						**11.44%**	
	Median (g)						**10.01%**	
	Midpoint						**9.41%**	
	Median - All Values						**9.93%**	
	Low-End Test (h)						**7.23%**	
	High-End Test (i)						**19.87%**	

(a) Six-month average dividend yield for May 2024 - Oct. 2024.
(b) www.finance.yahoo.com (retreived Oct. 31, 2024).
(c) Exhibit No. Transco-204, page 2.
(d) EPS Growth x 80% + GDP Growth x 20%.
(e) Six-month average dividend yield x [1+ (EPS Growth Rate / 2)].
(f) (d) + (e).
(g) Excludes highlighted values.
(h) Average Baa utility bond yield for six-months ending Oct. 2024, plus 20% of average IBES and Value Line CAPM market risk premium.
(i) 200% of Median - All Values.

GDP GROWTH RATE

Source	Nominal GDP ($ Billions) 2028	2050	2053	2078	Compound Annual Growth Rate
(a) **S&P Capital IQ**	33,679		88,959		3.96%
(b) **EIA**					
Real GDP	21,681	33,405			
GDP Deflator	1.475	2.433			
	31,970	81,288			4.33%
(c) **SSA Trustees Report**	33,709			240,304	4.01%
Average Projected GDP Growth					**4.10%**

(a) S&P Capital IQ (Jun. 10, 2024).
(b) Energy Information Administration, *Annual Energy Outlook 2023* (Mar. 16, 2023).
(c) Social Security Administration, *2024 OASDI Trustees Report*, Table VI.G6.-Selected Economic Variables.

Exhibit No. TRANSCO-205

IBES

		(a)	(b)		(c)		(d)		(e)	(f)		
		Market Return (R_m)				Market						
		Div	Proj.		Risk-Free	Risk		Unadjusted	Market	Size	CAPM	Break
	Company	Yield	Growth	$R_{(m)}$	Rate	Premium	Beta	K_e	Cap	Adjustment	Result	(B Pts)
1	Exelon Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	n/a	n/a	$36,900	0.46%	n/a	--
2	CenterPoint Energy	1.69%	10.64%	12.33%	4.35%	7.98%	1.15	13.53%	$17,400	0.46%	13.99%	0
3	PPL Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	1.15	13.53%	$21,900	0.46%	13.99%	26
4	OGE Energy Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	1.10	13.13%	$8,000	0.61%	13.73%	5
5	Black Hills Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	1.05	12.73%	$4,100	0.95%	13.68%	40
6	NorthWestern Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	1.00	12.33%	$3,400	0.95%	13.28%	9
7	Edison International	1.69%	10.64%	12.33%	4.35%	7.98%	1.05	12.73%	$32,700	0.46%	13.19%	5
8	Avista Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	0.95	11.93%	$2,900	1.21%	13.14%	26
9	Otter Tail Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	0.95	11.93%	$3,800	0.95%	12.88%	9
10	DTE Energy Co.	1.69%	10.64%	12.33%	4.35%	7.98%	1.00	12.33%	$25,800	0.46%	12.79%	0
11	Entergy Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	1.00	12.33%	$25,600	0.46%	12.79%	12
12	NextEra Energy, Inc.	1.69%	10.64%	12.33%	4.35%	7.98%	1.05	12.73%	$153,000	-0.06%	12.67%	13
13	Evergy Inc.	1.69%	10.64%	12.33%	4.35%	7.98%	0.95	11.93%	$13,600	0.61%	12.54%	0
14	Pinnacle West Capital	1.69%	10.64%	12.33%	4.35%	7.98%	0.95	11.93%	$9,900	0.61%	12.54%	6
15	TXNM Energy	1.69%	10.64%	12.33%	4.35%	7.98%	0.90	11.53%	$3,900	0.95%	12.48%	9
16	Eversource Energy	1.69%	10.64%	12.33%	4.35%	7.98%	0.95	11.93%	$22,900	0.46%	12.39%	12
17	Sempra Energy	1.69%	10.64%	12.33%	4.35%	7.98%	1.00	12.33%	$51,600	-0.06%	12.27%	12
18	Alliant Energy	1.69%	10.64%	12.33%	4.35%	7.98%	0.90	11.53%	$14,900	0.61%	12.14%	13
19	Ameren Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	0.90	11.53%	$22,000	0.46%	11.99%	15
20	FirstEnergy Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	0.90	11.53%	$23,900	0.46%	11.99%	0
21	Pub Sv Enterprise Grp.	1.69%	10.64%	12.33%	4.35%	7.98%	0.95	11.93%	$38,300	-0.06%	11.87%	12
22	Southern Company	1.69%	10.64%	12.33%	4.35%	7.98%	0.95	11.93%	$90,800	-0.06%	11.87%	0
23	IDACORP, Inc.	1.69%	10.64%	12.33%	4.35%	7.98%	0.85	11.13%	$5,400	0.64%	11.78%	9
24	CMS Energy Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	0.85	11.13%	$20,200	0.46%	11.59%	19
25	WEC Energy Group	1.69%	10.64%	12.33%	4.35%	7.98%	0.85	11.13%	$29,400	0.46%	11.59%	0
26	Xcel Energy Inc.	1.69%	10.64%	12.33%	4.35%	7.98%	0.85	11.13%	$35,100	0.46%	11.59%	0
27	Dominion Energy	1.69%	10.64%	12.33%	4.35%	7.98%	0.90	11.53%	$44,300	-0.06%	11.47%	12
28	Duke Energy Corp.	1.69%	10.64%	12.33%	4.35%	7.98%	0.90	11.53%	$83,900	-0.06%	11.47%	0
29	Consolidated Edison	1.69%	10.64%	12.33%	4.35%	7.98%	0.80	10.73%	$33,500	0.46%	11.19%	28
30	American Elec Pwr	1.69%	10.64%	12.33%	4.35%	7.98%	0.85	11.13%	$52,700	-0.06%	11.07%	12
31	Fortis Inc.	1.69%	10.64%	12.33%	4.35%	7.98%	0.75	10.34%	$29,300	0.46%	10.79%	28
	Lower End (g)										**10.79%**	
	Upper End (g)										**13.99%**	
	Median (g)										**12.33%**	
	Midpoint										**12.39%**	
	Median - All Values										**12.33%**	
	Low-End Test (h)										**7.32%**	
	High-End Test (i)										**24.66%**	

(a) Weighted average for dividend-paying stocks in the S&P 500 based on data from www.valueline.com (retrieved Nov. 3, 2024).
(b) IBES growth rates from Refinitiv as provided by fidelity.com (retrieved Nov. 3, 2024). Eliminated growth rates greater than 20%, as well as all negative values.
(c) Six-month average yield on 30-year Treasury bonds for Oct. 2024 from https://fred.stlouisfed.org/.
(d) The Value Line Investment Survey, Summary & Index (Nov. 1, 2024).
(e) The Value Line Investment Survey (Aug. 9, Sep. 6 and Oct. 18, 2024).
(f) Kroll, 2023 CRSP Deciles Size Premium, Cost of Capital Navigator (2024).
(g) Excludes highlighted values.
(h) Average Baa utility bond yield for six-months ending Oct. 2024, plus 20% of IBES CAPM market risk premium.
(i) 200% of Median - All Values.

Exhibit No. TRANSCO-206

IBES

	(a)		(a)	(b)	(a)				
								Weighted	
	Company	Ticker	Dividend Yield	IBES EPS Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
1	Agilent Technologies Inc	A	0.69%	4.90%	39.33	39.33	0.0013	0.000009	0.000062
2	Apple Inc	AAPL	0.45%	14.20%	3,369.68	3,369.68	0.1079	0.000484	0.015328
3	AbbVie Inc	ABBV	3.05%	6.50%	359.54	359.54	0.0115	0.000351	0.000749
4	Abbott Laboratories	ABT	1.85%	8.25%	205.71	205.71	0.0066	0.000122	0.000544
5	Accenture PLC	ACN	1.71%	9.64%	232.53	232.53	0.0074	0.000128	0.000718
6	Analog Devices Inc	ADI	1.63%	0.58%	111.95	111.95	0.0036	0.000059	0.000021
7	Archer-Daniels-Midland Co	ADM	3.66%	-5.50%	26.13	--	--	--	--
8	Automatic Data Processing Inc	ADP	2.11%	8.98%	117.49	117.49	0.0038	0.000079	0.000338
9	Ameren Corporation	AEE	3.12%	6.20%	22.91	22.91	0.0007	0.000023	0.000046
10	American Electric Power Co Inc	AEP	3.70%	6.62%	51.75	51.75	0.0017	0.000061	0.000110
11	AES Corp (The)	AES	4.83%	6.10%	10.46	10.46	0.0003	0.000016	0.000020
12	Aflac Incorporated	AFL	2.00%	9.40%	58.29	58.29	0.0019	0.000037	0.000176
13	American International Group Inc	AIG	2.17%	24.80%	48.76	--	--	--	--
14	Assurant Inc.	AIZ	1.50%	6.70%	9.93	9.93	0.0003	0.000005	0.000021
15	Arthur J. Gallagher & Co.	AJG	0.89%	11.15%	61.52	61.52	0.0020	0.000018	0.000220
16	Albemarle Corp	ALB	1.63%	-6.22%	11.55	--	--	--	--
17	The Allstate Corporation	ALL	2.00%	172.70%	48.76	--	--	--	--
18	Allegion PLC	ALLE	1.37%	7.60%	12.16	12.16	0.0004	0.000005	0.000030
19	Applied Materials Inc	AMAT	0.77%	14.36%	151.18	151.18	0.0048	0.000037	0.000695
20	Amcor Plc	AMCR	4.87%	7.50%	14.83	14.83	0.0005	0.000023	0.000036
21	AMETEK Inc	AME	0.63%	8.65%	41.27	41.27	0.0013	0.000008	0.000114
22	Amgen Inc	AMGN	2.91%	5.64%	171.59	171.59	0.0055	0.000160	0.000310
23	Ameriprise Financial Inc	AMP	1.21%	n/a	49.80	--	--	--	--
24	American Tower Corp	AMT	3.38%	32.26%	98.72	--	--	--	--
25	Aon plc	AON	0.74%	11.65%	78.81	78.81	0.0025	0.000019	0.000294
26	A. O. Smith Corp	AOS	1.80%	10.00%	8.98	8.98	0.0003	0.000005	0.000029
27	APA Corporation	APA	4.33%	0.57%	8.54	8.54	0.0003	0.000012	0.000002
28	Air Products and Chemicals Inc.	APD	2.29%	6.26%	68.74	68.74	0.0022	0.000050	0.000138
29	Amphenol Corp	APH	0.97%	18.80%	81.81	81.81	0.0026	0.000025	0.000493
30	Alexandria Real Estate Equities Inc.	ARE	4.69%	86.28%	19.37	--	--	--	--
31	Atmos Energy Corp	ATO	2.50%	7.40%	21.48	21.48	0.0007	0.000017	0.000051
32	AvalonBay Communities Inc.	AVB	3.24%	-1.23%	30.86	--	--	--	--
33	Broadcom Inc	AVGO	1.24%	19.90%	788.95	788.95	0.0253	0.000314	0.005029
34	Avery Dennison Corp	AVY	1.78%	13.00%	16.56	16.56	0.0005	0.000009	0.000069
35	American Water Works Company Inc	AWK	2.33%	n/a	26.51	--	--	--	--
36	American Express Co	AXP	1.11%	15.60%	192.10	192.10	0.0062	0.000069	0.000960
37	Bank of America Corp	BAC	2.59%	10.09%	320.42	320.42	0.0103	0.000265	0.001036
38	Ball Corporation	BALL	1.36%	10.50%	17.61	17.61	0.0006	0.000008	0.000059
39	Baxter International Inc	BAX	3.23%	10.00%	18.30	18.30	0.0006	0.000019	0.000059
40	Best Buy Co Inc	BBY	4.20%	n/a	19.52	--	--	--	--
41	Becton Dickinson and Co	BDX	1.67%	8.65%	67.99	67.99	0.0022	0.000036	0.000188
42	Franklin Resources Inc	BEN	5.95%	3.86%	10.90	10.90	0.0003	0.000021	0.000013
43	Brown-Forman Corp	BF/B	2.20%	-1.65%	13.23	--	--	--	--
44	Bunge Global SA	BG	3.36%	-11.00%	11.54	--	--	--	--
45	Bank of New York Mellon Corp (The)	BK	2.50%	15.40%	54.76	54.76	0.0018	0.000044	0.000270
46	Booking Holdings Inc	BKNG	0.74%	22.87%	157.18	--	--	--	--
47	Baker Hughes a GE Co	BKR	2.38%	35.15%	37.45	--	--	--	--
48	BlackRock Inc	BLK	2.25%	14.03%	157.74	157.74	0.0051	0.000114	0.000709
49	Bristol-Myers Squibb Co	BMY	4.42%	-4.34%	110.17	--	--	--	--
50	Broadridge Financial Solutions Inc	BR	1.67%	n/a	24.57	--	--	--	--
51	Brown & Brown Inc	BRO	0.54%	10.45%	29.79	29.79	0.0010	0.000005	0.000100
52	BorgWarner Inc	BWA	1.32%	12.83%	7.31	7.31	0.0002	0.000003	0.000030
53	Blackstone Inc	BX	1.95%	23.73%	205.40	--	--	--	--
54	BXP Inc	BXP	4.95%	n/a	12.51	--	--	--	--
55	Citigroup Inc	C	3.56%	10.00%	121.55	121.55	0.0039	0.000139	0.000389

IBES

	(a)		(a)	(b)	(a)				
				IBES	Market			Weighted	
			Dividend	EPS	Cap			Dividend	Growth
	Company	Ticker	Yield	Growth	($bil.)	Mkt. Cap.	Weight	Yield	Rate
56	Conagra Brands Inc	CAG	4.97%	1.56%	13.83	13.83	0.0004	0.000022	0.000007
57	Cardinal Health Inc	CAH	1.74%	9.28%	28.10	28.10	0.0009	0.000016	0.000083
58	Carrier Global Corp	CARR	1.05%	10.88%	65.13	65.13	0.0021	0.000022	0.000227
59	Caterpillar Inc	CAT	1.49%	4.60%	184.08	184.08	0.0059	0.000088	0.000271
60	Chubb Ltd	CB	1.34%	2.00%	111.82	111.82	0.0036	0.000048	0.000072
61	Cboe Global Markets Inc	CBOE	1.20%	9.78%	21.98	21.98	0.0007	0.000008	0.000069
62	Crown Castle Inc	CCI	6.01%	-5.39%	46.32	--	--	--	--
63	CDW Corp	CDW	1.32%	4.00%	25.10	25.10	0.0008	0.000011	0.000032
64	Celanese Corp	CE	2.24%	16.84%	13.64	13.64	0.0004	0.000010	0.000074
65	Constellation Energy Corp	CEG	0.55%	n/a	80.71	--	--	--	--
66	CF Industries Holdings Inc	CF	2.50%	-11.70%	14.63	--	--	--	--
67	Citizens Financial Group Inc	CFG	4.02%	n/a	18.75	--	--	--	--
68	Church & Dwight Co Inc	CHD	1.09%	8.89%	25.64	25.64	0.0008	0.000009	0.000073
69	C.H. Robinson Worldwide Inc.	CHRW	2.44%	16.60%	11.94	11.94	0.0004	0.000009	0.000064
70	The Cigna Group	CI	1.77%	11.91%	88.03	88.03	0.0028	0.000050	0.000336
71	Cincinnati Financial Corp	CINF	2.43%	8.30%	21.99	21.99	0.0007	0.000017	0.000058
72	Colgate-Palmolive Co	CL	2.14%	8.94%	76.25	76.25	0.0024	0.000052	0.000218
73	Clorox Co (The)	CLX	2.99%	8.30%	20.19	20.19	0.0006	0.000019	0.000054
74	Comcast Corp	CMCSA	2.85%	8.03%	166.68	166.68	0.0053	0.000152	0.000429
75	CME Group Inc	CME	2.06%	4.41%	80.52	80.52	0.0026	0.000053	0.000114
76	Cummins Inc.	CMI	2.22%	8.13%	45.02	45.02	0.0014	0.000032	0.000117
77	CMS Energy Corp	CMS	3.02%	7.60%	20.41	20.41	0.0007	0.000020	0.000050
78	CenterPoint Energy Inc.	CNP	2.80%	7.37%	18.63	18.63	0.0006	0.000017	0.000044
79	Capital One Financial Corp	COF	1.46%	-0.97%	62.53	--	--	--	--
80	Conocophillips	COP	2.89%	5.20%	124.11	124.11	0.0040	0.000115	0.000207
81	Cencora Inc	COR	0.87%	10.10%	46.16	46.16	0.0015	0.000013	0.000149
82	Costco Wholesale Corp	COST	0.56%	9.87%	388.71	388.71	0.0125	0.000070	0.001229
83	Campbell Soup Co	CPB	3.37%	5.05%	13.79	13.79	0.0004	0.000015	0.000022
84	Camden Property Trust	CPT	3.73%	-20.15%	12.13	--	--	--	--
85	SALESFORCE INC	CRM	0.54%	16.23%	281.75	281.75	0.0090	0.000049	0.001465
86	Cisco Systems Inc	CSCO	2.88%	3.71%	221.22	221.22	0.0071	0.000204	0.000263
87	CSX Corp	CSX	1.47%	8.40%	64.39	64.39	0.0021	0.000030	0.000173
88	Cintas Corp	CTAS	0.76%	12.85%	82.93	82.93	0.0027	0.000020	0.000341
89	Coterra Energy Inc	CTRA	3.70%	13.60%	16.79	16.79	0.0005	0.000020	0.000073
90	Cognizant Technology Solutions Corp	CTSH	1.69%	6.28%	36.99	36.99	0.0012	0.000020	0.000074
91	Corteva Inc	CTVA	1.13%	12.79%	42.13	42.13	0.0013	0.000015	0.000173
92	CVS Health Corp	CVS	4.77%	-1.00%	70.21	--	--	--	--
93	Chevron Corp	CVX	4.42%	0.40%	279.95	279.95	0.0090	0.000396	0.000036
94	Dominion Energy Inc	D	4.53%	15.67%	49.49	49.49	0.0016	0.000072	0.000248
95	Delta Air Lines Inc	DAL	1.03%	8.42%	37.68	37.68	0.0012	0.000012	0.000102
96	DuPont De Nemours Inc	DD	1.89%	10.52%	34.44	34.44	0.0011	0.000021	0.000116
97	DEERE & COMPANY	DE	1.47%	-12.10%	109.55	--	--	--	--
98	Dell Technologies Inc	DELL	1.36%	12.36%	91.87	91.87	0.0029	0.000040	0.000364
99	Discover Financial Services	DFS	1.85%	n/a	37.98	--	--	--	--
100	Dollar General Corporation	DG	2.89%	-2.07%	17.98	--	--	--	--
101	Quest Diagnostics Inc	DGX	1.93%	6.48%	17.33	17.33	0.0006	0.000011	0.000036
102	D.R. Horton Inc	DHI	0.76%	8.15%	54.32	54.32	0.0017	0.000013	0.000142
103	Danaher Corp	DHR	0.46%	6.43%	178.95	178.95	0.0057	0.000026	0.000369
104	Walt Disney Co (The)	DIS	0.94%	15.37%	173.76	173.76	0.0056	0.000052	0.000855
105	Digital Realty Trust Inc	DLR	2.88%	-8.84%	58.32	--	--	--	--
106	Healthpeak Properties Inc	DOC	5.46%	-23.36%	15.37	--	--	--	--
107	Dover Corp	DOV	1.09%	9.46%	25.94	25.94	0.0008	0.000009	0.000079
108	Dow Inc	DOW	5.92%	15.52%	34.28	34.28	0.0011	0.000065	0.000170
109	Domino's Pizza Inc	DPZ	1.46%	10.94%	14.70	14.70	0.0005	0.000007	0.000052
110	Darden Restaurants Inc	DRI	3.51%	8.64%	18.76	18.76	0.0006	0.000021	0.000052

