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Issues:	Cost of Capital; Capital Structure; Return on Equity
Witness:	Ann E. Bulkley
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Sponsoring Party:	Evergy Missouri Metro
Case No.:	ER-2026-0143
Date:	September 10, 2026

MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2026-0143

SURREBUTTAL TESTIMONY

OF

ANN E. BULKLEY

ON

BEHALF OF

EVERGY MISSOURI METRO

Kansas City, Missouri

September 2026

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SURREBUTTAL TESTIMONY

OF

ANN E. BULKLEY

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I. INTRODUCTION

Q. Are you the same Ann E. Bulkley that previously filed direct and rebuttal testimony in this proceeding?

A. Yes. I previously submitted direct and rebuttal testimony before the Missouri Public Service Commission ("Commission") in this proceeding on behalf of Evergy Metro, Inc. ("Evergy Metro") d/b/a Evergy Missouri Metro ("Evergy Missouri Metro" or the "Company"), a wholly-owned subsidiary of Evergy, Inc. ("Evergy").[1]

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimonies of Dr. Seoung Joun Won on behalf of the Missouri Public Service Commission Staff ("Staff"),[2] and David Murray on behalf of the Missouri Office of the Public Counsel ("OPC"),[3] regarding their respective proposals for the return on equity ("ROE") for the Company in this proceeding. To the extent that I do not address a particular issue raised by these witnesses in my surrebuttal testimony should not be viewed as acceptance of that issue.

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[1] Missouri Public Service Commission, Direct Testimony of Ann E. Bulkley, Case No. ER-2026-0143, February 26, 2026 ("Bulkley Direct"); Missouri Public Service Commission, Rebuttal Testimony of Ann E. Bulkley, Case No. ER-2026-0143, August 11, 2026 ("Bulkley Rebuttal").

[2] Missouri Public Service Commission, Case No. ER-2026-0143, Rebuttal Testimony of Seoung Joun Won, PhD, August 11, 2026 ("Won Rebuttal").

[3] Missouri Public Service Commission, Case No. ER-2026-0143, Rebuttal Testimony of David Murray, August 11, 2026 ("Murray Rebuttal").

Q. Are you sponsoring any exhibits in support of surrebuttal testimony?

A. Yes. I am sponsoring Schedule AEB-1SR through Schedule AEB-4SR, which have been prepared by me or under my direction.

II. SUMMARY AND CONCLUSIONS

Q. Please briefly summarize your surrebuttal testimony and your key conclusions and recommendations regarding the appropriate ROE for the Company in this proceeding.

A. Nothing in the rebuttal testimonies of Dr. Won and Mr. Murray has caused me to change my conclusions or recommendations. Based on my review of their respective rebuttal testimonies, my key conclusions regarding a reasonable ROE for the Company in this proceeding are as follows:

- **Capital Markets:** Mr. Murray's ROE recommendation of 9.25 percent does not reasonably reflect current capital market conditions. As Dr. Won observes, Mr. Murray's cost of equity estimates have considerably increased since the Company's prior rate proceeding, yet his recommended ROE has increased by only 25 basis points. In addition, interest rates have also considerably increased, and Mr. Murray's recommendation is well below recent national average authorized ROEs for vertically integrated electric utilities.

- **Cost of Equity versus Authorized ROE:** It is not credible for Mr. Murray to suggest that I should have relied on the assumptions used in his cost of equity estimation models when he does not directly rely on the results of those models to support his recommended ROE.

  - There is no basis to Mr. Murray's claim that regulators, including the Commission, have incorrectly authorized ROEs for years that are substantially higher than the cost of equity.

- **Proxy Group:** Neither Dr. Won nor Mr. Murray have demonstrated that their suggested changes to my proxy group are supported.

- The inclusion of Dominion Energy Inc. and NextEra Energy, Inc. in the proxy group raised by Dr. Won and Mr. Murray is not relevant considering I excluded them from my proxy group in my rebuttal testimony following their merger announcement.

- The concerns raised by Dr. Won and Mr. Murray regarding my use of an income screen, companies with unregulated operations, and the absence of a screen to account for recent negative dividend growth do not demonstrate that the companies in my proxy group are not comparable to Evergy Metro.

  - Dr. Won's screening criterion for excluding companies with recent negative dividend growth rates is inconsistently applied.

  - There is no discernible trend in the constant growth discounted cash flow ("DCF") results for the companies in my proxy group that would indicate companies with a relatively higher percentage of unregulated operations have a higher cost of equity than companies with a relatively lower percentage of unregulated operations.

- **Discounted Cash Flow Model ("DCF"):** Dr. Won's and Mr. Murray's criticisms regarding the use of projected earnings per share ("EPS") growth rates in the constant growth DCF model are unfounded.

  - Although Dr. Won and Mr. Murray suggest that I should have relied on the multi-stage DCF model using their assumptions, the results of their multi-stage DCF models are significantly lower than each of their ROE recommendations, demonstrating that they are not relying on these assumptions.

  - Earnings are the fundamental driver of dividend growth rates, and there is significant academic research demonstrating that EPS growth rates are most relevant in stock price valuation.

  - A reasonably specified multi-stage DCF analysis produces a cost of equity estimate that is materially higher than Dr. Won's and Mr. Murray's multi-stage DCF estimates and is supportive of the Company's requested ROE. Specifically, relying on a reasonable duration for the current industry growth and capital expenditure cycle and transitioning to a reasonable long-term growth rate that reflects the *Morningstar* method for GDP growth results in a cost of equity estimate that is significantly higher than the results of Dr. Won's and Mr. Murray's models.

- **Capital Asset Pricing Model ("CAPM"):** Dr. Won's and Mr. Murray's allegation that the market return in my CAPM and Empirical CAPM ("ECAPM") analyses is too high is contradicted by the fact that the methodology that I have used to estimate the market return:

- Is consistent with the observed historical market risk premia from 1926-2025.

- Has been accepted by various regulators.

- Is consistent with the results of a study by the Federal Reserve Bank of New York that evaluated various market risk premium estimates.

- There are critical errors in Dr. Won's "adjustment" to my CAPM and ECAPM analyses, that when corrected, continue to support an ROE of 10.50 percent and fails to support Dr. Won's conclusion.

- **Bond Yield Plus Risk Premium analysis ("BYRP"):** Neither Dr. Won nor Mr. Murray have provided any evidence that the results of my BYRP analyses are unreliable.

  - The regression analysis that I have conducted in my direct and rebuttal testimonies demonstrates a strong inverse relationship between interest rates and the equity risk premium for utilities.

  - Dr. Won misinterprets the effect of the increase in interest rates since the COVID-19 pandemic, which do not signal a change in the relationship between interest rates and authorized ROEs but instead indicate that that that the authorized ROEs for vertically integrated electric utilities should continue to increase over the near term to reflect the change in capital costs.

  - Dr. Won's concern regarding the data used in my BYRP analysis applies equally to his own analysis upon which he bases his ROE recommendation.

- **Business Risks:** Dr. Won and Mr. Murray fail to consider the relevant comparison point when evaluating the Company's business and regulatory risks.

  - Both fail to recognize that the ROE that is determined in this proceeding relies on market data for a proxy group. Therefore, the appropriate comparison is not the Company's risk with or without regulatory mechanisms, but rather the Company's risk as compared to the proxy group companies.

  - All else equal, while I agree that regulatory mechanisms that reduce a utility's regulatory lag in cost recovery help to mitigate risk, the appropriate analysis for purposes of establishing the Company's ROE in this proceeding is to evaluate how Evergy Metro's regulatory risk compares to the companies in the proxy group – which neither Dr. Won nor Mr. Murray have done.

- **Capital Structure:** I have independently evaluated Mr. Murray's analysis, and I agree with Dr. Won that Mr. Murray's proposed equity ratio recommendation of 45.00 percent is not reasonable and is inconsistent with typical regulatory practices.
    - Mr. Murray incorrectly relies on Evergy's consolidated holding-company capital structure rather than the capital structure for Evergy Metro on a stand-alone basis.
    - Mr. Murray's comparison of the average actual equity ratios of the proxy group companies to the Company's proposed equity ratio incorrectly relies on book-value capital structures of holding companies, while his cost of equity estimates reflect market value. When the market value of the debt and equity of the proxy group holding companies is used for his comparison, it is clear that the Company's proposed equity ratio in this proceeding is reasonable.
    - Mr. Murray's recommended equity ratio is materially below both Evergy Metro's recent actual equity ratio and the recent average authorized equity ratios for vertically integrated electric utilities nationally.

III. CAPITAL MARKET CONDITIONS

Q. Does Mr. Murray's ROE recommendation of 9.25 percent reflect changes in capital market conditions since the Company's last rate proceeding?

A. No. Despite interest rates increasing by 136 basis points since the Company's prior rate proceeding, Mr. Murray's ROE recommendation is 25 basis points ***lower*** than Company's currently authorized ROE of 9.50 percent.[4] Furthermore, Dr. Won observes that Mr. Murray's recommendation is approximately 59 basis points below the average authorized ROE for vertically integrated electric utilities nationally in the first half of 2026 of 9.84 percent.[5] Dr. Won also notes that Mr. Murray's cost of equity estimates are more than 70

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[4] Missouri Public Service Commission File Nos. ER-2022-0129 & ER-2022-0130, Report and Order, November 21, 2022; *Bloomberg Professional Services* reports that the 30-year Treasury Yield was 3.91% on the prior proceeding's settlement date of November 21, 2022 and 5.27% as of July 31, 2026.

[5] Won Rebuttal, at 49.

basis points higher than his estimates in the Company's prior proceeding, yet Mr. Murray's ROE recommendation in this proceeding is only 25 basis points higher from his recommended ROE in the Company's prior rate proceeding.[6] Based on all of these factors, Mr. Murray's ROE recommendation for the Company in this proceeding is not reasonable.

Q. Are the yields on long-term bonds expected to remain elevated?

A. Yes. Economists are still expecting elevated long-term interest rates. In the most recently published report by *Blue Chip Financial Forecasts*, the consensus estimate of economists is that the 30-year treasury bond yield will be 4.90 percent in Q4/2026 and 4.80 percent through Q4/2027.[7] Additionally, the consensus estimate over the longer term (*i.e.*, 2028-2032) is 4.70 percent.[8] This is important because it means that long-term interest rates are expected to remain elevated during the period that the Company's rates will be in effect.

Q. Is Mr. Murray's observation that price-to-earnings ("P/E") ratios have marginally increased since the 2024 Evergy Missouri West rate proceeding supportive of his claim that the cost of equity has declined since the Company's prior proceeding?[9]

A. No. A P/E ratio alone is not an appropriate benchmark to claim that the cost of capital has decreased. A company's P/E ratio reflects many factors such as expected earnings growth, dividend or payout policies, future profitability, business risk, interest rates, capital structure, and market sentiment. Furthermore, Mr. Murray acknowledges that the electric utility industry is undergoing a change with larger capital expenditures and higher

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[6] *Id.,* at 49-50.

[7] *Blue Chip Financial Forecasts*, Vol. 45, No. 7, July 1, 2026, at 9.

[8] *Blue Chip Financial Forecasts*, Vol. 45, No. 6, June 1, 2026, at 14.

[9] Murray Rebuttal, at 18-19.

projected EPS growth. These factors impact investor's valuation of stocks and therefore limit the usefulness of P/E comparisons.

As shown in my rebuttal testimony, Mr. Murray's own recommendations also undermine his conclusion. Although Mr. Murray suggests that there should be an inverse relationship between the P/E ratios and the cost of equity, it is clear that Mr. Murray's historical ROE recommendations have not considered the P/E ratios of his proxy group.[10] If P/E ratios were a reliable benchmark for determining the cost of equity and the appropriate authorized ROE as Mr. Murray contends, then it would be reasonable to assume that his ROE recommendations in various rate proceedings would move inversely with the P/E ratios of his proxy group – which they have not.

Q. Does Mr. Murray's analysis of the P/E ratios and PEG ratios provide any direction regarding whether the cost of equity is increasing or decreasing?

A. No. Mr. Murray concedes that higher growth projections may be contributing to higher P/E ratios as opposed to a decrease in the cost of equity; however, he ultimately acknowledges that he cannot isolate the effect of these two factors.[11] Mr. Murray attempts to evaluate these two variables by showing that the PEG ratio (*i.e.*, P/E ratio divided by the earnings growth rate) has been steady since Fall 2023. However, a relatively stable PEG ratio is also consistent with P/E ratios increasing (the numerator) along with an increase in the expected earnings growth rate (the denominator) and does not demonstrate that the cost of equity has declined. This is especially important because Mr. Murray notes that the

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[10] Bulkley Rebuttal, at 15-16.

[11] Murray Rebuttal, at 18.

utility industry is undergoing significant growth as a result of data centers. Thus, Mr. Murray's P/E ratio and PEG observations do not isolate changes in the cost of equity from changes in expected growth.

IV. PROXY GROUP

Q. Please summarize the disagreements that Dr. Won and Mr. Murray have with the proxy group that you relied on for Evergy Metro.

A. The disagreements raised by Dr. Won and Mr. Murray in this proceeding regarding my proxy group are as follows:[12]

- Dr. Won contends that an asset screen is more appropriate than my use of an income screen to evaluate regulated operations.
- Dr. Won contends that I should have accounted for non-regulated assets of companies in my proxy group, while Mr. Murray suggests that I do not recognize that some of the companies contained in my proxy group have "significant exposure" (which he defines as greater than 10.00 percent) to unregulated operations that he contends increases the risk of my proxy group.
- Dr. Won contends that my proxy group screening criteria do not exclude Dominion Energy Inc. ("Dominion") and PPL Corporation ("PPL"), which have experienced negative dividend growth in recent years.
- Mr. Murray contends that the Company's parent, Evergy, should have been considered.

It is important to note that the issues raised by Dr. Won and Mr. Murray lead to conflicting conclusions as to which companies should be included in the proxy group.

[12] Won Rebuttal at 8-12; Murray Rebuttal at 8-10.

Q. Do you agree with Dr. Won that an asset screen is more appropriate than an income screen in developing the proxy group?

A. No. The fundamental driver of the value of a company is earnings, not assets. Therefore, the more relevant screening criterion to use to establish the proportion of a utility's operations that are regulated versus unregulated is the relative contribution to earnings.

Q. Do you agree with Dr. Won and Mr. Murray that your proxy group includes companies with significant unregulated operations that result in greater risk for the proxy group companies?

A. No. Dr. Won and Mr. Murray collectively identify only three of the sixteen companies in the proxy group from my direct testimony that they contend have significant unregulated operations,[13] and two of those companies (*i.e.*, Dominion and NextEra Energy, Inc.) were already excluded from my proxy group because of their pending merger when I updated my cost of equity analyses to reflect current data as part of my rebuttal testimony.[14] The only remaining company in my proxy group which Mr. Murray suggests is inappropriate for having significant unregulated operations is DTE Energy Company ("DTE").

As discussed in my direct testimony, I apply a screening criterion that requires a company to derive at least 60.00 percent of its operating income from regulated electric operations, which ensures that, together with my other screening criteria, the companies used in my cost of equity analyses have operating and financial risk characteristics that are substantially comparable to Evergy Metro, including substantial regulated electric

[13] Won Rebuttal, at 10; Murray Rebuttal at 9.

[14] Bulkley Rebuttal, at 10.

operations.[15] As shown in Schedule AEB-2 of my direct testimony, over the most recent three year period, DTE derived more than 65.00 percent of its total operating income from regulated electric operations.[16] Moreover, although I have screened the proxy group to limit unregulated operations, neither Dr. Won nor Mr. Murray have conducted any analysis to support their conclusions that DTE is perceived to have greater risk than Evergy Metro.

Q. Have you conducted any analyses to test whether the unregulated operations of the proxy companies that you have relied upon have biased the results of your analyses?

A. Yes. Figure 1 graphs the percentage of regulated operations, as determined by operating income, and the constant growth DCF results for my proxy group. As shown, there is no discernible trend in the constant growth DCF results for the companies in my proxy group that would indicate companies with a relatively higher percentage of unregulated operations have a higher cost of equity than companies with a relatively lower percentage of unregulated operations. This further supports that the operating risk of companies with a relatively higher percentage of unregulated operations in the proxy group are not perceived to have greater risk than companies in the proxy group with a relatively lower percentage of unregulated operations.

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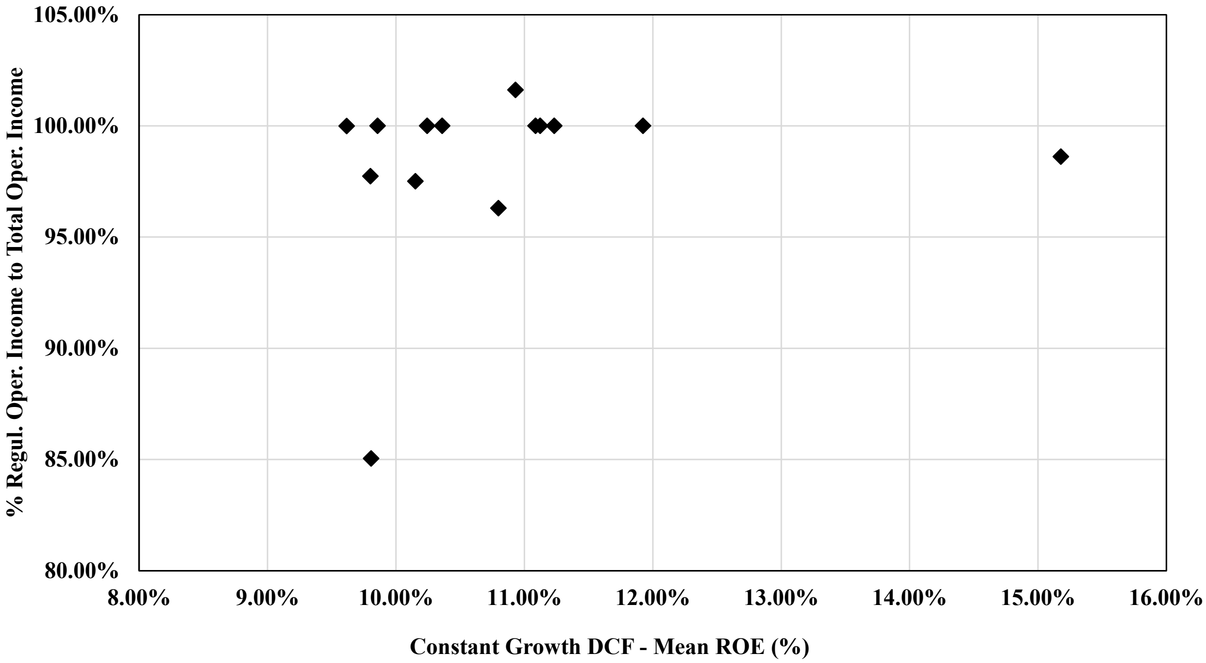
15 Bulkley Direct, at 19.

16 *Id.*, at Schedule AEB-2.

FIGURE 1: COMPARISON OF CONSTANT GROWTH DCF RESULTS AS OF JUNE 30, 2026 AND PERCENTAGE OF REGULATED OPERATING INCOME[17]



Therefore, I disagree with Dr. Won and Mr. Murray that my proxy group does not reasonably address unregulated operations for the proxy companies.

Q. Do you agree with Dr. Won that you should have included a screening criterion that excludes companies with recent negative dividend growth?

A. No. First, PPL's dividend cut is not "recent," but rather occurred in February 2022 as a result of a large restructuring that included divesting its business in the United Kingdom and acquiring Narragansett Electric.[18] Since that time, PPL has consistently increased its dividend. Therefore, it not reasonable to exclude PPL because of a dividend reduction over four years ago.

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17 Bulkley Rebuttal, Schedule AEB-2R; reflects 30-day average stock prices.

18 PPL Corporation, "PPL Corporation Reports 2021 Earnings," February 18, 2022.

Second, Dr. Won did not object to the inclusion of PPL in my proxy group in a 2024 rate proceeding filed by Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri") and, in fact, included PPL in his own Electric Proxy Group in that proceeding.[19] PPL's dividend cut in 2022 that Dr. Won is now highlighting in this proceeding would have been known and reflected in market data at the time of his testimony in the 2024 Ameren Missouri proceeding, so it is unclear why he believes PPL is not comparable to Evergy Metro four years after PPL's dividend cut when he believed it to be a reasonable proxy in Ameren Missouri's rate proceeding.

Q. Do you agree with Mr. Murray that the cost of equity for Evergy should be used to determine the cost of equity for Evergy Metro?[20]

A. No. Although Evergy Metro is a subsidiary of Evergy, it is important to treat Evergy Metro as a stand-alone entity and evaluate the Company based on its utility operations in Missouri. The *Hope* and *Bluefield* decisions require that the return established for a regulated utility be based on the returns for other entities of comparable risk. It does not suggest that the return be based on the return available to the parent company or affiliates. As stated in *Modern Regulatory Finance*:

> A utility operating company, segment, division, or line of business must be treated as a separate stand-alone entity, distinct from its parent company because it is the cost of capital for the division that we are attempting to measure and not the cost of capital for the parent company's consolidated activities.[21]

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[19] Missouri Public Service Commission, Direct Testimony of Seoung Joun Won, Case No. ER-2024-0319, January 17, 2024.

[20] Murray Rebuttal, at 10.

[21] Roger A. Morin, *Modern Regulatory Finance*, Public Utilities Reports, Inc., 2021, at 252.

In addition, I have excluded Evergy from the proxy group used to estimate the cost of equity for Evergy Metro because of the circularity that results from the use of the parent company market return to establish the return for the operating utility, which in turn contributes to the ROE of the parent company.

Q. Does Dr. Won include Evergy in his proxy group?

A. No.

Q. Do you agree with Mr. Murray's claim that your inclusion of Ameren Corporation ("Ameren") in your proxy group in this proceeding while including Evergy in your proxy group in a recent Ameren Missouri rate proceeding is inconsistent?[22]

A. No. The reasons for including and excluding companies from the proxy groups in these two cases are entirely consistent. I have excluded the publicly traded company in the evaluation of the cost of equity for the operating company owned by that parent. In this proceeding, Ameren provides an independent market observation for estimating Evergy Metro's cost of equity because Evergy Metro's regulated operations do not contribute to Ameren's consolidated financial results and Ameren meets my screening criteria. In contrast, in the Ameren Missouri proceeding that Mr. Murray references, Evergy provided an independent market observation because Ameren Missouri's regulated operations do not contribute to Evergy's consolidated financial results. In both proceedings, the subject utility is not publicly traded. Therefore, it is appropriate to use a group of publicly traded companies with comparable risk characteristics to estimate its cost of equity, while excluding the subject utility's parent company to avoid circularity.

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[22] Murray Rebuttal, at 8.

V. COST OF EQUITY AND RETURN ON EQUITY

Q. What is Mr. Murray's position regarding previously authorized ROEs?[23]

A. Mr. Murray contends that authorized ROEs have exceeded the cost of equity.[24] Mr. Murray has previously stated that the reason this is evident is because the market-to-book ratios for utilities have exceeded 1.0.[25]

Q. Do you agree with Mr. Murray that authorized ROEs have exceeded the cost of equity because the market-to-book ratios for utilities have exceeded 1.00?

A. No. Mr. Murray's position that ROEs have been materially higher than utilities' cost of equity for decades rests on the belief that capital markets are perfectly efficient (*i.e.,* what is referred to as the Efficient Market Hypothesis ("EMH")). For example, Mr. Murray has previously stated:

> [I]t is not my role as a cost of capital witness to provide market prognostications. **I adhere to the efficient market hypothesis** (as should anyone employing cost of capital models/methods) which dictates that current market prices reflect investors' expectations of changes in economic, capital market and business conditions.[26]

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23 Dr. Won cites my direct testimony where I state that I use the terms ROE and cost of equity interchangeably. While this has been common practice among regulators, I recognize and have correctly established in my testimony that the cost of equity is the cost required by the investor for making an equity investment while the ROE is the return that is authorized by the Commission. Therefore, Dr. Won and I agree as to the difference in the meaning of these terms.

24 *See, e.g*., Murray Rebuttal, at 39, 42.

25 Missouri Public Service Commission, Rebuttal Testimony of David Murray, ER-2024-0319, January 17, 2025, at 20-21; Missouri Public Service Commission, Direct Testimony of David Murray, Case No. ER-2024-0319, at 4-5; Missouri Public Service Commission, Rebuttal Testimony of David Murray, ER-2024-0189, August 6, 2024, at 12; Missouri Public Service Commission, Direct Testimony of David Murray, Case No. ER-2024-0189, June 27, 2024, at 3.

26 Missouri Public Service Commission, Case No. ER-2024-0189, Rebuttal Testimony of David Murray, August 6, 2024, at 23.

Q. What is the theory of the EMH?

A. The theory of the EMH contends that all information that is currently known by investors is already reflected in current stock prices.[27] For example, as shown in my direct testimony, the theory of the DCF model is that the current share price is equal to the present value of all expected future dividends.[28] Therefore, if markets were fully efficient as assumed by Mr. Murray, changes in share prices could only be explained by new information that results in a change to the expected dividends.

The premise implied by Mr. Murray is that because markets are efficient, if the ROE is set equal to the cost of equity, the share price will adjust so that the expected return is equivalent to the cost of equity, at which point the market-to-book ratio is 1.00. Therefore, Mr. Murray concludes that because the market-to-book ratio for each of the companies in my proxy groups is greater than 1.00, the authorized ROEs are greater than the cost of equity.

Q. What is the underlying problem with the EMH?

A. In the text *Behavioral Finance: The Second Generation*, Meir Statman noted that it is difficult to test the EMH because of the "joint hypothesis" problem (*i.e.*, trying to solve for two variables); therefore, one can either assume market efficiency and determine the asset pricing model, or assume an asset pricing model and determine market efficiency.[29] The problem can be illustrated as follows – if the returns predicted by the CAPM deviate from

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[27] R. J. Shiller, "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?," *The American Economic Review*, Vol. 71, No. 3, 1981, at 421–436.

[28] Bulkley Direct, at 23.

[29] Meir Statman, *Behavioral Finance: The Second Generation*, CFA Institute Research Foundation, 2019, at 162.

those achieved in the market, one could conclude either that the market is not efficient or the CAPM is not the appropriate model. Therefore, as Dr. Lawrence Kolbe and Dr. Michael Vilbert outlined in their 2016 presentation to the California Public Utilities Commission, the problem with assuming that authorized ROEs have exceeded the cost of equity, which is predicated on the theory of the EMH, is: (1) it is unclear whether the theory of the EMH holds true; and (2) even assuming for the sake of argument that the EMH does in fact hold true, there is also no consensus regarding which model produces reasonable estimates of the cost of equity.[30]

Q. Have economists identified inefficiencies in the market using historical market data?

A. Yes. For example, Nobel Prize winning economist Dr. Robert Shiller examined market efficiency in his 1981 study titled "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?," where he examined whether the volatility in share prices could be fully explained by new information regarding future dividends. Dr. Shiller found that the historical volatility of share prices has been far too high to be fully explained by changes in expectations for future dividends:

> We have seen that measures of stock price volatility over the past century appear to be far too high – five to thirteen times too high – to be attributed to new information about future real dividends if uncertainty about future dividends is measured by the sample standard deviations of real dividends around their long-run exponential growth path. The lower bound of a 95 percent one-sided x^2 confidence interval for the standard deviation of annual changes in real stock prices is over five times higher than the upper bound allowed by our measure of the observed variability of real dividends. ***The failure of the efficient markets model is thus so dramatic that it would***

[30] A. Lawrence Kolbe, Ph.D. and Michael J. Vilbert, Ph.D., "Moving Toward Value in Utility Compensation Shareholder Value Concept," Presented to the CPUC, June 13, 2016.

> ***seem impossible to attribute the failure to such things as data errors, price index problems, or changes in tax laws***.[31]

Thus, Dr. Shiller concluded that the DCF model does not fully explain stock prices, which, as noted, could be either an indication that markets are not efficient (the conclusion reached by Dr. Shiller) and/or the DCF model is not the correct asset pricing model.[32]

Q. Are there other practical examples of inefficiencies that indicate markets are not efficient or that the DCF model does not explain share prices?