IBES

	(a)		(a)	(b)	(a)				
								Weighted	
	Company	Ticker	Dividend Yield	IBES EPS Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
111	DTE Energy Co	DTE	3.36%	n/a	25.12	--	--	--	--
112	Duke Energy Corp	DUK	3.71%	6.71%	87.01	87.01	0.0028	0.000103	0.000187
113	Devon Energy Corp	DVN	2.30%	6.10%	25.22	25.22	0.0008	0.000019	0.000049
114	Electronic Arts Inc	EA	0.53%	12.90%	39.96	39.96	0.0013	0.000007	0.000165
115	eBay Inc.	EBAY	1.86%	8.82%	27.83	27.83	0.0009	0.000017	0.000079
116	Ecolab Inc.	ECL	0.93%	16.90%	69.25	69.25	0.0022	0.000021	0.000375
117	Consolidated Edison Inc.	ED	3.36%	5.70%	34.61	34.61	0.0011	0.000037	0.000063
118	Equifax Inc.	EFX	0.59%	17.94%	32.77	32.77	0.0010	0.000006	0.000188
119	Everest Group Ltd	EG	2.36%	-1.20%	15.09	--	--	--	--
120	Edison International	EIX	4.01%	8.70%	31.41	31.41	0.0010	0.000040	0.000088
121	Estee Lauder Cos Inc (The)	EL	3.97%	11.03%	23.90	23.90	0.0008	0.000030	0.000084
122	Elevance Health Inc	ELV	1.57%	12.05%	96.02	96.02	0.0031	0.000048	0.000371
123	Eastman Chemical Co	EMN	3.21%	12.45%	11.81	11.81	0.0004	0.000012	0.000047
124	Emerson Electric Co.	EMR	2.01%	12.94%	62.12	62.12	0.0020	0.000040	0.000257
125	EOG Resources Inc.	EOG	3.16%	7.40%	68.71	68.71	0.0022	0.000070	0.000163
126	Equinix Inc	EQIX	1.92%	10.10%	85.71	85.71	0.0027	0.000053	0.000277
127	Equity Residential	EQR	3.91%	n/a	26.22	--	--	--	--
128	EQT Corp	EQT	1.77%	22.10%	21.25	--	--	--	--
129	Erie Indemnity Co	ERIE	1.30%	n/a	21.71	--	--	--	--
130	Eversource Energy	ES	4.63%	4.20%	22.75	22.75	0.0007	0.000034	0.000031
131	Essex Property Trust Inc.	ESS	3.61%	3.62%	17.80	17.80	0.0006	0.000021	0.000021
132	Eaton Corporation plc	ETN	1.12%	14.13%	132.39	132.39	0.0042	0.000048	0.000599
133	Entergy corporation	ETR	3.12%	7.08%	31.04	31.04	0.0010	0.000031	0.000070
134	Evergy Inc	EVRG	4.38%	6.20%	13.70	13.70	0.0004	0.000019	0.000027
135	Exelon Corp	EXC	3.98%	4.80%	38.15	38.15	0.0012	0.000049	0.000059
136	Expeditors International of Washington Inc.	EXPD	1.23%	4.70%	16.80	16.80	0.0005	0.000007	0.000025
137	Extra Space Storage Inc	EXR	4.10%	n/a	34.16	--	--	--	--
138	Ford Motor Co	F	5.87%	-3.91%	40.62	--	--	--	--
139	Diamondback Energy Inc	FANG	2.05%	6.20%	51.82	51.82	0.0017	0.000034	0.000103
140	Fastenal Co	FAST	1.99%	n/a	44.82	--	--	--	--
141	Freeport-McMoRan Inc	FCX	0.66%	n/a	65.51	--	--	--	--
142	FactSet Research Systems Inc.	FDS	0.95%	4.70%	17.43	17.43	0.0006	0.000005	0.000026
143	FedEx Corp.	FDX	2.01%	14.33%	67.03	67.03	0.0021	0.000043	0.000308
144	FirstEnergy Corp.	FE	4.15%	7.03%	24.05	24.05	0.0008	0.000032	0.000054
145	Fidelity National Information Services Inc	FIS	1.62%	n/a	48.61	--	--	--	--
146	Fifth Third Bancorp	FITB	3.43%	n/a	29.17	--	--	--	--
147	FMC Corp.	FMC	3.83%	14.70%	7.88	7.88	0.0003	0.000010	0.000037
148	Federal Realty Investment Trust	FRT	3.95%	10.59%	9.38	9.38	0.0003	0.000012	0.000032
149	Fortive Corp	FTV	0.45%	10.10%	24.75	24.75	0.0008	0.000004	0.000080
150	General Dynamics Corp	GD	2.04%	13.68%	80.56	80.56	0.0026	0.000053	0.000353
151	GE Aerospace	GE	0.65%	29.20%	185.83	--	--	--	--
152	GE HealthCare Technologies Inc	GEHC	0.14%	10.50%	39.73	39.73	0.0013	0.000002	0.000134
153	Gen Digital Inc	GEN	1.77%	11.75%	17.42	17.42	0.0006	0.000010	0.000066
154	Gilead Sciences Inc	GILD	3.44%	5.98%	111.44	111.44	0.0036	0.000123	0.000213
155	General Mills Inc.	GIS	3.60%	3.36%	37.88	37.88	0.0012	0.000044	0.000041
156	Globe Life Inc	GL	0.92%	n/a	9.34	--	--	--	--
157	Corning Inc	GLW	2.32%	15.91%	39.37	39.37	0.0013	0.000029	0.000201
158	General Motors Co	GM	0.94%	14.05%	56.04	56.04	0.0018	0.000017	0.000252
159	Alphabet Inc	GOOG	0.49%	21.91%	955.45	--	--	--	--
160	Genuine Parts Co	GPC	3.65%	n/a	15.80	--	--	--	--
161	Global Payments Inc	GPN	1.04%	11.85%	26.58	26.58	0.0009	0.000009	0.000101
162	Garmin Ltd	GRMN	1.54%	9.60%	38.06	38.06	0.0012	0.000019	0.000117
163	Goldman Sachs Group Inc (The)	GS	2.31%	26.66%	164.01	--	--	--	--
164	Grainger (W.W.) Inc	GWW	0.76%	5.60%	53.82	53.82	0.0017	0.000013	0.000097
165	Halliburton Co	HAL	2.57%	10.80%	24.44	24.44	0.0008	0.000020	0.000085

IBES

	(a)		(a)	(b)	(a)				
								Weighted	
	Company	Ticker	Dividend Yield	IBES EPS Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
166	Hasbro Inc.	HAS	4.25%	27.50%	9.18	--	--	--	--
167	Huntington Bancshares Inc	HBAN	4.20%	4.64%	22.49	22.49	0.0007	0.000030	0.000033
168	HCA Healthcare Inc	HCA	0.74%	11.43%	90.48	90.48	0.0029	0.000021	0.000331
169	Home Depot Inc. (The)	HD	2.29%	3.80%	389.96	389.96	0.0125	0.000286	0.000475
170	Hess Corp	HES	1.45%	n/a	42.44	--	--	--	--
171	Hartford Financial Services Group Inc	HIG	1.71%	12.60%	31.91	31.91	0.0010	0.000017	0.000129
172	Huntington Ingalls Industries Inc	HII	2.75%	4.53%	7.40	7.40	0.0002	0.000007	0.000011
173	Hilton Worldwide Holdings Inc	HLT	0.25%	12.03%	57.65	57.65	0.0018	0.000005	0.000222
174	Honeywell International Inc	HON	2.07%	8.11%	136.03	136.03	0.0044	0.000090	0.000353
175	Hewlett Packard Enterprise Co	HPE	2.59%	2.62%	26.05	26.05	0.0008	0.000022	0.000022
176	HP Inc	HPQ	3.06%	4.10%	34.96	34.96	0.0011	0.000034	0.000046
177	Hormel Foods Corp	HRL	3.65%	6.20%	16.96	16.96	0.0005	0.000020	0.000034
178	Host Hotels & Resorts Inc	HST	6.23%	n/a	12.17	--	--	--	--
179	Hershey Co (The)	HSY	3.19%	0.67%	36.26	36.26	0.0012	0.000037	0.000008
180	Hubbell Inc	HUBB	1.16%	7.60%	22.85	22.85	0.0007	0.000008	0.000056
181	Humana Inc.	HUM	1.36%	-2.64%	31.39	--	--	--	--
182	Howmet Aerospace Inc	HWM	0.26%	29.10%	40.83	--	--	--	--
183	International Business Machines Corp	IBM	3.22%	3.80%	192.56	192.56	0.0062	0.000199	0.000234
184	Intercontinental Exchange Inc	ICE	1.16%	10.25%	88.79	88.79	0.0028	0.000033	0.000292
185	IDEX Corp	IEX	1.32%	12.00%	16.36	16.36	0.0005	0.000007	0.000063
186	International Flavors & Fragrances Inc	IFF	1.62%	13.11%	25.29	25.29	0.0008	0.000013	0.000106
187	Intuit Inc.	INTU	0.75%	14.20%	174.27	174.27	0.0056	0.000042	0.000793
188	Invitation Homes Inc	INVH	3.69%	3.57%	19.24	19.24	0.0006	0.000023	0.000022
189	International Paper Company	IP	3.32%	n/a	19.37	--	--	--	--
190	Interpublic Group of Cos Inc (The)	IPG	4.58%	3.60%	10.98	10.98	0.0004	0.000016	0.000013
191	Ingersoll Rand Inc	IR	0.09%	10.24%	37.90	37.90	0.0012	0.000001	0.000124
192	Iron Mountain Inc	IRM	2.31%	n/a	35.54	--	--	--	--
193	Illinois Tool Works Inc.	ITW	2.28%	5.03%	77.69	77.69	0.0025	0.000057	0.000125
194	Invesco Ltd	IVZ	4.89%	12.44%	7.99	7.99	0.0003	0.000013	0.000032
195	Jacobs Solutions Inc	J	0.86%	n/a	17.35	--	--	--	--
196	J.B. Hunt Transport Services Inc.	JBHT	0.98%	7.60%	18.46	18.46	0.0006	0.000006	0.000045
197	Jabil Inc	JBL	0.25%	12.70%	14.41	14.41	0.0005	0.000001	0.000059
198	Johnson Controls International Plc	JCI	1.96%	8.83%	50.44	50.44	0.0016	0.000032	0.000143
199	Henry (Jack) & Associates Inc	JKHY	1.20%	9.70%	13.35	13.35	0.0004	0.000005	0.000041
200	Johnson & Johnson	JNJ	3.16%	3.00%	385.53	385.53	0.0123	0.000390	0.000370
201	Juniper Networks Inc	JNPR	2.26%	n/a	12.84	--	--	--	--
202	JPMorgan Chase & Co	JPM	2.33%	2.62%	627.65	627.65	0.0201	0.000469	0.000527
203	Kellanova	K	2.85%	8.63%	27.79	27.79	0.0009	0.000025	0.000077
204	Keurig Dr Pepper Inc	KDP	2.89%	6.91%	44.52	44.52	0.0014	0.000041	0.000098
205	KeyCorp	KEY	4.83%	16.85%	17.04	17.04	0.0005	0.000026	0.000092
206	The Kraft Heinz Co	KHC	4.78%	2.68%	40.50	40.50	0.0013	0.000062	0.000035
207	Kimco Realty Corp	KIM	4.20%	-11.06%	16.06	--	--	--	--
208	KKR & Co Inc	KKR	0.51%	30.05%	122.09	--	--	--	--
209	KLA Corp	KLAC	0.87%	15.16%	89.54	89.54	0.0029	0.000025	0.000435
210	Kimberly-Clark Corp	KMB	3.63%	7.17%	44.89	44.89	0.0014	0.000052	0.000103
211	Kinder Morgan Inc.	KMI	4.76%	8.50%	53.72	53.72	0.0017	0.000082	0.000146
212	Coca-Cola Co (The)	KO	3.11%	5.25%	280.05	280.05	0.0090	0.000279	0.000471
213	Kroger Co. (The)	KR	2.26%	n/a	40.93	--	--	--	--
214	Kenvue Inc	KVUE	3.61%	1.05%	43.53	43.53	0.0014	0.000050	0.000015
215	Loews Corp	L	0.32%	n/a	17.40	--	--	--	--
216	Leidos Holdings Inc	LDOS	0.83%	12.70%	24.41	24.41	0.0008	0.000006	0.000099
217	Lennar Corp	LEN	1.18%	9.10%	40.52	40.52	0.0013	0.000015	0.000118
218	Labcorp Holdings Inc	LH	1.27%	8.23%	18.99	18.99	0.0006	0.000008	0.000050
219	L3Harris Technologies Inc	LHX	1.88%	8.41%	46.94	46.94	0.0015	0.000028	0.000126
220	Linde Plc	LIN	1.22%	9.31%	217.75	217.75	0.0070	0.000085	0.000649

IBES

	(a)		(a)	(b)	(a)				
								Weighted	
	Company	Ticker	Dividend Yield	IBES EPS Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
221	LKQ Corporation	LKQ	3.25%	n/a	9.59	--	--	--	--
222	Eli Lilly and Co	LLY	0.63%	71.70%	777.42	--	--	--	--
223	Lockheed Martin Corp	LMT	2.39%	4.34%	129.27	129.27	0.0041	0.000099	0.000180
224	Alliant Energy Corporation	LNT	3.33%	7.70%	14.81	14.81	0.0005	0.000016	0.000037
225	Lowe's Cos Inc	LOW	1.76%	2.60%	4.04	4.04	0.0001	0.000002	0.000003
226	Lam Research Corp	LRCX	1.20%	17.90%	96.24	96.24	0.0031	0.000037	0.000552
227	Southwest Airlines Co.	LUV	2.35%	18.90%	18.36	18.36	0.0006	0.000014	0.000111
228	Las Vegas Sands Corp	LVS	1.55%	14.84%	37.51	37.51	0.0012	0.000019	0.000178
229	Lamb Weston Holdings Inc	LW	2.02%	2.70%	10.99	10.99	0.0004	0.000007	0.000010
230	LyondellBasell Industries NV	LYB	6.19%	6.19%	28.14	28.14	0.0009	0.000056	0.000056
231	Mastercard Inc	MA	0.57%	16.51%	466.33	466.33	0.0149	0.000086	0.002466
232	Mid-America Apartment Communities Inc	MAA	3.94%	-0.78%	17.43	--	--	--	--
233	Marriott International Inc	MAR	0.97%	5.55%	73.36	73.36	0.0023	0.000023	0.000130
234	Masco Corporation	MAS	1.46%	7.40%	17.30	17.30	0.0006	0.000008	0.000041
235	McDonald's Corp	MCD	2.42%	4.48%	211.77	211.77	0.0068	0.000164	0.000304
236	Microchip Technology Inc	MCHP	2.47%	-10.90%	40.14	--	--	--	--
237	McKesson Corp	MCK	0.54%	13.85%	68.25	68.25	0.0022	0.000012	0.000303
238	Moody's Corp.	MCO	0.75%	16.62%	82.69	82.69	0.0026	0.000020	0.000440
239	Mondelez International Inc	MDLZ	2.74%	5.60%	91.61	91.61	0.0029	0.000081	0.000164
240	Medtronic PLC	MDT	3.11%	5.51%	115.51	115.51	0.0037	0.000115	0.000204
241	MetLife Inc	MET	2.78%	13.60%	54.41	54.41	0.0017	0.000048	0.000237
242	Meta Platforms Inc	META	0.35%	17.07%	1,431.79	1,431.79	0.0459	0.000162	0.007828
243	McCormick & Co Inc	MKC	2.13%	7.83%	19.86	19.86	0.0006	0.000014	0.000050
244	MarketAxess Holdings Inc	MKTX	1.03%	7.65%	10.85	10.85	0.0003	0.000004	0.000027
245	Martin Marietta Materials Inc	MLM	0.54%	8.70%	35.46	35.46	0.0011	0.000006	0.000099
246	Marsh & McLennan Companies Inc	MMC	1.49%	8.75%	107.60	107.60	0.0034	0.000051	0.000302
247	3M Co	MMM	2.20%	-3.92%	69.28	--	--	--	--
248	Altria Group Inc	MO	7.57%	3.91%	91.30	91.30	0.0029	0.000222	0.000114
249	Mosaic Company (The)	MOS	3.12%	n/a	8.57	--	--	--	--
250	Marathon Petroleum Corp	MPC	2.31%	-1.40%	47.90	--	--	--	--
251	Monolithic Power Systems Inc	MPWR	0.66%	n/a	37.04	--	--	--	--
252	Merck & Co Inc	MRK	3.02%	90.25%	258.25	--	--	--	--
253	Marathon Oil Corp	MRO	1.61%	12.60%	15.25	15.25	0.0005	0.000008	0.000062
254	Morgan Stanley	MS	3.17%	19.15%	188.36	188.36	0.0060	0.000191	0.001155
255	MSCI Inc	MSCI	1.11%	12.10%	45.29	45.29	0.0015	0.000016	0.000175
256	Microsoft Corp	MSFT	0.83%	13.95%	3,051.05	3,051.05	0.0977	0.000812	0.013629
257	Motorola Solutions Inc	MSI	0.86%	10.10%	75.73	75.73	0.0024	0.000021	0.000245
258	M&T Bank Corp	MTB	2.81%	4.29%	32.11	32.11	0.0010	0.000029	0.000044
259	Micron Technology Inc.	MU	0.47%	n/a	110.57	--	--	--	--
260	Nasdaq Inc	NDAQ	1.29%	8.75%	42.72	42.72	0.0014	0.000018	0.000120
261	Nordson Corp	NDSN	1.25%	13.00%	14.24	14.24	0.0005	0.000006	0.000059
262	NextEra Energy Inc	NEE	2.79%	8.18%	158.98	158.98	0.0051	0.000142	0.000416
263	Newmont Corporation	NEM	2.21%	25.40%	51.53	--	--	--	--
264	NiSource Inc	NI	3.22%	7.95%	16.10	16.10	0.0005	0.000017	0.000041
265	NIKE Inc	NKE	1.90%	4.92%	116.19	116.19	0.0037	0.000071	0.000183
266	Northrop Grumman Corp	NOC	1.71%	8.40%	73.86	73.86	0.0024	0.000040	0.000199
267	NRG Energy Inc	NRG	1.88%	n/a	17.90	--	--	--	--
268	Norfolk Southern Corp	NSC	2.16%	8.90%	56.58	56.58	0.0018	0.000039	0.000161
269	NetApp Inc	NTAP	1.79%	7.40%	23.78	23.78	0.0008	0.000014	0.000056
270	Northern Trust Corp	NTRS	3.00%	9.52%	19.81	19.81	0.0006	0.000019	0.000060
271	Nucor Corp	NUE	1.59%	n/a	34.07	--	--	--	--
272	NVIDIA Corporation	NVDA	0.06%	57.38%	3,321.36	--	--	--	--
273	News Corp	NWSA	0.73%	n/a	10.36	--	--	--	--
274	NXP Semiconductors NV	NXPI	1.70%	9.56%	60.78	60.78	0.0019	0.000033	0.000186
275	Realty Income Corp	O	5.42%	n/a	51.28	--	--	--	--

IBES

	(a)		(a)	(b)	(a)				
				IBES	**Market**			**Weighted**	
	Company	**Ticker**	**Dividend Yield**	**EPS Growth**	**Cap ($bil.)**	**Mkt. Cap.**	**Weight**	**Dividend Yield**	**Growth Rate**
276	Old Dominion Freight Line Inc	ODFL	0.53%	8.10%	43.07	43.07	0.0014	0.000007	0.000112
277	ONEOK Inc	OKE	4.32%	4.10%	54.54	54.54	0.0017	0.000075	0.000072
278	Omnicom Group Inc	OMC	2.77%	7.90%	19.72	19.72	0.0006	0.000017	0.000050
279	Oracle Corp	ORCL	0.94%	11.54%	471.14	471.14	0.0151	0.000142	0.001742
280	Otis Worldwide Corp	OTIS	1.57%	9.40%	39.83	39.83	0.0013	0.000020	0.000120
281	Occidental Petroleum Corp	OXY	1.98%	-1.20%	46.36	--	--	--	--
282	Paramount Global	PARA	1.82%	46.35%	6.87	--	--	--	--
283	Paycom Software Inc	PAYC	0.71%	8.67%	12.15	12.15	0.0004	0.000003	0.000034
284	Paychex Inc.	PAYX	2.99%	6.93%	50.06	50.06	0.0016	0.000048	0.000111
285	PACCAR Inc	PCAR	4.23%	n/a	54.19	--	--	--	--
286	PG&E Corp	PCG	0.30%	9.60%	52.41	52.41	0.0017	0.000005	0.000161
287	Public Service Enterprise Group Inc	PEG	2.82%	4.30%	43.49	43.49	0.0014	0.000039	0.000060
288	PepsiCo Inc	PEP	3.32%	6.42%	227.19	227.19	0.0073	0.000242	0.000467
289	Pfizer Inc	PFE	5.98%	18.73%	159.18	159.18	0.0051	0.000305	0.000955
290	Principal Financial Group Inc	PFG	3.50%	12.20%	18.80	18.80	0.0006	0.000021	0.000073
291	Procter & Gamble Co (The)	PG	2.44%	6.48%	388.82	388.82	0.0125	0.000304	0.000806
292	Progressive Corp (The)	PGR	0.16%	49.00%	142.19	--	--	--	--
293	Parker-Hannifin Corp	PH	1.03%	8.79%	81.71	81.71	0.0026	0.000027	0.000230
294	PulteGroup Inc	PHM	0.65%	7.85%	26.33	26.33	0.0008	0.000006	0.000066
295	Packaging Corp Of America	PKG	2.17%	n/a	20.66	--	--	--	--
296	Prologis Inc	PLD	3.54%	n/a	105.03	--	--	--	--
297	Philip Morris International Inc	PM	4.13%	9.98%	203.14	203.14	0.0065	0.000269	0.000649
298	The PNC Financial Services Group Inc	PNC	3.42%	5.40%	74.39	74.39	0.0024	0.000081	0.000129
299	Pentair plc	PNR	0.93%	14.35%	16.27	16.27	0.0005	0.000005	0.000075
300	Pinnacle West Capital Corp	PNW	4.19%	7.20%	9.75	9.75	0.0003	0.000013	0.000022
301	Pool Corp	POOL	1.35%	n/a	13.82	--	--	--	--
302	PPG Industries Inc.	PPG	2.19%	8.10%	28.86	28.86	0.0009	0.000020	0.000075
303	PPL Corp	PPL	3.26%	6.80%	23.28	23.28	0.0007	0.000024	0.000051
304	Prudential Financial Inc	PRU	4.45%	8.90%	43.30	43.30	0.0014	0.000062	0.000123
305	Public Storage	PSA	3.71%	0.55%	56.68	56.68	0.0018	0.000067	0.000010
306	Phillips 66	PSX	3.87%	-7.05%	49.56	--	--	--	--
307	Quanta Services Inc.	PWR	0.13%	n/a	44.80	--	--	--	--
308	QUALCOMM Inc.	QCOM	2.06%	12.63%	184.11	184.11	0.0059	0.000121	0.000745
309	Royal Caribbean Group	RCL	0.79%	33.05%	54.33	--	--	--	--
310	Regency Centers Corp.	REG	3.75%	-5.59%	12.96	--	--	--	--
311	Regions Financial Corp	RF	4.50%	2.60%	21.56	21.56	0.0007	0.000031	0.000018
312	Raymond James Financial Inc.	RJF	1.42%	14.20%	29.33	29.33	0.0009	0.000013	0.000133
313	Ralph Lauren Corp	RL	1.67%	10.45%	12.24	12.24	0.0004	0.000007	0.000041
314	Resmed Inc	RMD	0.87%	13.58%	35.86	35.86	0.0011	0.000010	0.000156
315	Rockwell Automation Inc.	ROK	1.86%	0.23%	30.49	30.49	0.0010	0.000018	0.000002
316	Rollins Inc	ROL	1.27%	n/a	22.92	--	--	--	--
317	Roper Technologies Inc	ROP	0.61%	8.50%	57.99	57.99	0.0019	0.000011	0.000158
318	Ross Stores Inc	ROST	1.12%	9.93%	46.47	46.47	0.0015	0.000017	0.000148
319	Republic Services Inc.	RSG	1.17%	9.99%	62.19	62.19	0.0020	0.000023	0.000199
320	RTX Corp	RTX	2.12%	10.99%	158.06	158.06	0.0051	0.000107	0.000557
321	Revvity Inc	RVTY	0.23%	8.20%	14.93	14.93	0.0005	0.000001	0.000039
322	SBA Communications Corp	SBAC	1.76%	25.53%	24.25	--	--	--	--
323	Starbucks Corp	SBUX	2.37%	7.87%	112.07	112.07	0.0036	0.000085	0.000283
324	Schwab (Charles) Corp	SCHW	1.41%	13.99%	129.77	129.77	0.0042	0.000059	0.000582
325	Sherwin-Williams Co (The)	SHW	0.84%	11.15%	90.16	90.16	0.0029	0.000024	0.000322
326	The J M Smucker Company	SJM	3.83%	4.40%	12.02	12.02	0.0004	0.000015	0.000017
327	Schlumberger Ltd	SLB	2.92%	13.90%	56.15	56.15	0.0018	0.000052	0.000250
328	Snap-On Inc	SNA	2.30%	4.80%	17.34	17.34	0.0006	0.000013	0.000027
329	Southern Co (The)	SO	3.25%	7.31%	97.01	97.01	0.0031	0.000101	0.000227
330	Simon Property Group Inc	SPG	5.09%	n/a	54.68	--	--	--	--

IBES

	(a)		(a)	(b)	(a)				
				IBES	Market			Weighted	
	Company	Ticker	Dividend Yield	EPS Growth	Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
331	S&P Global Inc	SPGI	0.75%	14.64%	149.97	149.97	0.0048	0.000036	0.000703
332	Sempra	SRE	3.14%	5.90%	51.70	51.70	0.0017	0.000052	0.000098
333	Steris Plc	STE	1.01%	n/a	22.21	--	--	--	--
334	Steel Dynamics Inc	STLD	1.44%	n/a	20.62	--	--	--	--
335	State Street Corporation	STT	3.37%	9.82%	27.20	27.20	0.0009	0.000029	0.000086
336	Seagate Technology Holdings plc	STX	2.83%	n/a	20.96	--	--	--	--
337	Constellation Brands Inc	STZ	1.79%	10.64%	42.26	42.26	0.0014	0.000024	0.000144
338	Stanley Black & Decker Inc	SWK	3.51%	15.82%	14.40	14.40	0.0005	0.000016	0.000073
339	Skyworks Solutions Inc	SWKS	3.17%	n/a	14.20	--	--	--	--
340	Synchrony Financial	SYF	1.81%	15.20%	21.51	21.51	0.0007	0.000012	0.000105
341	Stryker Corp	SYK	0.90%	11.59%	139.96	139.96	0.0045	0.000040	0.000520
342	Sysco Corporation	SYY	2.72%	7.35%	36.86	36.86	0.0012	0.000032	0.000087
343	AT&T Inc	T	5.02%	-0.10%	158.72	--	--	--	--
344	Molson Coors Beverage Company	TAP	3.25%	2.64%	11.11	11.11	0.0004	0.000012	0.000009
345	Bio-Techne Corp	TECH	0.42%	11.29%	11.95	11.95	0.0004	0.000002	0.000043
346	TE Connectivity plc	TEL	1.73%	7.10%	44.99	44.99	0.0014	0.000025	0.000102
347	Teradyne Inc	TER	0.47%	n/a	17.38	--	--	--	--
348	Truist Financial Corp	TFC	4.93%	6.36%	56.84	56.84	0.0018	0.000090	0.000116
349	Teleflex Inc	TFX	0.64%	7.90%	9.81	9.81	0.0003	0.000002	0.000025
350	Target Corp	TGT	2.97%	8.22%	69.49	69.49	0.0022	0.000066	0.000183
351	TJX Companies Inc (The)	TJX	1.38%	9.31%	126.76	126.76	0.0041	0.000056	0.000378
352	Thermo Fisher Scientific Inc	TMO	0.28%	6.14%	213.12	213.12	0.0068	0.000019	0.000419
353	T-Mobile US Inc	TMUS	1.23%	20.62%	259.11	--	--	--	--
354	Tapestry Inc	TPR	2.98%	4.00%	10.93	10.93	0.0004	0.000010	0.000014
355	Targa Resources Corp	TRGP	1.97%	21.70%	36.21	--	--	--	--
356	T. Rowe Price Group Inc	TROW	4.59%	8.10%	24.94	24.94	0.0008	0.000037	0.000065
357	Travelers Companies Inc (The)	TRV	1.71%	16.40%	55.76	55.76	0.0018	0.000031	0.000293
358	Tractor Supply Co	TSCO	1.74%	7.93%	28.75	28.75	0.0009	0.000016	0.000073
359	Tyson Foods Inc.	TSN	3.36%	47.90%	20.77	--	--	--	--
360	Trane Technologies plc	TT	0.89%	14.77%	84.64	84.64	0.0027	0.000024	0.000400
361	Texas Instruments Inc	TXN	2.54%	-2.70%	186.93	--	--	--	--
362	Textron Inc	TXT	0.10%	10.80%	15.11	15.11	0.0005	0.000000	0.000052
363	UDR Inc	UDR	4.24%	21.18%	13.63	--	--	--	--
364	Universal Health Services Inc.	UHS	0.39%	25.31%	13.56	--	--	--	--
365	UnitedHealth Group Incorporated	UNH	1.48%	11.74%	524.10	524.10	0.0168	0.000248	0.001970
366	Union Pacific Corp	UNP	2.30%	10.60%	141.07	141.07	0.0045	0.000104	0.000479
367	United Parcel Service Inc	UPS	4.86%	2.10%	114.82	114.82	0.0037	0.000179	0.000077
368	United Rentals Inc.	URI	0.82%	7.40%	52.07	52.07	0.0017	0.000014	0.000123
369	U.S. Bancorp	USB	4.18%	3.32%	74.68	74.68	0.0024	0.000100	0.000079
370	Visa Inc	V	0.79%	12.70%	571.56	571.56	0.0183	0.000145	0.002325
371	VICI Properties Inc	VICI	5.50%	n/a	33.14	--	--	--	--
372	Valero Energy Corp	VLO	3.34%	-20.80%	40.59	--	--	--	--
373	Veralto Corp	VLTO	0.35%	6.96%	25.12	25.12	0.0008	0.000003	0.000056
374	Vulcan Materials Co	VMC	0.68%	12.65%	35.71	35.71	0.0011	0.000008	0.000145
375	Verisk Analytics Inc	VRSK	0.57%	12.23%	38.90	38.90	0.0012	0.000007	0.000152
376	Vistra Corp	VST	0.74%	n/a	41.06	--	--	--	--
377	Ventas Inc.	VTR	2.90%	n/a	26.92	--	--	--	--
378	Viatris Inc	VTRS	4.13%	-3.80%	13.87	--	--	--	--
379	Verizon Communications Inc	VZ	6.55%	1.14%	174.11	174.11	0.0056	0.000365	0.000063
380	Westinghouse Air Brake Technologies Corp	WAB	0.45%	14.15%	32.12	32.12	0.0010	0.000005	0.000146
381	Walgreens Boots Alliance Inc	WBA	10.57%	-16.95%	8.18	--	--	--	--
382	WEC Energy Group Inc	WEC	3.49%	5.87%	30.23	30.23	0.0010	0.000034	0.000057
383	Welltower Inc	WELL	2.07%	55.38%	82.99	--	--	--	--
384	Wells Fargo & Co	WFC	2.55%	7.85%	216.39	216.39	0.0069	0.000177	0.000544
385	Waste Management Inc.	WM	1.40%	12.99%	85.89	85.89	0.0028	0.000039	0.000357

IBES

			(a)	(a)	(b)	(a)			Weighted	
	Company	**Ticker**	**Dividend Yield**	**IBES EPS Growth**	**Market Cap ($bil.)**	**Mkt. Cap.**	**Weight**	**Dividend Yield**	**Growth Rate**
386	Williams Cos Inc. (The)	WMB	3.69%	5.45%	62.85	62.85	0.0020	0.000074	0.000110
387	Walmart Inc	WMT	1.01%	10.17%	660.66	660.66	0.0212	0.000214	0.002153
388	Berkley (W.R.) Corp	WRB	0.56%	12.70%	21.92	21.92	0.0007	0.000004	0.000089
389	West Pharmaceutical Services Inc.	WST	0.25%	1.79%	22.92	22.92	0.0007	0.000002	0.000013
390	Willis Towers Watson plc	WTW	1.20%	9.50%	30.15	30.15	0.0010	0.000012	0.000092
391	Weyerhaeuser Co	WY	2.57%	n/a	22.65	--	--	--	--
392	Wynn Resorts Ltd	WYNN	1.05%	7.52%	10.62	10.62	0.0003	0.000004	0.000026
393	Xcel Energy Inc.	XEL	3.40%	6.73%	38.30	38.30	0.0012	0.000042	0.000083
394	Exxon Mobil Corp	XOM	3.31%	3.40%	510.70	510.70	0.0164	0.000541	0.000556
395	Xylem Inc	XYL	1.28%	14.66%	29.02	29.02	0.0009	0.000012	0.000136
396	YUM Brands Inc	YUM	2.03%	11.37%	37.21	37.21	0.0012	0.000024	0.000136
397	Zimmer Biomet Holdings Inc	ZBH	0.90%	6.86%	21.35	21.35	0.0007	0.000006	0.000047
398	Zoetis Inc	ZTS	0.95%	9.47%	82.43	82.43	0.0026	0.000025	0.000250
						31,217.75	1.0000		
	Weighted Average							**1.69%**	**10.64%**

n/a Not Available

(a) www.valueline.com (retrieved Nov. 3, 2024).

(b) IBES growth rates from Refinitiv as provided by fidelity.com (retrieved Nov. 3, 2024). Eliminated growth rates greater than 20%, as well as all negative values.

Exhibit No. TRANSCO-207

VALUE LINE

		(a)	(b)		(c)		(d)		(e)	(f)		
		Market Return (R_m)				Market						
		Div	Proj.		Risk-Free	Risk		Unadjusted	Market	Size	CAPM	Break
	Company	Yield	Growth	$R_{(m)}$	Rate	Premium	Beta	K_e	Cap	Adjustment	Result	(B Pts)
1	Exelon Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	n/a	n/a	$36,900	0.46%	n/a	--
2	CenterPoint Energy	1.73%	9.72%	11.45%	4.35%	7.10%	1.15	12.52%	$17,400	0.46%	12.97%	0
3	PPL Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	1.15	12.52%	$21,900	0.46%	12.97%	20
4	OGE Energy Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	1.10	12.16%	$8,000	0.61%	12.77%	1
5	Black Hills Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	1.05	11.81%	$4,100	0.95%	12.76%	36
6	NorthWestern Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	1.00	11.45%	$3,400	0.95%	12.40%	9
7	Avista Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	0.95	11.10%	$2,900	1.21%	12.31%	5
8	Edison International	1.73%	9.72%	11.45%	4.35%	7.10%	1.05	11.81%	$32,700	0.46%	12.26%	21
9	Otter Tail Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	0.95	11.10%	$3,800	0.95%	12.05%	14
10	DTE Energy Co.	1.73%	9.72%	11.45%	4.35%	7.10%	1.00	11.45%	$25,800	0.46%	11.91%	0
11	Entergy Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	1.00	11.45%	$25,600	0.46%	11.91%	16
12	NextEra Energy, Inc.	1.73%	9.72%	11.45%	4.35%	7.10%	1.05	11.81%	$153,000	-0.06%	11.75%	5
13	Evergy Inc.	1.73%	9.72%	11.45%	4.35%	7.10%	0.95	11.10%	$13,600	0.61%	11.70%	0
14	Pinnacle West Capital	1.73%	9.72%	11.45%	4.35%	7.10%	0.95	11.10%	$9,900	0.61%	11.70%	1
15	TXNM Energy	1.73%	9.72%	11.45%	4.35%	7.10%	0.90	10.74%	$3,900	0.95%	11.69%	14
16	Eversource Energy	1.73%	9.72%	11.45%	4.35%	7.10%	0.95	11.10%	$22,900	0.46%	11.55%	16
17	Sempra Energy	1.73%	9.72%	11.45%	4.35%	7.10%	1.00	11.45%	$51,600	-0.06%	11.39%	16
18	Alliant Energy	1.73%	9.72%	11.45%	4.35%	7.10%	0.90	10.74%	$14,900	0.61%	11.35%	4
19	Ameren Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	0.90	10.74%	$22,000	0.46%	11.20%	15
20	FirstEnergy Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	0.90	10.74%	$23,900	0.46%	11.20%	0
21	Pub Sv Enterprise Grp.	1.73%	9.72%	11.45%	4.35%	7.10%	0.95	11.10%	$38,300	-0.06%	11.04%	16
22	Southern Company	1.73%	9.72%	11.45%	4.35%	7.10%	0.95	11.10%	$90,800	-0.06%	11.04%	0
23	IDACORP, Inc.	1.73%	9.72%	11.45%	4.35%	7.10%	0.85	10.39%	$5,400	0.64%	11.03%	1
24	CMS Energy Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	0.85	10.39%	$20,200	0.46%	10.84%	19
25	WEC Energy Group	1.73%	9.72%	11.45%	4.35%	7.10%	0.85	10.39%	$29,400	0.46%	10.84%	0
26	Xcel Energy Inc.	1.73%	9.72%	11.45%	4.35%	7.10%	0.85	10.39%	$35,100	0.46%	10.84%	0
27	Dominion Energy	1.73%	9.72%	11.45%	4.35%	7.10%	0.90	10.74%	$44,300	-0.06%	10.68%	16
28	Duke Energy Corp.	1.73%	9.72%	11.45%	4.35%	7.10%	0.90	10.74%	$83,900	-0.06%	10.68%	0
29	Consolidated Edison	1.73%	9.72%	11.45%	4.35%	7.10%	0.80	10.03%	$33,500	0.46%	10.49%	19
30	American Elec Pwr	1.73%	9.72%	11.45%	4.35%	7.10%	0.85	10.39%	$52,700	-0.06%	10.33%	16
31	Fortis Inc.	1.73%	9.72%	11.45%	4.35%	7.10%	0.75	9.68%	$29,300	0.46%	10.13%	20
	Lower End (g)										**10.13%**	
	Upper End (g)										**12.97%**	
	Median (g)										**11.47%**	
	Midpoint										**11.55%**	
	Median - All Values										**11.47%**	
	Low-End Test (h)										**7.14%**	
	High-End Test (i)										**22.94%**	

(a) Weighted average for dividend-paying stocks in the S&P 500 based on data from www.valueline.com (retrieved Nov. 3, 2024).
(b) www.valueline.com (retrieved Nov. 3, 2024).. Eliminated growth rates greater than 20%, as well as all negative values.
(c) Six-month average yield on 30-year Treasury bonds for Oct. 2024 from https://fred.stlouisfed.org/.
(d) The Value Line Investment Survey, Summary & Index (Nov. 1, 2024).
(e) The Value Line Investment Survey (Aug. 9, Sep. 6 and Oct. 18, 2024).
(f) Kroll, 2023 CRSP Deciles Size Premium, Cost of Capital Navigator (2024).
(g) Excludes highlighted values.
(h) Average Baa utility bond yield for six-months ending Oct. 2024, plus 20% of Value Line CAPM market risk premium.
(i) 200% of Median - All Values.