A. Yes. Large sudden declines in the market such as Black Monday in 1987, the Great Recession of 2008/09, and the COVID-19 crash in March 2020 would not be explained by new information regarding dividends. Moreover, Dr. Shiller contended that there were "asset bubbles" such as the "tech boom" from 1994 to 2000 that resulted in substantial increases in share prices that could not be explained by market fundamentals.[33] In fact, as Brealey, Myers and Allen noted in *Principles of Corporate Finance*:

> Extensive empirical testing of the efficient-market hypothesis began around 1970. By 2009, after almost 40 years of work, the tests have uncovered dozens of statistically significant anomalies. Sorry, but this work does not translate into dozens of ways to make easy money. Superior returns are elusive. For example, only a few mutual fund managers can generate superior returns for a few years in a row, and then only in small amounts. Statisticians can beat the market, but real investors have a much harder time of it.[34]

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[31] R. J. Shiller, "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?," *The American Economic Review*, Vol. 71, No. 3,1981, at 421-436 (emphasis added).

[32] *See also,* Werner F. M. De Bondt and Richard Thaler, "Does the Stock Market Overreact?," *The Journal of Finance*, Vol. 40, No. 3, 1985, at 793-805; Andrei Shleifer and Lawrence H. Summers, "The Noise Trader Approach to Finance," *Journal of Economic Perspectives*, 1990, Vol. 4, No. 2, at 19-33.

[33] R.J. Shiller, "From Efficient Markets Theory to Behavioral Finance," *Journal of Economic Perspectives,* Vol. 17, No. 1, 2003, at 83-104.

[34] Richard A. Brealey, Stewart C. Myers, Franklin Allen, *Principles of Corporate Finance*, 10th ed., McGraw-Hill/Irwin, 2011, at 867.

Q. Are you aware of any practical examples where market inefficiencies were also identified using the share prices of individual stocks?

A. Yes. There are many examples where market inefficiencies were identified using the share prices of individual stocks. For example, Statman noted the following example:

> Direct evidence refuting the value-efficiency hypothesis comes from Palm Computing's spinoff from its parent, 3Com, as reported by economist Owen Lamont and Nobel Prize–winning economist Richard Thaler. (Palm Computing manufactured the Palm Pilot personal digital assistant.) The spinoff occurred at the height of the internet boom. Initially, only 5% of Palm Computing shares were sold to investors. The other 95% remained with 3Com. Enthusiasm for the shares of Palm Computing was so great and their price shot up so high that the total value of the 95% of Palm Computing shares still owned by 3Com greatly exceeded the total value of all 3Com shares, implying the absurd conclusion that the rest of 3Com's business had negative value. The more likely conclusion is that the price of 3Com shares was far below their value, the price of Palm Computing shares was far above their value, or both.[35]

Similarly, Sushma Karnati (2024) noted the example of the share price for GameStop in 2021 where retail investors influenced by herd dynamics drove up the share price in response to hedge funds that had short positions in GameStop.[36] The same applies for various other individual stocks that have experienced significant price increases and volatility when no new material financial information is made available that would otherwise justify such pricing changes.

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[35] Meir Statman, *Behavioral Finance: The Second Generation*, CFA Institute Research Foundation, 2019, at 148.

[36] Sushma Karnati, "The Role of Behavioral Finance in Market Anomalies and Investor Biases," International Journal for Multidisciplinary Research, June 2024.

Q. Although it is evident that inefficiencies in the market exist, is it correct that this could be due to either markets being inefficient as assumed by Dr. Shiller and/or that the asset pricing model used is not appropriate for determining the share price?

A. Yes. While the examples discussed above provide evidence of market inefficiencies that could very well prove that the EMH does not hold and stocks are not rationally priced, it could also be that the correct asset pricing model to determine expected returns is not known by economists. For example, in the text *Corporate Finance*, finance professor Ivo Welch states:

> Of course, few people doubt that big U.S. financial markets are, to such a first approximation, efficient – we all know that you just can't earn that much. But there is a large gray zone where it is difficult to distinguish between model error and market inefficiency. Because no one knows for sure what the correct model of expected returns is, no one can tell you affirmatively whether the stock market set the price of ABC stock so as to offer investors an expected rate of return on ABC of, say, 10 percent a year or 12 percent a year.[37]

Welch further noted that "we are not sure and cannot agree whether ABC should earn 10 percent, 20 percent, or 30 percent a year."[38] Similarly, Statman noted:

> The CAPM was accepted as the correct asset pricing model as long as it served to show that markets are hard to beat and value efficient. But the CAPM was largely replaced by the three-factor model when the former indicated that markets are not efficient, yielding abnormal returns to investors in small-capitalization and value stocks.
>
> The three-factor model was judged as faulty when it failed to account for abnormal returns yielded by the momentum factor. And the four-factor model was declared faulty when it failed to account for abnormal returns

[37] Ivo Welch, *Corporate Finance*, 5th edition, at 319-320.

[38] *Id.,* at 319.

> associated with investment and profitability, idiosyncratic volatility, and net stock issues, among many others.[39]

This is important because it shows that existing asset pricing models are continually being adjusted to better predict prices in the market and explain deficiencies and that currently there is not one correct asset pricing model.

Q. What is your conclusion regarding market-to-book ratios, authorized returns, and the cost of equity?

A. Since markets are not fully efficient and the correct asset pricing model is not known, Mr. Murray's position is unreasonable that a market-to-book ratio greater than 1.0 demonstrates that the authorized return exceeds the cost of equity. As discussed previously, it is possible that the selected cost of equity model may not produce an accurate estimate of the return required by investors given the level of prices. There is no irrefutable evidence that demonstrates whether stock prices reflect all information (*i.e.*, the EMH) or whether the models precisely reflect the return required by investors. Therefore, Mr. Murray cannot say with certainty that a market-to-book ratio of 1.0 necessarily means that the ROE is equivalent to the cost of equity or that a ratio above 1.0 means the ROE is above the cost of equity.

Q. Are you aware of any regulatory jurisdiction in the United States that has adopted Mr. Murray's views?

A. No. I am not aware of any regulatory commission in the United States – state or Federal – that has adopted Mr. Murray's position.

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[39] Meir Statman, *Behavioral Finance: The Second Generation*, CFA Institute Research Foundation, 2019, at 163.

Q. Are you aware of any regulatory commissions that have specifically disagreed with Mr. Murray's position that there is and has been a substantial difference between authorized ROEs and the cost of equity for utilities?

A. Yes. The Minnesota Public Utilities Commission has considered testimony offered by a witness on behalf of the Minnesota Department of Commerce, Division of Energy Resources ("Department") and a witness on behalf of the Citizens Utility Boad that contended authorized ROEs have historically exceeded the cost of equity. The Minnesota Public Utilities Commission has continued, however, to rely on its long-standing cost of equity estimation methodologies and other industry information to inform its decisions and has not specifically relied on the viewpoint that the authorized ROEs are substantially higher than the cost of equity. For example:

> The Department's recommended cost of equity of 9.30% is informed by an underlying assumption that the cost of equity and the return on equity are distinct concepts in the sense that utility earnings exceed the cost of equity over time. This understanding, according to the Department, undermines the reliability of earnings' estimates in predicting long-term growth and instead justifies the use of a multi-stage DCF analysis that uses GDP to forecast the long-term cost of equity. ***The Commission does not share this concern***.[40]

In addition, the North Carolina Utilities Commission ("NCUC") has also rejected the claim, similar to Mr. Murray's position in this proceeding, that the cost of equity is much lower than what regulatory commissions have authorized in the past. For example, in a proceeding for Duke Energy Carolina ("DEC"), the NCUC concluded that model results and ROE recommendation of 6.15 percent of one witness in the proceeding (which

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[40] Minnesota Public Utilities Commission, Docket No. E-015/GR-21-335, Findings of Fact, Conclusions, and Order, February 28, 2023, at 45 (emphasis added).

is the same individual that authorized the article that Mr. Murray attaches as Schedule DM-D-2 to his testimony) was inconsistent with the *Hope* and *Bluefield* decisions and would not allow the Company to attract capital at reasonable terms:

> In this case, the Commission considered the application of these models in the context of the witnesses' testimony and other evidence, in order to ensure that its rate of return on equity conclusion of 10.1% is adequately supported by the evidentiary record. However, the Commission first will discuss — and reject — the recommendations of witness Ellis. In sum, both his individual model results and his overall recommendation of a rate of return on equity of 6.15% show that witness Ellis' cost of equity estimate is an outlier, entitled to no weight, and should be rejected. Aside from being more than 300 basis points below any rate of return on equity ever approved by this Commission for DEC, a rate of return on equity at that level, is scarcely 150 basis points above DEC's embedded cost of debt, a premium that is clearly insufficient to compensate investors for the added risks associated with equity ownership relative to a debtholder's claim on the same enterprise. Worse, DEC witness Newlin testified that that the interest rate DEC could expect today in issuing a 30-year bond is 5.72%. Tr. vol. 16, 85. This is a mere 43 basis points below witness Ellis' rate of return on common equity recommendation of 6.15%. ***The Commission finds it inconceivable that an investor would make an equity investment in DEC to realize a 6.15% expected return when that same investor could obtain a much less risky return merely 43 basis points lower simply by purchasing bonds issued by DEC. The Commission does not believe that a 6.15% rate of return on common equity will allow DEC to attract equity capital on reasonable terms, which is the essence of the Bluefield/Hope test***.[41]

Q. How would Mr. Murray's ROE recommendation be affected if the ROE did not exceed the cost of equity?

A. Mr. Murray recommends that the Commission authorize an ROE of 9.25 percent to balance his view that authorized ROEs have historically exceeded the cost of equity with the

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[41] North Carolina Utilities Commission, Docket No. E-7, Sub 1276, Order Accepting Stipulations, Granting Partial Rate Increase, Requiring Public Notice and Modifying Lincoln CT CPCN Conditions, December 15, 2023, at 200 (emphasis added). *See also* North Carolina Utilities Commission, Docket No. E-2, Sub 1300, Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Public Notice, August 18, 2023, at 159.

increase in interest rates since the Company's last rate proceeding.[42] However, if Mr. Murray's position that authorized ROEs have historically exceeded the cost of equity is incorrect, then the evidence that remains is that capital market conditions have changed since the Company's last rate proceeding. As I discussed and as Dr. Won observes, the yield on the 30-year Treasury bond has increased significantly since the Company's prior proceeding. As a result, it is reasonable to conclude that the ROE authorized for Evergy Metro in this proceeding should be higher than its currently authorized ROE of 9.50 percent as Dr. Won and I have concluded – not 9.25 percent as recommended by Mr. Murray.

Q. Is there a cost of equity estimation model that will produce the actual cost of equity for Evergy Metro?

A. No, each of the models that Dr. Won, Mr. Murray, and I have relied on can only be used to *estimate* the cost of equity. Each model has limiting assumptions that make it incorrect to conclude that any one model produces the actual cost of equity for Evergy Metro.

Q. What does this mean for establishing the ROE in this proceeding?

A. Because each model can be affected by the assumptions relied upon, and the market data used for these assumptions cannot factor in all information consistently, it is important that the analyst consider multiple models to estimate the cost of equity. Therefore, I consider the results of multiple models, along with qualitative information such as capital market conditions that can have an effect on the assumptions and thus the cost of equity estimate produced by the models, to determine where within the range of results I recommend that the Commission establish the ROE in a given proceeding. Mr. Murray dismisses

[42] Murray Rebuttal, at 42.

consideration of market conditions based on the incorrect assumption that all information is accurately reflected in current share prices and bond yields. However, as discussed previously herein, Dr. Shiller's conclusion regarding the failure of the EMH demonstrates that it is important to consider multiple models, as well as overall market conditions and the effect of those conditions on the models.

VI. DCF ANALYSIS

Q. Please summarize the positions of Dr. Won and Mr. Murray regarding your DCF analyses.

A. Both witnesses contend that the use of projected EPS growth rates in the constant growth DCF model overstates the cost of equity.[43] Dr. Won suggests that it would be more appropriate to rely on a long-term growth rate that approximates the level of long-term gross domestic product ("GDP") growth.[44] Mr. Murray suggests that by relying on projected EPS growth rates, I have assumed approximately two-thirds of total returns will be in form of capital gains with the remaining portion related to dividends, which he views as logically inconsistent with utility companies typically paying out approximately two-thirds of their earnings as dividends to investors.[45] Additionally, Mr. Murray cites that electric demand from data centers is driving projected EPS growth, and that growth rates are not sustainable and will eventually normalize.[46]

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43 Won Rebuttal, at 12-14; Murray Rebuttal, at 13-14.

44 Won Rebuttal, at 14-15.

45 Murray Rebuttal, at 13.

46 *Id.*, at 13-14, and 16-22.

Q. Do you agree with these witnesses that you should have relied on a multi-stage DCF analysis using their assumptions for growth?

A. No. It is important to recognize that while these witnesses essentially suggest that I should have relied on either a two-step DCF (Dr. Won) or a multi-stage DCF model (Mr. Murray) using their own assumptions, none of them directly rely on the output of those DCF models for their respective ROE recommendations. Specifically:

- The result of Dr. Won's two-step DCF is 8.18 percent, or 155 basis points lower than his ROE recommendation of 9.73 percent.[47]
- The results of Mr. Murray's multi-stage DCF range from 7.85 percent to 8.05 percent, or 120 to 140 basis points lower than his ROE recommendation of 9.25 percent.[48]

Since both of these witnesses essentially abandon the cost of equity estimates from their respective multi-stage DCF analyses for purposes of their ROE recommendations, it is unreasonable to suggest that the assumptions or methodologies they rely on are superior to the DCF analyses that I have presented in my testimonies.

Q. What is your response to these witnesses regarding the use of projected EPS growth rates in the constant growth DCF model?

A. First, as discussed in my rebuttal testimony, there are multiple reasons why earnings growth rates are the appropriate measure of growth in the DCF model, including, but not limited to, the fact that earnings are the fundamental driver of dividend growth rates (*i.e.*, over the long-term, dividend growth can only be sustained by earnings growth) and there is

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[47] Missouri Public Service Commission, Case No. ER-2026-0143, Direct Testimony of Seoung Joun Won, June 30, 2026 ("Won Direct"), at 4 and 51.

[48] Missouri Public Service Commission, Case No. ER-2026-0143, Direct Testimony of David Murray, June 30, 2026 ("Murray Direct"), at 2 and 33.

significant academic research demonstrating that EPS growth rates are most relevant in stock price valuation.[49]

Second, as discussed in my direct and rebuttal testimonies, I have not relied exclusively on the results of the constant growth DCF model. Rather, I have considered the results of multiple cost of equity estimation models in determining the ROE range that is appropriate to consider for the Company.

Third, while both witnesses criticize the use of analysts' projected EPS growth rates in the constant growth DCF model, as noted, their preferred specification of the DCF model produces cost of equity estimates for their respective proxy groups that are below any authorized ROE in nearly half of a century for a vertically-integrated electric utility in a jurisdiction with a comparable regulatory framework to Missouri, and, are also more than 100 basis points below their own ROE recommendations for Evergy Metro.

Q. Is there any evidence that earnings growth for utilities could exceed GDP growth for an extended period?

A. Yes. There is academic research that demonstrates that Dr. Won's and Mr. Murray's assumptions regarding utility growth are understated, which results in their DCF model results understating the cost of equity. A study filed as part of the Rate Regulation Initiative of the Alberta Utilities Commission calculated the Total Factor Productivity ("TFP") [50] of the utility industry as compared to the broader economy and concluded that utility growth exceeded the growth in the overall economy over a 40 year period from 1972 through

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49 Bulkley Rebuttal, at 22-24.

50 TFP growth is a measure of productivity calculated as the difference between output growth and input growth. Higher TFP growth indicates that a company is converting inputs into higher levels of output growth (*i.e.*, increased productivity).

2009.[51] Considering the empirical studies comparing the TFP growth of the utility industry relative to the economy, it is reasonable to assume that earnings growth for utilities could exceed GDP growth for a time period significantly longer than the 15 years used by Mr. Murray.[52]

Q. Did you review the academic research Dr. Won references to support the use of a GDP growth rate in the DCF model?

A. Yes. Dr. Won references the text *New Regulatory Finance*, in which Dr. Morin notes that all growth rates eventually converge to a level consistent with the growth in GDP.[53] However, it is first important to note that Dr. Won's characterization of Dr. Morin's *New Regulatory Finance* is misleading. Dr. Morin stated that:

> ***[s]ome financial economists*** are uncomfortable with the assumption that the DCF growth rates are perpetual growth rates, and argue that above average growth can be expected to prevail for a fixed number of years and then the growth rate will settle down to a steady-state long-run level, consistent with that of the economy.[54]

Therefore, Dr. Morin did not note that "[a]nalysts are of the concurring opinion" that long-term growth rates will converge to GDP. Furthermore, in Dr. Morin's most recent 2021 text, he specifically addresses the shortcomings of using GDP growth as proposed by Dr. Won as the long-term growth rate estimate in the multi-stage DCF model:

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51 The authors calculated TFP growth[51] for 72 U.S. electric and combination electric and natural gas utilities and for the U.S. economy for the period of 1972 through 2009. For the U.S. utility group, TFP growth averaged 0.96 percent over the period of 1972 to 2009,[51] while TFP growth for the U.S. economy was 0.91 percent,[51] indicating that electric and combination electric and natural gas utilities were approximately 5 percent more productive than the U.S. economy over the study period.

52 Murray Direct, at Schedule DM-D4 through Schedule DM-D6.

53 Won Rebuttal, at 13.

54 Roger A. Morin, *New Regulatory Finance*, Public Utilities Reports, Inc., 2006, at 302; emphasis added.

> One central assumption in Multi-Stage DCF models, and a potential Achilles' heel, in my view, is that utility growth rates will eventually match the growth of the macroeconomy usually measured by the growth of the Gross Domestic Product (GDP). I am not aware of any financial literature supporting the notion that utility earnings per share are expected to grow at the average growth of the economy, or GDP growth.
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> ***
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> Multi-Stage DCF applications appear somewhat disconnected from the assumptions of the method and the consensus expectations of investors. The investment community does not look to GDP growth over the next several decades when evaluating an investment in utility stocks, nor does it anticipate a series of discrete multi-stage decennial stages. I am not aware of any evidence that investors evaluate the future based on the assumptions and data sources required to apply the two-stage or three stage DCF model.[55]

Q. Is Dr. Won's GDP growth rate consistent with the growth rate that Dr. Morin relies on in the multi-stage DCF analysis?

A. No. Although Dr. Won relies on Dr. Morin as support for the use of GDP growth, he fails to discuss, and chooses not to rely on, the methodology that Dr. Morin employs to estimate the long-term growth in GDP in his multi-stage DCF analysis.

Dr. Morin estimates the long-term growth rate in nominal GDP by first calculating the growth in real GDP and then adding the expected inflation rate.[56] In his text, Dr. Morin indicates that the growth rate in real GDP is estimated by calculating the compound annual growth rate in real GDP from 1929 through the present, and the expected inflation rate is estimated as the difference between the yield on the 20-year Treasury bond and the yield

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[55] Roger A. Morin, *Modern Regulatory Finance*, Pubic Utilities Reports, Inc., 2021, at 486.

[56] *Id.,* at 388.

on the 20-year Treasury Inflation Protected bond, resulting in a long-term GDP growth rate of 5.50 percent in 2020.[57]

Q. How does Dr. Won's growth rate differ from the approach supported by Dr. Morin?

A. Dr. Won relies on the projected GDP growth rate of 3.80 percent projected by the Congressional Budget Office ("CBO") for the 10-year period of 2026 through 2036 as the estimate of long-term growth in his two-stage DCF model.[58] Thus, Dr. Won is relying on a long-term growth rate using CBO data that only reflects growth for a ten-year forward-looking period. However, Dr. Won applies this growth rate for a long-term period that is inconsistent with the period for which the CBO has established this estimate. Therefore, Dr. Won's long-term growth estimate does not reflect the CBO's views for the entire period for which he has relied on this projection.

Q. Have you reviewed any additional academic research that supports Dr. Morin's methodology for estimating the long-term nominal GDP growth rate?

A. Yes. As discussed in my rebuttal testimony, similar to Dr. Morin's methodology, *Morningstar* recommends estimating the projected long-term nominal GDP growth rate by first calculating the historical growth in real GDP and then adding the expected inflation rate.[59] As shown on Schedule AEB-8R of my rebuttal testimony, when longer-term GDP growth is estimated consistent with the methodology outlined by *Morningstar*, the long-term nominal GDP growth rate is 5.28 percent – or significantly higher than the growth rate relied on by Dr. Won.

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[57] *Id*.

[58] Won Direct, at 14 and Schedule SJW-d10.

[59] Bulkley Rebuttal, at 25-26.

Q. Is it reasonable that you did not conduct a two-step or multi-stage DCF as suggested by Dr. Won and Mr. Murray?

A. Yes. As discussed in both my direct and rebuttal testimonies, it is reasonable to rely on the constant growth DCF model. However, in response to the criticisms of Dr. Won and Mr. Murray, I have also developed a multi-stage DCF analysis, which is presented in Schedule AEB-1SR, that demonstrates when specified reasonably, the results are materially higher than the models specified by both Dr. Won and Mr. Murray.

Q. How have you specified your multi-stage DCF?

A. My multi-stage DCF analysis sets a company's current stock price equal to the present value of future cash flows received over three stages where the durations of each stage are consistent with the current dynamics of the electric utility industry. The first stage is a shorter-term growth period that consists of the first twenty years; the second stage is a transition period (*i.e.*, years 21 through 40) from the shorter-term growth period to the long-term growth period; and the third stage is a long-term growth period that begins in year 41 and continues in perpetuity (*i.e.*, years 41 through 200). The cost of equity is then calculated as the rate of return that results from the initial stock investment and the dividend payments over the analytical period. The duration of the first stage is representative of the fact that it is clear the utility industry is in a robust capital investment cycle, which Mr. Murray also acknowledges, and which is reasonably expected to last for some time. The duration of the first and second stages also reflects the fact that, as discussed previously, growth in the utility industry has exceeded the growth in the US GDP over a 40-year period. The first stage growth rates are the projected EPS growth rates for the proxy group companies, and the long-term growth rate is the projected GDP growth using the *Morningstar* methodology discussed previously.

Q. What are the results of your multi-stage DCF analyses?

A. As shown on Schedule AEB-1SR, the results of reasonably specified multi-stage DCF analyses range from 9.63 percent to 10.79 percent, depending on whether the minimum, average or maximum projected EPS growth rates are assumed for each proxy group company. Based on the average projected EPS growth rates for each of the proxy group companies, the resulting cost of equity is 10.22 percent.

These analyses demonstrate that an appropriately specified multi-stage DCF is more supportive of the Company's requested ROE than either of the multi-stage DCF analyses conducted by Dr. Won or Mr. Murray. A reasonable transition consistent with the industry's existing dynamics from analysts' currently projected EPS growth rates to a long-term GDP growth rate produces a much higher cost of equity estimate than Mr. Murray. As discussed in my rebuttal testimony, Mr. Murray is assuming a decline in utility growth beginning in year six of his model and then trending to 2.50 percent or 3.50 percent, which is unreasonable given the capital investment planned within the industry, which he acknowledges.

Q. What does Mr. Murray suggest is the "most consequential problem" with your DCF analyses?[60]

A. Mr. Murray states that by relying on projected EPS growth rates, I have assumed that approximately two-thirds of investors' returns will be in the form of capital gains (*i.e.*,

[60] Murray Rebuttal, at 13.

price appreciation) with the remaining portion attributable to dividends. According to Mr. Murray, this assumption is inconsistent with historical utility experience given that utilities typically have a payout ratio that is approximately two-thirds of their annual EPS, meaning they pay out approximately 67 percent of earnings as dividends. Mr. Murray states that although many vertically-integrated electric utilities' are planning to reduce their dividend payout ratios to meet increasing capital expenditure requirements, dividend payout ratios will return to levels more consistent with historical averages at some point as the current capital expenditure cycle to meet electric demand from data centers matures, although he does not specify a time period by which this will occur.

Q. Do you agree with Mr. Murray?

A. No. Mr. Murray's analysis conflicts with at least one of the equity analyst reports that he cites in his testimony. For example, Mr. Murray states that Evergy and other vertically integrated electric utilities are lowering their dividend payout ratios "during the current capital expenditure cycle to meet increased electric demand from data centers,"[61] and "so they can retain more equity capital for investment in utility infrastructure."[62] He further goes on to cite that Wells Fargo is applying more weight to the PEG ratio than long-term bond yields.[63] Mr. Murray fails to mention that the same Wells Fargo report states that utility growth is "not a fad" and:

> The bottom line—supply and demand fundamentals underpin our bullish view on the entire sector, which we believe is perpetual in nature, given diverse growth angles. More specifically, this growth is non-cyclical and

[61] *Id*.

[62] Murray Direct, at 16.

[63] *Id.*, at 17

represents a structural change that is the engine behind utility and IPP growth.[64]

In other words, industry analysts also expect that strong earnings growth can be sustained for a long duration, contradicting Mr. Murray's view that growth will begin decreasing after just five years. Given that growth rates in earnings relied on by equity analysts are much greater than Mr. Murray's long-term growth rate assumption of 3.00 percent, it is reasonable to conclude that the investor-required return on electric utilities is higher than estimated by Mr. Murray's model assumptions. As stated in my rebuttal testimony, if Mr. Murray's long-term growth rate assumptions were reflected, utility stock prices would have to be significantly lower and thus their dividend yields higher – meaning an increase in the cost of equity relative to what he has derived.[65]

VII. CAPM ANALYSIS

Q. What criticisms do Dr. Won and Mr. Murray offer regarding your CAPM analyses?

A. Both witnesses contend that the market return used in my CAPM analysis is unreasonable. Specifically:

- Dr. Won suggests that the calculation of the market return should exclude companies that do not pay dividends and should not rely on short-term growth rates.[66] Dr. Won states that when companies that do not pay dividends are removed from the market return calculation, and his two-step DCF approach is also applied to the derivation of the market return, the result is a market return of 10.44 percent.

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64 Shahriar Pourreza, *et al.*, "When You See One Cockroach, Are There More? Not in Utilities or Power, Not in '26," Wells Fargo, January 20, 2026, at 8 and 53.

65 Bulkley Rebuttal, at 63.

66 Won Rebuttal, at 17-18.

Dr. Won contends that when this market return of 10.44 percent is applied to my CAPM, the resulting cost of equity would be 8.98 percent.[67]

- Mr. Murray states that he is unaware of any authoritative sources that calculate the market return such as I have done (*i.e.*, using a constant growth DCF model with projected earnings growth rates as the estimate of growth).[68] Mr. Murray states that the sources he has reviewed recommend using a growth rate no higher than the growth rate of GDP when estimating the long-term return for the market.[69] Finally, Mr. Murray asserts that the Wilshire 5000, which is an index of the value of all American stocks traded in the United States, would be approximately 89 times the value of GDP in 50 years if the index grew at the earnings growth rate that I have relied on to calculate my market return.[70]

Q. Do you agree with Dr. Won's proposed adjustment to your market return calculation to remove non-dividend paying companies?

A. No. While Dr. Won attempts to recalculate the market return used in my CAPM analysis by excluding non-dividend paying companies, his calculation contains an error associated with market-weighting discussed below. Therefore, neither his adjustment to my market return nor his CAPM result of 8.98 percent based on that incorrect market return can be relied upon.

Q. Please explain the error in Dr. Won's re-calculation of your market return calculation, excluding non-dividend paying companies.

A. The market return calculation relied upon in my direct testimony, which Dr. Won adjusts and then uses in his modifications to my CAPM and ECAPM analyses, is a market return weighted by the market capitalization of the companies in the S&P 500 Index. However,

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67 *Id.*, at 17-20; *see also* Dr. Won's workpapers titled "1 Summary," "4 CAPM," and "6 Mkt Return."

68 Murray Rebuttal, at 28.

69 *Id.*, at 29.

70 *Id.,* at 30.

there is an error with Dr. Won's adjustment when he attempts to remove non-dividend paying companies.