Exhibit No. TRANSCO-208

VALUE LINE

	(a)		(a)	(b)	(a)			Weighted	
	Company	**Ticker**	**Dividend Yield**	**Value Line Growth**	**Market Cap ($bil.)**	**Mkt. Cap.**	**Weight**	**Dividend Yield**	**Growth Rate**
1	Agilent Technologies Inc	A	0.69%	8.00%	39.33	39.33	0.0011	0.000008	0.000091
2	Apple Inc	AAPL	0.45%	8.50%	3,369.68	3,369.68	0.0975	0.000437	0.008284
3	AbbVie Inc	ABBV	3.05%	4.00%	359.54	359.54	0.0104	0.000317	0.000416
4	Abbott Laboratories	ABT	1.85%	4.00%	205.71	205.71	0.0059	0.000110	0.000238
5	Accenture PLC	ACN	1.71%	8.50%	232.53	232.53	0.0067	0.000115	0.000572
6	Analog Devices Inc	ADI	1.63%	7.50%	111.95	111.95	0.0032	0.000053	0.000243
7	Archer-Daniels-Midland Co	ADM	3.66%	3.50%	26.13	26.13	0.0008	0.000028	0.000026
8	Automatic Data Processing Inc	ADP	2.11%	10.50%	117.49	117.49	0.0034	0.000072	0.000357
9	Ameren Corporation	AEE	3.12%	6.00%	22.91	22.91	0.0007	0.000021	0.000040
10	American Electric Power Co Inc	AEP	3.70%	6.50%	51.75	51.75	0.0015	0.000055	0.000097
11	AES Corp (The)	AES	4.83%	n/a	10.46	--	--	--	--
12	Aflac Incorporated	AFL	2.00%	7.50%	58.29	58.29	0.0017	0.000034	0.000126
13	American International Group Inc	AIG	2.17%	8.50%	48.76	48.76	0.0014	0.000031	0.000120
14	Assurant Inc.	AIZ	1.50%	10.50%	9.93	9.93	0.0003	0.000004	0.000030
15	Arthur J. Gallagher & Co.	AJG	0.89%	15.50%	61.52	61.52	0.0018	0.000016	0.000276
16	Albemarle Corp	ALB	1.63%	-3.50%	11.55	--	--	--	--
17	The Allstate Corporation	ALL	2.00%	30.00%	48.76	--	--	--	--
18	Allegion PLC	ALLE	1.37%	8.50%	12.16	12.16	0.0004	0.000005	0.000030
19	Applied Materials Inc	AMAT	0.77%	10.00%	151.18	151.18	0.0044	0.000034	0.000437
20	Amcor Plc	AMCR	4.87%	7.50%	14.83	14.83	0.0004	0.000021	0.000032
21	AMETEK Inc	AME	0.63%	8.00%	41.27	41.27	0.0012	0.000007	0.000095
22	Amgen Inc	AMGN	2.91%	4.50%	171.59	171.59	0.0050	0.000145	0.000223
23	Ameriprise Financial Inc	AMP	1.21%	13.00%	49.80	49.80	0.0014	0.000017	0.000187
24	American Tower Corp	AMT	3.38%	11.00%	98.72	98.72	0.0029	0.000097	0.000314
25	Aon plc	AON	0.74%	10.50%	78.81	78.81	0.0023	0.000017	0.000239
26	A. O. Smith Corp	AOS	1.80%	9.00%	8.98	8.98	0.0003	0.000005	0.000023
27	APA Corporation	APA	4.33%	6.00%	8.54	8.54	0.0002	0.000011	0.000015
28	Air Products and Chemicals Inc.	APD	2.29%	8.50%	68.74	68.74	0.0020	0.000046	0.000169
29	Amphenol Corp	APH	0.97%	14.00%	81.81	81.81	0.0024	0.000023	0.000331
30	Alexandria Real Estate Equities Inc.	ARE	4.69%	9.50%	19.37	19.37	0.0006	0.000026	0.000053
31	Atmos Energy Corp	ATO	2.50%	7.00%	21.48	21.48	0.0006	0.000016	0.000043
32	AvalonBay Communities Inc.	AVB	3.24%	5.50%	30.86	30.86	0.0009	0.000029	0.000049
33	Broadcom Inc	AVGO	1.24%	17.50%	788.95	788.95	0.0228	0.000284	0.003993
34	Avery Dennison Corp	AVY	1.78%	2.00%	16.56	16.56	0.0005	0.000009	0.000010
35	American Water Works Company Inc	AWK	2.33%	4.00%	26.51	26.51	0.0008	0.000018	0.000031
36	American Express Co	AXP	1.11%	9.00%	192.10	192.10	0.0056	0.000062	0.000500
37	Bank of America Corp	BAC	2.59%	7.00%	320.42	320.42	0.0093	0.000240	0.000649
38	Ball Corporation	BALL	1.36%	9.50%	17.61	17.61	0.0005	0.000007	0.000048
39	Baxter International Inc	BAX	3.23%	3.00%	18.30	18.30	0.0005	0.000017	0.000016
40	Best Buy Co Inc	BBY	4.20%	1.00%	19.52	19.52	0.0006	0.000024	0.000006
41	Becton Dickinson and Co	BDX	1.67%	6.00%	67.99	67.99	0.0020	0.000033	0.000118
42	Franklin Resources Inc	BEN	5.95%	1.00%	10.90	10.90	0.0003	0.000019	0.000003
43	Brown-Forman Corp	BF/B	2.20%	14.00%	13.23	13.23	0.0004	0.000008	0.000054
44	Bunge Global SA	BG	3.36%	-0.50%	11.54	--	--	--	--
45	Bank of New York Mellon Corp (The)	BK	2.50%	11.00%	54.76	54.76	0.0016	0.000040	0.000174
46	Booking Holdings Inc	BKNG	0.74%	17.00%	157.18	157.18	0.0045	0.000034	0.000773
47	Baker Hughes a GE Co	BKR	2.38%	29.00%	37.45	--	--	--	--
48	BlackRock Inc	BLK	2.25%	9.50%	157.74	157.74	0.0046	0.000103	0.000433
49	Bristol-Myers Squibb Co	BMY	4.42%	1.00%	110.17	110.17	0.0032	0.000141	0.000032
50	Broadridge Financial Solutions Inc	BR	1.67%	9.50%	24.57	24.57	0.0007	0.000012	0.000068
51	Brown & Brown Inc	BRO	0.54%	12.50%	29.79	29.79	0.0009	0.000005	0.000108
52	BorgWarner Inc	BWA	1.32%	6.50%	7.31	7.31	0.0002	0.000003	0.000014
53	Blackstone Inc	BX	1.95%	16.00%	205.40	205.40	0.0059	0.000116	0.000951
54	BXP Inc	BXP	4.95%	0.50%	12.51	12.51	0.0004	0.000018	0.000002
55	Citigroup Inc	C	3.56%	3.00%	121.55	121.55	0.0035	0.000125	0.000105

VALUE LINE

	(a)		(a)	(b)	(a)			Weighted	
	Company	**Ticker**	**Dividend Yield**	**Value Line Growth**	**Market Cap ($bil.)**	**Mkt. Cap.**	**Weight**	**Dividend Yield**	**Growth Rate**
56	Conagra Brands Inc	CAG	4.97%	3.00%	13.83	13.83	0.0004	0.000020	0.000012
57	Cardinal Health Inc	CAH	1.74%	10.00%	28.10	28.10	0.0008	0.000014	0.000081
58	Carrier Global Corp	CARR	1.05%	12.50%	65.13	65.13	0.0019	0.000020	0.000235
59	Caterpillar Inc	CAT	1.49%	11.50%	184.08	184.08	0.0053	0.000079	0.000612
60	Chubb Ltd	CB	1.34%	13.00%	111.82	111.82	0.0032	0.000043	0.000420
61	Cboe Global Markets Inc	CBOE	1.20%	14.50%	21.98	21.98	0.0006	0.000008	0.000092
62	Crown Castle Inc	CCI	6.01%	-0.50%	46.32	--	--	--	--
63	CDW Corp	CDW	1.32%	7.00%	25.10	25.10	0.0007	0.000010	0.000051
64	Celanese Corp	CE	2.24%	2.00%	13.64	13.64	0.0004	0.000009	0.000008
65	Constellation Energy Corp	CEG	0.55%	n/a	80.71	--	--	--	--
66	CF Industries Holdings Inc	CF	2.50%	-1.50%	14.63	--	--	--	--
67	Citizens Financial Group Inc	CFG	4.02%	5.00%	18.75	18.75	0.0005	0.000022	0.000027
68	Church & Dwight Co Inc	CHD	1.09%	6.50%	25.64	25.64	0.0007	0.000008	0.000048
69	C.H. Robinson Worldwide Inc.	CHRW	2.44%	5.50%	11.94	11.94	0.0003	0.000008	0.000019
70	The Cigna Group	CI	1.77%	12.00%	88.03	88.03	0.0025	0.000045	0.000306
71	Cincinnati Financial Corp	CINF	2.43%	9.00%	21.99	21.99	0.0006	0.000015	0.000057
72	Colgate-Palmolive Co	CL	2.14%	11.50%	76.25	76.25	0.0022	0.000047	0.000254
73	Clorox Co (The)	CLX	2.99%	7.00%	20.19	20.19	0.0006	0.000017	0.000041
74	Comcast Corp	CMCSA	2.85%	7.50%	166.68	166.68	0.0048	0.000137	0.000362
75	CME Group Inc	CME	2.06%	6.00%	80.52	80.52	0.0023	0.000048	0.000140
76	Cummins Inc.	CMI	2.22%	6.00%	45.02	45.02	0.0013	0.000029	0.000078
77	CMS Energy Corp	CMS	3.02%	6.00%	20.41	20.41	0.0006	0.000018	0.000035
78	CenterPoint Energy Inc.	CNP	2.80%	6.50%	18.63	18.63	0.0005	0.000015	0.000035
79	Capital One Financial Corp	COF	1.46%	2.50%	62.53	62.53	0.0018	0.000026	0.000045
80	Conocophillips	COP	2.89%	4.00%	124.11	124.11	0.0036	0.000104	0.000144
81	Cencora Inc	COR	0.87%	11.00%	46.16	46.16	0.0013	0.000012	0.000147
82	Costco Wholesale Corp	COST	0.56%	10.00%	388.71	388.71	0.0112	0.000063	0.001124
83	Campbell Soup Co	CPB	3.37%	7.00%	13.79	13.79	0.0004	0.000013	0.000028
84	Camden Property Trust	CPT	3.73%	-6.50%	12.13	--	--	--	--
85	SALESFORCE INC	CRM	0.54%	24.00%	281.75	--	--	--	--
86	Cisco Systems Inc	CSCO	2.88%	3.50%	221.22	221.22	0.0064	0.000184	0.000224
87	CSX Corp	CSX	1.47%	7.50%	64.39	64.39	0.0019	0.000027	0.000140
88	Cintas Corp	CTAS	0.76%	14.00%	82.93	82.93	0.0024	0.000018	0.000336
89	Coterra Energy Inc	CTRA	3.70%	4.50%	16.79	16.79	0.0005	0.000018	0.000022
90	Cognizant Technology Solutions Corp	CTSH	1.69%	9.00%	36.99	36.99	0.0011	0.000018	0.000096
91	Corteva Inc	CTVA	1.13%	9.00%	42.13	42.13	0.0012	0.000014	0.000110
92	CVS Health Corp	CVS	4.77%	2.50%	70.21	70.21	0.0020	0.000097	0.000051
93	Chevron Corp	CVX	4.42%	4.00%	279.95	279.95	0.0081	0.000358	0.000324
94	Dominion Energy Inc	D	4.53%	3.00%	49.49	49.49	0.0014	0.000065	0.000043
95	Delta Air Lines Inc	DAL	1.03%	31.00%	37.68	--	--	--	--
96	DuPont De Nemours Inc	DD	1.89%	9.00%	34.44	34.44	0.0010	0.000019	0.000090
97	DEERE & COMPANY	DE	1.47%	4.00%	109.55	109.55	0.0032	0.000047	0.000127
98	Dell Technologies Inc	DELL	1.36%	9.00%	91.87	91.87	0.0027	0.000036	0.000239
99	Discover Financial Services	DFS	1.85%	-1.00%	37.98	--	--	--	--
100	Dollar General Corporation	DG	2.89%	-0.50%	17.98	--	--	--	--
101	Quest Diagnostics Inc	DGX	1.93%	3.00%	17.33	17.33	0.0005	0.000010	0.000015
102	D.R. Horton Inc	DHI	0.76%	5.00%	54.32	54.32	0.0016	0.000012	0.000079
103	Danaher Corp	DHR	0.46%	5.50%	178.95	178.95	0.0052	0.000024	0.000285
104	Walt Disney Co (The)	DIS	0.94%	31.00%	173.76	--	--	--	--
105	Digital Realty Trust Inc	DLR	2.88%	-5.00%	58.32	--	--	--	--
106	Healthpeak Properties Inc	DOC	5.46%	7.00%	15.37	15.37	0.0004	0.000024	0.000031
107	Dover Corp	DOV	1.09%	5.00%	25.94	25.94	0.0008	0.000008	0.000038
108	Dow Inc	DOW	5.92%	0.50%	34.28	34.28	0.0010	0.000059	0.000005
109	Domino's Pizza Inc	DPZ	1.46%	12.50%	14.70	14.70	0.0004	0.000006	0.000053
110	Darden Restaurants Inc	DRI	3.51%	10.00%	18.76	18.76	0.0005	0.000019	0.000054

VALUE LINE

	(a)		(a)	(b)	(a)				
								Weighted	
	Company	Ticker	Dividend Yield	Value Line Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
111	DTE Energy Co	DTE	3.36%	8.50%	25.12	25.12	0.0007	0.000024	0.000062
112	Duke Energy Corp	DUK	3.71%	6.50%	87.01	87.01	0.0025	0.000093	0.000164
113	Devon Energy Corp	DVN	2.30%	3.00%	25.22	25.22	0.0007	0.000017	0.000022
114	Electronic Arts Inc	EA	0.53%	14.00%	39.96	39.96	0.0012	0.000006	0.000162
115	eBay Inc.	EBAY	1.86%	9.00%	27.83	27.83	0.0008	0.000015	0.000072
116	Ecolab Inc.	ECL	0.93%	12.00%	69.25	69.25	0.0020	0.000019	0.000240
117	Consolidated Edison Inc.	ED	3.36%	6.00%	34.61	34.61	0.0010	0.000034	0.000060
118	Equifax Inc.	EFX	0.59%	7.00%	32.77	32.77	0.0009	0.000006	0.000066
119	Everest Group Ltd	EG	2.36%	14.50%	15.09	15.09	0.0004	0.000010	0.000063
120	Edison International	EIX	4.01%	6.50%	31.41	31.41	0.0009	0.000036	0.000059
121	Estee Lauder Cos Inc (The)	EL	3.97%	3.50%	23.90	23.90	0.0007	0.000027	0.000024
122	Elevance Health Inc	ELV	1.57%	11.00%	96.02	96.02	0.0028	0.000044	0.000305
123	Eastman Chemical Co	EMN	3.21%	3.50%	11.81	11.81	0.0003	0.000011	0.000012
124	Emerson Electric Co.	EMR	2.01%	5.50%	62.12	62.12	0.0018	0.000036	0.000099
125	EOG Resources Inc.	EOG	3.16%	7.50%	68.71	68.71	0.0020	0.000063	0.000149
126	Equinix Inc	EQIX	1.92%	13.00%	85.71	85.71	0.0025	0.000048	0.000322
127	Equity Residential	EQR	3.91%	-4.00%	26.22	--	--	--	--
128	EQT Corp	EQT	1.77%	57.00%	21.25	--	--	--	--
129	Erie Indemnity Co	ERIE	1.30%	20.00%	21.71	21.71	0.0006	0.000008	0.000126
130	Eversource Energy	ES	4.63%	6.00%	22.75	22.75	0.0007	0.000030	0.000039
131	Essex Property Trust Inc.	ESS	3.61%	4.50%	17.80	17.80	0.0005	0.000019	0.000023
132	Eaton Corporation plc	ETN	1.12%	11.00%	132.39	132.39	0.0038	0.000043	0.000421
133	Entergy corporation	ETR	3.12%	0.50%	31.04	31.04	0.0009	0.000028	0.000004
134	Evergy Inc	EVRG	4.38%	5.50%	13.70	13.70	0.0004	0.000017	0.000022
135	Exelon Corp	EXC	3.98%	3.50%	38.15	38.15	0.0011	0.000044	0.000039
136	Expeditors International of Washington Inc.	EXPD	1.23%	-1.50%	16.80	--	--	--	--
137	Extra Space Storage Inc	EXR	4.10%	5.00%	34.16	34.16	0.0010	0.000040	0.000049
138	Ford Motor Co	F	5.87%	19.50%	40.62	40.62	0.0012	0.000069	0.000229
139	Diamondback Energy Inc	FANG	2.05%	2.50%	51.82	51.82	0.0015	0.000031	0.000037
140	Fastenal Co	FAST	1.99%	9.00%	44.82	44.82	0.0013	0.000026	0.000117
141	Freeport-McMoRan Inc	FCX	0.66%	11.00%	65.51	65.51	0.0019	0.000012	0.000208
142	FactSet Research Systems Inc.	FDS	0.95%	9.00%	17.43	17.43	0.0005	0.000005	0.000045
143	FedEx Corp.	FDX	2.01%	7.00%	67.03	67.03	0.0019	0.000039	0.000136
144	FirstEnergy Corp.	FE	4.15%	5.50%	24.05	24.05	0.0007	0.000029	0.000038
145	Fidelity National Information Services Inc	FIS	1.62%	4.00%	48.61	48.61	0.0014	0.000023	0.000056
146	Fifth Third Bancorp	FITB	3.43%	4.50%	29.17	29.17	0.0008	0.000029	0.000038
147	FMC Corp.	FMC	3.83%	4.00%	7.88	7.88	0.0002	0.000009	0.000009
148	Federal Realty Investment Trust	FRT	3.95%	n/a	9.38	--	--	--	--
149	Fortive Corp	FTV	0.45%	11.50%	24.75	24.75	0.0007	0.000003	0.000082
150	General Dynamics Corp	GD	2.04%	10.50%	80.56	80.56	0.0023	0.000048	0.000245
151	GE Aerospace	GE	0.65%	22.00%	185.83	--	--	--	--
152	GE HealthCare Technologies Inc	GEHC	0.14%	n/a	39.73	--	--	--	--
153	Gen Digital Inc	GEN	1.77%	8.50%	17.42	17.42	0.0005	0.000009	0.000043
154	Gilead Sciences Inc	GILD	3.44%	2.50%	111.44	111.44	0.0032	0.000111	0.000081
155	General Mills Inc.	GIS	3.60%	4.50%	37.88	37.88	0.0011	0.000040	0.000049
156	Globe Life Inc	GL	0.92%	10.50%	9.34	9.34	0.0003	0.000002	0.000028
157	Corning Inc	GLW	2.32%	12.50%	39.37	39.37	0.0011	0.000026	0.000142
158	General Motors Co	GM	0.94%	6.50%	56.04	56.04	0.0016	0.000015	0.000105
159	Alphabet Inc	GOOG	0.49%	13.50%	955.45	955.45	0.0276	0.000134	0.003731
160	Genuine Parts Co	GPC	3.65%	8.00%	15.80	15.80	0.0005	0.000017	0.000037
161	Global Payments Inc	GPN	1.04%	13.50%	26.58	26.58	0.0008	0.000008	0.000104
162	Garmin Ltd	GRMN	1.54%	5.50%	38.06	38.06	0.0011	0.000017	0.000061
163	Goldman Sachs Group Inc (The)	GS	2.31%	7.50%	164.01	164.01	0.0047	0.000110	0.000356
164	Grainger (W.W.) Inc	GWW	0.76%	7.50%	53.82	53.82	0.0016	0.000012	0.000117
165	Halliburton Co	HAL	2.57%	18.00%	24.44	24.44	0.0007	0.000018	0.000127