As shown on Dr. Won's rebuttal testimony workpaper "6 Market Return," his calculation does not properly adjust the market capitalization weightings for each of the remaining companies included in the calculation of the market return when he attempts to remove the non-dividend paying companies. Therefore, his adjusted market return of 10.44 percent is incorrect. In order for this calculation to be performed correctly, it is necessary that the dividend yield and growth rates are weighted by the market capitalization of the companies that are included in the calculation. In other words, when the non-dividend paying companies are removed from the calculation, the market capitalization of the non-dividend paying companies also must be removed from the weighting factor as it affects both the dividend yield and growth rate.

Q. Can you provide a specific example that demonstrates the error in the market weightings in Dr. Won's market return calculation?

A. Yes. Although I disagree with removing the non-dividend paying companies from the market return calculation, I can provide an example of the error that resulted when Dr. Won attempted to remove these companies from his estimated market return. As shown on his workpaper "6 Market Return," the company Solventum Corp ("SOLV") does not have an estimated dividend yield. However, SOLV has a projected EPS growth rate between zero and 20.00 percent and therefore Dr. Won's formula assigns 0.04 percent for a weight in the index. When removing SOLV from his calculation, Dr. Won should have also removed SOLV from his weighting of the companies by market capitalization. However, as shown on his workpaper, Dr. Won did not remove SOLV but rather has incorrectly included the company in the overall index weighting. While SOLV is one example, this same error also applies to numerous additional companies in the S&P 500 where Dr. Won has failed to consistently remove non-dividend paying companies consistent with his stated methodology.

Q. What is another effect of Dr. Won's error in calculating the market capitalization weightings?

A. As noted, both the dividend yield and growth rate components should be weighted based on the market capitalization of the dividend-paying companies included in the calculation. However, Dr. Won does not properly re-weight the S&P 500 Index after excluding non-dividend-paying companies. Instead, his weighting formula includes companies based on whether they have projected EPS growth rates between zero and 20.00 percent, regardless of whether they pay a dividend. As a result, the weighting applied to both the dividend yield and growth rate components is incorrect because it does not reflect the companies Dr. Won states he intends to include in his adjusted market return.

Although the inclusion of companies such as SOLV demonstrates that Dr. Won has not properly excluded non-dividend-paying companies from his weighting calculation, this error also affects the weights assigned to the dividend-paying companies that remain in his calculation. Specifically, because Dr. Won does not properly remove the market capitalization of the non-dividend paying companies, he does not properly re-weight the remaining dividend paying companies.

Q. Can you provide an example of the error in how Dr. Won applies the weightings to the growth rate used in his market return calculation?

A. Yes. As shown on his workpaper "6 Market Return," the second company listed in the S&P 500 Index is American Express Co ("AXP"). In my calculation of the market return, this company had a weight in the overall S&P 500 Index based on market capitalization of 0.60562 percent. Dr. Won also assigns AXP a weight of 0.60562 percent because his weighting formula does not properly re-weight the index to reflect the exclusion of non-dividend-paying companies. However, as shown in Schedule AEB-2SR, when Dr. Won's error is corrected and the index is properly re-weighted to include only the dividend-paying companies, AXP's weight increases to 0.68449 percent. Because of his error, Dr. Won instead continues to apply the 0.60562 percent weighting in calculating both AXP's weighted dividend yield and weighted growth rate. As a result, neither the dividend yield nor growth rate components reflect the market-capitalization weighting of the companies that Dr. Won intended to include in his adjusted market return. This same weighting error applies to each company included in Dr. Won's adjusted market return calculation.

Q. Do you agree with Dr. Won's application of the two-step DCF when adjusting your calculation of the market return?

A. No. Dr. Won's application of the two-step DCF to his recalculation of my market return is not appropriate for several reasons. First, it relies on a long-term GDP growth rate that is not consistent with the methodology supported by Dr. Morin, whom Dr. Won cites in his testimony, or *Morningstar*. Second, it is inconsistent with the method that the Federal Energy Regulatory Commission ("FERC") uses to calculate the market return used in the CAPM analysis, even though Dr. Won cites the FERC in his direct testimony to support his use of a two-step DCF analysis to estimate the cost of equity for the Company. Specifically, Dr. Won calculates the dividend yield component of the market return in the same general manner as I have done (although, as noted, he removes only a portion of the non-dividend paying companies), but he applies a two-step DCF for purposes of calculating the growth rate component of the market return. For his two-step DCF, Dr. Won calculates the growth rate by applying a weight of 80.00 percent to his derived growth rate of the S&P 500 Index (which, as just discussed, was derived incorrectly) and applying a weight of 20.00 percent to the GDP growth rate of 3.80 percent that he assumes in his CAPM analysis. Dr. Won does not discuss in his testimony why or how this two-step DCF approach to calculating the growth rate component of the market returns is appropriate, but rather simply states that, "[w]ith more reasonable assumptions, such as a market return of 10.44%," my average CAPM result would be 8.98 percent.[71] Thus, Dr. Won fails to acknowledge that the FERC has continued to rely on the constant growth DCF model to calculate the market return such as I have done in my CAPM analyses, not the use of a two-step DCF model using GDP growth as suggested by Dr. Won:

> As NETOs propose and, consistent with Opinion Nos. 569 and 569-A, we find that estimating the CAPM expected market return using a forward-looking approach based on applying the DCF model to the dividend paying members of the S&P 500 is reasonable. No participant opposes the use of a DCF analysis of the dividend-paying members of the S&P 500 to estimate the expected market return. However, CAPs, EMCOS, and Trial Staff disagree with the use of the one-step DCF model for the CAPM without any long-term growth projection based on GDP. As discussed below, we are not persuaded by CAPs' and Trial Staff's arguments in support of a two-step DCF analysis to calculate the CAPM expected market return.[72]

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[71] Won Rebuttal, at 20.

[72] *Coakley Mass. Attorney Gen. v. Bangor Hydro-Elec. Co*., 194 FERC ¶ 61,208 at P 232 (2026).

In addition, the U.S. Court of Appeals for the District of Columbia addressed this issue in its review of FERC Opinion No. 569-B. In the Court's decision, it acknowledged that the FERC has relied on the use of EPS growth rates in the calculation of the market return on the S&P 500 because the S&P 500 is regularly updated to include companies with high market capitalization, and it includes companies at all stages of growth, including lower and higher growth potential. The Court determined that FERC's rationale for using projected EPS growth rates was sufficient and rejected the challenge to this assumption.[73]

Q. What are your conclusions regarding Dr. Won's adjustments to your CAPM and ECAPM analyses?

A. As noted previously, there are fundamental errors with Dr. Won's adjustment to the market return that render his recalculation of the results of my CAPM and ECAPM analyses unusable.

Q. Have you corrected Dr. Won's calculation of the market return to properly reflect the exclusion of non-dividend paying companies?

A. Yes. Schedule AEB-2SR presents the market return calculation as filed in my direct testimony of 13.53 percent and Dr. Won's erroneous adjustment to my market return of 10.44 percent, respectively. However, as shown on Schedule AEB-2SR, while I do not agree with excluding non-dividend paying companies from the calculation of the overall market return, I have first corrected the error in Dr. Won's market return calculation and then separately show the effect on the market return of using the GDP growth rate based on the *Morningstar* methodology and removing Dr. Won's application of the two-step DCF

[73] *MISO Transmission Owners v. FERC*, 45 F.4th 248, 259-60, (D.C. Cir. 2022).

to calculate the market return. As shown on Schedule AEB-2SR, these analyses demonstrate that my market return is not an "extreme outlier" as Dr. Won suggests.

Specifically, as shown on page 17 of Schedule AEB-2SR, I made three changes to Dr. Won's calculation:

- When the non-dividend paying companies are correctly removed from the calculation, *and no other changes are made to Dr. Won's market return calculation*, the overall market return is 11.69 percent.[74]

- Using the corrected data set and correcting the GDP growth rate to be consistent with the calculation supported by *Morningstar* in Dr. Won's two-step DCF analysis, the resulting market return is 11.99 percent.

- When Dr. Won's market return is reasonably adjusted to (1) remove non-dividend paying companies correctly from the market return calculation; and (2) rely on a constant growth DCF analysis instead of a two-step DCF analysis, the market return is 13.29 percent, comparable to my calculation of the market return that includes both dividend paying and non-dividend paying companies.

Therefore, when the errors in Dr. Won's analysis are corrected, the resulting projected market return supports my analyses and demonstrates that my market return is not an "extreme outlier" as Dr. Won contends.[75]

Q. How would the results of your CAPM analyses change if you relied on this adjusted market return calculation?

A. Schedule AEB-3SR adjusts the results of the CAPM and ECAPM analyses reflected in my direct testimony to rely on the three market return calculations presented on page 17 of Schedule AEB-2SR which correct Dr. Won's adjustments to my market return calculation. Specifically, as shown on Schedule AEB-3SR, page 1:

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74 This adjustment maintains Dr. Won's two-step DCF methodology that is inconsistent with the FERC approach and relies on a GDP growth rate that is inconsistent with the approach supported by Dr. Morin and *Morningstar* for calculating the long-term GDP growth rate.

75 Won Rebuttal, at 19.

- Relying on the lowest market return of 11.69 percent,[76] the average CAPM result is 10.00 percent, which is 102 basis points higher than the 8.98 percent claimed by Dr. Won's erroneous adjustment to my CAPM.

- The second change, shown on Schedule AEB-3SR, page 2, correctly removes the non-dividend paying companies and then also corrects the GDP growth rate to be consistent with the approach supported by *Morningstar*, which results in a market return of 11.99 percent and produces an average CAPM result of 10.22 percent.

- Finally, as shown on Schedule AEB-3SR, page 3, when relying on a fully corrected market return (*i.e.,* constant growth DCF market return consistent with FERC) of 13.29 percent, the average CAPM result is 11.22 percent, which demonstrates that the Company's requested ROE of 10.50 percent is reasonable.

Q. Based on their criticisms of your market return calculation, what do Dr. Won and Mr. Murray state regarding your estimation of the market risk premium used in your CAPM analysis?

A. The primary critique is that the projected market risk premia used in my CAPM analyses are overstated.[77]

Q. Have other regulatory commissions supported the use of a constant growth DCF model to estimate the market return in the CAPM such as you have done?

A. Yes. In addition to the FERC, as shown Figure 2, the Staff of the Illinois Commerce Commission ("ICC"), the Bureau of Investigation and Enforcement ("I&E") of the Pennsylvania Public Utility Commission ("Pennsylvania PUC"), and the Staff of the Maine Public Utilities Commission ("Maine PUC") have each supported the forward-looking market risk premium, and the market return estimates using the constant growth DCF

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[76] Note, while this market return scenario excludes the non-dividend paying companies and derives the resulting weighting of the dividend paying companies remaining in the index correctly, I disagree with this market return estimate given 1) its exclusion of non-dividend paying companies; 2) retains Dr. Won's two-step DCF methodology inconsistent with FERC's approach; and 3) retains Dr. Won's GDP growth rate inconsistent with the approach supported by Dr. Morin and *Morningstar*.

[77] Won Rebuttal, at 20; Murray Rebuttal, at 27.

model. In each of these cases, the respective regulatory commissions relied on the estimated CAPM results by these parties to determine the authorized ROE and did not dispute the use of the constant growth DCF model to calculate the market return.

FIGURE 2: REGULATORY COMMISSIONS – MARKET RETURN ESTIMATED USING THE CONSTANT GROWTH DCF MODEL

Intervening Party	Applicant	Docket No.	Approach of Intervening Party to Calculating the Market Return	Date of Order	Did the Commission Rely on the Intervening Party's CAPM?
Staff of the ICC	North Shore Gas Company	20-0810	CGDCF of the dividend-paying companies in the S&P 500 (11.95%)[78]	9/8/21	Yes[79]
I&E	Aqua Pennsylvania, Inc.	R-2021-3027385	CGDCF of the Value Line Universe and S&P 500 (12.14%)[80]	5/12/22	Yes, the regulator placed primary weight on I&E's CAPM[81]
Staff of the Maine PUC	Northern Utilities, Inc.	2019-00092	CGDCF of the dividend-paying companies in the S&P 500 (11.33%-13.49%)[82]	4/1/20	Yes[83]

Q. Have the courts addressed Dr. Won's and Mr. Murray's concern that your forward-looking market return is "overstated"?

A. Yes. In its review of FERC Opinion No. 569-B, the U.S. Circuit Court of Appeals for the District of Columbia addressed the concern regarding the use of projected EPS growth rates in a constant growth DCF model to estimate the market return. In the Court's decision, it

[78] Illinois Commerce Commission, Docket No. 20-0810, Order at 71 (Sept. 8, 2021).

[79] *Id*. at 86-87.

[80] Pennsylvania Public Utility Commission, Docket No. R-2021-3027385, Opinion and Order at 147, (May 16, 2022).

[81] *Id*. at 178.

[82] Maine Public Utilities Commission, Docket No. 2019-00092, Bench Analysis at 21 (Oct. 29, 2019).

[83] *Id*., Order Part II at 58 (April 1, 2020).

acknowledged that the FERC has relied on the use of EPS growth rates in the calculation of the forward-looking market return on the S&P 500 because the S&P 500 is regularly updated to include companies with high market capitalization and it includes companies at all stages of growth, including lower and higher growth potential. The Court determined that FERC's rationale for using projected EPS growth rates was sufficient and did not accept the challenge to this assumption.[84]

Q. Are there studies that demonstrate the market risk premia used in your CAPM analysis are reasonable?

A. Yes. The Federal Reserve Bank of New York published an analysis in 2015 that reviewed 20 methodologies over the period 1960 through 2013 for estimating the market risk premium.[85] This analysis included several studies referenced by Dr. Won in Figure 2 of his rebuttal testimony such as the historical market risk premium, survey results similar to the survey conducted by the IESE Business School, and the methodology relied on by Professor Damodaran. The results of the Federal Reserve Bank study demonstrate that both the market risk premia estimates in my direct testimony, which range from 8.88 percent to 8.93 percent (see Schedule AEB-4), as well as the market risk premia estimates in my rebuttal testimony, which range from 8.38 percent to 8.66 percent (see Schedule AEB-3R), are reasonable. Specifically, the key conclusions from this study are:

- The 20 methodologies reviewed reflected a range for the market risk premium of between -1.0 percent and 14.5 percent.

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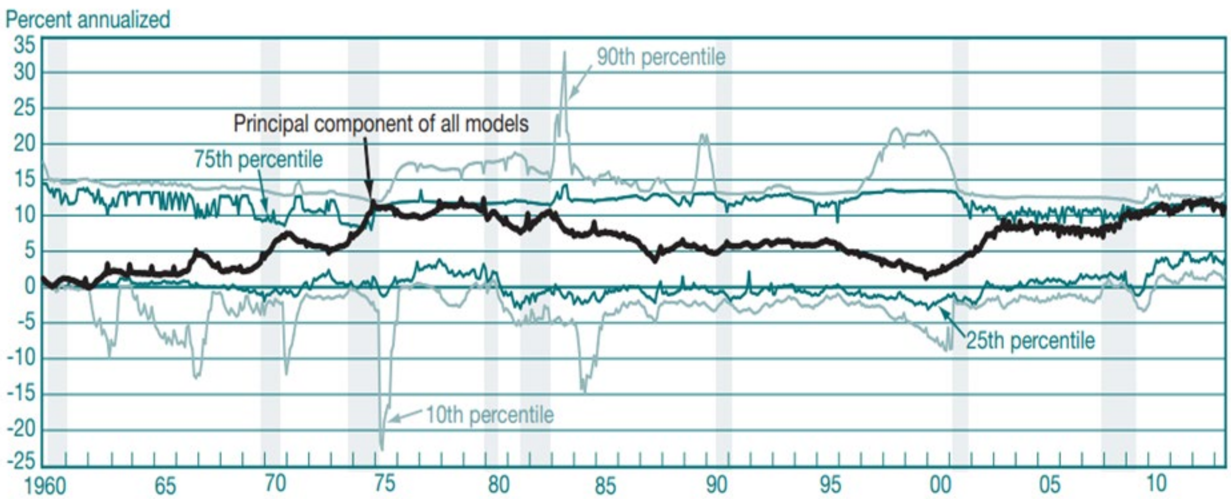
[84] *MISO Transmission Owners, et al. v. FERC*, 45 F.4th 248 (D.C. Cir. 2022).

[85] Fernando Duarte and Carla Rosa, "The Equity Risk Premium: A Review of Models," Federal Reserve Bank of New York, 2015.

- As shown in Figure 3, the principal component analysis of the 20 models (*i.e.*, the bold black line) produced a range for the market risk premium of approximately 0 percent to over 10 percent from 1960 through 2013.

- The one-year-ahead market risk premium was consistently greater than 10 percent following the financial crisis of 2008/09.

FIGURE 3: THE FEDERAL RESERVE BANK OF NEW YORK, ONE-YEAR-AHEAD MARKET RISK PREMIUM[86]



Further, the Federal Reserve Bank of New York also noted the following:

> Chart 2 shows the first principal component of all twenty models in black (the black line is the same principal component shown in black in each of the panels of Chart 1). ***As expected, the principal component tends to peak during financial turmoil, recessions, and periods of low real GDP growth or high inflation***. It tends to bottom out after periods of sustained bullish stock markets and high real GDP growth. Evaluated by the first principal component, the one-year ahead ERP [equity risk premium] reaches a local peak in June 2012 at 12.2 percent. The surrounding months have ERP estimates of similar magnitude, with the most recent estimate in June 2013 at 11.2 percent. This behavior is not so clearly seen by simply looking at the collection of individual models in Chart 1, a finding that highlights the usefulness of principal component analysis. Similarly high levels were observed in the mid- and late 1970s, during a period of stagflation, while

[86] *Id.,* at 50.

> the recent financial crisis had slightly lower ERP estimates, closer to 10 percent.[87]

Thus, the Federal Reserve Bank of New York noted that the market risk premium is higher during periods of increased inflation. While inflation has been reduced significantly in the past two years, it remains above the Federal Reserve's target of 2.00 percent.

Q. How do the market risk premia in your CAPM and ECAPM analyses compare with the observed historical market risk premia?

A. As shown in Figure 4, the vast majority of the positive historical market risk premia observations (51 out of 66, or 77 percent) are at or above the range of market risk premia in my direct testimony (8.88 percent to 8.93 percent) and rebuttal testimony (8.38 percent to 8.66 percent), whereas there are very few positive historical market risk premia observations (7 out of 66, or 11 percent) that are below the low-end of the market risk premium range (4.00 percent to 7.03 percent) relied on by the Intervenor Witnesses.

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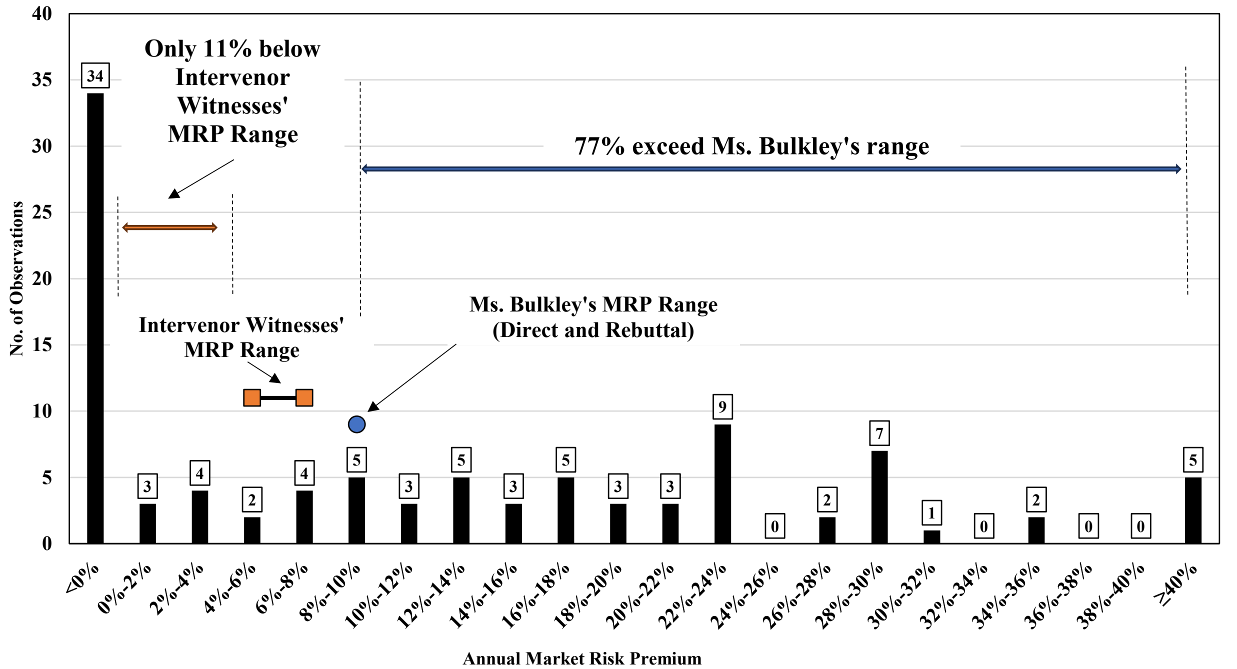
[87] *Id.*; emphasis and clarification added.

FIGURE 4: DISTRIBUTION OF HISTORICAL MARKET RISK PREMIA (1926-2025)[88]



Q. What is your response to Mr. Murray's contention that he is not "aware of any authoritative sources" that use your approach to estimating the market return?[89]

A. I do not believe that is a true statement. I have filed testimony in this jurisdiction in numerous cases in response to Mr. Murray and have discussed the regulatory support for the calculation of the market return that I have relied upon.[90] Accordingly, as just discussed, there are multiple authoritative sources that have relied on the constant growth

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88 Depicts the risk premia as calculated as the difference between total annual returns on large company stocks and income only returns on long-term government bonds, as reported in the 2023 *Kroll* SBBI Yearbook for 1926-2022 and from *S&P Capital IQ Pro* (market returns) and *Kroll* (long-term government bond yields) for 2023-2025.

89 Murray Rebuttal, at 28.

90 *See, e.g.*, Missouri Public Service Commission, Case No. ER-2022-0337, Surrebuttal Testimony of Ann E. Bulkley, March 13, 2023, at 35-36; Missouri Public Service Commission, Case No. WR-2022-0303, Surrebuttal Testimony of Ann E. Bulkley, at 46-48. Missouri Public Service Commission, Case No. ER-2024-0319, Surrebuttal Testimony of Ann E. Bulkley, February 14, 2025, at 44-47.

DCF to estimate the market return in the CAPM of which I am aware and previously have made Mr. Murray aware.

Q. How do you respond to Dr. Won's view that your market risk premium is an "extreme outlier"?[91]

A. I disagree. The decisions of other regulators, as well as the findings of the Federal Reserve that I have just discussed contradict Dr. Won's conclusion that my market return and thus market risk premia are outliers. Further, the estimates that Dr. Won summarizes in Figure 2 of his rebuttal testimony have been addressed in my rebuttal testimony since they are used in Dr. Won's CAPM analyses, and in part in Mr. Murray's CAPM analyses.[92] The additional estimates that he provides in his rebuttal testimony are misleading, in that they were proposed by parties in a FERC proceeding, but not accepted by the FERC. Therefore, Dr. Won has provided no evidence demonstrating that a regulator has relied on these estimates.

Specifically, Dr. Won presents forward-looking market risk premium estimates from *Value Line*, Duff & Phelps (now *Kroll*), and American Appraisal in Figure 2 of his rebuttal testimony, and he cites the FERC's Opinion No. 569 as the source for those estimates.[93] However, Dr. Won fails to acknowledge that the market risk premia that he cites from Opinion No. 569 were not agreed upon by the FERC in that proceeding. Rather, these estimates were raised by a specific intervenor group in that proceeding and

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[91] Won Rebuttal, at 19.

[92] Bulkley Rebuttal, at 28-40.

[93] Won Rebuttal, at 18-19, footnote 57.

summarized as such in Opinion No. 569 as part of the summary of the record.[94] The FERC did not agree with that intervenor's position in calculating the market return and thus market risk premium, and it instead adopted an approach that is similar to the methodology I use to estimate the market risk premium.[95] Moreover, Opinion No. 569 was issued in November 2019, approximately seven years ago, which means that the specific estimates of the market risk premia that he summarizes, while not supported by FERC, are also outdated and not relevant for purposes of determining the cost of equity in the current proceeding.

Q. Dr. Won also references the market risk premium resulting from a 2025 survey conducted by the IESE Business School.[96] Is this supportive of Dr. Won's position?

A. No. Dr. Won ignores the fact that the authors of this study caution against the use of survey data to estimate the market return and market risk premium. Specifically, the survey notes:

> We can find out the REP [Required Equity Premium] and the EEP [Expected Equity Premium] of an investor by asking him, although for many investors the REP is not an explicit parameter but, rather, it is implicit in the price they are prepared to pay for the shares. However, it is not possible to determine the REP for the market as a whole, because it does not exist: even if we knew the REPs of all the investors in the market, it would be meaningless to talk of a REP for the market as a whole. There is a distribution of REPs and we can only say that some percentage of investors have REPs contained in a range. The average of that distribution cannot be interpreted as the REP of the market nor as the REP of a representative investor.[97]

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94 *Ass'n. of Businesses Advocating Tariff Equity, et al. v. Midcontinent Indep. Sys. Operator, Inc., et. al.*, 169 FERC ¶ 61,129 (2019) ("Opinion No. 569"), at ¶ 249.

95 *Id.,* at ¶ 260-261.

96 Won Rebuttal, at 18.

97 Fernández, P., de la Garza, D. G., & Acín, L. F, "Market Risk Premium and Risk-Free Rate. Survey 2025." Revista Española de Capital Riesgo, March 2025, at 47.

Q. Please summarize the analysis that Mr. Murray performed using the Wilshire 5000 Index.

A. Mr. Murray calculates the market capitalization of the Wilshire 5000 index in 50 years using the earnings growth rate that I relied on to calculate my market return, as well as GDP in 50 years using a long-term GDP growth rate of 4.00 percent. Mr. Murray concluded that in 50 years the value of the Wilshire 5000 would be approximately 89 times higher than GDP, which he notes is unreasonable.[98]

Q. Is this analysis meaningful?

A. No. First, Mr. Murray has ignored the fact that the annualized ten-year total return on the Wilshire 5000 as of August 28, 2026, was 13.90 percent, which is consistent with the market return estimate in both my direct and rebuttal testimonies.

Further, Mr. Murray's comparison is entirely dependent on his selection of an assumed GDP growth rate of 4.00 percent. This analysis has no probative value, as he has not provided any support for his GDP growth rate, which is fundamental to the point of his analysis. It is simply a demonstration of compound annual growth at two different rates. As shown previously in Schedule AEB-8R of my rebuttal testimony, Mr. Murray's assumed growth rate is significantly below a long-term projected GDP growth rate of 5.28 percent.

98 Murray Rebuttal at 30.

Q. What conclusions does Mr. Murray reach from comparing your estimates of the market return and market risk premium in Evergy Missouri West's 2024 rate proceeding and the current proceeding?

A. Mr. Murray contends that the P/E ratio for the S&P 500 has recently been in the range of 21 to 24 which is greater than the S&P 500's P/E ratio during Evergy Missouri West's 2024 rate proceeding. According to Mr. Murray, this implies that the risk premium should be lower currently than at the time of Evergy Missouri West's 2024 rate proceeding (*i.e.,* Mr. Murray assumes an inverse relationship between the market risk premium and the P/E ratio).

Q. Do you agree with Mr. Murray that your estimates of the market return and market risk premium in the current proceeding are inconsistent with your estimates of the market return and market risk premium in Evergy Missouri West's 2024 rate proceeding?

A. No, I do not. Mr. Murray notes that my estimates of the market risk premium in Evergy Missouri West's 2024 rate proceeding were lower than my estimates of the market risk premium in the current proceeding, which he concludes is not "logical." However, Case No. ER-2024-0189 for Evergy Missouri West was filed on February 2, 2024 and the Commission's decision was issued on December 4, 2024 during which time the P/E ratio for the S&P 500 ranged from 20.25 to 23.34. In comparison, the Company filed the current proceeding on February 6, 2026. Since that time, the P/E ratio for the S&P 500 has ranged from 19.78 to 22.76.[99] Therefore, the range of P/E ratios for the S&P 500 is currently

[99] *S&P Capital IQ Pro.*

lower than at the time of Evergy Missouri West's 2024 rate proceeding. Following Mr. Murray's logic, the currently lower P/E ratio implies that the market risk premium should currently be *higher* not *lower* than at the time of Evergy Missouri West's 2024 rate proceeding. As a result, my estimates of the market risk premium in the current proceeding are consistent with my estimates of the market risk premium in Evergy Missouri West's 2024 rate proceeding.

VIII. ECAPM ANALYSIS

Q. What are the positions of Dr. Won and Mr. Murray regarding your ECAPM analysis?

A. Dr. Won states that my ECAPM analyses rely on a market risk premium that is too high. In addition, Dr. Won disagrees with the adjustment made in the ECAPM to account for the tendency of the CAPM to underestimate the cost of equity for companies with betas less than 1.00.[100] Specifically, Dr. Won states that there is a fairly wide range of alpha estimates between academic studies primarily due to the methodologies employed and time periods used which means the estimates of alpha are not strictly comparable.[101] Further, Dr. Won contends that Dr. Morin presented other studies that produced returns between -9.61 percent to 13.56 percent. Based on these studies Dr. Won claims that the CAPM overestimated the return in some instances and that such findings do not lend credibility to the use of the ECAPM.[102]

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100 Won Rebuttal, at 20-21.

101 *Id*.

102 *Id*.

Mr. Murray's response to my ECAPM simply reiterates his concern regarding the market risk premium of my CAPM, which I have already addressed; however, he does not specifically discuss the ECAPM.[103]

Q. Do you agree with Dr. Won's conclusions on the ECAPM studies?

A. No, I do not. The concept of the ECAPM and the conclusion that the risk-return relationship is flatter than predicted by the CAPM is generally accepted in financial literature. In *Modern Regulatory Finance*, Dr. Morin provides a list of studies each of which concludes that the CAPM understates the returns for companies with betas less than 1.0 (which is typically utilities) and overstates the return for companies with betas greater than 1.0.[104] It is these empirical studies that formed the basis of the development of alternative models such as the ECAPM that would better predict the risk return-relationship observed when reviewing actual market data.

Academics and researchers use the equation shown below to determine the value of the constant term (α) or "alpha factor" using historical market data:

$$K_e = r_f + \alpha + \beta\left(\left(r_m - r_f\right) - \alpha\right) \quad [1]$$

Where:

K_e = the required return of an individual security;
α = a constant term;
β = the adjusted beta coefficient of an individual security;
r_f = the risk-free rate of return; and
r_m = the required return on the market as a whole.

[103] Murray Rebuttal, at 30.

[104] Roger A. Morin, *Modern Regulatory Finance*, Public Utilities Reports, Inc., 2021, at 206-208.

There have been numerous additional studies published to estimate the value of the constant term or alpha factor in the ECAPM equation. Figure 5 provides the list of studies summarized by Dr. Morin and referenced by Dr. Won as support for his conclusion that the ECAPM is not credible. However, Dr. Won's conclusion improperly masks the fact that, as shown, six of the eight studies estimated positive values of the constant term, which indicates that the consensus among the studies is that the CAPM understates the observed return. Additionally, among the six studies that estimate only positive values of the constant term, the range of the constant term was 1.63 percent to 13.56 percent. Dr. Morin relied on a constant term in the range of 1.00 to 2.00 percent to develop the 0.25 and 0.75 factors included in the ECAPM. Considering the range of the constant term provided in Figure 5, it would appear Dr. Morin's estimate is conservative.

FIGURE 5: EMPIRICAL EVIDENCE ON THE ALPHA FACTOR (CONSTANT TERM)[105]

Author	Range of Alpha
Fischer (1993)	-3.6% to 3.6%
Fischer, Jensen and Scholes (1972)	-9.61% to 12.24%
Fama and McBeth (1972)	4.08% to 9.36%
Fama and French (1992)	10.08% to 13.56%
Litzenberger and Ramaswamy (1979)	5.32% to 8.17%
Litzenberger, Ramaswamy and Sosin (1980)	1.63% to 5.04%
Pettengill, Sundaram and Mathur (1995)	4.6%
Morin (1989)	2.0%

[105] *Id*., at 222.

Q. Is Dr. Won's recalculation of your ECAPM analyses reasonable? [106]

A. No. Dr. Won's recalculation relies on the same incorrect market return and thus market risk premium "adjustment" that he developed in response to my CAPM. As a result, his ECAPM is unusable as an estimate of the cost of equity. Further, as summarized on Schedule AEB-3SR, when the error in Dr. Won's recalculation of my ECAPM analysis is corrected, *and yet no other changes are made to Dr. Won's market return calculation*, which includes retaining his two-step DCF methodology inconsistent with FERC's approach and his GDP growth rate inconsistent with *Morningstar's* approach, the overall resulting cost of equity is 10.42 percent, which is supportive of the Company's proposed 10.50 percent ROE in this proceeding.

IX. RISK PREMIUM ANALYSIS

Q. What are the positions of Dr. Won and Mr. Murray regarding your Bond Yield Plus Risk Premium ("BYRP" or "Risk Premium") analysis?

A. Dr. Won and Mr. Murray offer the following positions regarding the Risk Premium approach generally, and my analyses specifically:

- Dr. Won's primary concerns with the BYRP analysis are that: (1) the relationship between the authorized ROEs for vertically integrated electric utilities and the 30-year Treasury bond yield changed "materially" following the COVID-19 pandemic; (2) the analysis is determined based on the yield on the 30-year Treasury bond yield, which is affected by government intervention through the Federal Reserve's monetary policy that could cause significant changes in the 30-year Treasury bond yield resulting in "unstable" return estimates from the BYRP analysis; and (3) the relationship between the 30-year Treasury bond yield and the

[106] Won Rebuttal, Workpaper "4 CAPM."

ROE is not constant over time.[107] In addition, Dr. Won states that he agrees with the FERC that the BYRP is likely to provide a less accurate current cost of equity estimate than the DCF or CAPM models because it relies on previous ROE determinations that may not be directly determined by a market-based methodology.[108]

- Mr. Murray contends that I have concluded from my BYRP analysis that ROEs have not changed as much as interest rates, and thus an adjustment needs to be made to recognize that regulators have been hesitant to adjust authorized ROEs as much as interest rates would suggest. Mr. Murray states that this is circular because the regression coefficient is dependent on regulatory commissions' decisions and not on market required returns.[109]

Q. Is there merit to Dr. Won's concerns regarding your BYRP analysis?

A. No. Regardless of my use of authorized ROE and Treasury bond yield data back to 1980 and the changes in that data over time, the regression analysis that I have conducted nonetheless demonstrates a strong inverse relationship between interest rates and the equity risk premium for utilities. As shown in Schedule AEB-6R of my rebuttal testimony, the regression in my BYRP analysis has an R^2 of approximately 0.83, which means that approximately 83.00 percent of the variation in historical implied utility equity risk premia can be explained by changes in interest rates. The regression indicates that there indeed exists a strong negative correlation between utility equity risk premia and interest rates, and that the regression equation is an effective tool for predicting authorized ROEs at specified interest rate levels, whether current or projected interest rates.

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[107] Won Rebuttal, at 24-26.

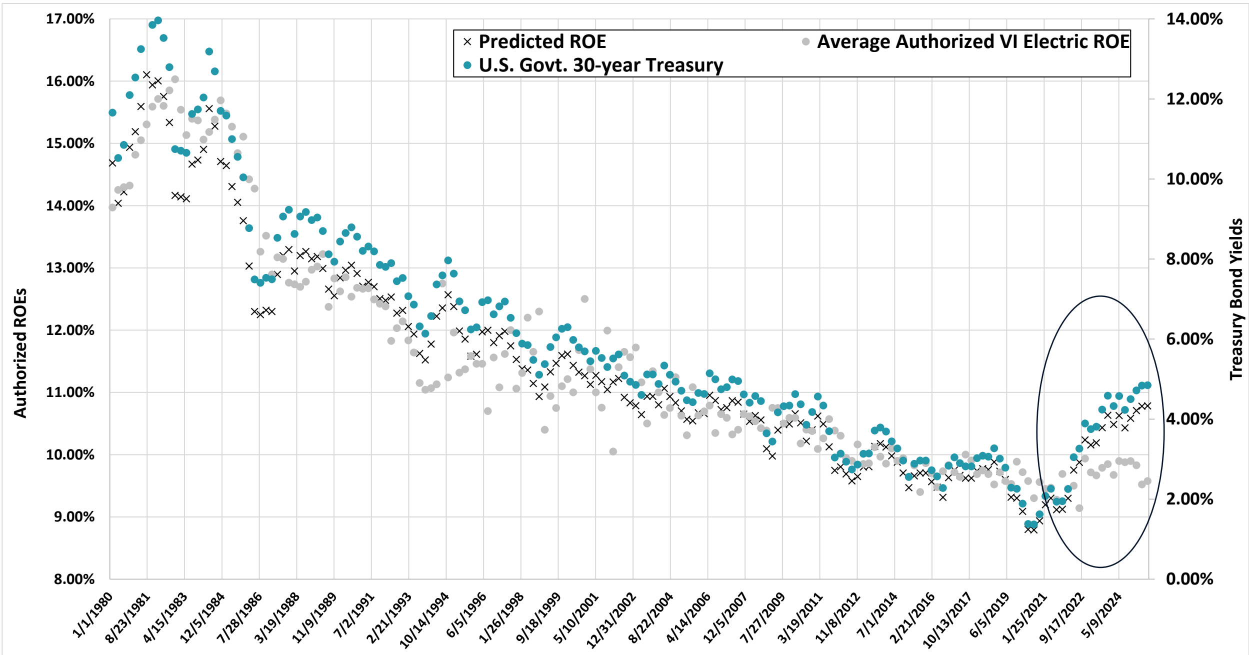
[108] *Id.*, at 26.

[109] Murray Rebuttal, at 31.

Q. Do you agree with Dr. Won that the relationship between the authorized ROEs for vertically integrated electric utilities and the 30-year Treasury bond yield changed "materially" following the COVID-19 pandemic?

A. No, I do not. Dr. Won's interpretation of the data is incorrect. The period from 2020 through 2022 was an unexpected and unprecedented change in interest rates. That period was followed by a return to more normal levels of interest rates, which has been slow to be reflected in authorized returns. For example, Figure 6 shows the 30-year Treasury Bond yields, predicted ROEs, and actual authorized ROEs for vertically integrated electric utilities, over the entire period (i.e., January 1980 – November 2025) considered in my BRYP analyses. As shown, over the period of 1980 through approximately 2022, authorized ROEs increased as Treasury yields increased and vice versa. However, the 30-year Treasury bond yield increased significantly since 2020, increasing from 1.40 percent to approximately 4.67 percent in Q4/2025. Although the average authorized returns for both vertically integrated electric utilities have increased, the increase in authorized returns has not been sufficient given the increase in treasury bond yields. Counter to Dr. Won's claim, this does not mean that there has been a material change in the relationship between authorized returns and interest rates, but an indication that authorized returns for vertically integrated utilities should continue to increase given the increase in capital costs.

FIGURE 6: BYRP ANALYSIS – VERTICALLY INTEGRATED ELECTRIC UTILITIES: AUTHORIZED ROE, PREDICTED ROE AND TREASURY YIELDS (JANUARY 1980 – NOVEMBER 2025[110]



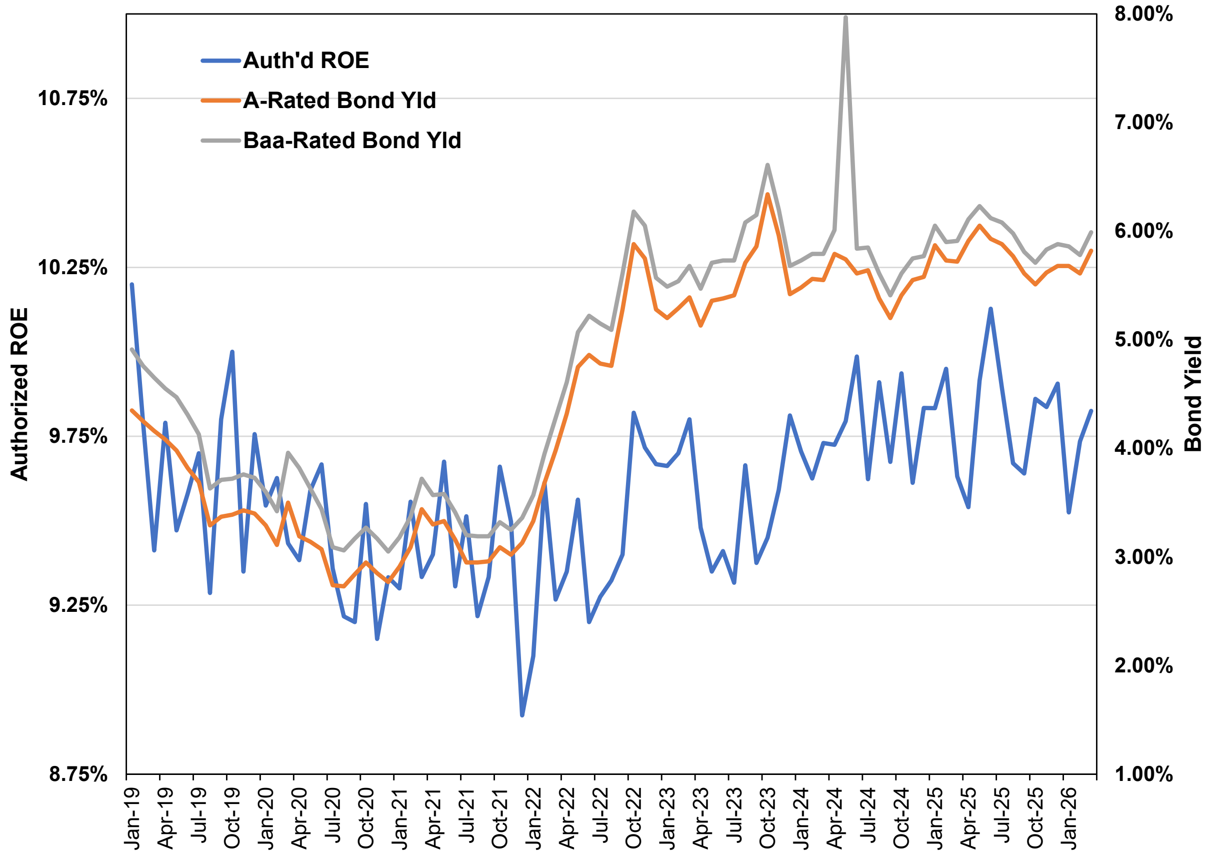
Q. Is Dr. Won's contention that the relationship between authorized ROEs and the 30-year Treasury yield has changed inconsistent with his own BYRP analysis?

A. Yes. As noted, in Figure 3 of Dr. Won's rebuttal testimony, he claims that the results of my BYRP analysis are unreliable because of a divergence in the relationship between authorized ROEs and 30-year Treasury bond yields post-COVID. However, as shown in Figure 7 below, the same divergence is present in the authorized ROE and utility bond yield data that Dr. Won relies on for his BYRP analysis. Further, if Dr. Won believes that such a divergence in the authorized ROE and utility bond yield data produces an unreliable result, then he has invalidated the result of his own BYRP analysis. More importantly,

[110] Schedule AEB-7.

given that Dr. Won's ROE recommendation in this proceeding is equivalent to the result of his BYRP analysis, he has also invalidated his ROE recommendation in this proceeding.

FIGURE 7: DR. WON'S AUTHORIZED ROE AND MOODY'S UTILITY BOND YIELD DATA[111]



Q. Is Mr. Murray's position regarding your BYRP analysis consistent with his own analyses?

A. No. While Mr. Murray suggests that the relationship between authorized ROEs and bond yields does not reflect investor behavior,[112] he evaluates authorized ROEs and long-term

[111] Data sourced from Direct Testimony of Dr. Won, workpaper "BYRP.xls," tab "BYRP Separated."

[112] Murray Rebuttal at 31.

Treasury bond yields as support for his recommended ROE.[113] Therefore, to the extent that Mr. Murray believes that my BYRP analysis cannot be relied upon, he has invalidated his own analyses.

It is unquestionable that both credit rating agencies and investors consider the authorized ROE data in their determination of the valuation of utility stocks. As I discussed in my rebuttal testimony, both credit rating agencies and investors have responded negatively to authorized ROEs deemed to be too low.[114] Therefore, the relationship between recently authorized ROEs and the prevailing interest rates at the time that the ROE was authorized is reasonable to consider when setting the ROE in the context of a rate proceeding.

Lastly, while Mr. Murray criticizes my BYRP analysis for not reflecting a market required return, his own "rule of thumb" risk premium analysis[115] is simply that – a rule of thumb – which is certainly not derived based on current or projected market conditions.

Therefore, for all of these reasons, there is no basis to Mr. Murray's criticism regarding my BYRP analysis.

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113 Murray Direct, at 2-3 and 6-8.

114 Bulkley Rebuttal, at 67-72.

115 Murray Direct, at 43.

X. BUSINESS RISK FACTORS

Q. What are the positions of Dr. Won and Mr. Murray regarding the Company's business risks and the effect on the Company's ROE?

A. Dr. Won states that he considers Evergy Metro's business and regulatory risks when recommending his ROE in this proceeding; however, he alleges that I have a biased approach that inflates the Company's business and regulatory risks.[116] While acknowledging that the Company does have some regulatory lag and time limits, Dr. Won contends that Evergy Metro does not have greater risk than the proxy group, stating that the Company takes advantage of several alternative regulatory mechanisms such as Plant-In-Service Accounting ("PISA"), and that he has not found any evidence that Evergy Metro has significantly greater risk than the proxy group that requires an upward adjustment to the ROE to be authorized in this proceeding.[117]

Similarly, Mr. Murray contends that the implementation of PISA has reduced Evergy Metro's business risk. Mr. Murray states that the Commission should explicitly recognize this reduced risk by authorizing a capital structure for Evergy Metro that is based on the capital structure ratios for the Company's parent company, Evergy.[118] In addition, Mr. Murray states that I have failed to recognize that my proxy group contains companies with significant non-regulated business risk exposure, specifically Dominion, DTE, and NEE.[119] Finally, Mr. Murray concludes that his average DCF result for the companies in

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116 Won Rebuttal, at 33.

117 *Id.*, at 36.

118 Murray Rebuttal, at 36.

119 *Id.*, at 31.

my proxy group that own nuclear generation is lower than the average DCF result for the companies that do not own nuclear generation. As a result, Mr. Murray concludes that Evergy Metro does not have increased risk relative to the proxy group due to the fact that the Company owns a nuclear generation facility.[120]

Q. What is your response to these witnesses' positions regarding the Company's business and regulatory risks?

A. Dr. Won and Mr. Murray fail to recognize the purpose for the business risk analysis in the estimation of the appropriate ROE for a company from within the range of cost of equity estimates developed. Since the cost of equity estimates are based on market data for the proxy group companies, which reflect the risk profiles of these companies, it is necessary to evaluate the Company's business and regulatory risk *relative to the proxy group*. This analysis allows the analyst to make a more informed determination as to where, within the range of returns established for the proxy group, the return on equity should reasonably be established.

Mr. Murray does not evaluate the Company's business and regulatory risks *relative to the proxy group.* Dr. Won also largely omits this comparative analysis with the exception of his discussion regarding Evergy Metro's expected capital expenditures as a percentage of net utility plant relative to the average ratio of the proxy group. Dr. Won and Mr. Murray simply claim that the Company's business risk has been reduced in absolute terms because of PISA, which provides no information as to *where in the range of market data* the authorized ROE should be established. Thus, these witnesses focus

[120] *Id.*, at 36-38.

solely or nearly solely on the ratemaking mechanisms in use by Evergy Metro to support their conclusions that the Company has reduced overall business risk. In contrast, I evaluated various regulatory and business risks to which Evergy Metro is subject relative to the proxy group in my direct testimony and concluded that the Company has relatively greater regulatory and business risk than the proxy group.[121]

Q. Dr. Won contends that you also concluded that the Company's regulatory risk is comparable to the operating utilities of the proxy group. Is this correct?

A. No, it is not. Dr. Won misquotes my testimony to incorrectly state that I concluded the Company's regulatory risk was comparable to the proxy group. However, Dr. Won only quotes part of the sentence in my direct testimony, which completely and incorrectly changes the conclusion. Specifically, my direct testimony stated the following:

> Based on my analysis, the Company's regulatory risk and the ability to timely recover its prudently incurred costs is generally consistent with the operating utilities of the proxy group, *albeit moderately higher given the lack of full fuel cost recovery, and the limitations on capital cost recovery associated with PISA.*[122]

As shown, I did not conclude that the Company's regulatory risk was comparable to the proxy group and instead concluded that the Company's regulatory risk was "moderately higher" than the proxy group given the lack of full fuel cost recovery and limitations associated with PISA.

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[121] Bulkley Direct, at 34-50.

[122] *Id.,* at 48 (emphasis added).

Q. Do you agree with Mr. Murray that you have failed to consider the non-regulated business risk exposure of your proxy group?

A. No. As discussed previously, Mr. Murray contends that my proxy group contains significant non-regulated business risk exposure but only identifies three companies out of the 16 companies in my proxy group that he views as currently having significant exposure, two of which I removed from my proxy group in my rebuttal testimony. In developing a proxy group, it is essential to balance the relative risk of the companies included in the proxy group with the overall size of the group, and thus it is always the case that the proxy companies do not have exactly the same risk profile as the subject company. However, as stated in my direct testimony, I have developed the proxy group to ensure that all of the companies used in my cost of equity analyses possess a set of operating and financial risk characteristics that are substantially comparable to Evergy Metro, and, therefore, provide a reasonable basis to estimate the appropriate cost of equity for the Company. This includes a screening criterion that requires a substantial portion of a utility's total operating income to be from regulated electric operations.[123]

Q. Do you agree with Mr. Murray's comparison of the average DCF results for the companies that own nuclear generation relative to the companies that do not own nuclear generation?

A. No. I disagree because the DCF results would reflect not only a company's risk with respect to nuclear generation, but also other business and financial risks such that it would not be possible to isolate the specific effect of nuclear generation risk. However, as I

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123 *Id.*, at 19.

discussed in my direct testimony, I evaluated various business risks (i.e., nuclear generation risk, regulatory risk, capital expenditures) of the Company relative to the proxy group to determine where amongst the range of results, including the results of the DCF analyses, that the Company's ROE should fall. This approach is similar to the comparison recommended by Mr. Murray, but is more appropriate because it considers multiple business risks faced by the Company and the proxy companies as opposed to just nuclear risk. Further, it does not appear as though Mr. Murray opposes such an approach since he recommends considering the range of DCF results when considering nuclear generation risk.

Q. What is your conclusion regarding the Company's business and regulatory risks and its effect on the ROE to be authorized in this proceeding?

A. The results of the cost of equity analyses alone do not provide an appropriate estimate of the cost of equity, and several additional factors must be considered when determining where the Company's cost of equity falls within the range of analytical results. However, Dr. Won and Mr. Murray have not evaluated the Company's business and regulatory risk relative to the proxy group, and thus cannot simply conclude that Evergy Metro has lower risk because it has regulatory mechanisms such as PISA.

All else equal, I agree that regulatory mechanisms that reduce a utility's regulatory lag in cost recovery help to mitigate risk. However, in setting the ROE, the data relied upon is based on the risk profile of a proxy group of companies. Therefore, the appropriate analysis for purposes of establishing the Company's ROE in this proceeding is not to identify whether Evergy Metro has regulatory mechanisms that mitigate its regulatory lag, but rather to evaluate how Evergy Metro's regulatory risk compares to the other companies in the proxy group. Dr. Won and Mr. Murray both highlight the regulatory mechanisms that Evergy Metro has for cost recovery, yet neither evaluates Evergy Metro's cost recovery risk relative to the proxy group.

XI. CAPITAL STRUCTURE

Q. Do you agree with Dr. Won's recommendation that the Commission disregard Mr. Murray's capital structure proposal?[124]

A. Yes. Dr. Won and I agree that Mr. Murray's proposed 45.00 percent equity ratio, which is based on Evergy's consolidated capital structure and not Evergy Metro's stand-alone capital structure, is neither reasonable nor appropriate.[125] Dr. Won observes that Mr. Murray's recommendation (1) relies on Evergy's higher leveraged consolidated capital structure rather than Evergy Metro's stand-alone capital structure;[126] and (2) is below both Evergy Metro's recent and actual equity ratio and the average authorized equity ratios for vertically integrated electric utilities.[127] I agree with Dr. Won's conclusion that "Mr. Murray's recommendation is not consistent with typical regulatory practices on when to use a parent company's capital structure instead of a subsidiary's own capital structure for the subsidiary's ratemaking."[128]

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124 Won Rebuttal, at 57.

125 *Id.*, at 50.

126 *Id.*, at 50.

127 *Id.*, at 4 and 51.

128 *Id.*, at 52.

Q. What does Mr. Murray state regarding your comparison of Evergy Metro's proposed equity ratio relative to the operating companies of the proxy group holding companies?

A. Mr. Murray states that utility operating companies are not good proxies for market-based holding company capital structures.[129] Since the cost of equity being estimated in this proceeding is based on a proxy group of publicly-traded holding companies, it is Mr. Murray's view that the capital structures of the holding companies are the appropriate capital structures to observe to test the reasonableness of the Company's proposed capital structure.[130] To support the reasonableness of his proposed 45.00 percent equity ratio for Evergy Metro, Mr. Murray states that the average equity ratio of the holding companies in my proxy group was 39.12 percent excluding short-term debt, and 38.22 percent including short-term debt.[131]

Q. Is Mr. Murray's comparison of the Company's proposed equity ratio to the actual equity ratios of the holding companies in the proxy group reasonable?

A. No. There is a significant problem with Mr. Murray's comparison of the Company's proposed equity ratio to the average equity ratio of the proxy group holding companies. If the capital structures at the holding company level are to be considered for comparison to the Company's proposal, the *market value* of debt and equity must be used to estimate the percentage of debt and equity in the capital structure, not the *book value* of debt and equity.

[129] Murray Rebuttal, at 4.

[130] *Id.*

[131] *Id.*

Q. Is the Company's proposed equity ratio consistent with the actual capital structures of the operating utilities of the proxy group companies?

A. Yes. As shown on Schedule AEB-12 of my direct testimony, the average actual equity ratio over the past two years for the utility operating subsidiaries of my proxy group was 51.98 percent, within a range from 44.83 percent to 60.14 percent. The Company's proposed equity ratio of 52.0749 percent is clearly consistent with and well within the range of equity ratios of the proxy group.

Q. Why is it inappropriate for Mr. Murray to rely on the book value of the capital structure of the proxy group companies at the holding company level as a comparison to Evergy Metro's proposed capital structure?

A. The use of the book value of debt and equity for the proxy group companies at the holding company level creates a mismatch between the capital structure data that is being used to determine the reasonableness of the Company's proposed equity ratios and the data that is being used to estimate the DCF and the CAPM analyses to determine the cost of equity for the Company. For example, Mr. Murray considers the multi-stage DCF model to estimate the cost of equity for the Company, which relies on the current stock prices of the proxy group companies or, in other words, the current *market value* of their equity. Similarly, Mr. Murray also relies on the CAPM to estimate the cost of equity for the Company, and in doing so, relies on beta coefficients – which reflect the returns of each proxy group company based on that company's respective *market value*. Therefore, the cost of equity developed by Mr. Murray is intended to represent the percentage return required by investors on the *market* value of equity not the book value.

Q. Does Mr. Murray acknowledge that the cost of equity is the return on the market value of common equity?

A. Yes. When discussing his view that authorized ROEs have been in excess of utilities' costs of equity, he states that this alleged dynamic increases the *market* value of the original equity invested.[132]

Q. What is the effect of relying on the required return on the market value of equity for assessing the cost of equity, but then the book value of debt and equity for assessing the capital structure?