VALUE LINE

	(a)		(a)	(b)	(a)			Weighted	
	Company	Ticker	Dividend Yield	Value Line Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
166	Hasbro Inc.	HAS	4.25%	8.50%	9.18	9.18	0.0003	0.000011	0.000023
167	Huntington Bancshares Inc	HBAN	4.20%	7.50%	22.49	22.49	0.0007	0.000027	0.000049
168	HCA Healthcare Inc	HCA	0.74%	10.50%	90.48	90.48	0.0026	0.000019	0.000275
169	Home Depot Inc. (The)	HD	2.29%	5.50%	389.96	389.96	0.0113	0.000259	0.000620
170	Hess Corp	HES	1.45%	8.00%	42.44	42.44	0.0012	0.000018	0.000098
171	Hartford Financial Services Group Inc	HIG	1.71%	10.00%	31.91	31.91	0.0009	0.000016	0.000092
172	Huntington Ingalls Industries Inc	HII	2.75%	11.50%	7.40	7.40	0.0002	0.000006	0.000025
173	Hilton Worldwide Holdings Inc	HLT	0.25%	18.00%	57.65	57.65	0.0017	0.000004	0.000300
174	Honeywell International Inc	HON	2.07%	10.50%	136.03	136.03	0.0039	0.000081	0.000413
175	Hewlett Packard Enterprise Co	HPE	2.59%	5.50%	26.05	26.05	0.0008	0.000020	0.000041
176	HP Inc	HPQ	3.06%	6.00%	34.96	34.96	0.0010	0.000031	0.000061
177	Hormel Foods Corp	HRL	3.65%	5.00%	16.96	16.96	0.0005	0.000018	0.000025
178	Host Hotels & Resorts Inc	HST	6.23%	n/a	12.17	--	--	--	--
179	Hershey Co (The)	HSY	3.19%	7.00%	36.26	36.26	0.0010	0.000033	0.000073
180	Hubbell Inc	HUBB	1.16%	9.50%	22.85	22.85	0.0007	0.000008	0.000063
181	Humana Inc.	HUM	1.36%	4.50%	31.39	31.39	0.0009	0.000012	0.000041
182	Howmet Aerospace Inc	HWM	0.26%	17.00%	40.83	40.83	0.0012	0.000003	0.000201
183	International Business Machines Corp	IBM	3.22%	5.00%	192.56	192.56	0.0056	0.000179	0.000278
184	Intercontinental Exchange Inc	ICE	1.16%	7.50%	88.79	88.79	0.0026	0.000030	0.000193
185	IDEX Corp	IEX	1.32%	5.00%	16.36	16.36	0.0005	0.000006	0.000024
186	International Flavors & Fragrances Inc	IFF	1.62%	0.50%	25.29	25.29	0.0007	0.000012	0.000004
187	Intuit Inc.	INTU	0.75%	12.50%	174.27	174.27	0.0050	0.000038	0.000630
188	Invitation Homes Inc	INVH	3.69%	13.50%	19.24	19.24	0.0006	0.000021	0.000075
189	International Paper Company	IP	3.32%	5.50%	19.37	19.37	0.0006	0.000019	0.000031
190	Interpublic Group of Cos Inc (The)	IPG	4.58%	5.50%	10.98	10.98	0.0003	0.000015	0.000017
191	Ingersoll Rand Inc	IR	0.09%	10.50%	37.90	37.90	0.0011	0.000001	0.000115
192	Iron Mountain Inc	IRM	2.31%	7.50%	35.54	35.54	0.0010	0.000024	0.000077
193	Illinois Tool Works Inc.	ITW	2.28%	9.00%	77.69	77.69	0.0022	0.000051	0.000202
194	Invesco Ltd	IVZ	4.89%	10.50%	7.99	7.99	0.0002	0.000011	0.000024
195	Jacobs Solutions Inc	J	0.86%	10.00%	17.35	17.35	0.0005	0.000004	0.000050
196	J.B. Hunt Transport Services Inc.	JBHT	0.98%	6.50%	18.46	18.46	0.0005	0.000005	0.000035
197	Jabil Inc	JBL	0.25%	13.50%	14.41	14.41	0.0004	0.000001	0.000056
198	Johnson Controls International Plc	JCI	1.96%	9.50%	50.44	50.44	0.0015	0.000029	0.000139
199	Henry (Jack) & Associates Inc	JKHY	1.20%	6.50%	13.35	13.35	0.0004	0.000005	0.000025
200	Johnson & Johnson	JNJ	3.16%	3.50%	385.53	385.53	0.0112	0.000352	0.000390
201	Juniper Networks Inc	JNPR	2.26%	7.00%	12.84	12.84	0.0004	0.000008	0.000026
202	JPMorgan Chase & Co	JPM	2.33%	7.00%	627.65	627.65	0.0182	0.000423	0.001271
203	Kellanova	K	2.85%	3.00%	27.79	27.79	0.0008	0.000023	0.000024
204	Keurig Dr Pepper Inc	KDP	2.89%	9.00%	44.52	44.52	0.0013	0.000037	0.000116
205	KeyCorp	KEY	4.83%	-2.00%	17.04	--	--	--	--
206	The Kraft Heinz Co	KHC	4.78%	4.50%	40.50	40.50	0.0012	0.000056	0.000053
207	Kimco Realty Corp	KIM	4.20%	18.00%	16.06	16.06	0.0005	0.000019	0.000084
208	KKR & Co Inc	KKR	0.51%	5.00%	122.09	122.09	0.0035	0.000018	0.000177
209	KLA Corp	KLAC	0.87%	14.00%	89.54	89.54	0.0026	0.000022	0.000363
210	Kimberly-Clark Corp	KMB	3.63%	7.50%	44.89	44.89	0.0013	0.000047	0.000097
211	Kinder Morgan Inc.	KMI	4.76%	10.00%	53.72	53.72	0.0016	0.000074	0.000155
212	Coca-Cola Co (The)	KO	3.11%	7.00%	280.05	280.05	0.0081	0.000252	0.000567
213	Kroger Co. (The)	KR	2.26%	5.00%	40.93	40.93	0.0012	0.000027	0.000059
214	Kenvue Inc	KVUE	3.61%	n/a	43.53	--	--	--	--
215	Loews Corp	L	0.32%	14.50%	17.40	17.40	0.0005	0.000002	0.000073
216	Leidos Holdings Inc	LDOS	0.83%	9.00%	24.41	24.41	0.0007	0.000006	0.000064
217	Lennar Corp	LEN	1.18%	6.00%	40.52	40.52	0.0012	0.000014	0.000070
218	Labcorp Holdings Inc	LH	1.27%	0.50%	18.99	18.99	0.0005	0.000007	0.000003
219	L3Harris Technologies Inc	LHX	1.88%	11.50%	46.94	46.94	0.0014	0.000026	0.000156
220	Linde Plc	LIN	1.22%	7.00%	217.75	217.75	0.0063	0.000077	0.000441

VALUE LINE

	(a)		(a)	(b)	(a)			Weighted	
	Company	Ticker	Dividend Yield	Value Line Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
221	LKQ Corporation	LKQ	3.25%	4.50%	9.59	9.59	0.0003	0.000009	0.000012
222	Eli Lilly and Co	LLY	0.63%	28.50%	777.42	--	--	--	--
223	Lockheed Martin Corp	LMT	2.39%	9.50%	129.27	129.27	0.0037	0.000089	0.000355
224	Alliant Energy Corporation	LNT	3.33%	6.00%	14.81	14.81	0.0004	0.000014	0.000026
225	Lowe's Cos Inc	LOW	1.76%	5.50%	4.04	4.04	0.0001	0.000002	0.000006
226	Lam Research Corp	LRCX	1.20%	10.50%	96.24	96.24	0.0028	0.000033	0.000292
227	Southwest Airlines Co.	LUV	2.35%	63.50%	18.36	--	--	--	--
228	Las Vegas Sands Corp	LVS	1.55%	n/a	37.51	--	--	--	--
229	Lamb Weston Holdings Inc	LW	2.02%	10.50%	10.99	10.99	0.0003	0.000006	0.000033
230	LyondellBasell Industries NV	LYB	6.19%	-1.00%	28.14	--	--	--	--
231	Mastercard Inc	MA	0.57%	14.50%	466.33	466.33	0.0135	0.000077	0.001956
232	Mid-America Apartment Communities Inc	MAA	3.94%	-15.00%	17.43	--	--	--	--
233	Marriott International Inc	MAR	0.97%	11.00%	73.36	73.36	0.0021	0.000021	0.000233
234	Masco Corporation	MAS	1.46%	8.00%	17.30	17.30	0.0005	0.000007	0.000040
235	McDonald's Corp	MCD	2.42%	8.00%	211.77	211.77	0.0061	0.000148	0.000490
236	Microchip Technology Inc	MCHP	2.47%	1.50%	40.14	40.14	0.0012	0.000029	0.000017
237	McKesson Corp	MCK	0.54%	10.00%	68.25	68.25	0.0020	0.000011	0.000197
238	Moody's Corp.	MCO	0.75%	9.00%	82.69	82.69	0.0024	0.000018	0.000215
239	Mondelez International Inc	MDLZ	2.74%	7.50%	91.61	91.61	0.0026	0.000073	0.000199
240	Medtronic PLC	MDT	3.11%	6.50%	115.51	115.51	0.0033	0.000104	0.000217
241	MetLife Inc	MET	2.78%	7.50%	54.41	54.41	0.0016	0.000044	0.000118
242	Meta Platforms Inc	META	0.35%	17.50%	1,431.79	1,431.79	0.0414	0.000146	0.007247
243	McCormick & Co Inc	MKC	2.13%	5.00%	19.86	19.86	0.0006	0.000012	0.000029
244	MarketAxess Holdings Inc	MKTX	1.03%	9.00%	10.85	10.85	0.0003	0.000003	0.000028
245	Martin Marietta Materials Inc	MLM	0.54%	11.00%	35.46	35.46	0.0010	0.000006	0.000113
246	Marsh & McLennan Companies Inc	MMC	1.49%	10.00%	107.60	107.60	0.0031	0.000046	0.000311
247	3M Co	MMM	2.20%	31.00%	69.28	--	--	--	--
248	Altria Group Inc	MO	7.57%	5.00%	91.30	91.30	0.0026	0.000200	0.000132
249	Mosaic Company (The)	MOS	3.12%	-11.00%	8.57	--	--	--	--
250	Marathon Petroleum Corp	MPC	2.31%	-6.00%	47.90	--	--	--	--
251	Monolithic Power Systems Inc	MPWR	0.66%	12.00%	37.04	37.04	0.0011	0.000007	0.000129
252	Merck & Co Inc	MRK	3.02%	15.50%	258.25	258.25	0.0075	0.000226	0.001158
253	Marathon Oil Corp	MRO	1.61%	12.50%	15.25	15.25	0.0004	0.000007	0.000055
254	Morgan Stanley	MS	3.17%	9.50%	188.36	188.36	0.0054	0.000173	0.000518
255	MSCI Inc	MSCI	1.11%	9.50%	45.29	45.29	0.0013	0.000015	0.000124
256	Microsoft Corp	MSFT	0.83%	14.50%	3,051.05	3,051.05	0.0882	0.000733	0.012796
257	Motorola Solutions Inc	MSI	0.86%	10.00%	75.73	75.73	0.0022	0.000019	0.000219
258	M&T Bank Corp	MTB	2.81%	4.50%	32.11	32.11	0.0009	0.000026	0.000042
259	Micron Technology Inc.	MU	0.47%	24.00%	110.57	--	--	--	--
260	Nasdaq Inc	NDAQ	1.29%	3.50%	42.72	42.72	0.0012	0.000016	0.000043
261	Nordson Corp	NDSN	1.25%	8.00%	14.24	14.24	0.0004	0.000005	0.000033
262	NextEra Energy Inc	NEE	2.79%	8.00%	158.98	158.98	0.0046	0.000128	0.000368
263	Newmont Corporation	NEM	2.21%	13.00%	51.53	51.53	0.0015	0.000033	0.000194
264	NiSource Inc	NI	3.22%	7.00%	16.10	16.10	0.0005	0.000015	0.000033
265	NIKE Inc	NKE	1.90%	10.50%	116.19	116.19	0.0034	0.000064	0.000353
266	Northrop Grumman Corp	NOC	1.71%	7.50%	73.86	73.86	0.0021	0.000036	0.000160
267	NRG Energy Inc	NRG	1.88%	11.00%	17.90	17.90	0.0005	0.000010	0.000057
268	Norfolk Southern Corp	NSC	2.16%	9.50%	56.58	56.58	0.0016	0.000035	0.000155
269	NetApp Inc	NTAP	1.79%	9.00%	23.78	23.78	0.0007	0.000012	0.000062
270	Northern Trust Corp	NTRS	3.00%	4.00%	19.81	19.81	0.0006	0.000017	0.000023
271	Nucor Corp	NUE	1.59%	-1.50%	34.07	--	--	--	--
272	NVIDIA Corporation	NVDA	0.06%	41.00%	3,321.36	--	--	--	--
273	News Corp	NWSA	0.73%	14.50%	10.36	10.36	0.0003	0.000002	0.000043
274	NXP Semiconductors NV	NXPI	1.70%	7.50%	60.78	60.78	0.0018	0.000030	0.000132
275	Realty Income Corp	O	5.42%	5.00%	51.28	51.28	0.0015	0.000080	0.000074

VALUE LINE

	(a)		(a)	(b)	(a)			Weighted	
	Company	Ticker	Dividend Yield	Value Line Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
276	Old Dominion Freight Line Inc	ODFL	0.53%	7.50%	43.07	43.07	0.0012	0.000007	0.000093
277	ONEOK Inc	OKE	4.32%	12.00%	54.54	54.54	0.0016	0.000068	0.000189
278	Omnicom Group Inc	OMC	2.77%	7.00%	19.72	19.72	0.0006	0.000016	0.000040
279	Oracle Corp	ORCL	0.94%	12.50%	471.14	471.14	0.0136	0.000128	0.001703
280	Otis Worldwide Corp	OTIS	1.57%	10.50%	39.83	39.83	0.0012	0.000018	0.000121
281	Occidental Petroleum Corp	OXY	1.98%	6.00%	46.36	46.36	0.0013	0.000027	0.000080
282	Paramount Global	PARA	1.82%	3.00%	6.87	6.87	0.0002	0.000004	0.000006
283	Paycom Software Inc	PAYC	0.71%	12.50%	12.15	12.15	0.0004	0.000003	0.000044
284	Paychex Inc.	PAYX	2.99%	8.00%	50.06	50.06	0.0014	0.000043	0.000116
285	PACCAR Inc	PCAR	4.23%	7.50%	54.19	54.19	0.0016	0.000066	0.000118
286	PG&E Corp	PCG	0.30%	9.50%	52.41	52.41	0.0015	0.000005	0.000144
287	Public Service Enterprise Group Inc	PEG	2.82%	4.50%	43.49	43.49	0.0013	0.000035	0.000057
288	PepsiCo Inc	PEP	3.32%	7.50%	227.19	227.19	0.0066	0.000218	0.000493
289	Pfizer Inc	PFE	5.98%	2.50%	159.18	159.18	0.0046	0.000275	0.000115
290	Principal Financial Group Inc	PFG	3.50%	4.00%	18.80	18.80	0.0005	0.000019	0.000022
291	Procter & Gamble Co (The)	PG	2.44%	5.00%	388.82	388.82	0.0112	0.000275	0.000562
292	Progressive Corp (The)	PGR	0.16%	22.50%	142.19	--	--	--	--
293	Parker-Hannifin Corp	PH	1.03%	10.00%	81.71	81.71	0.0024	0.000024	0.000236
294	PulteGroup Inc	PHM	0.65%	8.00%	26.33	26.33	0.0008	0.000005	0.000061
295	Packaging Corp Of America	PKG	2.17%	7.00%	20.66	20.66	0.0006	0.000013	0.000042
296	Prologis Inc	PLD	3.54%	0.50%	105.03	105.03	0.0030	0.000108	0.000015
297	Philip Morris International Inc	PM	4.13%	6.00%	203.14	203.14	0.0059	0.000243	0.000353
298	The PNC Financial Services Group Inc	PNC	3.42%	6.50%	74.39	74.39	0.0022	0.000074	0.000140
299	Pentair plc	PNR	0.93%	12.00%	16.27	16.27	0.0005	0.000004	0.000056
300	Pinnacle West Capital Corp	PNW	4.19%	4.50%	9.75	9.75	0.0003	0.000012	0.000013
301	Pool Corp	POOL	1.35%	0.50%	13.82	13.82	0.0004	0.000005	0.000002
302	PPG Industries Inc.	PPG	2.19%	7.00%	28.86	28.86	0.0008	0.000018	0.000058
303	PPL Corp	PPL	3.26%	11.50%	23.28	23.28	0.0007	0.000022	0.000077
304	Prudential Financial Inc	PRU	4.45%	6.00%	43.30	43.30	0.0013	0.000056	0.000075
305	Public Storage	PSA	3.71%	7.00%	56.68	56.68	0.0016	0.000061	0.000115
306	Phillips 66	PSX	3.87%	0.50%	49.56	49.56	0.0014	0.000056	0.000007
307	Quanta Services Inc.	PWR	0.13%	18.00%	44.80	44.80	0.0013	0.000002	0.000233
308	QUALCOMM Inc.	QCOM	2.06%	6.00%	184.11	184.11	0.0053	0.000110	0.000320
309	Royal Caribbean Group	RCL	0.79%	n/a	54.33	--	--	--	--
310	Regency Centers Corp.	REG	3.75%	11.50%	12.96	12.96	0.0004	0.000014	0.000043
311	Regions Financial Corp	RF	4.50%	4.50%	21.56	21.56	0.0006	0.000028	0.000028
312	Raymond James Financial Inc.	RJF	1.42%	10.00%	29.33	29.33	0.0008	0.000012	0.000085
313	Ralph Lauren Corp	RL	1.67%	11.00%	12.24	12.24	0.0004	0.000006	0.000039
314	Resmed Inc	RMD	0.87%	10.00%	35.86	35.86	0.0010	0.000009	0.000104
315	Rockwell Automation Inc.	ROK	1.86%	10.00%	30.49	30.49	0.0009	0.000016	0.000088
316	Rollins Inc	ROL	1.27%	9.00%	22.92	22.92	0.0007	0.000008	0.000060
317	Roper Technologies Inc	ROP	0.61%	9.00%	57.99	57.99	0.0017	0.000010	0.000151
318	Ross Stores Inc	ROST	1.12%	15.00%	46.47	46.47	0.0013	0.000015	0.000202
319	Republic Services Inc.	RSG	1.17%	11.00%	62.19	62.19	0.0018	0.000021	0.000198
320	RTX Corp	RTX	2.12%	12.00%	158.06	158.06	0.0046	0.000097	0.000549
321	Revvity Inc	RVTY	0.23%	-2.50%	14.93	--	--	--	--
322	SBA Communications Corp	SBAC	1.76%	18.00%	24.25	24.25	0.0007	0.000012	0.000126
323	Starbucks Corp	SBUX	2.37%	8.50%	112.07	112.07	0.0032	0.000077	0.000276
324	Schwab (Charles) Corp	SCHW	1.41%	10.50%	129.77	129.77	0.0038	0.000053	0.000394
325	Sherwin-Williams Co (The)	SHW	0.84%	12.00%	90.16	90.16	0.0026	0.000022	0.000313
326	The J M Smucker Company	SJM	3.83%	7.00%	12.02	12.02	0.0003	0.000013	0.000024
327	Schlumberger Ltd	SLB	2.92%	21.50%	56.15	--	--	--	--
328	Snap-On Inc	SNA	2.30%	5.50%	17.34	17.34	0.0005	0.000012	0.000028
329	Southern Co (The)	SO	3.25%	6.00%	97.01	97.01	0.0028	0.000091	0.000168
330	Simon Property Group Inc	SPG	5.09%	3.50%	54.68	54.68	0.0016	0.000081	0.000055