A. If the *market value* of debt and equity are substantially different than the *book value* of debt and equity, then the resulting cost of equity estimate would not reflect the financial risk of the book value capital structure. This is illustrated in the following set of equations readily found in corporate finance textbooks.[133] As shown in Equation [2], the value of a company (or asset) is determined as follows:

$$V = D + E \qquad [2]$$

Where:

V = market value of a company/asset
D = market value of debt
E = market value of equity

For simplicity, if it is assumed that there are no taxes, based on Equation [2], the total return on V can be estimated as follows:

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132 Murray Rebuttal, at 12.

133 Richard A. Brealey, Stewart Myers, and Franklin Allen, *Principles of Corporate Finance*, 13th Ed., 2020, at 452-462.

$$r_V = \frac{D}{D + E} \text{ x } r_D + \frac{E}{E + D} \text{ x } r_E \quad [3]$$

Where:

r_V = expected return on assets / weighted-average cost of capital

r_D = expected return on debt

r_E = expected return on equity

Then, Equation [3] can be rearranged into the following form to solve for the expected return on equity, r_E:

$$r_E = r_V + (r_V - r_D)\frac{D}{E} \quad [4]$$

As shown in Equation [4], the expected return on the market value of equity is a function of the market debt-to-equity ratio. As the percentage of debt increases, the financial risk of the firm increases, and thus investors require a higher return to compensate for the additional financial risk. Therefore, if the book debt-to-equity ratio for the proxy group is substantially different than market debt-to-equity ratio, the expected return on equity will also be substantially different.

Q. Is the book value debt-to-equity ratio different from the market value debt-to-equity ratio for your proxy group in this proceeding?

A. Yes. As shown in Schedule AEB-4SR, the average market value common equity ratio for the holding companies in my proxy group from my rebuttal testimony as of December 31, 2025 is 56.52 percent. Given that Mr. Murray estimates the cost of equity using the DCF and CAPM analyses based on the *market value* of the proxy group companies' equity, the costs of equity that he estimates for the proxy group reflect the financial risk of a *market value* common equity ratio of 56.52 percent based on Equation [4]. This means that the *market value* common equity ratio of the proxy group is significantly greater than the average book value equity ratios cited by Mr. Murray. Given the greater financial risk associated with the increased leverage of the book value capital structures relied on by Mr. Murray, investors would require a much higher cost of equity than estimated by his DCF and CAPM analyses. In fact, Mr. Murray acknowledges that increased levels of leverage result in greater financial risk and thus increased required returns.[134] In other words, Mr. Murray's reliance on a cost of equity estimates based on market values – but a capital structure based on book value – is a mismatch that results in the incorrect conclusion that an ROE reflecting the financial risk of the market value equity ratio would be sufficient to compensate investors for a much more highly levered capital structure based on book value.

Q. How does the Company's proposed equity ratio compare to the market value equity ratio of the proxy group?

A. Evergy Metro's proposed equity ratio of 52.0749 percent is much lower than the average market value common equity ratio for my proxy group as of December 31, 2025 of 56.52 percent. Therefore, when the equity ratio comparison based on the approach supported by Mr. Murray is done correctly, it demonstrates that the Company's proposed equity ratio is reasonable.

[134] *Id.*, at 4.

Q. Is there another reason that relying on the holding company capital structures to set the capital structure for the utility operating subsidiary is problematic?

A. Yes. The holding company data on which Mr. Murray relies includes corporate-level debt that is not part of the regulated or financial capital structure of the operating utilities.[135] Simply because the parent companies in the proxy group are used to estimate the Company's cost of equity does not mean that the *holding company* capital structures are the relevant comparators for establishing the Company's authorized capital structure. There is no question that the utility subsidiaries of those holding companies are *more* comparable to the Company in terms of risk. Holding companies have multiple regulated utility subsidiaries, including in multiple jurisdictions, as well as unregulated operations or other business activities, which differ from the Company's purely regulated utility operations in a single jurisdiction. Therefore, the appropriate comparison for the Company's proposed capital structures is a comparison to the capital structures of the utility subsidiaries of the proxy group companies since they are the most comparable to the Company.

Q. Is the Company's proposed equity ratio also consistent with the equity ratios that have been previously authorized for vertically integrated electric utilities?

A. Yes. Figure 8 presents the authorized equity ratios for vertically integrated electric utilities across the U.S. since 2020, properly excluding both limited issue rider cases and authorizations in Arkansas, Indiana, Michigan and Florida due to the inclusion of zero cost capital items in the capital structure. As shown, the Company's proposed equity ratio of

[135] Murray Direct, Workpaper "WP-1 - Bulkley Proxy Group Consolidated Capital Structures.xlsx"

52.0749 percent is consistent with both the mean and median equity ratios for utilities across the U.S. in the past several years.

FIGURE 8: AUTHORIZED EQUITY RATIOS FOR VERTICALLY INTEGRATED ELECTRIC UTILITIES FOR 2020-2026[136]

Year	Average	Median	Min.	Max.
2020	51.99%	52.25%	46.00%	56.83%
2021	51.42%	52.00%	43.25%	55.00%
2022	52.62%	52.00%	48.90%	58.22%
2023	52.74%	52.50%	48.02%	60.70%
2024	51.35%	51.93%	41.25%	56.54%
2025	51.28%	52.00%	44.00%	57.00%
2026	52.00%	52.50%	46.13%	55.00%

Q. What is your conclusion regarding the appropriate capital structure for the Company?

A. I continue to conclude that the Company's proposed capital structure is reasonable. The Company's proposed equity ratio of 52.0749 percent is both: (1) consistent with the average actual equity ratio of the utility subsidiaries of the proxy group companies (*i.e.*, utilities with risk profiles that are similar to the Company's risk profile); and (2) consistent with the average equity ratios authorized for vertically integrated electric utilities across the U.S. over the past several years. Further, if Mr. Murray's comparison of the Company's proposed equity ratio to the average equity ratios of the proxy group holding companies is

[136] *S&P Capital IQ Pro*; data through July 31, 2026. The average annual authorized equity ratios differ from the average authorized equity ratios presented in Table 4 of Dr. Won's rebuttal testimony. The workpaper that Dr. Won provides does not indicate how his average annual authorized equity ratios are developed. His workpaper does not contain an average formula for each year and instead simply reflects the values of the annual authorized equity ratios for 2010-2024. However, it appears that his analysis is incorrect and has, at a minimum, included utilities in jurisdictions that include zero cost of capital items in the capital structure. In addition, it is unclear whether Dr. Won's analysis also includes authorized equity ratios for limited issue rider cases and transmission and distribution-only electric utilities instead of just for vertically integrated electric utilities.

done correctly, it also demonstrates that, contrary to his conclusion, the Company's proposed equity ratio is well below those of the proxy group and thus reasonable.

Q. Does this conclude your surrebuttal testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement A General Rate Increase for Electric Service	))))	Case No. ER-2026-0143

AFFIDAVIT OF ANN E. BULKLEY

COMMONWEALTH OF MASSACHUSETTS)
) ss
COUNTY OF SUFFOLK)

Ann E. Bulkley, being first duly sworn on his oath, states:

1. My name is Ann E. Bulkley. I work in Boston, Massachusetts, and I am employed by The Brattle Group, Inc. as Principal.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Evergy Missouri Metro consisting of seventy-three (73) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Ann Bulkley
Ann E. Bulkley

Subscribed and sworn before me this 2 day of September 2026.

Sera M. McCarthy
Notary Public

My commission expires: August 5, 2027

Sera M. McCarthy
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
August 5, 2027

Multi-Stage DCF

First Stage Growth Rate: **Minimum Projected EPS Growth Rates**
Stock Price Averaging Convention: **30.00 days**

		1	2	3	4	5	6	7	8	9	10	11	12	13
Company	Ticker	Annualized Dividend	Stock Price	First Stage Gwth Rate	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Alliant Energy Corporation	LNT	$2.14	$73.26	6.00%	5.97%	5.93%	5.90%	5.86%	5.83%	5.79%	5.76%	5.73%	5.69%	5.66%
Ameren Corporation	AEE	$3.00	$109.41	7.50%	7.39%	7.29%	7.18%	7.08%	6.97%	6.87%	6.76%	6.65%	6.55%	6.44%
American Electric Power Company, Inc.	AEP	$3.80	$130.03	5.50%	5.49%	5.48%	5.47%	5.46%	5.45%	5.44%	5.43%	5.42%	5.41%	5.40%
Avista Corporation	AVA	$1.97	$41.24	4.10%	4.16%	4.21%	4.27%	4.32%	4.38%	4.44%	4.49%	4.55%	4.61%	4.66%
CMS Energy Corporation	CMS	$2.28	$73.65	7.10%	7.01%	6.93%	6.84%	6.75%	6.67%	6.58%	6.49%	6.41%	6.32%	6.23%
DTE Energy Company	DTE	$4.66	$145.32	5.90%	5.87%	5.84%	5.81%	5.78%	5.75%	5.72%	5.69%	5.66%	5.63%	5.60%
Entergy Corporation	ETR	$2.56	$111.27	11.50%	11.20%	10.91%	10.61%	10.32%	10.02%	9.72%	9.43%	9.13%	8.83%	8.54%
IDACORP, Inc.	IDA	$3.52	$142.64	5.00%	5.01%	5.03%	5.04%	5.05%	5.07%	5.08%	5.09%	5.11%	5.12%	5.13%
OGE Energy Corporation	OGE	$1.70	$47.76	5.60%	5.58%	5.57%	5.55%	5.54%	5.52%	5.51%	5.49%	5.48%	5.46%	5.45%
Pinnacle West Capital Corporation	PNW	$3.64	$102.67	5.80%	5.78%	5.75%	5.73%	5.70%	5.68%	5.65%	5.63%	5.60%	5.58%	5.55%
Portland General Electric Company	POR	$2.21	$49.87	6.49%	6.43%	6.37%	6.31%	6.26%	6.20%	6.14%	6.08%	6.03%	5.97%	5.91%
PPL Corporation	PPL	$1.14	$35.62	7.50%	7.39%	7.29%	7.18%	7.08%	6.97%	6.87%	6.76%	6.65%	6.55%	6.44%
Southern Company	SO	$3.04	$93.53	7.00%	6.92%	6.84%	6.75%	6.67%	6.59%	6.51%	6.43%	6.34%	6.26%	6.18%
Xcel Energy Inc.	XEL	$2.37	$78.93	8.00%	7.87%	7.74%	7.61%	7.48%	7.35%	7.22%	7.09%	6.96%	6.83%	6.70%
Mean				6.64%	6.58%	6.51%	6.45%	6.38%	6.32%	6.25%	6.19%	6.12%	6.06%	5.99%
Median				6.24%	6.20%	6.15%	6.11%	6.06%	6.01%	5.97%	5.92%	5.88%	5.83%	5.78%

		14	15	16	17	18	19	20	21	22	23	24	25
Company	Ticker	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Third Stage Growth Rate	Cost of Equity
Alliant Energy Corporation	LNT	5.62%	5.59%	5.55%	5.52%	5.49%	5.45%	5.42%	5.38%	5.35%	5.31%	5.28%	8.83%
Ameren Corporation	AEE	6.34%	6.23%	6.13%	6.02%	5.91%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	9.58%
American Electric Power Company, Inc.	AEP	5.38%	5.37%	5.36%	5.35%	5.34%	5.33%	5.32%	5.31%	5.30%	5.29%	5.28%	8.52%
Avista Corporation	AVA	4.72%	4.77%	4.83%	4.89%	4.94%	5.00%	5.06%	5.11%	5.17%	5.22%	5.28%	9.53%
CMS Energy Corporation	CMS	6.15%	6.06%	5.97%	5.89%	5.80%	5.71%	5.63%	5.54%	5.45%	5.37%	5.28%	9.78%
DTE Energy Company	DTE	5.58%	5.55%	5.52%	5.49%	5.46%	5.43%	5.40%	5.37%	5.34%	5.31%	5.28%	9.10%
Entergy Corporation	ETR	8.24%	7.95%	7.65%	7.35%	7.06%	6.76%	6.46%	6.17%	5.87%	5.58%	5.28%	11.75%
IDACORP, Inc.	IDA	5.15%	5.16%	5.17%	5.19%	5.20%	5.21%	5.23%	5.24%	5.25%	5.27%	5.28%	7.74%
OGE Energy Corporation	OGE	5.43%	5.42%	5.40%	5.39%	5.37%	5.36%	5.34%	5.33%	5.31%	5.30%	5.28%	9.30%
Pinnacle West Capital Corporation	PNW	5.53%	5.50%	5.48%	5.45%	5.43%	5.40%	5.38%	5.35%	5.33%	5.30%	5.28%	9.42%
Portland General Electric Company	POR	5.85%	5.80%	5.74%	5.68%	5.62%	5.57%	5.51%	5.45%	5.39%	5.34%	5.28%	10.97%
PPL Corporation	PPL	6.34%	6.23%	6.13%	6.02%	5.91%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	10.20%
Southern Company	SO	6.10%	6.02%	5.94%	5.85%	5.77%	5.69%	5.61%	5.53%	5.44%	5.36%	5.28%	9.91%
Xcel Energy Inc.	XEL	6.58%	6.45%	6.32%	6.19%	6.06%	5.93%	5.80%	5.67%	5.54%	5.41%	5.28%	10.29%
Mean		5.93%	5.86%	5.80%	5.73%	5.67%	5.60%	5.54%	5.47%	5.41%	5.34%	5.28%	9.63%
Median		5.74%	5.69%	5.65%	5.60%	5.56%	5.51%	5.46%	5.42%	5.37%	5.33%	5.28%	9.55%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 30-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Minimum (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
[10] Equals [9] + ([24] − [3]) / 21
[11] Equals [10] + ([24] − [3]) / 21
[12] Equals [11] + ([24] − [3]) / 21
[13] Equals [12] + ([24] − [3]) / 21
[14] Equals [13] + ([24] − [3]) / 21
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[19] Equals [18] + ([24] − [3]) / 21
[20] Equals [19] + ([24] − [3]) / 21
[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Minimum Projected EPS Growth Rates**
Stock Price Averaging Convention: **90.00 days**

Company	Ticker	1 Annualized Dividend	2 Stock Price	3 First Stage Gwth Rate	4 Year 21	5 Year 22	6 Year 23	7 Year 24	8 Year 25	9 Year 26	10 Year 27	11 Year 28	12 Year 29
Alliant Energy Corporation	LNT	$2.14	$72.10	6.00%	5.97%	5.93%	5.90%	5.86%	5.83%	5.79%	5.76%	5.73%	5.69%
Ameren Corporation	AEE	$3.00	$109.76	7.50%	7.39%	7.29%	7.18%	7.08%	6.97%	6.87%	6.76%	6.65%	6.55%
American Electric Power Company, Inc.	AEP	$3.80	$131.01	5.50%	5.49%	5.48%	5.47%	5.46%	5.45%	5.44%	5.43%	5.42%	5.41%
Avista Corporation	AVA	$1.97	$40.46	4.10%	4.16%	4.21%	4.27%	4.32%	4.38%	4.44%	4.49%	4.55%	4.61%
CMS Energy Corporation	CMS	$2.28	$75.19	7.10%	7.01%	6.93%	6.84%	6.75%	6.67%	6.58%	6.49%	6.41%	6.32%
DTE Energy Company	DTE	$4.66	$145.02	5.90%	5.87%	5.84%	5.81%	5.78%	5.75%	5.72%	5.69%	5.66%	5.63%
Entergy Corporation	ETR	$2.56	$110.10	11.50%	11.20%	10.91%	10.61%	10.32%	10.02%	9.72%	9.43%	9.13%	8.83%
IDACORP, Inc.	IDA	$3.52	$142.69	5.00%	5.01%	5.03%	5.04%	5.05%	5.07%	5.08%	5.09%	5.11%	5.12%
OGE Energy Corporation	OGE	$1.70	$47.74	5.60%	5.58%	5.57%	5.55%	5.54%	5.52%	5.51%	5.49%	5.48%	5.46%
Pinnacle West Capital Corporation	PNW	$3.64	$101.19	5.80%	5.78%	5.75%	5.73%	5.70%	5.68%	5.65%	5.63%	5.60%	5.58%
Portland General Electric Company	POR	$2.21	$50.70	6.49%	6.43%	6.37%	6.31%	6.26%	6.20%	6.14%	6.08%	6.03%	5.97%
PPL Corporation	PPL	$1.14	$36.97	7.50%	7.39%	7.29%	7.18%	7.08%	6.97%	6.87%	6.76%	6.65%	6.55%
Southern Company	SO	$3.04	$94.30	7.00%	6.92%	6.84%	6.75%	6.67%	6.59%	6.51%	6.43%	6.34%	6.26%
Xcel Energy Inc.	XEL	$2.37	$79.57	8.00%	7.87%	7.74%	7.61%	7.48%	7.35%	7.22%	7.09%	6.96%	6.83%
Mean				6.64%	6.58%	6.51%	6.45%	6.38%	6.32%	6.25%	6.19%	6.12%	6.06%
Median				6.24%	6.20%	6.15%	6.11%	6.06%	6.01%	5.97%	5.92%	5.88%	5.83%

Company	13 Year 30	14 Year 31	15 Year 32	16 Year 33	17 Year 34	18 Year 35	19 Year 36	20 Year 37	21 Year 38	22 Year 39	23 Year 40	24 Third Stage Growth Rate	25 Cost of Equity
Alliant Energy Corporation	5.66%	5.62%	5.59%	5.55%	5.52%	5.49%	5.45%	5.42%	5.38%	5.35%	5.31%	5.28%	8.88%
Ameren Corporation	6.44%	6.34%	6.23%	6.13%	6.02%	5.91%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	9.57%
American Electric Power Company, Inc.	5.40%	5.38%	5.37%	5.36%	5.35%	5.34%	5.33%	5.32%	5.31%	5.30%	5.29%	5.28%	8.49%
Avista Corporation	4.66%	4.72%	4.77%	4.83%	4.89%	4.94%	5.00%	5.06%	5.11%	5.17%	5.22%	5.28%	9.62%
CMS Energy Corporation	6.23%	6.15%	6.06%	5.97%	5.89%	5.80%	5.71%	5.63%	5.54%	5.45%	5.37%	5.28%	9.69%
DTE Energy Company	5.60%	5.58%	5.55%	5.52%	5.49%	5.46%	5.43%	5.40%	5.37%	5.34%	5.31%	5.28%	9.11%
Entergy Corporation	8.54%	8.24%	7.95%	7.65%	7.35%	7.06%	6.76%	6.46%	6.17%	5.87%	5.58%	5.28%	11.79%
IDACORP, Inc.	5.13%	5.15%	5.16%	5.17%	5.19%	5.20%	5.21%	5.23%	5.24%	5.25%	5.27%	5.28%	7.73%
OGE Energy Corporation	5.45%	5.43%	5.42%	5.40%	5.39%	5.37%	5.36%	5.34%	5.33%	5.31%	5.30%	5.28%	9.30%
Pinnacle West Capital Corporation	5.55%	5.53%	5.50%	5.48%	5.45%	5.43%	5.40%	5.38%	5.35%	5.33%	5.30%	5.28%	9.48%
Portland General Electric Company	5.91%	5.85%	5.80%	5.74%	5.68%	5.62%	5.57%	5.51%	5.45%	5.39%	5.34%	5.28%	10.88%
PPL Corporation	6.44%	6.34%	6.23%	6.13%	6.02%	5.91%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	10.04%
Southern Company	6.18%	6.10%	6.02%	5.94%	5.85%	5.77%	5.69%	5.61%	5.53%	5.44%	5.36%	5.28%	9.87%
Xcel Energy Inc.	6.70%	6.58%	6.45%	6.32%	6.19%	6.06%	5.93%	5.80%	5.67%	5.54%	5.41%	5.28%	10.26%
Mean	5.99%	5.93%	5.86%	5.80%	5.73%	5.67%	5.60%	5.54%	5.47%	5.41%	5.34%	5.28%	9.62%
Median	5.78%	5.74%	5.69%	5.65%	5.60%	5.56%	5.51%	5.46%	5.42%	5.37%	5.33%	5.28%	9.59%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 90-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Minimum (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
[10] Equals [9] + ([24] − [3]) / 21
[11] Equals [10] + ([24] − [3]) / 21
[12] Equals [11] + ([24] − [3]) / 21
[13] Equals [12] + ([24] − [3]) / 21
[14] Equals [13] + ([24] − [3]) / 21
[15] Equals [14] + ([24] − [3]) / 21
[16] Equals [15] + ([24] − [3]) / 21
[17] Equals [16] + ([24] − [3]) / 21
[18] Equals [17] + ([24] − [3]) / 21
[19] Equals [18] + ([24] − [3]) / 21
[20] Equals [19] + ([24] − [3]) / 21
[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Minimum Projected EPS Growth Rates**
Stock Price Averaging Convention: **180.00 days**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Company	Ticker	Annualized Dividend	Stock Price	First Stage Gwth Rate	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Third Stage Growth Rate	Cost of Equity
Alliant Energy Corporation	LNT	$2.14	$69.02	6.00%	5.97%	5.93%	5.90%	5.86%	5.83%	5.79%	5.76%	5.73%	5.69%	5.66%	5.62%	5.59%	5.55%	5.52%	5.49%	5.45%	5.42%	5.38%	5.35%	5.31%	5.28%	9.04%
Ameren Corporation	AEE	$3.00	$105.47	7.50%	7.39%	7.29%	7.18%	7.08%	6.97%	6.87%	6.76%	6.65%	6.55%	6.44%	6.34%	6.23%	6.13%	6.02%	5.91%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	9.72%
American Electric Power Company, Inc.	AEP	$3.80	$124.03	5.50%	5.49%	5.48%	5.47%	5.46%	5.45%	5.44%	5.43%	5.42%	5.41%	5.40%	5.38%	5.37%	5.36%	5.35%	5.34%	5.33%	5.32%	5.31%	5.30%	5.29%	5.28%	8.68%
Avista Corporation	AVA	$1.97	$39.58	4.10%	4.16%	4.21%	4.27%	4.32%	4.38%	4.44%	4.49%	4.55%	4.61%	4.66%	4.72%	4.77%	4.83%	4.89%	4.94%	5.00%	5.06%	5.11%	5.17%	5.22%	5.28%	9.73%
CMS Energy Corporation	CMS	$2.28	$73.22	7.10%	7.01%	6.93%	6.84%	6.75%	6.67%	6.58%	6.49%	6.41%	6.32%	6.23%	6.15%	6.06%	5.97%	5.89%	5.80%	5.71%	5.63%	5.54%	5.45%	5.37%	5.28%	9.80%
DTE Energy Company	DTE	$4.66	$138.79	5.90%	5.87%	5.84%	5.81%	5.78%	5.75%	5.72%	5.69%	5.66%	5.63%	5.60%	5.58%	5.55%	5.52%	5.49%	5.46%	5.43%	5.40%	5.37%	5.34%	5.31%	5.28%	9.27%
Entergy Corporation	ETR	$2.56	$102.15	11.50%	11.20%	10.91%	10.61%	10.32%	10.02%	9.72%	9.43%	9.13%	8.83%	8.54%	8.24%	7.95%	7.65%	7.35%	7.06%	6.76%	6.46%	6.17%	5.87%	5.58%	5.28%	12.13%
IDACORP, Inc.	IDA	$3.52	$136.04	5.00%	5.01%	5.03%	5.04%	5.05%	5.07%	5.08%	5.09%	5.11%	5.12%	5.13%	5.15%	5.16%	5.17%	5.19%	5.20%	5.21%	5.23%	5.24%	5.25%	5.27%	5.28%	7.86%
OGE Energy Corporation	OGE	$1.70	$45.66	5.60%	5.58%	5.57%	5.55%	5.54%	5.52%	5.51%	5.49%	5.48%	5.46%	5.45%	5.43%	5.42%	5.40%	5.39%	5.37%	5.36%	5.34%	5.33%	5.31%	5.30%	5.28%	9.49%
Pinnacle West Capital Corporation	PNW	$3.64	$95.15	5.80%	5.78%	5.75%	5.73%	5.70%	5.68%	5.65%	5.63%	5.60%	5.58%	5.55%	5.53%	5.50%	5.48%	5.45%	5.43%	5.40%	5.38%	5.35%	5.33%	5.30%	5.28%	9.74%
Portland General Electric Company	POR	$2.21	$49.00	6.49%	6.43%	6.37%	6.31%	6.26%	6.20%	6.14%	6.08%	6.03%	5.97%	5.91%	5.85%	5.80%	5.74%	5.68%	5.62%	5.57%	5.51%	5.45%	5.39%	5.34%	5.28%	11.06%
PPL Corporation	PPL	$1.14	$36.12	7.50%	7.39%	7.29%	7.18%	7.08%	6.97%	6.87%	6.76%	6.65%	6.55%	6.44%	6.34%	6.23%	6.13%	6.02%	5.91%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	10.14%
Southern Company	SO	$3.04	$91.45	7.00%	6.92%	6.84%	6.75%	6.67%	6.59%	6.51%	6.43%	6.34%	6.26%	6.18%	6.10%	6.02%	5.94%	5.85%	5.77%	5.69%	5.61%	5.53%	5.44%	5.36%	5.28%	10.00%
Xcel Energy Inc.	XEL	$2.37	$77.91	8.00%	7.87%	7.74%	7.61%	7.48%	7.35%	7.22%	7.09%	6.96%	6.83%	6.70%	6.58%	6.45%	6.32%	6.19%	6.06%	5.93%	5.80%	5.67%	5.54%	5.41%	5.28%	10.34%
Mean				6.64%	6.58%	6.51%	6.45%	6.38%	6.32%	6.25%	6.19%	6.12%	6.06%	5.99%	5.93%	5.86%	5.80%	5.73%	5.67%	5.60%	5.54%	5.47%	5.41%	5.34%	5.28%	9.79%
Median				6.24%	6.20%	6.15%	6.11%	6.06%	6.01%	5.97%	5.92%	5.88%	5.83%	5.78%	5.74%	5.69%	5.65%	5.60%	5.56%	5.51%	5.46%	5.42%	5.37%	5.33%	5.28%	9.74%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 180-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Minimum (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
[10] Equals [9] + ([24] − [3]) / 21
[11] Equals [10] + ([24] − [3]) / 21
[12] Equals [11] + ([24] − [3]) / 21
[13] Equals [12] + ([24] − [3]) / 21
[14] Equals [13] + ([24] − [3]) / 21
[15] Equals [14] + ([24] − [3]) / 21
[16] Equals [15] + ([24] − [3]) / 21
[17] Equals [16] + ([24] − [3]) / 21
[18] Equals [17] + ([24] − [3]) / 21
[19] Equals [18] + ([24] − [3]) / 21
[20] Equals [19] + ([24] − [3]) / 21
[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Average Projected EPS Growth Rates**
Stock Price Averaging Convention: **30.00 days**