VALUE LINE

	(a)		(a)	(b)	(a)			Weighted	
	Company	Ticker	Dividend Yield	Value Line Growth	Market Cap ($bil.)	Mkt. Cap.	Weight	Dividend Yield	Growth Rate
331	S&P Global Inc	SPGI	0.75%	8.00%	149.97	149.97	0.0043	0.000033	0.000347
332	Sempra	SRE	3.14%	6.00%	51.70	51.70	0.0015	0.000047	0.000090
333	Steris Plc	STE	1.01%	7.50%	22.21	22.21	0.0006	0.000007	0.000048
334	Steel Dynamics Inc	STLD	1.44%	-1.00%	20.62	--	--	--	--
335	State Street Corporation	STT	3.37%	5.50%	27.20	27.20	0.0008	0.000027	0.000043
336	Seagate Technology Holdings plc	STX	2.83%	18.50%	20.96	20.96	0.0006	0.000017	0.000112
337	Constellation Brands Inc	STZ	1.79%	7.00%	42.26	42.26	0.0012	0.000022	0.000086
338	Stanley Black & Decker Inc	SWK	3.51%	10.50%	14.40	14.40	0.0004	0.000015	0.000044
339	Skyworks Solutions Inc	SWKS	3.17%	-4.50%	14.20	--	--	--	--
340	Synchrony Financial	SYF	1.81%	3.00%	21.51	21.51	0.0006	0.000011	0.000019
341	Stryker Corp	SYK	0.90%	9.50%	139.96	139.96	0.0040	0.000036	0.000385
342	Sysco Corporation	SYY	2.72%	9.50%	36.86	36.86	0.0011	0.000029	0.000101
343	AT&T Inc	T	5.02%	4.00%	158.72	158.72	0.0046	0.000230	0.000184
344	Molson Coors Beverage Company	TAP	3.25%	11.00%	11.11	11.11	0.0003	0.000010	0.000035
345	Bio-Techne Corp	TECH	0.42%	10.00%	11.95	11.95	0.0003	0.000001	0.000035
346	TE Connectivity plc	TEL	1.73%	8.00%	44.99	44.99	0.0013	0.000023	0.000104
347	Teradyne Inc	TER	0.47%	10.50%	17.38	17.38	0.0005	0.000002	0.000053
348	Truist Financial Corp	TFC	4.93%	1.50%	56.84	56.84	0.0016	0.000081	0.000025
349	Teleflex Inc	TFX	0.64%	8.50%	9.81	9.81	0.0003	0.000002	0.000024
350	Target Corp	TGT	2.97%	9.50%	69.49	69.49	0.0020	0.000060	0.000191
351	TJX Companies Inc (The)	TJX	1.38%	11.50%	126.76	126.76	0.0037	0.000051	0.000422
352	Thermo Fisher Scientific Inc	TMO	0.28%	6.00%	213.12	213.12	0.0062	0.000017	0.000370
353	T-Mobile US Inc	TMUS	1.23%	20.00%	259.11	259.11	0.0075	0.000092	0.001499
354	Tapestry Inc	TPR	2.98%	8.00%	10.93	10.93	0.0003	0.000009	0.000025
355	Targa Resources Corp	TRGP	1.97%	20.00%	36.21	36.21	0.0010	0.000021	0.000209
356	T. Rowe Price Group Inc	TROW	4.59%	5.50%	24.94	24.94	0.0007	0.000033	0.000040
357	Travelers Companies Inc (The)	TRV	1.71%	12.00%	55.76	55.76	0.0016	0.000028	0.000194
358	Tractor Supply Co	TSCO	1.74%	10.50%	28.75	28.75	0.0008	0.000014	0.000087
359	Tyson Foods Inc.	TSN	3.36%	-6.50%	20.77	--	--	--	--
360	Trane Technologies plc	TT	0.89%	14.50%	84.64	84.64	0.0024	0.000022	0.000355
361	Texas Instruments Inc	TXN	2.54%	3.00%	186.93	186.93	0.0054	0.000137	0.000162
362	Textron Inc	TXT	0.10%	13.00%	15.11	15.11	0.0004	0.000000	0.000057
363	UDR Inc	UDR	4.24%	2.50%	13.63	13.63	0.0004	0.000017	0.000010
364	Universal Health Services Inc.	UHS	0.39%	12.00%	13.56	13.56	0.0004	0.000002	0.000047
365	UnitedHealth Group Incorporated	UNH	1.48%	11.50%	524.10	524.10	0.0152	0.000224	0.001743
366	Union Pacific Corp	UNP	2.30%	6.50%	141.07	141.07	0.0041	0.000094	0.000265
367	United Parcel Service Inc	UPS	4.86%	2.50%	114.82	114.82	0.0033	0.000162	0.000083
368	United Rentals Inc.	URI	0.82%	19.00%	52.07	52.07	0.0015	0.000012	0.000286
369	U.S. Bancorp	USB	4.18%	4.00%	74.68	74.68	0.0022	0.000090	0.000086
370	Visa Inc	V	0.79%	13.50%	571.56	571.56	0.0165	0.000131	0.002232
371	VICI Properties Inc	VICI	5.50%	10.50%	33.14	33.14	0.0010	0.000053	0.000101
372	Valero Energy Corp	VLO	3.34%	-2.50%	40.59	--	--	--	--
373	Veralto Corp	VLTO	0.35%	n/a	25.12	--	--	--	--
374	Vulcan Materials Co	VMC	0.68%	8.00%	35.71	35.71	0.0010	0.000007	0.000083
375	Verisk Analytics Inc	VRSK	0.57%	11.00%	38.90	38.90	0.0011	0.000006	0.000124
376	Vistra Corp	VST	0.74%	n/a	41.06	--	--	--	--
377	Ventas Inc.	VTR	2.90%	n/a	26.92	--	--	--	--
378	Viatris Inc	VTRS	4.13%	-1.50%	13.87	--	--	--	--
379	Verizon Communications Inc	VZ	6.55%	0.50%	174.11	174.11	0.0050	0.000330	0.000025
380	Westinghouse Air Brake Technologies Corp	WAB	0.45%	16.00%	32.12	32.12	0.0009	0.000004	0.000149
381	Walgreens Boots Alliance Inc	WBA	10.57%	-7.00%	8.18	--	--	--	--
382	WEC Energy Group Inc	WEC	3.49%	7.00%	30.23	30.23	0.0009	0.000031	0.000061
383	Welltower Inc	WELL	2.07%	26.50%	82.99	--	--	--	--
384	Wells Fargo & Co	WFC	2.55%	9.50%	216.39	216.39	0.0063	0.000160	0.000595
385	Waste Management Inc.	WM	1.40%	8.50%	85.89	85.89	0.0025	0.000035	0.000211

VALUE LINE

			(a)	(a)	(b)	(a)			Weighted	
	Company	**Ticker**	**Dividend Yield**	**Value Line Growth**	**Market Cap ($bil.)**	**Mkt. Cap.**	**Weight**	**Dividend Yield**	**Growth Rate**
386	Williams Cos Inc. (The)	WMB	3.69%	11.00%	62.85	62.85	0.0018	0.000067	0.000200
387	Walmart Inc	WMT	1.01%	9.50%	660.66	660.66	0.0191	0.000193	0.001815
388	Berkley (W.R.) Corp	WRB	0.56%	13.00%	21.92	21.92	0.0006	0.000004	0.000082
389	West Pharmaceutical Services Inc.	WST	0.25%	3.00%	22.92	22.92	0.0007	0.000002	0.000020
390	Willis Towers Watson plc	WTW	1.20%	9.50%	30.15	30.15	0.0009	0.000010	0.000083
391	Weyerhaeuser Co	WY	2.57%	-2.00%	22.65	--	--	--	--
392	Wynn Resorts Ltd	WYNN	1.05%	n/a	10.62	--	--	--	--
393	Xcel Energy Inc.	XEL	3.40%	6.50%	38.30	38.30	0.0011	0.000038	0.000072
394	Exxon Mobil Corp	XOM	3.31%	-3.00%	510.70	--	--	--	--
395	Xylem Inc	XYL	1.28%	12.00%	29.02	29.02	0.0008	0.000011	0.000101
396	YUM Brands Inc	YUM	2.03%	10.00%	37.21	37.21	0.0011	0.000022	0.000108
397	Zimmer Biomet Holdings Inc	ZBH	0.90%	6.00%	21.35	21.35	0.0006	0.000006	0.000037
398	Zoetis Inc	ZTS	0.95%	7.50%	82.43	82.43	0.0024	0.000023	0.000179
						34,574.07	1.0000		
	Weighted Average							**1.73%**	**9.72%**

n/a Not Available

(a) www.valueline.com (retrieved Nov. 3, 2024).

(b) EPS growth rates from Value Line (retrieved Nov. 3, 2024). Eliminated growth rates greater than 20%, as well as all negative values.

Exhibit No. TRANSCO-209

IMPLIED ROE

Current Equity Risk Premium				
(a)	Average Yield Over Study Period		5.36%	
(b)	Baa Utility Bond Yield		5.72%	
	Change in Bond Yield		0.36%	
(c)	Risk Premium/Interest Rate Relationship		-0.6832	
	Adjustment to Average Risk Premium		-0.25%	
(a)	Average Risk Premium over Study Period		4.87%	
	Adjusted Risk Premium		**4.63%**	
Implied Cost of Equity				
(b)	Baa Utility Bond Yield		5.72%	
	Adjusted Equity Risk Premium		4.63%	
	Risk Premium Cost of Equity		**10.35%**	
Implied Cost of Equity Range				
	Range Spread			
(d)	Two-step DCF		4.07%	
	CAPM			
(e)	IBES-based		3.20%	
(f)	Value Line-based		2.84%	
	Average		3.02%	
(g)	Expected Earnings		7.32%	
(h)	Average Range Spread		4.80%	
(i)	**Risk Premium Range**	**7.95%**	--	**12.75%**

(a) See Exhibit No. Transco-209, pp. 2-5.
(b) Six-month average yield for May 2024 to Oct. 2024 based on data from Moody's Investors Service, www.moodys.credittrends.com.
(c) See Exhibit No. Transco-209, p. 6.
(d) Difference between high and low estimates from Exhibit No. Transco-204, p. 1.
(e) Difference between high and low estimates from Exhibit No. Transco-205.
(f) Difference between high and low estimates from Exhibit No. Transco-207.
(g) Difference between high and low estimates from Exhibit No. Transco-210.
(h) Risk Premium cost of equity -/+ one-half of averge range spread.

Date	Docket No.	Utility	Base ROE	Baa Bond Yield	Implied Risk Premium
Feb-06	ER05-515	Baltimore Gas & Elec.	10.80%	6.07%	4.73%
Feb-06	ER05-515	Baltimore Gas & Elec.	11.30%	6.07%	5.23%
Jun-06	ER05-925	Westar Energy Inc.	10.80%	6.36%	4.44%
Feb-07	ER07-284	San Diego Gas & Elec.	11.35%	6.14%	5.21%
May-07	ER06-787	Idaho Power Co.	10.70%	6.15%	4.55%
May-07	ER06-1320	Wisconsin Elec. Pwr. Co.	11.00%	6.15%	4.85%
Sep-07	EL06-109	Duquesne Light Co.	10.90%	6.41%	4.49%
Sep-07	ER07-583	Commonwealth Edison Co.	11.00%	6.41%	4.59%
Oct-07	ER08-92	Virginia Elec. & Power Co.	10.90%	6.43%	4.47%
Nov-07	ER08-374	Atlantic Path 15	10.65%	6.44%	4.21%
Nov-07	ER08-396	Westar Energy Inc.	10.80%	6.44%	4.36%
Nov-07	ER08-413	Startrans IO, LLC	10.65%	6.44%	4.21%
Nov-07	ER08-375	So. Cal Edison	10.55%	6.44%	4.11%
Jan-08	ER08-686	Pepco Holdings, Inc.	11.30%	6.41%	4.89%
Feb-08	ER07-562	Trans-Allegheny	11.20%	6.42%	4.78%
Apr-08	ER07-1142	Arizona Public Service Co.	10.75%	6.54%	4.21%
May-08	ER08-1207	Virginia Elec. & Power Co.	10.90%	6.62%	4.28%
May-08	ER08-1233	Public Service Elec. & Gas	11.18%	6.62%	4.56%
Jun-08	ER08-1402	Duquesne Light Co.	10.90%	6.69%	4.21%
Jun-08	ER08-1423	Pepco Holdings, Inc.	10.80%	6.69%	4.11%
Jul-08	ER09-35/36	Tallgrass / Prairie Wind	10.80%	6.80%	4.00%
Sep-08	ER09-249	Public Service Elec. & Gas	11.18%	6.94%	4.24%
Sep-08	ER09-187	So. Cal Edison	10.53%	6.94%	3.59%
Sep-08	ER09-548	ITC Great Plains	10.66%	6.94%	3.72%
Sep-08	ER09-75	Pioneer Transmission	10.54%	6.94%	3.60%
Nov-08	ER08-1584	Black Hills Power Co.	10.80%	7.60%	3.20%
Dec-08	ER09-745	Baltimore Gas & Elec.	10.80%	7.80%	3.00%
Jan-09	ER07-1069	AEP - SPP Zone	10.70%	7.95%	2.75%
Jan-09	ER09-681	Green Power Express	10.78%	7.95%	2.83%
Mar-09	ER08-281	Oklahoma Gas & Elec.	10.60%	8.22%	2.38%
Apr-09	ER08-1457	PPL Elec. Utilities Corp.	11.10%	8.13%	2.97%
Apr-09	ER08-1457	PPL Elec. Utilities Corp.	11.14%	8.13%	3.01%
Apr-09	ER08-1457	PPL Elec. Utilities Corp.	11.18%	8.13%	3.05%
Apr-09	ER08-1588	Kentucky Utilities Co.	11.00%	8.13%	2.87%
Jul-09	ER08-552	Niagara Mohawk Pwr. Co.	11.00%	7.62%	3.38%
Aug-09	ER08-313	Southwestern Public Service Co.	10.77%	7.39%	3.38%
Aug-09	ER09-628	National Grid Generation LLC	10.75%	7.08%	3.67%
Sep-09	ER10-160	So. Cal Edison	10.33%	7.08%	3.25%
Mar-10	ER08-1329	AEP - PJM Zone	10.99%	6.20%	4.79%
Aug-10	ER10-230	Kansas City Power & Light Co.	10.60%	6.05%	4.55%

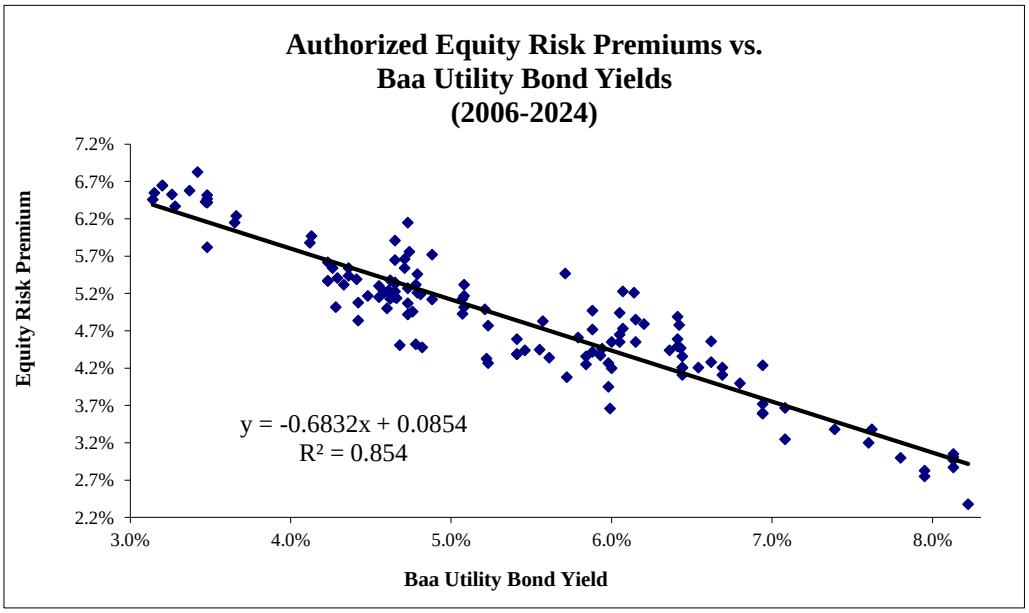
Date	Docket No.	Utility	Base ROE	Baa Bond Yield	Implied Risk Premium
Aug-10	ER10-355	AEP Transcos - PJM	10.99%	6.05%	4.94%
Aug-10	ER10-355	AEP Transcos - SPP	10.70%	6.05%	4.65%
Sep-10	ER11-1952	So. Cal Edison	10.30%	5.93%	4.37%
Oct-10	EL11-13	Atlantic Grid Operations	10.09%	5.84%	4.25%
Oct-10	ER11-2895	Duke Energy Carolinas	10.20%	5.84%	4.36%
Nov-10	ER11-2377	Northern Pass Transmission	10.40%	5.79%	4.61%
Mar-11	ER10-1377	Northern States Power Co. (MN)	10.40%	5.94%	4.46%
Apr-11	ER10-516	South Carolina Elec. & Gas	10.55%	6.00%	4.55%
Apr-11	ER10-992	Northern States Power Co.	10.20%	6.00%	4.20%
May-11	ER11-4069	RITELine	9.93%	5.98%	3.95%
Aug-11	ER12-296	PJM & PSE&G	11.18%	5.71%	5.47%
Sep-11	ER08-386	PATH	10.40%	5.57%	4.83%
Dec-11	ER11-2560	Entergy Arkansas	10.20%	5.21%	4.99%
Mar-12	ER12-2300	Public Service Co. of Colorado	10.25%	5.08%	5.17%
Mar-12	ER11-2853	Public Service Co. of Colorado	10.10%	5.08%	5.02%
Mar-12	ER11-2853	Public Service Co. of Colorado	10.40%	5.08%	5.32%
Nov-12	ER12-1378	Cleco Power LLC	10.50%	4.74%	5.76%
Jan-13	ER12-778	Puget Sound Energy	9.80%	4.65%	5.15%
Jan-13	ER12-778	Puget Sound Energy - PSANI	10.30%	4.65%	5.65%
Jan-13	ER12-2554	Transource Missouri	9.80%	4.65%	5.15%
Feb-13	ER11-3643	PacifiCorp	9.80%	4.62%	5.18%
Feb-13	ER12-1650	Maine Public Service Co.	9.75%	4.62%	5.13%
Jul-13	ER11-3697	So. Cal Edison	9.30%	4.82%	4.48%
Jan-14	ER13-941	San Diego Gas & Electric	9.55%	5.22%	4.33%
Aug-14	ER12-1589	Public Service Co. of Colorado	9.72%	4.76%	4.96%
Sep-14	ER12-91	Duke Energy Ohio	10.88%	4.73%	6.15%
Nov-14	ER13-1508	Entergy Arkansas	10.37%	4.71%	5.66%
Jan-15	EL12-101	Niagara Mohawk Power Corp.	9.80%	4.66%	5.14%
Feb-15	ER13-685	Public Service Company of New Mexico	10.00%	4.62%	5.38%
Mar-15	ER14-1661	MidAmerican Central Calif. Transco	9.80%	4.58%	5.22%
May-15	EL14-93	Westar Energy	9.80%	4.58%	5.22%
Jun-15	EL14-12	MISO Complaint I	9.98%	4.65%	5.33%
Jun-15	EL12-39	Duke Energy Florida	10.00%	4.65%	5.35%
Jun-15	ER15-303	American Transmission Systems, Inc.	10.56%	4.65%	5.91%
Jun-15	ER15-303	American Transmission Systems, Inc.	9.88%	4.65%	5.23%
Jul-15	ER14-192	Southwestern Public Service Co.	10.00%	4.79%	5.21%
Jul-15	ER13-2428	Kentucky Utilities Co.	10.25%	4.79%	5.46%
Sep-15	ER14-2751	Xcel Energy Southwest Trans. Co. (Gen)	10.20%	5.07%	5.13%
Sep-15	ER14-2751	Xcel Energy Southwest Trans. Co. (Zn 11)	10.00%	5.07%	4.93%
Oct-15	EL15-27	Baltimore G&E / Pepco Holdings, Inc.	10.00%	5.23%	4.77%

Date	Docket No.	Utility	Base ROE	Baa Bond Yield	Implied Risk Premium
Oct-15	ER15-572	New York Transco LLC	9.50%	5.23%	4.27%
Dec-15	ER15-2237	Kanstar Transmission, LLC	9.80%	5.41%	4.39%
Dec-15	ER15-2114	Transource West Virginia, LLC	10.00%	5.41%	4.59%
Jan-16	ER15-1809	ATX Southwest, LLC	9.90%	5.46%	4.44%
Mar-16	ER15-958	Transource Kansas, LLC	9.80%	5.41%	4.39%
Jul-16	EL16-30	Duke Energy Carolinas	10.00%	4.73%	5.27%
Jul-16	ER15-1682	TransCanyon DCR, LLC	9.80%	4.73%	5.07%
Jul-16	ER15-2069	NorthWestern Corp.	9.65%	4.73%	4.92%
Aug-16	ER15-2239	NextEra Energy Transmission West	9.70%	4.55%	5.15%
Aug-16	ER16-453	Northeast Transmission Development	9.85%	4.55%	5.30%
Sep-16	ER15-2594	South Central MCN LLC	9.80%	4.41%	5.39%
May-17	ER15-1429	Emera Maine	9.60%	4.60%	5.00%
Jul-17	ER15-572	New York Transco, LLC	9.65%	4.48%	5.17%
Aug-17	ER17-856	Rockland Electric Co.	9.50%	4.42%	5.08%
Aug-17	ER16-2320-002	Pacific Gas & Electric Co.	9.26%	4.42%	4.84%
Sep-17	ER17-211	Mid-Atlantic Interstate Transmission	9.80%	4.36%	5.44%
Sep-17	ER17-419	Transource Pennsylvania/Maryland, LLC	9.90%	4.36%	5.54%
Nov-17	ER16-2720	NextEra Energy Trans. Southwest LLC	9.80%	4.26%	5.54%
Feb-18	ER16-2716	NextEra Energy Trans. MidAtlantic, LLC	9.60%	4.23%	5.37%
Feb-18	ER17-706	GridLiance West Transco LLC	9.60%	4.23%	5.37%
Feb-18	EL17-13	AEP East Cos.	9.85%	4.23%	5.62%
Mar-18	ER17-135	DesertLink, LLC	9.30%	4.28%	5.02%
Apr-18	ER16-2719	NextEra Energy Trans. New York LLC	9.65%	4.33%	5.32%
Sep-18	ER18-1639	Constellation Mystic Power, LLC	9.19%	4.68%	4.51%
Nov-18	ER18-1225	Southwestern Electric Power Co.	10.10%	4.78%	5.32%
Nov-18	ER19-605	Republic Transmission, LLC	9.30%	4.78%	4.52%
Feb-19	ER19-1396	AEP West Cos.	10.00%	4.88%	5.12%
Feb-19	ER19-1427	Alabama Power Co.	10.60%	4.88%	5.72%
Apr-19	EL18-58	Oklahoma G&E	10.00%	4.81%	5.19%
May-19	ER18-1953	Gulf Power Co.	10.25%	4.71%	5.54%
Jun-19	ER17-1519	PECO	9.85%	4.61%	5.24%
Aug-19	ER18-169-002	Southern California Edison	9.70%	4.29%	5.41%
Sep-19	ER19-221	San Diego Gas & Electric Co.	10.10%	4.13%	5.97%
Feb-20	ER19-697-001	Cheyenne Light, Fuel and Power	9.90%	3.66%	6.24%
Jun-20	ER19-1553	Southern California Edison Co.	9.80%	3.65%	6.15%
Sep-20	ER19-13	Pacific Gas & Electric Co.	9.95%	3.37%	6.58%
Oct-20	ER19-1756	NorthWestern Corp.	9.65%	3.28%	6.37%
Nov-20	ER20-1150	Dayton Power and Light Co.	9.85%	3.20%	6.65%
Dec-20	ER21-2198	Avista Corp.	9.60%	3.14%	6.46%
Jan-21	ER20-227	Jersey Central Power & Light Co.	9.70%	3.15%	6.55%

RISK PREMIUM METHOD **Exhibit**
ALLOWED ROE **Page 5 of 8**

Date	Docket No.	Utility	Base ROE	Baa Bond Yield	Implied Risk Premium
Feb-21	ER21-1319	Duke Energy Progress	9.85%	3.20%	6.65%
Jun-21	ER21-2450	Public Service Elec. & Gas Co.	9.90%	3.47%	6.43%
Jul-21	ER21-1065	TransCanyon Western Development, LLC	9.90%	3.48%	6.42%
Jul-21	ER21-669	Morongo Transmission LLC	9.30%	3.48%	5.82%
Jul-21	EL20-48	PPL Elec. Utilities Corp.	9.90%	3.48%	6.42%
Jul-21	EL20-48	PPL Elec. Utilities Corp.	9.95%	3.48%	6.47%
Jul-21	EL20-48	PPL Elec. Utilities Corp.	10.00%	3.48%	6.52%
Nov-21	ER19-2019	Tucson Electric Power Co.	9.79%	3.26%	6.53%
Feb-22	ER20-2878	Pacific Gas & Electric Co.	10.25%	3.42%	6.83%
May-22	ER22-2125	Duke Energy Progress	10.00%	4.12%	5.88%
Nov-22	ER22-233	Portland General Electric Co.	10.00%	5.55%	4.45%
Dec-22	ER21-253	South FirstEnergy Operating Cos.	9.95%	5.61%	4.34%
Aug-23	ER22-2185	Black Hills Colorado Electric	9.80%	5.72%	4.08%
Oct-23	ER18-1182 et al.	System Energy Resources, Inc.	9.65%	5.99%	3.66%
Mar-24	ER22-282	El Paso Electric Co.	10.25%	5.98%	4.27%
Jul-24	ER23-2212	Commonwealth Edison Co. (Sch. 10)	10.60%	5.88%	4.72%
Jul-24	ER23-2212	Commonwealth Edison Co. (Sch. 19)	10.85%	5.88%	4.97%
Jul-24	ER24-232	New York Transco LLC	10.30%	5.88%	4.42%
		Average	**10.23%**	**5.36%**	**4.87%**

REGRESSION RESULTS



Regression Statistics	
Multiple R	0.924099401
R Square	0.853959703
Adjusted R Square	0.852885877
Standard Error	0.003550012
Observations	138

Coefficients	
Intercept	0.085350671
X Variable 1	-0.68319596

ADJUSTMENTS TO FERC CASE SET

Date	Docket No.	Utility	Base ROE	Explanation
Added to FERC Case Set				
May-08	ER08-1233	Public Service Elec. & Gas	11.18%	Original formula rate order. Commission accepted 11.18% ROE based on applicant's DCF analysis using May 2008 study period. 124 FERC ¶ 61,303 at P 1 (2008).
Apr-09	ER08-1457	PPL Elec. Utilities Corp.	11.18%	Order authorized ROEs of 11.10%, 11.14%, and 11.18%. Opinion No. 569-B included 11.10% and 11.14% values. No basis to distinguish 11.18% or to exclude it because it applies to a future date, as do the majority of ROEs approved by the Commission.
Sep-15	ER14-2751	Xcel Energy Southwest Trans. Co. (Zn 11)	10.00%	Settlement specifies separate ROE for Zone 11 under SPP OATT. 153 FERC ¶ 63,019 (2015). Commission failed to include.
Jun-15	EL14-12	MISO Complaint I	9.98%	Add observation corresponding to 189 FERC ¶ 61,036 (2024).
Aug-17	ER16-2320-002	Pacific Gas & Electric Co.	9.26%	Add observation corresponding to 178 FERC ¶ 61,175 (2022).
Sep-18	ER18-1639	Constellation Mystic Power, LLC	9.19%	Add observation corresponding to 177 FERC ¶ 61,106 (2021).
Apr-19	EL18-58	Oklahoma G&E	10.00%	Offer of Settlement dated 5/21/19. 167 FERC ¶ 63,048 (2019).
May-19	ER18-1953	Gulf Power Co.	10.25%	Offer of Settlement dated 6/20/19. 169 FERC ¶ 61,023 (2019).
Jun-19	ER17-1519	PECO	9.85%	Offer of Settlement dated 7/22/19. 168 FERC ¶ 63,038 (2019).
Aug-19	ER18-169-002	Southern California Edison	9.70%	Offer of Settlement dated 9/19/19. 169 FERC ¶ 63,009 (2019).
Sep-19	ER19-221	San Diego Gas & Electric Co.	10.10%	Offer of Settlement dated 10/18/19. 170 FERC ¶ 63,010 (2020).
Feb-20	ER19-697-001	Cheyenne Light, Fuel and Power	9.90%	Offer of Settlement dated 3/20/20. 171 FERC ¶ 63,012 (2020).
Jun-20	ER19-1553	Southern California Edison Co.	9.80%	Offer of Settlement dated 7/01/20. 172 FERC ¶ 63,011 (2020).
Sep-20	ER19-13	Pacific Gas & Electric Co.	9.95%	Offer of Settlement dated 10/15/20. 173 FERC ¶ 63,024 (2020).
Oct-20	ER19-1756	NorthWestern Corp.	9.65%	Offer of Settlement dated 11/16/20. 174 FERC ¶ 61,074 (2020).
Nov-20	ER20-1150	Dayton Power and Light Co.	9.85%	Offer of Settlement dated 12/10/20. 175 FERC ¶ 61,021 (2020).
Dec-20	ER21-2198	Avista Corp.	9.60%	Add observation corresponding to 176 FERC ¶ 61,222 (2020).
Jan-21	ER20-227	Jersey Central Power & Light Co.	9.70%	Offer of Settlement dated 02/02/21. 175 FERC ¶ 61,023 (2020).
Feb-21	ER21-1319	Duke Energy Progress	9.85%	Offer of Settlement dated 03/10/21. 175 FERC ¶ 63,006 (2021).
Jun-21	ER21-2450	Public Service Elec. & Gas Co.	9.90%	Offer of Settlement dated 07/14/21. 177 FERC ¶ 61,115 (2021).
Jul-21	ER21-1065	TransCanyon Western Development, LLC	9.90%	Offer of Settlement dated 08/13/21. 176 FERC ¶ 63,025 (2021).
Jul-21	ER21-669	Morongo Transmission LLC	9.30%	Offer of Settlement dated 08/16/21. 178 FERC ¶ 61,062 (2021).
Jul-21	EL20-48	PPL Elec. Utilities Corp.	9.90%	Offer of Settlement dated 08/20/21. Effective 05/21/20-05/31/22. 176 FERC ¶ 63,028 (2021).
Jul-21	EL20-48	PPL Elec. Utilities Corp.	9.95%	Offer of Settlement dated 08/20/21. Effective 06/1/22-05/31/23. 176 FERC ¶ 63,028 (2021).
Jul-21	EL20-48	PPL Elec. Utilities Corp.	10.00%	Offer of Settlement dated 08/20/21. Effective 06/1/23. 176 FERC ¶ 63,028 (2021).
Nov-21	ER19-2019	Tucson Electric Power Co.	9.79%	Offer of Settlement dated 12/22/21. 178 FERC ¶ 61,229 (2022).
Feb-22	ER20-2878	Pacific Gas & Electric Co.	10.25%	Offer of Settlement dated 03/31/22. 179 FERC ¶ 61,167 (2022).
May-22	ER22-2125	Duke Energy Progress	10.00%	Offer of Settlement dated 06/16/22. 181 FERC ¶ 61,111 (2022).
Nov-22	ER22-233	Portland General Electric Co.	10.00%	Offer of Settlement dated 12/19/22. 182 FERC ¶ 63,008 (2023).
Dec-22	ER21-253	South FirstEnergy Operating Cos.	9.95%	Offer of Settlement dated 01/18/23. 182 FERC ¶ 63,016 (2023).
Aug-23	ER22-2185	Black Hills Colorado Electric	9.80%	Offer of Settlement dated 09/12/23. 185 FERC ¶ 61,115 (2023).
Oct-23	ER18-1182	System Energy Resources, Inc.	9.65%	Offer of Settlement dated 11/17/23. 186 FERC ¶ 61,194 (2024).
Mar-24	ER22-282	El Paso Electric Co.	10.25%	Offer of Settlement dated 04/11/24. 188 FERC ¶ 61,104 (2024).

Jul-24	ER23-2212	Commonwealth Edison Co. (Sch. 10)	10.60%	Offer of Settlement dated 08/19/24.	189 FERC ¶ 61,107 (2024).
Jul-24	ER23-2212	Commonwealth Edison Co. (Sch. 19)	10.85%	Offer of Settlement dated 08/20/24.	189 FERC ¶ 61,107 (2024).
Jul-24	ER24-232	New York Transco LLC	10.30%	Offer of Settlement dated 08/21/24.	188 FERC ¶ 63,031 (2024).

ADJUSTMENTS TO FERC CASE SET

Date	Docket No.	Utility	Base ROE	Explanation
Removed from FERC Case Set				
Jun-15	EL14-12	MISO Complaint I	10.02%	Vacated by Court of Appeals, No. 16-1325 (Aug. 9, 2022).
Dec-15	ER15-45	MISO Complaint II	10.05%	Remove ROE attributed to Complaint II, which was dismissed. No ROE was established or approved in that proceeding.
Jul-16	ER15-1976	East River	9.60%	Remove observation for publicly-owned entity.
Aug-16	ER16-835	NYPA	8.95%	Remove observation for publicly-owned entity.
Sep-16	ER15-1775	Basin Electric	9.60%	Remove observation for publicly-owned entity.
Jan-17	ER16-204	Tri-State	9.30%	Remove observation for publicly-owned entity.
Feb-17	ER16-209	Central Power	9.50%	Remove observation for publicly-owned entity.
	ER16-1774	Western Farmers	8.77%	Remove observation for publicly-owned entity.
Feb-17	ER16-1546	Arkansas Electric	8.00%	Remove observation for publicly-owned entity.
Aug-17	ER17-426	Denison	9.60%	Remove observation for publicly-owned entity.
Nov-17	ER17-1610	Mountrail-Williams	9.60%	Remove observation for publicly-owned entity.
Nov-17	ER17-428	Vermillion	9.60%	Remove observation for publicly-owned entity.
Feb-19	ER19-1396	PSCo, SWPECo, AEP Oklahoma, et al.	10.00%	Remove duplicate observation previously reflected as "AEP West."
Other Corrections to FERC Case Set				
Sep-08	ER09-187	So. Cal Edison	10.53%	Remove post-record period adjustment from 10.04% authorized ROE to match ROE with study period interest rate. 139 FERC ¶ 61,042 at P 41 (2012) .

Exhibit No. TRANSCO-210

ELECTRIC GROUP

	Company	(a) Expected Return on Common Equity	(b) Adjustment Factor	(c) Adjusted Return on Common Equity	Break (B Pts)
1	FirstEnergy Corp.	14.50%	1.0312	14.95%	31
2	Southern Company	14.50%	1.0095	14.64%	52
3	NextEra Energy, Inc.	13.50%	1.0456	14.12%	21
4	Edison International	13.50%	1.0302	13.91%	75
5	OGE Energy Corp.	13.00%	1.0126	13.16%	0
6	WEC Energy Group	13.00%	1.0126	13.16%	32
7	CMS Energy Corp.	12.50%	1.0273	12.84%	5
8	DTE Energy Co.	12.50%	1.0229	12.79%	50
9	Pub Sv Enterprise Grp.	12.00%	1.0243	12.29%	6
10	Alliant Energy	12.00%	1.0189	12.23%	56
11	Otter Tail Corp.	11.50%	1.0144	11.67%	33
12	Xcel Energy Inc.	11.00%	1.0311	11.34%	2
13	Eversource Energy	11.00%	1.0287	11.32%	7
14	Dominion Energy	11.00%	1.0228	11.25%	3
15	American Elec Pwr	11.00%	1.0201	11.22%	34
16	Sempra Energy	10.50%	1.0359	10.88%	--
17	TXNM Energy	10.00%	1.0300	10.30%	58
18	Ameren Corp.	10.00%	1.0274	10.27%	3
19	Evergy Inc.	10.00%	1.0124	10.12%	15
20	Exelon Corp.	10.00%	1.0111	10.11%	1
21	CenterPoint Energy	9.50%	1.0306	9.79%	32
22	Entergy Corp.	9.50%	1.0300	9.78%	1
23	PPL Corp.	9.50%	1.0217	9.71%	7
24	IDACORP, Inc.	9.00%	1.0264	9.24%	47
25	Consolidated Edison	9.00%	1.0221	9.20%	4
26	Duke Energy Corp.	9.00%	1.0096	9.09%	11
27	Pinnacle West Capital	8.50%	1.0355	8.80%	29
28	Black Hills Corp.	8.50%	1.0268	8.73%	7
29	Avista Corp.	8.50%	1.0197	8.67%	6
30	NorthWestern Corp.	8.00%	1.0174	8.14%	53
31	Fortis Inc.	7.50%	1.0172	7.63%	51
	Lower End (d)			**7.63%**	
	Upper End (d)			**14.95%**	
	Median (d)			**10.88%**	
	Midpoint			**11.29%**	
	Median - All Values			**10.88%**	
	Low-End Test (e)			**7.23%**	
	High-End Test (f)			**21.76%**	

(a) The Value Line Investment Survey (Aug. 9, Sep. 6 and Oct. 18, 2024).
(b) Computed using the formula 2*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity).
(c) (a) x (b).
(d) Excludes highlighted values.
(e) Average Baa utility bond yield for six-months ending Oct. 2024, plus 20% of average IBES and Value Line CAPM market risk premium.
(f) 200% of Median - All Values.

Exhibit No. TRANSCO-211

NON-UTILITY GROUP

			(a)	(b)	(c)	(c)	(c)
			S&P	**Moody's**	**Value Line**		
	Company	**Industry**	**Corporate Rating**	**Long-term Rating**	**Safety Rank**	**Financial Strength**	**Beta**
1	Abbott Labs.	Med Supp Non-Invasive	AA-	Aa3	1	A+	0.85
2	AbbVie Inc.	Drug	A-	A3	1	A+	0.80
3	Air Products & Chem.	Chemical (Diversified)	A	A2	1	A++	0.90
4	Alphabet Inc.	Internet	AA+	Aa2	1	A++	0.90
5	Amdocs Ltd.	IT Services	BBB	Baa1	1	A	0.90
6	Amgen	Biotechnology	BBB+	Baa1	1	A	0.70
7	Apple Inc.	Computers/Peripherals	AA+	Aaa	1	A+	0.95
8	AptarGroup	Packaging & Container	BBB-	Baa3	1	A	0.90
9	Becton, Dickinson	Med Supp Invasive	BBB	Baa2	1	A	0.75
10	Bristol-Myers Squibb	Drug	A	A2	1	A+	0.80
11	Brown & Brown	Financial Svcs. (Div.)	BBB-	Baa3	1	A	0.95
12	Brown-Forman 'B'	Beverage	A-	A1	1	A	0.90
13	Church & Dwight	Household Products	BBB+	A3	1	A	0.55
14	Cisco Systems	Telecom. Equipment	AA-	A1	1	A+	0.85
15	CME Group	Brokers & Exchanges	AA-	Aa3	1	A+	0.95
16	Coca-Cola	Beverage	A+	A1	1	A+	0.85
17	Colgate-Palmolive	Household Products	A+	Aa3	1	A	0.65
18	Comcast Corp.	Cable TV	A-	A3	1	A	0.85
19	Conagra Brands	Food Processing	BBB-	Baa3	1	A	0.55
20	Costco Wholesale	Retail Store	A+	Aa3	1	A+	0.65
21	Danaher Corp.	Med Supp Non-Invasive	A-	A3	1	A+	0.90
22	Electronic Arts	Entertainment Tech	BBB+	Baa1	1	A	0.65
23	Gallagher (Arthur J.)	Financial Svcs. (Div.)	BBB	Baa2	1	A	0.95
24	Gen'l Mills	Food Processing	BBB	Baa2	1	A	0.50
25	Gilead Sciences	Drug	BBB+	A3	1	A	0.60
26	Hershey Co.	Food Processing	A	A1	1	A+	0.75
27	Home Depot	Retail Building Supply	A	A2	1	A++	0.95
28	Hormel Foods	Food Processing	A-	A1	1	A	0.55
29	IDEX Corp.	Machinery	BBB	Baa2	1	A	0.95
30	Int'l Business Mach.	Computer Software	A-	A3	1	A+	0.90
31	Johnson & Johnson	Drug	AAA	Aaa	1	A++	0.75
32	Kimberly-Clark	Household Products	A	A2	1	A	0.70
33	Lilly (Eli)	Drug	A+	A1	1	A++	0.80
34	Lockheed Martin	Aerospace/Defense	A-	A2	1	A	0.85
35	Marsh & McLennan	Financial Svcs. (Div.)	A-	A3	1	A	0.95
36	McDonald's Corp.	Restaurant	BBB+	Baa1	1	A++	0.95
37	McKesson Corp.	Med Supp Non-Invasive	BBB+	A3	1	A	0.80
38	Merck & Co.	Drug	A+	A1	1	A+	0.75
39	Microsoft Corp.	Computer Software	AAA	Aaa	1	A++	0.90
40	Mondelez Int'l	Food Processing	BBB	Baa1	1	A+	0.80
41	NewMarket Corp.	Chemical (Specialty)	BBB+	Baa2	1	A	0.80
42	Northrop Grumman	Aerospace/Defense	BBB+	Baa1	1	A	0.75
43	PepsiCo, Inc.	Beverage	A+	A1	1	A+	0.70
44	Procter & Gamble	Household Products	AA-	Aa3	1	A+	0.70
45	Progressive Corp.	Insurance (Prop/Cas.)	A	A2	1	A+	0.75
46	Republic Services	Environmental	BBB+	Baa1	1	A	0.85
47	Roper Tech.	Computer Software	BBB+	Baa2	1	A	0.95
48	Smucker (J.M.)	Food Processing	BBB	Baa2	1	A	0.60
49	Texas Instruments	Semiconductor	A+	Aa3	1	A+	0.90
50	Thermo Fisher Sci.	Med Supp Non-Invasive	A-	A3	1	A	0.85
51	Travelers Cos.	Insurance (Prop/Cas.)	A	A2	1	A+	0.95
52	UnitedHealth Group	Medical Services	A+	A2	1	A+	0.95
53	Verizon Communic.	Telecom. Services	BBB+	Baa1	1	A+	0.65
54	Walmart Inc.	Retail Store	AA	Aa2	1	A++	0.55
55	Waste Management	Environmental	A-	A3	1	A	0.80
	Average		**A-**	**A2**	**1**	**A+**	**0.80**

(a) www.spglobal.com (retrieved Nov. 26, 2024).
(b) www.moodys.com (retrieved Nov. 26, 2024).
(c) www.valueline.com (retrieved Nov. 26, 2024).