Company	Ticker	1 Annualized Dividend	2 Stock Price	3 First Stage Gwth Rate	4 Year 21	5 Year 22	6 Year 23	7 Year 24	8 Year 25	9 Year 26	10 Year 27
Alliant Energy Corporation	LNT	$2.14	$73.26	7.12%	7.04%	6.95%	6.86%	6.77%	6.69%	6.60%	6.51%
Ameren Corporation	AEE	$3.00	$109.41	8.23%	8.09%	7.95%	7.81%	7.67%	7.53%	7.39%	7.25%
American Electric Power Company, Inc.	AEP	$3.80	$130.03	7.33%	7.23%	7.13%	7.04%	6.94%	6.84%	6.74%	6.65%
Avista Corporation	AVA	$1.97	$41.24	4.96%	4.98%	4.99%	5.01%	5.02%	5.04%	5.05%	5.07%
CMS Energy Corporation	CMS	$2.28	$73.65	7.72%	7.60%	7.48%	7.37%	7.25%	7.14%	7.02%	6.90%
DTE Energy Company	DTE	$4.66	$145.32	6.50%	6.44%	6.38%	6.32%	6.26%	6.21%	6.15%	6.09%
Entergy Corporation	ETR	$2.56	$111.27	12.73%	12.37%	12.02%	11.67%	11.31%	10.96%	10.60%	10.25%
IDACORP, Inc.	IDA	$3.52	$142.64	7.06%	6.98%	6.89%	6.81%	6.72%	6.64%	6.55%	6.47%
OGE Energy Corporation	OGE	$1.70	$47.76	6.13%	6.09%	6.05%	6.01%	5.97%	5.93%	5.89%	5.85%
Pinnacle West Capital Corporation	PNW	$3.64	$102.67	6.58%	6.52%	6.46%	6.40%	6.33%	6.27%	6.21%	6.15%
Portland General Electric Company	POR	$2.21	$49.87	6.66%	6.60%	6.53%	6.46%	6.40%	6.33%	6.27%	6.20%
PPL Corporation	PPL	$1.14	$35.62	7.80%	7.68%	7.56%	7.44%	7.32%	7.20%	7.08%	6.96%
Southern Company	SO	$3.04	$93.53	7.43%	7.32%	7.22%	7.12%	7.02%	6.92%	6.81%	6.71%
Xcel Energy Inc.	XEL	$2.37	$78.93	8.79%	8.62%	8.45%	8.29%	8.12%	7.95%	7.79%	7.62%
Mean				7.50%	7.40%	7.29%	7.19%	7.08%	6.97%	6.87%	6.76%
Median				7.23%	7.13%	7.04%	6.95%	6.86%	6.76%	6.67%	6.58%

Company	11 Year 28	12 Year 29	13 Year 30	14 Year 31	15 Year 32	16 Year 33	17 Year 34	18 Year 35	19 Year 36	20 Year 37	21 Year 38	22 Year 39	23 Year 40	24 Third Stage Growth Rate	25 Cost of Equity
Alliant Energy Corporation	6.42%	6.33%	6.25%	6.16%	6.07%	5.98%	5.89%	5.81%	5.72%	5.63%	5.54%	5.46%	5.37%	5.28%	9.56%
Ameren Corporation	7.11%	6.97%	6.83%	6.69%	6.55%	6.40%	6.26%	6.12%	5.98%	5.84%	5.70%	5.56%	5.42%	5.28%	10.08%
American Electric Power Company, Inc.	6.55%	6.45%	6.35%	6.26%	6.16%	6.06%	5.96%	5.87%	5.77%	5.67%	5.57%	5.48%	5.38%	5.28%	9.71%
Avista Corporation	5.08%	5.10%	5.11%	5.13%	5.14%	5.16%	5.17%	5.19%	5.20%	5.22%	5.23%	5.25%	5.26%	5.28%	10.17%
CMS Energy Corporation	6.79%	6.67%	6.56%	6.44%	6.32%	6.21%	6.09%	5.98%	5.86%	5.74%	5.63%	5.51%	5.40%	5.28%	10.21%
DTE Energy Company	6.03%	5.97%	5.92%	5.86%	5.80%	5.74%	5.69%	5.63%	5.57%	5.51%	5.45%	5.40%	5.34%	5.28%	9.50%
Entergy Corporation	9.89%	9.54%	9.18%	8.83%	8.47%	8.12%	7.76%	7.41%	7.05%	6.70%	6.34%	5.99%	5.63%	5.28%	12.69%
IDACORP, Inc.	6.38%	6.30%	6.21%	6.13%	6.04%	5.96%	5.87%	5.79%	5.70%	5.62%	5.53%	5.45%	5.36%	5.28%	8.92%
OGE Energy Corporation	5.81%	5.77%	5.73%	5.69%	5.64%	5.60%	5.56%	5.52%	5.48%	5.44%	5.40%	5.36%	5.32%	5.28%	9.67%
Pinnacle West Capital Corporation	6.09%	6.02%	5.96%	5.90%	5.84%	5.78%	5.71%	5.65%	5.59%	5.53%	5.47%	5.40%	5.34%	5.28%	9.97%
Portland General Electric Company	6.14%	6.07%	6.00%	5.94%	5.87%	5.81%	5.74%	5.67%	5.61%	5.54%	5.48%	5.41%	5.35%	5.28%	11.11%
PPL Corporation	6.84%	6.72%	6.60%	6.48%	6.36%	6.24%	6.12%	6.00%	5.88%	5.76%	5.64%	5.52%	5.40%	5.28%	10.41%
Southern Company	6.61%	6.51%	6.40%	6.30%	6.20%	6.10%	6.00%	5.89%	5.79%	5.69%	5.59%	5.48%	5.38%	5.28%	10.21%
Xcel Energy Inc.	7.45%	7.28%	7.12%	6.95%	6.78%	6.62%	6.45%	6.28%	6.12%	5.95%	5.78%	5.61%	5.45%	5.28%	10.87%
Mean	6.66%	6.55%	6.44%	6.34%	6.23%	6.13%	6.02%	5.92%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	10.22%
Median	6.49%	6.39%	6.30%	6.21%	6.11%	6.02%	5.93%	5.84%	5.74%	5.65%	5.56%	5.47%	5.37%	5.28%	10.13%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 30-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Average (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
[10] Equals [9] + ([24] − [3]) / 21
[11] Equals [10] + ([24] − [3]) / 21
[12] Equals [11] + ([24] − [3]) / 21
[13] Equals [12] + ([24] − [3]) / 21
[14] Equals [13] + ([24] − [3]) / 21
[15] Equals [14] + ([24] − [3]) / 21
[16] Equals [15] + ([24] − [3]) / 21
[17] Equals [16] + ([24] − [3]) / 21
[18] Equals [17] + ([24] − [3]) / 21
[19] Equals [18] + ([24] − [3]) / 21
[20] Equals [19] + ([24] − [3]) / 21
[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Average Projected EPS Growth Rates**
Stock Price Averaging Convention: **90.00 days**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Company	Ticker	Annualized Dividend	Stock Price	First Stage Gwth Rate	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Third Stage Growth Rate	Cost of Equity
Alliant Energy Corporation	LNT	$2.14	$72.10	7.12%	7.04%	6.95%	6.86%	6.77%	6.69%	6.60%	6.51%	6.42%	6.33%	6.25%	6.16%	6.07%	5.98%	5.89%	5.81%	5.72%	5.63%	5.54%	5.46%	5.37%	5.28%	9.63%
Ameren Corporation	AEE	$3.00	$109.76	8.23%	8.09%	7.95%	7.81%	7.67%	7.53%	7.39%	7.25%	7.11%	6.97%	6.83%	6.69%	6.55%	6.40%	6.26%	6.12%	5.98%	5.84%	5.70%	5.56%	5.42%	5.28%	10.07%
American Electric Power Company, Inc.	AEP	$3.80	$131.01	7.33%	7.23%	7.13%	7.04%	6.94%	6.84%	6.74%	6.65%	6.55%	6.45%	6.35%	6.26%	6.16%	6.06%	5.96%	5.87%	5.77%	5.67%	5.57%	5.48%	5.38%	5.28%	9.68%
Avista Corporation	AVA	$1.97	$40.46	4.96%	4.98%	4.99%	5.01%	5.02%	5.04%	5.05%	5.07%	5.08%	5.10%	5.11%	5.13%	5.14%	5.16%	5.17%	5.19%	5.20%	5.22%	5.23%	5.25%	5.26%	5.28%	10.27%
CMS Energy Corporation	CMS	$2.28	$75.19	7.72%	7.60%	7.48%	7.37%	7.25%	7.14%	7.02%	6.90%	6.79%	6.67%	6.56%	6.44%	6.32%	6.21%	6.09%	5.98%	5.86%	5.74%	5.63%	5.51%	5.40%	5.28%	10.13%
DTE Energy Company	DTE	$4.66	$145.02	6.50%	6.44%	6.38%	6.32%	6.26%	6.21%	6.15%	6.09%	6.03%	5.97%	5.92%	5.86%	5.80%	5.74%	5.69%	5.63%	5.57%	5.51%	5.45%	5.40%	5.34%	5.28%	9.51%
Entergy Corporation	ETR	$2.56	$110.10	12.73%	12.37%	12.02%	11.67%	11.31%	10.96%	10.60%	10.25%	9.89%	9.54%	9.18%	8.83%	8.47%	8.12%	7.76%	7.41%	7.05%	6.70%	6.34%	5.99%	5.63%	5.28%	12.74%
IDACORP, Inc.	IDA	$3.52	$142.69	7.06%	6.98%	6.89%	6.81%	6.72%	6.64%	6.55%	6.47%	6.38%	6.30%	6.21%	6.13%	6.04%	5.96%	5.87%	5.79%	5.70%	5.62%	5.53%	5.45%	5.36%	5.28%	8.92%
OGE Energy Corporation	OGE	$1.70	$47.74	6.13%	6.09%	6.05%	6.01%	5.97%	5.93%	5.89%	5.85%	5.81%	5.77%	5.73%	5.69%	5.64%	5.60%	5.56%	5.52%	5.48%	5.44%	5.40%	5.36%	5.32%	5.28%	9.67%
Pinnacle West Capital Corporation	PNW	$3.64	$101.19	6.58%	6.52%	6.46%	6.40%	6.33%	6.27%	6.21%	6.15%	6.09%	6.02%	5.96%	5.90%	5.84%	5.78%	5.71%	5.65%	5.59%	5.53%	5.47%	5.40%	5.34%	5.28%	10.04%
Portland General Electric Company	POR	$2.21	$50.70	6.66%	6.60%	6.53%	6.46%	6.40%	6.33%	6.27%	6.20%	6.14%	6.07%	6.00%	5.94%	5.87%	5.81%	5.74%	5.67%	5.61%	5.54%	5.48%	5.41%	5.35%	5.28%	11.02%
PPL Corporation	PPL	$1.14	$36.97	7.80%	7.68%	7.56%	7.44%	7.32%	7.20%	7.08%	6.96%	6.84%	6.72%	6.60%	6.48%	6.36%	6.24%	6.12%	6.00%	5.88%	5.76%	5.64%	5.52%	5.40%	5.28%	10.25%
Southern Company	SO	$3.04	$94.30	7.43%	7.32%	7.22%	7.12%	7.02%	6.92%	6.81%	6.71%	6.61%	6.51%	6.40%	6.30%	6.20%	6.10%	6.00%	5.89%	5.79%	5.69%	5.59%	5.48%	5.38%	5.28%	10.18%
Xcel Energy Inc.	XEL	$2.37	$79.57	8.79%	8.62%	8.45%	8.29%	8.12%	7.95%	7.79%	7.62%	7.45%	7.28%	7.12%	6.95%	6.78%	6.62%	6.45%	6.28%	6.12%	5.95%	5.78%	5.61%	5.45%	5.28%	10.83%
Mean				7.50%	7.40%	7.29%	7.19%	7.08%	6.97%	6.87%	6.76%	6.66%	6.55%	6.44%	6.34%	6.23%	6.13%	6.02%	5.92%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	10.21%
Median				7.23%	7.13%	7.04%	6.95%	6.86%	6.76%	6.67%	6.58%	6.49%	6.39%	6.30%	6.21%	6.11%	6.02%	5.93%	5.84%	5.74%	5.65%	5.56%	5.47%	5.37%	5.28%	10.10%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 90-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Average (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
[10] Equals [9] + ([24] − [3]) / 21
[11] Equals [10] + ([24] − [3]) / 21
[12] Equals [11] + ([24] − [3]) / 21
[13] Equals [12] + ([24] − [3]) / 21
[14] Equals [13] + ([24] − [3]) / 21
[15] Equals [14] + ([24] − [3]) / 21
[16] Equals [15] + ([24] − [3]) / 21
[17] Equals [16] + ([24] − [3]) / 21
[18] Equals [17] + ([24] − [3]) / 21
[19] Equals [18] + ([24] − [3]) / 21
[20] Equals [19] + ([24] − [3]) / 21
[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Average Projected EPS Growth Rates**
Stock Price Averaging Convention: **180.00 days**

Company	Ticker	1 Annualized Dividend	2 Stock Price	3 First Stage Gwth Rate	4 Year 21	5 Year 22	6 Year 23	7 Year 24	8 Year 25	9 Year 26	10 Year 27	11 Year 28	12 Year 29
Alliant Energy Corporation	LNT	$2.14	$69.02	7.12%	7.04%	6.95%	6.86%	6.77%	6.69%	6.60%	6.51%	6.42%	6.33%
Ameren Corporation	AEE	$3.00	$105.47	8.23%	8.09%	7.95%	7.81%	7.67%	7.53%	7.39%	7.25%	7.11%	6.97%
American Electric Power Company, Inc.	AEP	$3.80	$124.03	7.33%	7.23%	7.13%	7.04%	6.94%	6.84%	6.74%	6.65%	6.55%	6.45%
Avista Corporation	AVA	$1.97	$39.58	4.96%	4.98%	4.99%	5.01%	5.02%	5.04%	5.05%	5.07%	5.08%	5.10%
CMS Energy Corporation	CMS	$2.28	$73.22	7.72%	7.60%	7.48%	7.37%	7.25%	7.14%	7.02%	6.90%	6.79%	6.67%
DTE Energy Company	DTE	$4.66	$138.79	6.50%	6.44%	6.38%	6.32%	6.26%	6.21%	6.15%	6.09%	6.03%	5.97%
Entergy Corporation	ETR	$2.56	$102.15	12.73%	12.37%	12.02%	11.67%	11.31%	10.96%	10.60%	10.25%	9.89%	9.54%
IDACORP, Inc.	IDA	$3.52	$136.04	7.06%	6.98%	6.89%	6.81%	6.72%	6.64%	6.55%	6.47%	6.38%	6.30%
OGE Energy Corporation	OGE	$1.70	$45.66	6.13%	6.09%	6.05%	6.01%	5.97%	5.93%	5.89%	5.85%	5.81%	5.77%
Pinnacle West Capital Corporation	PNW	$3.64	$95.15	6.58%	6.52%	6.46%	6.40%	6.33%	6.27%	6.21%	6.15%	6.09%	6.02%
Portland General Electric Company	POR	$2.21	$49.00	6.66%	6.60%	6.53%	6.46%	6.40%	6.33%	6.27%	6.20%	6.14%	6.07%
PPL Corporation	PPL	$1.14	$36.12	7.80%	7.68%	7.56%	7.44%	7.32%	7.20%	7.08%	6.96%	6.84%	6.72%
Southern Company	SO	$3.04	$91.45	7.43%	7.32%	7.22%	7.12%	7.02%	6.92%	6.81%	6.71%	6.61%	6.51%
Xcel Energy Inc.	XEL	$2.37	$77.91	8.79%	8.62%	8.45%	8.29%	8.12%	7.95%	7.79%	7.62%	7.45%	7.28%
Mean				7.50%	7.40%	7.29%	7.19%	7.08%	6.97%	6.87%	6.76%	6.66%	6.55%
Median				7.23%	7.13%	7.04%	6.95%	6.86%	6.76%	6.67%	6.58%	6.49%	6.39%

Company	13 Year 30	14 Year 31	15 Year 32	16 Year 33	17 Year 34	18 Year 35	19 Year 36	20 Year 37	21 Year 38	22 Year 39	23 Year 40	24 Third Stage Growth Rate	25 Cost of Equity
Alliant Energy Corporation	6.25%	6.16%	6.07%	5.98%	5.89%	5.81%	5.72%	5.63%	5.54%	5.46%	5.37%	5.28%	9.80%
Ameren Corporation	6.83%	6.69%	6.55%	6.40%	6.26%	6.12%	5.98%	5.84%	5.70%	5.56%	5.42%	5.28%	10.23%
American Electric Power Company, Inc.	6.35%	6.26%	6.16%	6.06%	5.96%	5.87%	5.77%	5.67%	5.57%	5.48%	5.38%	5.28%	9.89%
Avista Corporation	5.11%	5.13%	5.14%	5.16%	5.17%	5.19%	5.20%	5.22%	5.23%	5.25%	5.26%	5.28%	10.39%
CMS Energy Corporation	6.56%	6.44%	6.32%	6.21%	6.09%	5.98%	5.86%	5.74%	5.63%	5.51%	5.40%	5.28%	10.24%
DTE Energy Company	5.92%	5.86%	5.80%	5.74%	5.69%	5.63%	5.57%	5.51%	5.45%	5.40%	5.34%	5.28%	9.68%
Entergy Corporation	9.18%	8.83%	8.47%	8.12%	7.76%	7.41%	7.05%	6.70%	6.34%	5.99%	5.63%	5.28%	13.10%
IDACORP, Inc.	6.21%	6.13%	6.04%	5.96%	5.87%	5.79%	5.70%	5.62%	5.53%	5.45%	5.36%	5.28%	9.08%
OGE Energy Corporation	5.73%	5.69%	5.64%	5.60%	5.56%	5.52%	5.48%	5.44%	5.40%	5.36%	5.32%	5.28%	9.86%
Pinnacle West Capital Corporation	5.96%	5.90%	5.84%	5.78%	5.71%	5.65%	5.59%	5.53%	5.47%	5.40%	5.34%	5.28%	10.32%
Portland General Electric Company	6.00%	5.94%	5.87%	5.81%	5.74%	5.67%	5.61%	5.54%	5.48%	5.41%	5.35%	5.28%	11.20%
PPL Corporation	6.60%	6.48%	6.36%	6.24%	6.12%	6.00%	5.88%	5.76%	5.64%	5.52%	5.40%	5.28%	10.35%
Southern Company	6.40%	6.30%	6.20%	6.10%	6.00%	5.89%	5.79%	5.69%	5.59%	5.48%	5.38%	5.28%	10.31%
Xcel Energy Inc.	7.12%	6.95%	6.78%	6.62%	6.45%	6.28%	6.12%	5.95%	5.78%	5.61%	5.45%	5.28%	10.93%
Mean	6.44%	6.34%	6.23%	6.13%	6.02%	5.92%	5.81%	5.70%	5.60%	5.49%	5.39%	5.28%	10.38%
Median	6.30%	6.21%	6.11%	6.02%	5.93%	5.84%	5.74%	5.65%	5.56%	5.47%	5.37%	5.28%	10.27%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 180-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Average (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
[10] Equals [9] + ([24] − [3]) / 21
[11] Equals [10] + ([24] − [3]) / 21
[12] Equals [11] + ([24] − [3]) / 21
[13] Equals [12] + ([24] − [3]) / 21
[14] Equals [13] + ([24] − [3]) / 21
[15] Equals [14] + ([24] − [3]) / 21
[16] Equals [15] + ([24] − [3]) / 21
[17] Equals [16] + ([24] − [3]) / 21
[18] Equals [17] + ([24] − [3]) / 21
[19] Equals [18] + ([24] − [3]) / 21
[20] Equals [19] + ([24] − [3]) / 21
[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Maximum Projected EPS Growth Rates**
Stock Price Averaging Convention: **30.00 days**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Company	Ticker	Annualized Dividend	Stock Price	First Stage Gwth Rate	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Third Stage Growth Rate	Cost of Equity
Alliant Energy Corporation	LNT	$2.14	$73.26	8.17%	8.04%	7.90%	7.76%	7.62%	7.49%	7.35%	7.21%	7.07%	6.93%	6.80%	6.66%	6.52%	6.38%	6.24%	6.11%	5.97%	5.83%	5.69%	5.56%	5.42%	5.28%	10.30%
Ameren Corporation	AEE	$3.00	$109.41	9.30%	9.11%	8.92%	8.73%	8.53%	8.34%	8.15%	7.96%	7.77%	7.58%	7.39%	7.19%	7.00%	6.81%	6.62%	6.43%	6.24%	6.05%	5.85%	5.66%	5.47%	5.28%	10.85%
American Electric Power Company, Inc.	AEP	$3.80	$130.03	8.59%	8.43%	8.27%	8.12%	7.96%	7.80%	7.64%	7.49%	7.33%	7.17%	7.01%	6.86%	6.70%	6.54%	6.38%	6.23%	6.07%	5.91%	5.75%	5.60%	5.44%	5.28%	10.60%
Avista Corporation	AVA	$1.97	$41.24	5.78%	5.76%	5.73%	5.71%	5.68%	5.66%	5.64%	5.61%	5.59%	5.57%	5.54%	5.52%	5.49%	5.47%	5.45%	5.42%	5.40%	5.38%	5.35%	5.33%	5.30%	5.28%	10.82%
CMS Energy Corporation	CMS	$2.28	$73.65	7.72%	7.60%	7.48%	7.37%	7.25%	7.14%	7.02%	6.90%	6.79%	6.67%	6.56%	6.44%	6.32%	6.21%	6.09%	5.98%	5.86%	5.74%	5.63%	5.51%	5.40%	5.28%	10.21%
DTE Energy Company	DTE	$4.66	$145.32	7.59%	7.48%	7.37%	7.26%	7.15%	7.04%	6.93%	6.82%	6.71%	6.60%	6.49%	6.38%	6.27%	6.16%	6.05%	5.94%	5.83%	5.72%	5.61%	5.50%	5.39%	5.28%	10.27%
Entergy Corporation	ETR	$2.56	$111.27	13.39%	13.00%	12.62%	12.23%	11.84%	11.46%	11.07%	10.69%	10.30%	9.91%	9.53%	9.14%	8.76%	8.37%	7.98%	7.60%	7.21%	6.82%	6.44%	6.05%	5.67%	5.28%	13.22%
IDACORP, Inc.	IDA	$3.52	$142.64	8.38%	8.24%	8.09%	7.94%	7.79%	7.64%	7.50%	7.35%	7.20%	7.05%	6.91%	6.76%	6.61%	6.46%	6.31%	6.17%	6.02%	5.87%	5.72%	5.58%	5.43%	5.28%	9.78%
OGE Energy Corporation	OGE	$1.70	$47.76	6.79%	6.72%	6.65%	6.58%	6.51%	6.43%	6.36%	6.29%	6.22%	6.14%	6.07%	6.00%	5.93%	5.86%	5.78%	5.71%	5.64%	5.57%	5.50%	5.42%	5.35%	5.28%	10.15%
Pinnacle West Capital Corporation	PNW	$3.64	$102.67	7.94%	7.82%	7.69%	7.56%	7.44%	7.31%	7.18%	7.06%	6.93%	6.80%	6.67%	6.55%	6.42%	6.29%	6.17%	6.04%	5.91%	5.79%	5.66%	5.53%	5.41%	5.28%	10.99%
Portland General Electric Company	POR	$2.21	$49.87	7.00%	6.92%	6.84%	6.75%	6.67%	6.59%	6.51%	6.43%	6.34%	6.26%	6.18%	6.10%	6.02%	5.94%	5.85%	5.77%	5.69%	5.61%	5.53%	5.44%	5.36%	5.28%	11.38%
PPL Corporation	PPL	$1.14	$35.62	7.89%	7.77%	7.64%	7.52%	7.39%	7.27%	7.14%	7.02%	6.90%	6.77%	6.65%	6.52%	6.40%	6.27%	6.15%	6.03%	5.90%	5.78%	5.65%	5.53%	5.40%	5.28%	10.48%
Southern Company	SO	$3.04	$93.53	8.08%	7.95%	7.81%	7.68%	7.55%	7.41%	7.28%	7.15%	7.01%	6.88%	6.75%	6.61%	6.48%	6.35%	6.21%	6.08%	5.95%	5.81%	5.68%	5.55%	5.41%	5.28%	10.69%
Xcel Energy Inc.	XEL	$2.37	$78.93	9.40%	9.20%	9.01%	8.81%	8.62%	8.42%	8.22%	8.03%	7.83%	7.63%	7.44%	7.24%	7.05%	6.85%	6.65%	6.46%	6.26%	6.06%	5.87%	5.67%	5.48%	5.28%	11.33%
Mean				8.29%	8.14%	8.00%	7.86%	7.71%	7.57%	7.43%	7.29%	7.14%	7.00%	6.86%	6.71%	6.57%	6.43%	6.28%	6.14%	6.00%	5.85%	5.71%	5.57%	5.42%	5.28%	10.79%
Median				8.01%	7.88%	7.75%	7.62%	7.49%	7.36%	7.23%	7.10%	6.97%	6.84%	6.71%	6.58%	6.45%	6.32%	6.19%	6.06%	5.93%	5.80%	5.67%	5.54%	5.41%	5.28%	10.65%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 30-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Maximum (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
[10] Equals [9] + ([24] − [3]) / 21
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[15] Equals [14] + ([24] − [3]) / 21
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[17] Equals [16] + ([24] − [3]) / 21
[18] Equals [17] + ([24] − [3]) / 21
[19] Equals [18] + ([24] − [3]) / 21
[20] Equals [19] + ([24] − [3]) / 21
[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Maximum Projected EPS Growth Rates**
Stock Price Averaging Convention: **90.00 days**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Company	Ticker	Annualized Dividend	Stock Price	First Stage Gwth Rate	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Third Stage Growth Rate	Cost of Equity
Alliant Energy Corporation	LNT	$2.14	$72.10	8.17%	8.04%	7.90%	7.76%	7.62%	7.49%	7.35%	7.21%	7.07%	6.93%	6.80%	6.66%	6.52%	6.38%	6.24%	6.11%	5.97%	5.83%	5.69%	5.56%	5.42%	5.28%	10.37%
Ameren Corporation	AEE	$3.00	$109.76	9.30%	9.11%	8.92%	8.73%	8.53%	8.34%	8.15%	7.96%	7.77%	7.58%	7.39%	7.19%	7.00%	6.81%	6.62%	6.43%	6.24%	6.05%	5.85%	5.66%	5.47%	5.28%	10.84%
American Electric Power Company, Inc.	AEP	$3.80	$131.01	8.59%	8.43%	8.27%	8.12%	7.96%	7.80%	7.64%	7.49%	7.33%	7.17%	7.01%	6.86%	6.70%	6.54%	6.38%	6.23%	6.07%	5.91%	5.75%	5.60%	5.44%	5.28%	10.57%
Avista Corporation	AVA	$1.97	$40.46	5.78%	5.76%	5.73%	5.71%	5.68%	5.66%	5.64%	5.61%	5.59%	5.57%	5.54%	5.52%	5.49%	5.47%	5.45%	5.42%	5.40%	5.38%	5.35%	5.33%	5.30%	5.28%	10.92%
CMS Energy Corporation	CMS	$2.28	$75.19	7.72%	7.60%	7.48%	7.37%	7.25%	7.14%	7.02%	6.90%	6.79%	6.67%	6.56%	6.44%	6.32%	6.21%	6.09%	5.98%	5.86%	5.74%	5.63%	5.51%	5.40%	5.28%	10.13%
DTE Energy Company	DTE	$4.66	$145.02	7.59%	7.48%	7.37%	7.26%	7.15%	7.04%	6.93%	6.82%	6.71%	6.60%	6.49%	6.38%	6.27%	6.16%	6.05%	5.94%	5.83%	5.72%	5.61%	5.50%	5.39%	5.28%	10.28%
Entergy Corporation	ETR	$2.56	$110.10	13.39%	13.00%	12.62%	12.23%	11.84%	11.46%	11.07%	10.69%	10.30%	9.91%	9.53%	9.14%	8.76%	8.37%	7.98%	7.60%	7.21%	6.82%	6.44%	6.05%	5.67%	5.28%	13.27%
IDACORP, Inc.	IDA	$3.52	$142.69	8.38%	8.24%	8.09%	7.94%	7.79%	7.64%	7.50%	7.35%	7.20%	7.05%	6.91%	6.76%	6.61%	6.46%	6.31%	6.17%	6.02%	5.87%	5.72%	5.58%	5.43%	5.28%	9.78%
OGE Energy Corporation	OGE	$1.70	$47.74	6.79%	6.72%	6.65%	6.58%	6.51%	6.43%	6.36%	6.29%	6.22%	6.14%	6.07%	6.00%	5.93%	5.86%	5.78%	5.71%	5.64%	5.57%	5.50%	5.42%	5.35%	5.28%	10.15%
Pinnacle West Capital Corporation	PNW	$3.64	$101.19	7.94%	7.82%	7.69%	7.56%	7.44%	7.31%	7.18%	7.06%	6.93%	6.80%	6.67%	6.55%	6.42%	6.29%	6.17%	6.04%	5.91%	5.79%	5.66%	5.53%	5.41%	5.28%	11.06%
Portland General Electric Company	POR	$2.21	$50.70	7.00%	6.92%	6.84%	6.75%	6.67%	6.59%	6.51%	6.43%	6.34%	6.26%	6.18%	6.10%	6.02%	5.94%	5.85%	5.77%	5.69%	5.61%	5.53%	5.44%	5.36%	5.28%	11.29%
PPL Corporation	PPL	$1.14	$36.97	7.89%	7.77%	7.64%	7.52%	7.39%	7.27%	7.14%	7.02%	6.90%	6.77%	6.65%	6.52%	6.40%	6.27%	6.15%	6.03%	5.90%	5.78%	5.65%	5.53%	5.40%	5.28%	10.32%
Southern Company	SO	$3.04	$94.30	8.08%	7.95%	7.81%	7.68%	7.55%	7.41%	7.28%	7.15%	7.01%	6.88%	6.75%	6.61%	6.48%	6.35%	6.21%	6.08%	5.95%	5.81%	5.68%	5.55%	5.41%	5.28%	10.66%
Xcel Energy Inc.	XEL	$2.37	$79.57	9.40%	9.20%	9.01%	8.81%	8.62%	8.42%	8.22%	8.03%	7.83%	7.63%	7.44%	7.24%	7.05%	6.85%	6.65%	6.46%	6.26%	6.06%	5.87%	5.67%	5.48%	5.28%	11.30%
Mean				8.29%	8.14%	8.00%	7.86%	7.71%	7.57%	7.43%	7.29%	7.14%	7.00%	6.86%	6.71%	6.57%	6.43%	6.28%	6.14%	6.00%	5.85%	5.71%	5.57%	5.42%	5.28%	10.78%
Median				8.01%	7.88%	7.75%	7.62%	7.49%	7.36%	7.23%	7.10%	6.97%	6.84%	6.71%	6.58%	6.45%	6.32%	6.19%	6.06%	5.93%	5.80%	5.67%	5.54%	5.41%	5.28%	10.61%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 90-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Maximum (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
[8] Equals [7] + ([24] − [3]) / 21
[9] Equals [8] + ([24] − [3]) / 21
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[16] Equals [15] + ([24] − [3]) / 21
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[18] Equals [17] + ([24] − [3]) / 21
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[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Multi-Stage DCF

First Stage Growth Rate: **Maximum Projected EPS Growth Rates**
Stock Price Averaging Convention: **180.00 days**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Company	Ticker	Annualized Dividend	Stock Price	First Stage Gwth Rate	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Third Stage Growth Rate	Cost of Equity
Alliant Energy Corporation	LNT	$2.14	$69.02	8.17%	8.04%	7.90%	7.76%	7.62%	7.49%	7.35%	7.21%	7.07%	6.93%	6.80%	6.66%	6.52%	6.38%	6.24%	6.11%	5.97%	5.83%	5.69%	5.56%	5.42%	5.28%	10.55%
Ameren Corporation	AEE	$3.00	$105.47	9.30%	9.11%	8.92%	8.73%	8.53%	8.34%	8.15%	7.96%	7.77%	7.58%	7.39%	7.19%	7.00%	6.81%	6.62%	6.43%	6.24%	6.05%	5.85%	5.66%	5.47%	5.28%	11.01%
American Electric Power Company, Inc.	AEP	$3.80	$124.03	8.59%	8.43%	8.27%	8.12%	7.96%	7.80%	7.64%	7.49%	7.33%	7.17%	7.01%	6.86%	6.70%	6.54%	6.38%	6.23%	6.07%	5.91%	5.75%	5.60%	5.44%	5.28%	10.81%
Avista Corporation	AVA	$1.97	$39.58	5.78%	5.76%	5.73%	5.71%	5.68%	5.66%	5.64%	5.61%	5.59%	5.57%	5.54%	5.52%	5.49%	5.47%	5.45%	5.42%	5.40%	5.38%	5.35%	5.33%	5.30%	5.28%	11.05%
CMS Energy Corporation	CMS	$2.28	$73.22	7.72%	7.60%	7.48%	7.37%	7.25%	7.14%	7.02%	6.90%	6.79%	6.67%	6.56%	6.44%	6.32%	6.21%	6.09%	5.98%	5.86%	5.74%	5.63%	5.51%	5.40%	5.28%	10.24%
DTE Energy Company	DTE	$4.66	$138.79	7.59%	7.48%	7.37%	7.26%	7.15%	7.04%	6.93%	6.82%	6.71%	6.60%	6.49%	6.38%	6.27%	6.16%	6.05%	5.94%	5.83%	5.72%	5.61%	5.50%	5.39%	5.28%	10.47%
Entergy Corporation	ETR	$2.56	$102.15	13.39%	13.00%	12.62%	12.23%	11.84%	11.46%	11.07%	10.69%	10.30%	9.91%	9.53%	9.14%	8.76%	8.37%	7.98%	7.60%	7.21%	6.82%	6.44%	6.05%	5.67%	5.28%	13.63%
IDACORP, Inc.	IDA	$3.52	$136.04	8.38%	8.24%	8.09%	7.94%	7.79%	7.64%	7.50%	7.35%	7.20%	7.05%	6.91%	6.76%	6.61%	6.46%	6.31%	6.17%	6.02%	5.87%	5.72%	5.58%	5.43%	5.28%	9.96%
OGE Energy Corporation	OGE	$1.70	$45.66	6.79%	6.72%	6.65%	6.58%	6.51%	6.43%	6.36%	6.29%	6.22%	6.14%	6.07%	6.00%	5.93%	5.86%	5.78%	5.71%	5.64%	5.57%	5.50%	5.42%	5.35%	5.28%	10.35%
Pinnacle West Capital Corporation	PNW	$3.64	$95.15	7.94%	7.82%	7.69%	7.56%	7.44%	7.31%	7.18%	7.06%	6.93%	6.80%	6.67%	6.55%	6.42%	6.29%	6.17%	6.04%	5.91%	5.79%	5.66%	5.53%	5.41%	5.28%	11.37%
Portland General Electric Company	POR	$2.21	$49.00	7.00%	6.92%	6.84%	6.75%	6.67%	6.59%	6.51%	6.43%	6.34%	6.26%	6.18%	6.10%	6.02%	5.94%	5.85%	5.77%	5.69%	5.61%	5.53%	5.44%	5.36%	5.28%	11.48%
PPL Corporation	PPL	$1.14	$36.12	7.89%	7.77%	7.64%	7.52%	7.39%	7.27%	7.14%	7.02%	6.90%	6.77%	6.65%	6.52%	6.40%	6.27%	6.15%	6.03%	5.90%	5.78%	5.65%	5.53%	5.40%	5.28%	10.42%
Southern Company	SO	$3.04	$91.45	8.08%	7.95%	7.81%	7.68%	7.55%	7.41%	7.28%	7.15%	7.01%	6.88%	6.75%	6.61%	6.48%	6.35%	6.21%	6.08%	5.95%	5.81%	5.68%	5.55%	5.41%	5.28%	10.80%
Xcel Energy Inc.	XEL	$2.37	$77.91	9.40%	9.20%	9.01%	8.81%	8.62%	8.42%	8.22%	8.03%	7.83%	7.63%	7.44%	7.24%	7.05%	6.85%	6.65%	6.46%	6.26%	6.06%	5.87%	5.67%	5.48%	5.28%	11.39%
Mean				8.29%	8.14%	8.00%	7.86%	7.71%	7.57%	7.43%	7.29%	7.14%	7.00%	6.86%	6.71%	6.57%	6.43%	6.28%	6.14%	6.00%	5.85%	5.71%	5.57%	5.42%	5.28%	10.97%
Median				8.01%	7.88%	7.75%	7.62%	7.49%	7.36%	7.23%	7.10%	6.97%	6.84%	6.71%	6.58%	6.45%	6.32%	6.19%	6.06%	5.93%	5.80%	5.67%	5.54%	5.41%	5.28%	10.80%

Notes:
[1] Bloomberg Professional as of June 30, 2026
[2] Bloomberg Professional 180-day average as of June 30, 2026
[3] Source: Schedule AEB-2R, Equals Maximum (Cols. [5], [6], [7])
[4] Equals [3] + ([24] − [3]) / 21
[5] Equals [4] + ([24] − [3]) / 21
[6] Equals [5] + ([24] − [3]) / 21
[7] Equals [6] + ([24] − [3]) / 21
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[21] Equals [20] + ([24] − [3]) / 21
[22] Equals [21] + ([24] − [3]) / 21
[23] Equals [22] + ([24] − [3]) / 21
[24] Source: Schedule AEB-8R
[25] Equals internal rate of return of cash flows for Year 0 through Year 200

Original as Filed
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

[1] Estimate of the S&P 500 Dividend Yield	1.27%
[2] Estimate of the S&P 500 Growth Rate	12.18%
[3] S&P 500 Estimated Required Market Return	13.53%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
LyondellBasell Industries NV	LYB	321.873	47.62	15,327.59		11.51%		-14.20%	
American Express Co	AXP	688.8517	365.27	251,616.84	0.61%	0.90%	0.01%	14.37%	0.09%
Verizon Communications Inc	VZ	4216.425	41.11	173,337.25	0.42%	6.71%	0.03%	1.78%	0.01%
Texas Pacific Land Corp	TPL	22.97941	862.69	19,824.11		0.74%			
Broadcom Inc	AVGO	4722.365	402.96	1,902,924.21		0.59%		40.05%	
Boeing Co/The	BA	760.0955	189	143,658.04				31.33%	
Solventum Corp	SOLV	173.4476	85.26	14,788.14	0.04%			1.57%	0.00%
Caterpillar Inc	CAT	467.9796	575.76	269,443.93	0.65%	1.05%	0.01%	11.06%	0.07%
JPMorgan Chase & Co	JPM	2722.262	313.08	852,285.88	2.05%	1.92%	0.04%	9.66%	0.20%
Chevron Corp	CVX	2013.522	151.13	304,303.52	0.73%	4.53%	0.03%	2.27%	0.02%
Coca-Cola Co/The	KO	4301.609	72.61	312,339.82	0.75%	2.81%	0.02%	5.90%	0.04%
AbbVie Inc	ABBV	1767.385	227.7	402,433.48	0.97%	3.04%	0.03%	15.90%	0.15%
Walt Disney Co/The	DIS	1785.289	104.47	186,509.13	0.45%	1.44%	0.01%	10.91%	0.05%
Corpay Inc	CPAY	69.95806	295.8	20,693.59	0.05%			12.88%	0.01%
Extra Space Storage Inc	EXR	212.2476	133.17	28,265.01	0.07%	4.87%	0.00%	2.40%	0.00%
Exxon Mobil Corp	XOM	4217.166	115.92	488,853.84	1.18%	3.55%	0.04%	11.51%	0.14%
Phillips 66	PSX	402.9211	136.96	55,184.08		3.50%		30.71%	
General Electric Co	GE	1054.814	298.45	314,809.21		0.48%		21.74%	
HP Inc	HPQ	934.7019	24.42	22,825.42		4.91%		-2.43%	
Home Depot Inc/The	HD	995.5115	356.92	355,317.96	0.86%	2.58%	0.02%	3.91%	0.03%
Monolithic Power Systems Inc	MPWR	47.907	928.17	44,465.84		0.67%			
International Business Machines Corp	IBM	934.7352	308.58	288,440.59	0.69%	2.18%	0.02%	7.64%	0.05%
Johnson & Johnson	JNJ	2409.295	206.92	498,531.34	1.20%	2.51%	0.03%	8.26%	0.10%
Lululemon Athletica Inc	LULU	113.4681	184.18	20,898.55	0.05%			1.24%	0.00%
McDonald's Corp	MCD	712.1544	309.96	220,739.36	0.53%	2.40%	0.01%	7.55%	0.04%
Merck & Co Inc	MRK	2482.023	104.83	260,190.42	0.63%	3.24%	0.02%	13.82%	0.09%
3M Co	MMM	531.2251	172.05	91,397.27	0.22%	1.70%	0.00%	7.47%	0.02%
American Water Works Co Inc	AWK	195.1236	130.07	25,379.72	0.06%	2.54%	0.00%	6.77%	0.00%
Bank of America Corp	BAC	7302.496	53.65	391,778.89		2.09%			
Pfizer Inc	PFE	5685.708	25.74	146,350.11		6.68%		-1.83%	
Procter & Gamble Co/The	PG	2336.734	148.16	346,210.44	0.83%	2.85%	0.02%	4.30%	0.04%
AT&T Inc	T	7089.45	26.02	184,467.48	0.44%	4.27%	0.02%	8.30%	0.04%
Travelers Cos Inc/The	TRV	223.0634	292.86	65,326.35	0.16%	1.50%	0.00%	4.11%	0.01%
RTX Corp	RTX	1340.772	174.91	234,514.42	0.56%	1.56%	0.01%	10.11%	0.06%
Analog Devices Inc	ADI	489.6541	265.34	129,924.82		1.49%			
Walmart Inc	WMT	7972.851	110.51	881,079.78	2.12%	0.85%	0.02%	8.46%	0.18%
Cisco Systems Inc	CSCO	3951.095	76.94	303,997.22	0.73%	2.13%	0.02%	8.02%	0.06%
Intel Corp	INTC	4770	40.56	193,471.20	0.47%			9.28%	0.04%
General Motors Co	GM	932.8613	73.52	68,583.96	0.17%	0.82%	0.00%	6.35%	0.01%
Microsoft Corp	MSFT	7432.378	492.01	3,656,804.13	8.80%	0.74%	0.07%	14.24%	1.25%
Dollar General Corp	DG	220.106	109.49	24,099.41	0.06%	2.16%	0.00%	5.24%	0.00%
Cigna Group/The	CI	267.1258	277.28	74,068.65	0.18%	2.18%	0.00%	9.43%	0.02%
Qnity Electronics Inc	Q	209.4632	81.09	16,985.37		0.30%			
Kinder Morgan Inc	KMI	2224.76	27.32	60,780.45	0.15%	4.28%	0.01%	8.95%	0.01%
Citigroup Inc	C	1789.266	103.6	185,367.97		2.32%		25.37%	
American International Group Inc	AIG	539.5761	76.16	41,094.11	0.10%	2.36%	0.00%	19.52%	0.02%
Altria Group Inc	MO	1678.672	59.01	99,058.41	0.24%	7.19%	0.02%	3.83%	0.01%
HCA Healthcare Inc	HCA	228.1939	508.29	115,988.68	0.28%	0.57%	0.00%	10.65%	0.03%
Solstice Advanced Materials Inc	SOLS	158.7275	47.68	7,568.13					
International Paper Co	IP	528.0383	39.48	20,846.95		4.69%		46.71%	
Hewlett Packard Enterprise Co	HPE	1319.45	21.87	28,856.37	0.07%	2.38%	0.00%	12.72%	0.01%
Abbott Laboratories	ABT	1738.872	128.9	224,140.59	0.54%	1.83%	0.01%	9.99%	0.05%
Aflac Inc	AFL	524.1139	110.31	57,815.01		2.21%		25.35%	
Air Products and Chemicals Inc	APD	222.5902	261.05	58,107.18	0.14%	2.74%	0.00%	6.86%	0.01%
Super Micro Computer Inc	SMCI	596.9711	33.85	20,207.47				28.01%	
Royal Caribbean Cruises Ltd	RCL	272.713	266.25	72,609.83		1.50%		21.23%	
Interactive Brokers Group Inc	IBKR	445.3637	64.94	28,921.92	0.07%	0.49%	0.00%	15.91%	0.01%
Lennox International Inc	LII	35.07278	498.87	17,496.76		1.04%			
Archer-Daniels-Midland Co	ADM	480.5697	60.74	29,189.81	0.07%	3.36%	0.00%	3.47%	0.00%
EMCOR Group Inc	EME	44.76586	615.07	27,534.14		0.16%			
Automatic Data Processing Inc	ADP	404.4487	255.3	103,255.76		2.66%			
Verisk Analytics Inc	VRSK	139.3726	225.07	31,368.58		0.80%			
AutoZone Inc	AZO	16.63266	3954.33	65,771.03	0.16%			13.66%	0.02%
Linde PLC	LIN	466.9489	410.32	191,598.48	0.46%	1.46%	0.01%	8.11%	0.04%
Avery Dennison Corp	AVY	77.29539	172.37	13,323.41	0.03%	2.18%	0.00%	7.76%	0.00%
MSCI Inc	MSCI	75.13954	563.72	42,357.66		1.28%			
Ball Corp	BALL	267.9872	49.33	13,219.81	0.03%	1.62%	0.00%	13.10%	0.00%
Axon Enterprise Inc	AXON	78.91047	540.14	42,622.70				24.88%	
Dayforce Inc	DAY	160.035	69.1	11,058.42					
Carrier Global Corp	CARR	842.2098	54.88	46,220.47	0.11%	1.64%	0.00%	9.38%	0.01%

Original as Filed
Calculation of Market Return from Analysts' Long-Term Growth Estimates in Bulkley Direct Testimony

[1] Estimate of the S&P 500 Dividend Yield	1.27%
[2] Estimate of the S&P 500 Growth Rate	12.18%
[3] S&P 500 Estimated Required Market Return	13.53%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Bank of New York Mellon Corp/The	BK	697.3491	112.1	78,172.84	0.19%	1.89%	0.00%	14.97%	0.03%
Otis Worldwide Corp	OTIS	389.7159	88.85	34,626.25		1.89%			
Baxter International Inc	BAX	514.0558	18.74	9,633.41	0.02%	0.21%	0.00%	3.24%	0.00%
Becton Dickinson & Co	BDX	285.4186	194.02	55,376.91	0.13%	2.16%	0.00%	6.10%	0.01%
Berkshire Hathaway Inc	BRK/B	1378.546	513.81	708,310.54					
Best Buy Co Inc	BBY	210.1013	79.28	16,656.83	0.04%	4.79%	0.00%	4.46%	0.00%
Boston Scientific Corp	BSX	1482.442	101.58	150,586.46	0.36%			16.51%	0.06%
Bristol-Myers Squibb Co	BMY	2035.753	49.2	100,159.05		5.04%			
Brown-Forman Corp	BF/B	303.6089	28.98	8,798.59	0.02%	3.19%	0.00%	2.43%	0.00%
Coterra Energy Inc	CTRA	761.3776	26.84	20,435.37		3.28%		27.81%	
Hilton Worldwide Holdings Inc	HLT	232.4352	285.03	66,251.00	0.16%	0.21%	0.00%	11.78%	0.02%
Carnival Corp	CCL	1167.541	25.78	30,099.21				22.49%	
Builders FirstSource Inc	BLDR	110.5806	112.23	12,410.46				-11.47%	
UDR Inc	UDR	330.4858	36.42	12,036.29	0.03%	4.72%	0.00%	1.72%	0.00%
Clorox Co/The	CLX	121.9804	107.94	13,166.56		4.60%		-1.26%	
Paycom Software Inc	PAYC	56.26901	161.17	9,068.88	0.02%	0.93%	0.00%	9.57%	0.00%
CMS Energy Corp	CMS	304.3198	75.44	22,957.88	0.06%	2.88%	0.00%	7.55%	0.00%
Colgate-Palmolive Co	CL	806.0649	80.39	64,799.56	0.16%	2.59%	0.00%	4.00%	0.01%
EPAM Systems Inc	EPAM	55.24262	187	10,330.37					
Conagra Brands Inc	CAG	478.3516	17.85	8,538.58		7.84%		-7.51%	
Airbnb Inc	ABNB	425.2941	116.99	49,755.16	0.12%			12.55%	0.02%
Consolidated Edison Inc	ED	360.9356	100.36	36,223.50	0.09%	3.39%	0.00%	5.84%	0.01%
Corning Inc	GLW	857.3604	84.2	72,189.75		1.33%		21.00%	
GoDaddy Inc	GDDY	135.1416	127.86	17,279.20					
Cummins Inc	CMI	138.0363	497.98	68,739.29		1.61%			
Danaher Corp	DHR	706.3496	226.78	160,185.95	0.39%	0.56%	0.00%	6.95%	0.03%
Target Corp	TGT	452.8064	90.62	41,033.32		5.03%		-1.57%	
Williams-Sonoma Inc	WSM	119.3807	180.01	21,489.72	0.05%	1.47%	0.00%	4.68%	0.00%
Deere & Co	DE	270.3294	464.49	125,565.30	0.30%	1.40%	0.00%	14.47%	0.04%
Dominion Energy Inc	D	853.9133	62.77	53,600.14	0.13%	4.25%	0.01%	14.50%	0.02%
Trade Desk Inc/The	TTD	440.3189	39.56	17,419.02	0.04%			16.73%	0.01%
Dover Corp	DOV	137.1532	185.28	25,411.75	0.06%	1.12%	0.00%	11.85%	0.01%
Alliant Energy Corp	LNT	257.0537	69.47	17,857.52	0.04%	2.92%	0.00%	6.43%	0.00%
Steel Dynamics Inc	STLD	146.0349	167.83	24,509.03	0.06%	1.19%	0.00%	16.25%	0.01%
Duke Energy Corp	DUK	778	123.94	96,425.32	0.23%	3.44%	0.01%	6.72%	0.02%
Regency Centers Corp	REG	182.901	71.16	13,015.23	0.03%	4.24%	0.00%	5.57%	0.00%
Eaton Corp PLC	ETN	388.4	345.89	134,343.68		1.20%			
Ecolab Inc	ECL	283.2357	275.16	77,935.12	0.19%	0.94%	0.00%	12.80%	0.02%
Revvity Inc	RVTY	113.3756	104.41	11,837.55	0.03%	0.27%	0.00%	6.16%	0.00%
Dell Technologies Inc	DELL	336.9046	133.35	44,926.23	0.11%	1.57%	0.00%	16.44%	0.02%
Emerson Electric Co	EMR	561.8	133.38	74,932.88		1.66%			
EOG Resources Inc	EOG	542.5985	107.85	58,519.24	0.14%	3.78%	0.01%	0.29%	0.00%
Aon PLC	AON	214.9353	353.92	76,069.89	0.18%	0.84%	0.00%	10.35%	0.02%
Entergy Corp	ETR	446.5969	97.52	43,552.13	0.10%	2.63%	0.00%	9.05%	0.01%
Equifax Inc	EFX	122.394	212.37	25,992.82	0.06%	0.94%	0.00%	10.74%	0.01%
EQT Corp	EQT	624.067	60.86	37,980.72		1.08%		42.28%	
IQVIA Holdings Inc	IQV	170.3	230.01	39,170.70	0.09%			8.97%	0.01%
Gartner Inc	IT	72.07715	232.74	16,775.24					
FedEx Corp	FDX	235.9555	275.68	65,048.20	0.16%	2.10%	0.00%	9.35%	0.01%
Brown & Brown Inc	BRO	341.4208	80.43	27,460.47	0.07%	0.82%	0.00%	9.99%	0.01%
Ford Motor Co	F	3913.646	13.28	51,973.23		4.52%			
NextEra Energy Inc	NEE	2082.61	86.29	179,708.39	0.43%	2.63%	0.01%	7.85%	0.03%
Franklin Resources Inc	BEN	520.9706	22.59	11,768.73		5.67%			
Garmin Ltd	GRMN	192.3348	195.32	37,566.84	0.09%	1.84%	0.00%	10.79%	0.01%
Freeport-McMoRan Inc	FCX	1435.931	42.98	61,716.30		1.40%		27.12%	
Expand Energy Corp	EXE	238.1697	121.93	29,040.03		1.89%		62.79%	
Dexcom Inc	DXCM	390.0163	63.47	24,754.33				22.55%	
General Dynamics Corp	GD	270.1204	341.63	92,281.25	0.22%	1.76%	0.00%	14.95%	0.03%
General Mills Inc	GIS	533.4164	47.35	25,257.27		5.15%		-2.94%	
Genuine Parts Co	GPC	139.1105	130.4	18,140.01		3.16%			
Atmos Energy Corp	ATO	161.6933	176.37	28,517.85	0.07%	2.27%	0.00%	7.98%	0.01%
WW Grainger Inc	GWW	47.54934	948.63	45,106.73	0.11%	0.95%	0.00%	4.61%	0.01%
Halliburton Co	HAL	841.6266	26.22	22,067.45		2.59%		-6.66%	
L3Harris Technologies Inc	LHX	187.0529	278.69	52,129.76	0.13%	1.72%	0.00%	13.68%	0.02%
Healthpeak Properties Inc	DOC	694.9498	18.26	12,689.78	0.03%	6.68%	0.00%	2.16%	0.00%
Insulet Corp	PODD	70.3469	327.19	23,016.80				32.05%	
Fortive Corp	FTV	317.6116	53.48	16,985.87		0.45%			
Hershey Co/The	HSY	148.1716	188.08	27,868.12		2.91%		-8.20%	
Synchrony Financial	SYF	360.1711	77.36	27,862.84	0.07%	1.55%	0.00%	15.68%	0.01%
Hormel Foods Corp	HRL	549.9984	23.21	12,765.46		5.04%		-1.07%	

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Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