Exhibit No. TRANSCO-212

NON-UTILITY GROUP

		(a)	(b)	(c)	(d)
				IBES	
	Company	6-Mo. Div. Yield	Adjusted Yield	EPS Growth	DCF Result
1	Abbott Labs.	2.04%	2.13%	8.30%	10.43%
2	AbbVie Inc.	2.69%	2.78%	6.80%	9.58%
3	Air Products & Chem.	0.47%	0.49%	6.30%	6.79%
4	Alphabet Inc.	2.30%	2.56%	21.90%	24.46%
5	Amdocs Ltd.	2.92%	3.04%	8.00%	11.04%
6	Amgen	0.49%	0.51%	5.60%	6.11%
7	Apple Inc.	1.16%	1.24%	14.20%	15.44%
8	AptarGroup	1.62%	1.70%	10.80%	12.50%
9	Becton, Dickinson	5.23%	5.46%	8.70%	14.16%
10	Bristol-Myers Squibb	1.89%	1.86%	-3.90%	-2.04%
11	Brown & Brown	1.09%	1.15%	10.40%	11.55%
12	Brown-Forman 'B'	3.33%	3.33%	-0.11%	3.22%
13	Church & Dwight	2.24%	2.34%	9.00%	11.34%
14	Cisco Systems	2.95%	3.01%	4.00%	7.01%
15	CME Group	2.06%	2.11%	4.60%	6.71%
16	Coca-Cola	3.15%	3.23%	5.30%	8.53%
17	Colgate-Palmolive	4.63%	4.84%	8.90%	13.74%
18	Comcast Corp.	0.57%	0.59%	7.90%	8.49%
19	Conagra Brands	0.42%	0.42%	1.60%	2.02%
20	Costco Wholesale	0.55%	0.57%	9.80%	10.37%
21	Danaher Corp.	0.91%	0.94%	6.40%	7.34%
22	Electronic Arts	3.47%	3.70%	12.90%	16.60%
23	Gallagher (Arthur J.)	4.31%	4.55%	11.20%	15.75%
24	Gen'l Mills	2.82%	2.87%	3.30%	6.17%
25	Gilead Sciences	2.54%	2.62%	6.20%	8.82%
26	Hershey Co.	3.50%	3.47%	-1.80%	1.67%
27	Home Depot	1.31%	1.33%	3.70%	5.03%
28	Hormel Foods	3.64%	3.75%	6.20%	9.95%
29	IDEX Corp.	3.20%	3.39%	12.00%	15.39%
30	Int'l Business Mach.	3.54%	3.61%	3.80%	7.41%
31	Johnson & Johnson	0.62%	0.63%	3.00%	3.63%
32	Kimberly-Clark	2.53%	2.62%	7.20%	9.82%
33	Lilly (Eli)	1.43%	1.94%	71.70%	73.64%
34	Lockheed Martin	2.48%	2.53%	4.30%	6.83%
35	Marsh & McLennan	0.47%	0.49%	9.70%	10.19%
36	McDonald's Corp.	2.52%	2.57%	4.50%	7.07%
37	McKesson Corp.	0.71%	0.77%	14.40%	15.17%
38	Merck & Co.	2.54%	3.68%	90.30%	93.98%
39	Microsoft Corp.	1.79%	1.91%	14.00%	15.91%
40	Mondelez Int'l	1.71%	1.76%	5.30%	7.06%
41	NewMarket Corp.	1.21%	n/a	n/a	n/a
42	Northrop Grumman	3.11%	3.24%	8.40%	11.64%
43	PepsiCo, Inc.	2.43%	2.51%	6.40%	8.91%
44	Procter & Gamble	0.18%	0.19%	6.50%	6.69%
45	Progressive Corp.	1.13%	1.36%	40.40%	41.76%
46	Republic Services	0.55%	0.58%	10.00%	10.58%
47	Roper Tech.	3.70%	3.86%	8.50%	12.36%
48	Smucker (J.M.)	2.70%	2.76%	4.50%	7.26%
49	Texas Instruments	0.26%	0.26%	-2.70%	-2.44%
50	Thermo Fisher Sci.	1.45%	1.50%	6.10%	7.60%
51	Travelers Cos.	1.92%	2.08%	16.40%	18.48%
52	UnitedHealth Group	1.54%	1.63%	11.70%	13.33%
53	Verizon Communic.	6.50%	6.53%	1.10%	7.63%
54	Walmart Inc.	1.23%	1.29%	10.70%	11.99%
55	Waste Management	1.44%	1.54%	13.00%	14.54%
	Lower End (e)				**7.26%**
	Upper End (e)				**14.54%**
	Median (e)				**10.37%**
	Midpoint				**10.90%**
	Low-End Test (f)				**7.23%**
	High-End Test (g)				**14.95%**

(a) Six-month average dividend yield for May to Oct. 2024.
(b) Six-month average yield x [1 + 0.5 x EPS Growth].
(c) LSEG Stock Reports Plus, as provided by fidelity.com (retrieved Nov. 26, 2024).
(d) Sum of adjusted yield and growth rate.
(e) Excludes highlighted values.
(f) 6-mo. avg. Baa utility bonds yield for Oct. 2024, plus 20% of average CAPM risk premium.
(g) Highest cost of equity estimate for Electric Group from Exhibit No. Transco-210.

NON-UTILITY GROUP

	Company	(a) 6-Mo. Div. Yield
1	Abbott Labs.	2.04%
2	AbbVie Inc.	2.69%
3	Air Products & Chem.	0.47%
4	Alphabet Inc.	2.30%
5	Amdocs Ltd.	2.92%
6	Amgen	0.49%
7	Apple Inc.	1.16%
8	AptarGroup	1.62%
9	Becton, Dickinson	5.23%
10	Bristol-Myers Squibb	1.89%
11	Brown & Brown	1.09%
12	Brown-Forman 'B'	3.33%
13	Church & Dwight	2.24%
14	Cisco Systems	2.95%
15	CME Group	2.06%
16	Coca-Cola	3.15%
17	Colgate-Palmolive	4.63%
18	Comcast Corp.	0.57%
19	Conagra Brands	0.42%
20	Costco Wholesale	0.55%
21	Danaher Corp.	0.91%
22	Electronic Arts	3.47%
23	Gallagher (Arthur J.)	4.31%
24	Gen'l Mills	2.82%
25	Gilead Sciences	2.54%
26	Hershey Co.	3.50%
27	Home Depot	1.31%
28	Hormel Foods	3.64%
29	IDEX Corp.	3.20%
30	Int'l Business Mach.	3.54%
31	Johnson & Johnson	0.62%
32	Kimberly-Clark	2.53%
33	Lilly (Eli)	1.43%
34	Lockheed Martin	2.48%
35	Marsh & McLennan	0.47%
36	McDonald's Corp.	2.52%
37	McKesson Corp.	0.71%
38	Merck & Co.	2.54%
39	Microsoft Corp.	1.79%
40	Mondelez Int'l	1.71%
41	NewMarket Corp.	1.21%
42	Northrop Grumman	3.11%
43	PepsiCo, Inc.	2.43%
44	Procter & Gamble	0.18%
45	Progressive Corp.	1.13%
46	Republic Services	0.55%
47	Roper Tech.	3.70%
48	Smucker (J.M.)	2.70%
49	Texas Instruments	0.26%
50	Thermo Fisher Sci.	1.45%
51	Travelers Cos.	1.92%
52	UnitedHealth Group	1.54%
53	Verizon Communic.	6.50%
54	Walmart Inc.	1.23%
55	Waste Management	1.44%
	Lower End (e)	
	Upper End (e)	
	Median (e)	
	Midpoint	
	Low-End Test (f)	
	High-End Test (g)	

NON-UTILITY GROUP

	Company	(a) 6-Mo. Div. Yield	(b) Value Line Adjusted Yield	(c) Value Line EPS Growth	(d) DCF Result
1	Abbott Labs.	2.04%	2.08%	4.00%	6.08%
2	AbbVie Inc.	2.69%	2.74%	4.00%	6.74%
3	Air Products & Chem.	0.47%	0.49%	8.50%	8.99%
4	Alphabet Inc.	2.30%	2.46%	13.50%	15.96%
5	Amdocs Ltd.	2.92%	3.02%	7.00%	10.02%
6	Amgen	0.49%	0.50%	4.50%	5.00%
7	Apple Inc.	1.16%	1.21%	8.50%	9.71%
8	AptarGroup	1.62%	1.72%	12.50%	14.22%
9	Becton, Dickinson	5.23%	5.40%	6.50%	11.90%
10	Bristol-Myers Squibb	1.89%	1.90%	1.00%	2.90%
11	Brown & Brown	1.09%	1.16%	12.50%	13.66%
12	Brown-Forman 'B'	3.33%	3.56%	14.00%	17.56%
13	Church & Dwight	2.24%	2.31%	6.50%	8.81%
14	Cisco Systems	2.95%	3.00%	3.50%	6.50%
15	CME Group	2.06%	2.12%	6.00%	8.12%
16	Coca-Cola	3.15%	3.26%	7.00%	10.26%
17	Colgate-Palmolive	4.63%	4.90%	11.50%	16.40%
18	Comcast Corp.	0.57%	0.59%	7.50%	8.09%
19	Conagra Brands	0.42%	0.42%	3.00%	3.42%
20	Costco Wholesale	0.55%	0.58%	10.00%	10.58%
21	Danaher Corp.	0.91%	0.92%	2.00%	2.92%
22	Electronic Arts	3.47%	3.72%	14.00%	17.72%
23	Gallagher (Arthur J.)	4.31%	4.64%	15.50%	20.14%
24	Gen'l Mills	2.82%	2.88%	4.50%	7.38%
25	Gilead Sciences	2.54%	2.57%	2.50%	5.07%
26	Hershey Co.	3.50%	3.63%	7.00%	10.63%
27	Home Depot	1.31%	1.34%	5.50%	6.84%
28	Hormel Foods	3.64%	3.73%	5.00%	8.73%
29	IDEX Corp.	3.20%	3.28%	5.00%	8.28%
30	Int'l Business Mach.	3.54%	3.63%	5.00%	8.63%
31	Johnson & Johnson	0.62%	0.63%	3.50%	4.13%
32	Kimberly-Clark	2.53%	2.62%	7.50%	10.12%
33	Lilly (Eli)	1.43%	1.63%	28.50%	30.13%
34	Lockheed Martin	2.48%	2.60%	9.50%	12.10%
35	Marsh & McLennan	0.47%	0.49%	10.00%	10.49%
36	McDonald's Corp.	2.52%	2.62%	8.50%	11.12%
37	McKesson Corp.	0.71%	0.75%	10.00%	10.75%
38	Merck & Co.	2.54%	2.73%	15.50%	18.23%
39	Microsoft Corp.	1.79%	1.92%	14.50%	16.42%
40	Mondelez Int'l	1.71%	1.78%	7.50%	9.28%
41	NewMarket Corp.	1.21%	1.25%	7.50%	8.75%
42	Northrop Grumman	3.11%	3.23%	7.50%	10.73%
43	PepsiCo, Inc.	2.43%	2.58%	12.50%	15.08%
44	Procter & Gamble	0.18%	0.19%	7.50%	7.69%
45	Progressive Corp.	1.13%	1.16%	5.00%	6.16%
46	Republic Services	0.55%	0.62%	24.50%	25.12%
47	Roper Tech.	3.70%	3.91%	11.00%	14.91%
48	Smucker (J.M.)	2.70%	2.83%	9.00%	11.83%
49	Texas Instruments	0.26%	0.27%	7.00%	7.27%
50	Thermo Fisher Sci.	1.45%	1.47%	3.00%	4.47%
51	Travelers Cos.	1.92%	1.98%	6.00%	7.98%
52	UnitedHealth Group	1.54%	1.64%	12.00%	13.64%
53	Verizon Communic.	6.50%	6.87%	11.50%	18.37%
54	Walmart Inc.	1.23%	1.23%	0.50%	1.73%
55	Waste Management	1.44%	1.51%	9.50%	11.01%
	Lower End (e)				**7.27%**
	Upper End (e)				**14.91%**
	Median (e)				**10.12%**
	Midpoint				**11.09%**
	Low-End Test (f)				**7.23%**
	High-End Test (g)				**14.95%**

(a) Six-month average dividend yield for May to Oct. 202(a) Six-month average dividend yield for May to Oct. 2024.
(b) Six-month average yield x [1 + 0.5 x EPS Growth]. (b) Six-month average yield x [1 + 0.5 x EPS Growth].
(c) LSEG Stock Reports Plus, as provided by fidelity.com(c) www.valueline.com (retrieved Nov. 26, 2024).
(d) Sum of adjusted yield and growth rate. (d) Sum of adjusted yield and growth rate.
(e) Excludes highlighted values. (e) Excludes highlighted values.
(f) 6-mo. avg. Baa utility bonds yield for Oct. 2024, plus (f) 6-mo. avg. Baa utility bonds yield for , plus 20% of average CAPM risk premium.
(g) Highest cost of equity estimate for Electric Group fror(g) Highest cost of equity estimate for Electric Group from Exhibit No. Transco-210.

NON-UTILITY GROUP

	Company	(a) 6-Mo. Div. Yield
1	Abbott Labs.	2.04%
2	AbbVie Inc.	2.69%
3	Air Products & Chem.	0.47%
4	Alphabet Inc.	2.30%
5	Amdocs Ltd.	2.92%
6	Amgen	0.49%
7	Apple Inc.	1.16%
8	AptarGroup	1.62%
9	Becton, Dickinson	5.23%
10	Bristol-Myers Squibb	1.89%
11	Brown & Brown	1.09%
12	Brown-Forman 'B'	3.33%
13	Church & Dwight	2.24%
14	Cisco Systems	2.95%
15	CME Group	2.06%
16	Coca-Cola	3.15%
17	Colgate-Palmolive	4.63%
18	Comcast Corp.	0.57%
19	Conagra Brands	0.42%
20	Costco Wholesale	0.55%
21	Danaher Corp.	0.91%
22	Electronic Arts	3.47%
23	Gallagher (Arthur J.)	4.31%
24	Gen'l Mills	2.82%
25	Gilead Sciences	2.54%
26	Hershey Co.	3.50%
27	Home Depot	1.31%
28	Hormel Foods	3.64%
29	IDEX Corp.	3.20%
30	Int'l Business Mach.	3.54%
31	Johnson & Johnson	0.62%
32	Kimberly-Clark	2.53%
33	Lilly (Eli)	1.43%
34	Lockheed Martin	2.48%
35	Marsh & McLennan	0.47%
36	McDonald's Corp.	2.52%
37	McKesson Corp.	0.71%
38	Merck & Co.	2.54%
39	Microsoft Corp.	1.79%
40	Mondelez Int'l	1.71%
41	NewMarket Corp.	1.21%
42	Northrop Grumman	3.11%
43	PepsiCo, Inc.	2.43%
44	Procter & Gamble	0.18%
45	Progressive Corp.	1.13%
46	Republic Services	0.55%
47	Roper Tech.	3.70%
48	Smucker (J.M.)	2.70%
49	Texas Instruments	0.26%
50	Thermo Fisher Sci.	1.45%
51	Travelers Cos.	1.92%
52	UnitedHealth Group	1.54%
53	Verizon Communic.	6.50%
54	Walmart Inc.	1.23%
55	Waste Management	1.44%
	Lower End (e)	
	Upper End (e)	
	Median (e)	
	Midpoint	
	Low-End Test (f)	
	High-End Test (g)	

(a) Six-month average dividend yield for May to Oct. 202
(b) Six-month average yield x [1 + 0.5 x EPS Growth].
(c) LSEG Stock Reports Plus, as provided by fidelity.com
(d) Sum of adjusted yield and growth rate.
(e) Excludes highlighted values.
(f) 6-mo. avg. Baa utility bonds yield for Oct. 2024, plus
(g) Highest cost of equity estimate for Electric Group fror

NON-UTILITY GROUP

	Company	(a) 6-Mo. Div. Yield	(b) Zacks Adjusted Yield	(c) Zacks EPS Growth	(d) DCF Result
1	Abbott Labs.	2.04%	2.13%	9.10%	11.23%
2	AbbVie Inc.	2.69%	2.80%	7.99%	10.79%
3	Air Products & Chem.	0.47%	0.49%	7.79%	8.28%
4	Alphabet Inc.	2.30%	2.51%	17.83%	20.34%
5	Amdocs Ltd.	2.92%	3.06%	9.69%	12.75%
6	Amgen	0.49%	0.51%	5.75%	6.26%
7	Apple Inc.	1.16%	1.24%	13.74%	14.98%
8	AptarGroup	1.62%	1.70%	10.79%	12.49%
9	Becton, Dickinson	5.23%	5.47%	9.31%	14.78%
10	Bristol-Myers Squibb	1.89%	1.93%	4.00%	5.93%
11	Brown & Brown	1.09%	1.16%	11.62%	12.78%
12	Brown-Forman 'B'	3.33%	3.39%	3.78%	7.17%
13	Church & Dwight	2.24%	2.32%	7.93%	10.25%
14	Cisco Systems	2.95%	3.02%	4.52%	7.54%
15	CME Group	2.06%	2.10%	4.24%	6.34%
16	Coca-Cola	3.15%	3.24%	5.77%	9.01%
17	Colgate-Palmolive	4.63%	4.81%	7.80%	12.61%
18	Comcast Corp.	0.57%	0.59%	6.21%	6.80%
19	Conagra Brands	0.42%	0.42%	3.76%	4.18%
20	Costco Wholesale	0.55%	0.57%	9.13%	9.70%
21	Danaher Corp.	0.91%	0.94%	7.25%	8.19%
22	Electronic Arts	3.47%	3.70%	13.11%	16.81%
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24	Gen'l Mills	2.82%	2.88%	4.27%	7.15%
25	Gilead Sciences	2.54%	2.64%	7.37%	10.01%
26	Hershey Co.	3.50%	3.59%	4.61%	8.20%
27	Home Depot	1.31%	1.37%	9.52%	10.89%
28	Hormel Foods	3.64%	3.74%	5.61%	9.35%
29	IDEX Corp.	3.20%	3.39%	12.00%	15.39%
30	Int'l Business Mach.	3.54%	3.62%	4.40%	8.02%
31	Johnson & Johnson	0.62%	0.64%	5.67%	6.31%
32	Kimberly-Clark	2.53%	2.61%	6.55%	9.16%
33	Lilly (Eli)	1.43%	1.57%	20.00%	21.57%
34	Lockheed Martin	2.48%	2.54%	4.55%	7.09%
35	Marsh & McLennan	0.47%	0.49%	9.57%	10.06%
36	McDonald's Corp.	2.52%	2.60%	6.39%	8.99%
37	McKesson Corp.	0.71%	0.77%	14.14%	14.91%
38	Merck & Co.	2.54%	2.65%	9.00%	11.65%
39	Microsoft Corp.	1.79%	1.92%	14.58%	16.50%
40	Mondelez Int'l	1.71%	1.77%	6.36%	8.13%
41	NewMarket Corp.	1.21%	n/a	n/a	n/a
42	Northrop Grumman	3.11%	3.41%	19.11%	22.52%
43	PepsiCo, Inc.	2.43%	2.51%	6.58%	9.09%
44	Procter & Gamble	0.18%	0.19%	6.66%	6.85%
45	Progressive Corp.	1.13%	1.28%	27.36%	28.64%
46	Republic Services	0.55%	0.58%	10.48%	11.06%
47	Roper Tech.	3.70%	3.90%	10.50%	14.40%
48	Smucker (J.M.)	2.70%	2.75%	3.64%	6.39%
49	Texas Instruments	0.26%	0.28%	9.00%	9.28%
50	Thermo Fisher Sci.	1.45%	1.50%	6.98%	8.48%
51	Travelers Cos.	1.92%	2.03%	11.20%	13.23%
52	UnitedHealth Group	1.54%	1.64%	12.34%	13.98%
53	Verizon Communic.	6.50%	6.59%	2.98%	9.57%
54	Walmart Inc.	1.23%	1.28%	8.52%	9.80%
55	Waste Management	1.44%	1.54%	12.98%	14.52%
	Lower End (e)				**7.54%**
	Upper End (e)				**14.91%**
	Median (e)				**10.03%**
	Midpoint				**11.22%**
	Low-End Test (f)				**7.23%**
	High-End Test (g)				**14.95%**

(a) Six-month average dividend yield for Feb. 2024 to Jul. 2024.
(b) Six-month average yield x [1 + 0.5 x EPS Growth].
(c) www.zacks.com (retrieved Nov. 26, 2024).
(d) Sum of adjusted yield and growth rate.
(e) Excludes highlighted values.
(f) 6-mo. avg. Baa utility bonds yield for , plus 20% of average CAPM risk premium.
(g) Highest cost of equity estimate for Electric Group from Exhibit No. Transco-210.