[1] Estimate of the S&P 500 Dividend Yield	1.27%
[2] Estimate of the S&P 500 Growth Rate	12.18%
[3] S&P 500 Estimated Required Market Return	13.53%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Arthur J Gallagher & Co	AJG	256.8	247.62	63,588.82		1.05%			
Mondelez International Inc	MDLZ	1290.358	57.57	74,285.94	0.18%	3.47%	0.01%	0.89%	0.00%
CenterPoint Energy Inc	CNP	652.8683	39.98	26,101.67	0.06%	2.20%	0.00%	8.95%	0.01%
Humana Inc	HUM	120.2731	245.77	29,559.51	0.07%	1.44%	0.00%	8.51%	0.01%
Willis Towers Watson PLC	WTW	95.74861	321	30,735.30	0.07%	1.15%	0.00%	10.80%	0.01%
Illinois Tool Works Inc	ITW	290.1	249.28	72,316.13	0.17%	2.58%	0.00%	2.15%	0.00%
CDW Corp/DE	CDW	130.1937	144.22	18,776.53	0.05%	1.75%	0.00%	7.66%	0.00%
Trane Technologies PLC	TT	221.739	421.48	93,458.55	0.22%	0.89%	0.00%	14.47%	0.03%
International Flavors & Fragrances Inc	IFF	256.0964	69.48	17,793.58	0.04%	2.30%	0.00%	4.29%	0.00%
Generac Holdings Inc	GNRC	58.68407	151.63	8,898.27	0.02%			19.00%	0.00%
NXP Semiconductors NV	NXPI	251.6745	194.94	49,061.42	0.12%	2.08%	0.00%	4.27%	0.01%
Kellanova	K	347.9326	83.06	28,899.28	0.07%	2.79%	0.00%	1.95%	0.00%
Broadridge Financial Solutions Inc	BR	116.7276	228.09	26,624.39		1.71%			
Kimco Realty Corp	KIM	679.4986	20.66	14,038.44	0.03%	5.03%	0.00%	4.01%	0.00%
Oracle Corp	ORCL	2850.793	201.95	575,717.57	1.39%	0.99%	0.01%	18.09%	0.25%
Kroger Co/The	KR	662.6782	67.28	44,584.99	0.11%	2.08%	0.00%	6.37%	0.01%
Lennar Corp	LEN	223.8035	131.3	29,385.40		1.52%		-9.37%	
Eli Lilly & Co	LLY	945.3838	1075.47	1,016,731.87	2.45%	0.56%	0.01%	20.00%	0.49%
Charter Communications Inc	CHTR	129.4094	200.12	25,897.40	0.06%			9.01%	0.01%
Loews Corp	L	206.6596	107.87	22,292.37		0.23%			
Lowe's Cos Inc	LOW	560.9515	242.48	136,019.51	0.33%	1.98%	0.01%	4.92%	0.02%
Hubbell Inc	HUBB	53.14475	431.43	22,928.24		1.32%			
IDEX Corp	IEX	74.84944	173.93	13,018.56		1.63%			
Marsh & McLennan Cos Inc	MMC	489.9097	183.45	89,873.93	0.22%	1.96%	0.00%	6.06%	0.01%
Masco Corp	MAS	207.6956	64.87	13,473.21	0.03%	1.91%	0.00%	6.16%	0.00%
S&P Global Inc	SPGI	310	498.83	154,637.30		0.77%			
Medtronic PLC	MDT	1282.014	105.33	135,034.56	0.33%	2.70%	0.01%	6.49%	0.02%
Viatris Inc	VTRS	1151.77	10.69	12,312.42		4.49%		-2.05%	
CVS Health Corp	CVS	1269.432	80.36	102,011.59	0.25%	3.31%	0.01%	9.25%	0.02%
DuPont de Nemours Inc	DD	418.9753	39.77	16,662.65		2.01%		-14.43%	
Micron Technology Inc	MU	1125.35	236.48	266,122.71		0.19%		28.55%	
Motorola Solutions Inc	MSI	166.555	369.68	61,572.05	0.15%	1.31%	0.00%	9.07%	0.01%
Cboe Global Markets Inc	CBOE	104.6445	258.17	27,016.07	0.07%	1.12%	0.00%	16.26%	0.01%
Newmont Corp	NEM	1091.263	90.73	99,010.29		1.10%		23.72%	
NIKE Inc	NKE	1189.314	64.22	76,377.72	0.18%	2.55%	0.00%	19.43%	0.04%
NiSource Inc	NI	477.1955	44.13	21,058.64	0.05%	2.54%	0.00%	8.27%	0.00%
Norfolk Southern Corp	NSC	224.3866	292.09	65,541.09		1.85%			
Principal Financial Group Inc	PFG	219.6938	84.82	18,634.43	0.04%	3.73%	0.00%	14.03%	0.01%
Eversource Energy	ES	375.1892	67.18	25,205.21	0.06%	4.48%	0.00%	4.70%	0.00%
Northrop Grumman Corp	NOC	142.7201	569.94	81,341.88	0.20%	1.62%	0.00%	5.99%	0.01%
Wells Fargo & Co	WFC	3139.085	85.85	269,490.41	0.65%	2.10%	0.01%	15.67%	0.10%
Nucor Corp	NUE	228.8587	159.49	36,500.67	0.09%	1.38%	0.00%	17.05%	0.01%
Occidental Petroleum Corp	OXY	985.2104	42	41,378.84		2.29%			
Omnicom Group Inc	OMC	192.9836	71.62	13,821.48	0.03%	4.47%	0.00%	7.31%	0.00%
ONEOK Inc	OKE	629.2316	72.82	45,820.64	0.11%	5.66%	0.01%	3.06%	0.00%
Raymond James Financial Inc	RJF	196.6739	156.54	30,787.34	0.07%	1.28%	0.00%	16.32%	0.01%
PG&E Corp	PCG	2197.907	16.12	35,430.27	0.09%	0.62%	0.00%	12.55%	0.01%
Parker-Hannifin Corp	PH	126.1867	861.7	108,735.08	0.26%	0.84%	0.00%	9.46%	0.02%
Rollins Inc	ROL	484.6288	61.48	29,794.98		1.19%			
PPL Corp	PPL	739.7392	36.9	27,296.38	0.07%	2.95%	0.00%	8.12%	0.01%
Aptiv PLC	APTV	216.0794	77.55	16,756.96	0.04%			17.33%	0.01%
ConocoPhillips	COP	1235.718	88.69	109,595.83		3.79%		-10.54%	
PulteGroup Inc	PHM	194.9169	127.19	24,791.48		0.82%		-5.07%	
Pinnacle West Capital Corp	PNW	119.6904	90.86	10,875.07	0.03%	4.01%	0.00%	7.00%	0.00%
PNC Financial Services Group Inc/The	PNC	392.1585	190.72	74,792.46	0.18%	3.57%	0.01%	11.15%	0.02%
PPG Industries Inc	PPG	224.4	100.04	22,448.98	0.05%	2.84%	0.00%	5.91%	0.00%
DoorDash Inc	DASH	406.3346	198.37	80,604.60					
Progressive Corp/The	PGR	586.3972	228.79	134,161.82	0.32%	0.17%	0.00%	12.58%	0.04%
Veralto Corp	VLTO	248.2974	101.22	25,132.66		0.43%			
Public Service Enterprise Group Inc	PEG	499.154	83.52	41,689.34	0.10%	3.02%	0.00%	8.35%	0.01%
Cooper Cos Inc/The	COO	198.8089	77.93	15,493.18	0.04%			9.31%	0.00%
Edison International	EIX	384.7871	58.89	22,660.11	0.05%	5.62%	0.00%	5.10%	0.00%
SLB Ltd	SLB	1493.924	36.24	54,139.79		3.15%		-3.83%	
Charles Schwab Corp/The	SCHW	1776.937	92.73	164,775.35		1.16%		21.66%	
Sherwin-Williams Co/The	SHW	247.8935	343.69	85,198.52	0.21%	0.92%	0.00%	7.18%	0.01%
West Pharmaceutical Services Inc	WST	71.94341	277.25	19,946.31	0.05%	0.32%	0.00%	10.12%	0.00%
J M Smucker Co/The	SJM	106.6943	104.18	11,115.42	0.03%	4.22%	0.00%	2.19%	0.00%
Snap-on Inc	SNA	52.00756	340.05	17,685.17	0.04%	2.87%	0.00%	4.10%	0.00%
AMETEK Inc	AME	230.2039	197.89	45,555.04	0.11%	0.63%	0.00%	9.13%	0.01%
Uber Technologies Inc	UBER	2077.83	87.54	181,893.27				-3.85%	

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Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

[1] Estimate of the S&P 500 Dividend Yield	1.27%
[2] Estimate of the S&P 500 Growth Rate	12.18%
[3] S&P 500 Estimated Required Market Return	13.53%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Southern Co/The	SO	1100.194	91.12	100,249.64	0.24%	3.25%	0.01%	7.01%	0.02%
Truist Financial Corp	TFC	1279.246	46.5	59,484.95	0.14%	4.47%	0.01%	11.73%	0.02%
Southwest Airlines Co	LUV	517.1551	34.81	18,002.17		2.07%		62.37%	
W R Berkley Corp	WRB	380.0212	77.69	29,523.84	0.07%	0.46%	0.00%	6.14%	0.00%
Stanley Black & Decker Inc	SWK	154.885	70.69	10,948.82		4.70%			
Public Storage	PSA	175.463	274.54	48,171.61	0.12%	4.37%	0.01%	3.01%	0.00%
Arista Networks Inc	ANET	1259.285	130.68	164,563.37				20.08%	
Sysco Corp	SYY	478.8611	76.2	36,489.21		2.83%			
Corteva Inc	CTVA	683.0146	67.29	45,960.05	0.11%	1.07%	0.00%	15.70%	0.02%
Texas Instruments Inc	TXN	908.623	168.27	152,894.00	0.37%	3.38%	0.01%	8.65%	0.03%
Textron Inc	TXT	176.2241	83.16	14,654.79	0.04%	0.10%	0.00%	10.03%	0.00%
Thermo Fisher Scientific Inc	TMO	375.7081	590.83	221,979.59	0.53%	0.29%	0.00%	7.82%	0.04%
TJX Cos Inc/The	TJX	1112.939	151.92	169,077.65	0.41%	1.12%	0.00%	9.55%	0.04%
Globe Life Inc	GL	79.6058	134.73	10,725.29		0.80%			
Johnson Controls International plc	JCI	611.1357	116.31	71,081.19	0.17%	1.38%	0.00%	17.57%	0.03%
Ulta Beauty Inc	ULTA	44.83836	538.83	24,160.25	0.06%			4.39%	0.00%
Union Pacific Corp	UNP	593.1609	231.83	137,512.49	0.33%	2.38%	0.01%	7.53%	0.02%
Keysight Technologies Inc	KEYS	171.2	197.95	33,889.04	0.08%			13.32%	0.01%
UnitedHealth Group Inc	UNH	905.8386	329.77	298,718.40		2.68%		-18.25%	
Blackstone Inc	BX	738.4509	146.42	108,123.98		3.52%		24.20%	
Ventas Inc	VTR	469.7328	80.63	37,874.56	0.09%	2.38%	0.00%	11.40%	0.01%
Labcorp Holdings Inc	LH	82.9	268.78	22,281.86	0.05%	1.07%	0.00%	9.44%	0.01%
Vulcan Materials Co	VMC	132.1309	297.24	39,274.59	0.09%	0.66%	0.00%	14.51%	0.01%
Weyerhaeuser Co	WY	720.861	22.21	16,010.32		3.78%		-22.16%	
Williams Cos Inc/The	WMB	1221.219	60.93	74,408.87	0.18%	3.28%	0.01%	17.57%	0.03%
Constellation Energy Corp	CEG	312.4056	364.36	113,828.10	0.27%	0.43%	0.00%	15.42%	0.04%
AppLovin Corp	APP	307.597	599.48	184,398.25				75.47%	
WEC Energy Group Inc	WEC	325.2943	112.07	36,455.73	0.09%	3.19%	0.00%	7.65%	0.01%
Adobe Inc	ADBE	418.6	320.13	134,006.42	0.32%			14.13%	0.05%
Vistra Corp	VST	338.8255	178.86	60,602.33	0.15%	0.51%	0.00%	11.67%	0.02%
AES Corp/The	AES	712.1209	14.06	10,012.42	0.02%	5.01%	0.00%	11.17%	0.00%
Expeditors International of Washington Inc	EXPD	134.0209	146.13	19,584.48	0.05%	1.05%	0.00%	8.47%	0.00%
Amgen Inc	AMGN	538.4807	345.46	186,023.53	0.45%	2.76%	0.01%	5.12%	0.02%
Apple Inc	AAPL	14776.35	278.85	4,120,386.03	9.92%	0.37%	0.04%	13.33%	1.32%
Autodesk Inc	ADSK	212	303.34	64,308.08	0.15%			15.94%	0.02%
Cintas Corp	CTAS	401.8667	186.02	74,755.24		0.97%			
Comcast Corp	CMCSA	3634.45	26.69	97,003.47		4.95%			
Molson Coors Beverage Co	TAP	185.2979	46.51	8,618.20		4.04%		-1.02%	
KLA Corp	KLAC	131.3923	1175.47	154,447.75	0.37%	0.65%	0.00%	11.70%	0.04%
Marriott International Inc/MD	MAR	268.3518	304.79	81,790.95	0.20%	0.88%	0.00%	10.30%	0.02%
McCormick & Co Inc/MD	MKC	253.2399	67.48	17,088.63	0.04%	2.85%	0.00%	4.54%	0.00%
PACCAR Inc	PCAR	525.2044	105.42	55,367.04		1.25%		-3.95%	
Costco Wholesale Corp	COST	443.1792	913.59	404,884.07	0.97%	0.57%	0.01%	6.75%	0.07%
Stryker Corp	SYK	382.4237	371.18	141,948.01	0.34%	0.91%	0.00%	10.42%	0.04%
Tyson Foods Inc	TSN	283.0451	57.54	16,286.41	0.04%	3.55%	0.00%	11.30%	0.00%
Lamb Weston Holdings Inc	LW	139.3525	59.06	8,230.16		2.51%		-2.55%	
Applied Materials Inc	AMAT	796.6424	252.25	200,953.05	0.48%	0.73%	0.00%	9.83%	0.05%
Cardinal Health Inc	CAH	237.595	212.26	50,431.92	0.12%	0.96%	0.00%	14.90%	0.02%
Cincinnati Financial Corp	CINF	156.0185	167.59	26,147.14	0.06%	2.08%	0.00%	5.30%	0.00%
DR Horton Inc	DHI	292.0605	159.01	46,440.55	0.11%	1.13%	0.00%	10.70%	0.01%
Electronic Arts Inc	EA	250.1061	202.03	50,528.94	0.12%	0.38%	0.00%	13.01%	0.02%
Erie Indemnity Co	ERIE	46.18907	295.49	13,648.41		1.85%			
Fair Isaac Corp	FICO	23.70905	1805.83	42,814.51					
Fastenal Co	FAST	1148.036	40.4	46,380.64	0.11%	2.18%	0.00%	10.79%	0.01%
M&T Bank Corp	MTB	153.6908	188.72	29,004.52	0.07%	3.18%	0.00%	12.56%	0.01%
Xcel Energy Inc	XEL	591.5398	82.11	48,571.33		2.78%			
Fiserv Inc	FISV	537.8519	61.47	33,061.76					
Fifth Third Bancorp	FITB	661.0118	43.46	28,727.57		3.68%			
Gilead Sciences Inc	GILD	1240.68	125.84	156,127.12		2.51%		29.92%	
Hasbro Inc	HAS	140.337	82.6	11,591.84	0.03%	3.39%	0.00%	10.25%	0.00%
Huntington Bancshares Inc/OH	HBAN	1565.62	16.3	25,519.61	0.06%	3.80%	0.00%	17.74%	0.01%
Welltower Inc	WELL	686.328	208.22	142,907.22		1.42%		21.25%	
Biogen Inc	BIIB	146.7023	182.09	26,713.02	0.06%			0.86%	0.00%
Northern Trust Corp	NTRS	189.1174	131.34	24,838.68	0.06%	2.44%	0.00%	10.71%	0.01%
Packaging Corp of America	PKG	89.97707	204.07	18,361.62	0.04%	2.45%	0.00%	13.74%	0.01%
Paychex Inc	PAYX	359.8941	111.69	40,196.58		3.87%			
QUALCOMM Inc	QCOM	1071	168.09	180,024.39	0.43%	2.12%	0.01%	4.66%	0.02%
Ross Stores Inc	ROST	325.2263	176.36	57,356.90	0.14%	0.92%	0.00%	7.04%	0.01%
IDEXX Laboratories Inc	IDXX	79.85133	752.88	60,118.47	0.14%			14.93%	0.02%
Starbucks Corp	SBUX	1137.1	87.11	99,052.78		2.85%		20.21%	

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Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
KeyCorp	KEY	1092.92	18.1776	19,866.66		4.51%		22.71%	
Fox Corp	FOXA	208.3617	65.5	13,647.69		0.85%		-0.63%	
Fox Corp	FOX	235.581	58.26	13,724.95		0.96%		-0.63%	
State Street Corp	STT	279.3124	119.02	33,243.77	0.08%	2.82%	0.00%	10.63%	0.01%
Norwegian Cruise Line Holdings Ltd	NCLH	455.2575	18.46	8,404.05	0.02%			16.59%	0.00%
US Bancorp	USB	1554.434	49.05	76,244.99	0.18%	4.24%	0.01%	11.65%	0.02%
A O Smith Corp	AOS	113.3721	65.98	7,480.29		2.18%			
Gen Digital Inc	GEN	616.7161	26.37	16,262.80	0.04%	1.90%	0.00%	13.08%	0.01%
T Rowe Price Group Inc	TROW	218.237	102.38	22,343.10	0.05%	4.96%	0.00%	4.02%	0.00%
Waste Management Inc	WM	402.8671	217.87	87,772.64	0.21%	1.51%	0.00%	10.33%	0.02%
Constellation Brands Inc	STZ	175.0133	136.38	23,868.32		2.99%		-2.10%	
Invesco Ltd	IVZ	445.0929	24.45	10,882.52	0.03%	3.44%	0.00%	19.16%	0.01%
Intuit Inc	INTU	278.2741	634.08	176,448.03	0.42%	0.76%	0.00%	14.47%	0.06%
Morgan Stanley	MS	1589.309	169.66	269,642.22	0.65%	2.36%	0.02%	12.46%	0.08%
Microchip Technology Inc	MCHP	540.4468	53.58	28,957.14		3.40%		27.10%	
Crowdstrike Holdings Inc	CRWD	250.9551	509.16	127,776.32				23.87%	
Chubb Ltd	CB	393.5509	296.18	116,561.89	0.28%	1.31%	0.00%	3.70%	0.01%
Hologic Inc	HOLX	222.9052	74.97	16,711.21	0.04%			8.55%	0.00%
Citizens Financial Group Inc	CFG	429.4862	54.1	23,235.20		3.40%		24.41%	
Jabil Inc	JBL	106.8373	210.71	22,511.70	0.05%	0.15%	0.00%	13.93%	0.01%
O'Reilly Automotive Inc	ORLY	844.1041	101.7	85,845.39	0.21%			10.54%	0.02%
Allstate Corp/The	ALL	261.6817	211.98	55,471.32	0.13%	1.89%	0.00%	18.89%	0.03%
Equity Residential	EQR	380.4747	61.75	23,494.31	0.06%	4.49%	0.00%	3.40%	0.00%
Keurig Dr Pepper Inc	KDP	1358.583	27.9	37,904.47	0.09%	3.30%	0.00%	6.51%	0.01%
Host Hotels & Resorts Inc	HST	687.6895	17.63	12,123.97		4.54%		-0.96%	
Incyte Corp	INCY	196.3227	104.46	20,507.87					
Simon Property Group Inc	SPG	326.4621	186.32	60,826.41	0.15%	4.72%	0.01%	1.62%	0.00%
AvalonBay Communities Inc	AVB	141.595	181.94	25,761.79	0.06%	3.85%	0.00%	3.79%	0.00%
Prudential Financial Inc	PRU	350	108.25	37,887.50	0.09%	4.99%	0.00%	8.46%	0.01%
United Parcel Service Inc	UPS	738.9901	95.79	70,787.86	0.17%	6.85%	0.01%	1.19%	0.00%
STERIS PLC	STE	98.14701	266.28	26,134.59		0.95%			
McKesson Corp	MCK	123.4267	880.3	108,652.48	0.26%	0.37%	0.00%	15.90%	0.04%
Lockheed Martin Corp	LMT	231.3978	454.41	105,149.47	0.25%	3.04%	0.01%	13.13%	0.03%
Cencora Inc	COR	193.9934	368.93	71,570.00	0.17%	0.65%	0.00%	9.17%	0.02%
Capital One Financial Corp	COF	635.7336	219.07	139,270.16		1.46%		22.97%	
Campbell's Company/The	CPB	297.7031	30.48	9,073.99		5.12%		-2.52%	
Waters Corp	WAT	59.53474	403.42	24,017.50	0.06%			8.33%	0.00%
Nordson Corp	NDSN	56.1863	237.66	13,353.24		1.38%			
Dollar Tree Inc	DLTR	203.9678	110.81	22,601.68	0.05%			10.33%	0.01%
Darden Restaurants Inc	DRI	116.3138	179.58	20,887.63	0.05%	3.34%	0.00%	10.59%	0.01%
Evergy Inc	EVRG	229.7459	77.65	17,839.77	0.04%	3.58%	0.00%	6.59%	0.00%
Match Group Inc	MTCH	236.0702	33.31	7,863.50	0.02%	2.28%	0.00%	15.49%	0.00%
NVR Inc	NVR	2.83943	7507.29	21,316.42	0.05%			1.76%	0.00%
NetApp Inc	NTAP	198.0604	111.56	22,095.61	0.05%	1.86%	0.00%	7.14%	0.00%
Old Dominion Freight Line Inc	ODFL	209.0984	135.29	28,288.93	0.07%	0.83%	0.00%	3.92%	0.00%
DaVita Inc	DVA	70.6	119.68	8,449.41	0.02%			10.54%	0.00%
Hartford Insurance Group Inc/The	HIG	278.6503	136.43	38,016.23	0.09%	1.76%	0.00%	8.62%	0.01%
Iron Mountain Inc	IRM	295.5895	86.35	25,524.15		4.00%			
Estee Lauder Cos Inc/The	EL	234.8182	94.07	22,089.35		1.49%		33.46%	
Cadence Design Systems Inc	CDNS	272.201	311.84	84,883.16	0.20%			14.87%	0.03%
Tyler Technologies Inc	TYL	43.02773	469.62	20,206.68					
Universal Health Services Inc	UHS	55.2337	243.43	13,445.54	0.03%	0.33%	0.00%	12.31%	0.00%
Skyworks Solutions Inc	SWKS	148.6798	65.95	9,805.43		4.31%		-4.84%	
Quest Diagnostics Inc	DGX	111.2424	189.18	21,044.83	0.05%	1.69%	0.00%	1.06%	0.00%
Rockwell Automation Inc	ROK	112.2736	395.86	44,444.62	0.11%	1.39%	0.00%	15.87%	0.02%
Kraft Heinz Co/The	KHC	1183.656	25.51	30,195.05		6.27%		-5.53%	
American Tower Corp	AMT	468.1466	181.27	84,860.94		3.75%		23.18%	
Regeneron Pharmaceuticals Inc	REGN	103.2823	780.19	80,579.83	0.19%	0.45%	0.00%	8.68%	0.02%
Amazon.com Inc	AMZN	10690.22	233.22	2,493,172.18	6.00%			18.83%	1.13%
Jack Henry & Associates Inc	JKHY	72.37713	173.899	12,586.31		1.33%			
Ralph Lauren Corp	RL	38.75938	367.33	14,237.48	0.03%	0.99%	0.00%	15.52%	0.01%
BXP Inc	BXP	158.4687	72.36	11,466.79	0.03%	3.87%	0.00%	1.55%	0.00%
Amphenol Corp	APH	1224.056	140.9	172,469.42		0.71%		38.67%	
Howmet Aerospace Inc	HWM	402.0623	204.59	82,257.92		0.23%		20.01%	
Valero Energy Corp	VLO	305.0095	176.76	53,913.49	0.13%	2.56%	0.00%	19.41%	0.03%
Synopsys Inc	SNPS	185.7487	418.01	77,644.80	0.19%			9.76%	0.02%
CH Robinson Worldwide Inc	CHRW	118.1372	158.87	18,768.45	0.05%	1.59%	0.00%	15.78%	0.01%
Accenture PLC	ACN	620.1389	250	155,034.72		2.61%			
TransDigm Group Inc	TDG	56.31858	1360.17	76,602.84	0.18%			11.66%	0.02%
Yum! Brands Inc	YUM	277.6528	152.488	42,338.70	0.10%	1.86%	0.00%	8.81%	0.01%

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Prologis Inc	PLD	926.175	128.53	119,041.27	0.29%	3.14%	0.01%	5.61%	0.02%
FirstEnergy Corp	FE	577.1262	47.72	27,540.46	0.07%	3.73%	0.00%	3.35%	0.00%
VeriSign Inc	VRSN	92.7	251.99	23,359.47		1.22%			
Quanta Services Inc	PWR	149.1159	464.88	69,320.99	0.17%	0.09%	0.00%	18.14%	0.03%
Henry Schein Inc	HSIC	117.7248	74.57	8,778.74	0.02%			8.41%	0.00%
Ameren Corp	AEE	270.5	106.35	28,767.68	0.07%	2.67%	0.00%	8.47%	0.01%
FactSet Research Systems Inc	FDS	37.41994	277.27	10,375.43		1.59%			
NVIDIA Corp	NVDA	24300	177	4,301,100.00		0.02%		48.04%	
Cognizant Technology Solutions Corp	CTSH	482.6465	77.71	37,506.46		1.60%			
Intuitive Surgical Inc	ISRG	354.4961	573.48	203,296.41	0.49%			14.54%	0.07%
Take-Two Interactive Software Inc	TTWO	184.7788	246.07	45,468.53				59.16%	
Republic Services Inc	RSG	309.5636	217.06	67,193.88	0.16%	1.15%	0.00%	9.49%	0.02%
eBay Inc	EBAY	452	82.79	37,421.08	0.09%	1.40%	0.00%	9.97%	0.01%
Goldman Sachs Group Inc/The	GS	299.9285	821.965	246,530.74	0.59%	1.95%	0.01%	15.51%	0.09%
SBA Communications Corp	SBAC	106.5469	194.27	20,698.86	0.05%	2.29%	0.00%	9.46%	0.00%
Sempra	SRE	652.6815	94.72	61,821.99	0.15%	2.72%	0.00%	8.07%	0.01%
Moody's Corp	MCO	178.4	490.78	87,555.15		0.77%			
ON Semiconductor Corp	ON	402.3784	50.24	20,215.49				-3.56%	
Booking Holdings Inc	BKNG	32.23382	4914.69	158,419.23	0.38%	0.78%	0.00%	17.83%	0.07%
F5 Inc	FFIV	58.08961	239.16	13,892.71	0.03%			2.69%	0.00%
Akamai Technologies Inc	AKAM	143.8652	89.52	12,878.82	0.03%			5.96%	0.00%
Charles River Laboratories International Inc	CRL	49.21547	178.14	8,767.24	0.02%			3.82%	0.00%
Devon Energy Corp	DVN	627.3	37.06	23,247.74	0.06%	2.59%	0.00%	2.43%	0.00%
Bio-Techne Corp	TECH	155.8127	64.51	10,051.48		0.50%			
Alphabet Inc	GOOGL	5818	320.18	1,862,807.24	4.48%	0.26%	0.01%	15.88%	0.71%
Allegion plc	ALLE	86.03195	166.03	14,283.88	0.03%	1.23%	0.00%	6.24%	0.00%
Netflix Inc	NFLX	4237.323	107.58	455,851.24				26.73%	
Warner Bros Discovery Inc	WBD	2477.975	24	59,471.39				40.66%	
Agilent Technologies Inc	A	283.0544	153.5	43,448.85	0.10%	0.66%	0.00%	5.81%	0.01%
Trimble Inc	TRMB	237.921	81.42	19,371.52					
Elevance Health Inc	ELV	222.2388	338.26	75,174.48	0.18%	2.02%	0.00%	2.95%	0.01%
CME Group Inc	CME	360.5967	281.46	101,493.53	0.24%	1.78%	0.00%	3.88%	0.01%
DTE Energy Co	DTE	207.683	137.03	28,458.80	0.07%	3.18%	0.00%	6.89%	0.00%
Nasdaq Inc	NDAQ	570.9954	90.92	51,914.90	0.12%	1.19%	0.00%	16.51%	0.02%
Philip Morris International Inc	PM	1556.639	157.48	245,139.47	0.59%	3.73%	0.02%	11.14%	0.07%
Ingersoll Rand Inc	IR	395.1104	80.34	31,743.17		0.10%			
Salesforce Inc	CRM	952	230.54	219,474.08	0.53%	0.72%	0.00%	14.31%	0.08%
Roper Technologies Inc	ROP	107.6374	446.22	48,029.97		0.82%			
Huntington Ingalls Industries Inc	HII	39.24143	313.62	12,306.90	0.03%	1.76%	0.00%	16.46%	0.00%
MetLife Inc	MET	658.8917	76.56	50,444.75	0.12%	2.96%	0.00%	12.00%	0.01%
Tapestry Inc	TPR	204.6498	109.28	22,364.12	0.05%	1.46%	0.00%	8.71%	0.00%
CSX Corp	CSX	1862.137	35.36	65,845.16	0.16%	1.47%	0.00%	6.33%	0.01%
Edwards Lifesciences Corp	EW	580.3	86.67	50,294.60	0.12%			8.69%	0.01%
Ameriprise Financial Inc	AMP	92.90571	455.74	42,340.85	0.10%	1.40%	0.00%	10.30%	0.01%
Zebra Technologies Corp	ZBRA	50.66024	252.75	12,804.38					
Zimmer Biomet Holdings Inc	ZBH	198.1816	97.52	19,326.67	0.05%	0.98%	0.00%	4.20%	0.00%
Camden Property Trust	CPT	106.3953	106.34	11,314.08	0.03%	3.95%	0.00%	1.82%	0.00%
CBRE Group Inc	CBRE	297.593	161.83	48,159.48					
Mastercard Inc	MA	891.2582	550.53	490,664.37	1.18%	0.55%	0.01%	14.89%	0.18%
Datadog Inc	DDOG	325.4434	160.01	52,074.19	0.13%			11.55%	0.01%
Intercontinental Exchange Inc	ICE	570.1786	157.3	89,689.09	0.22%	1.22%	0.00%	12.79%	0.03%
Fidelity National Information Services Inc	FIS	517.8508	65.77	34,059.04		2.43%			
Smurfit WestRock PLC	SW	522.1863	35.69	18,636.83		4.83%		66.90%	
Chipotle Mexican Grill Inc	CMG	1322.278	34.52	45,645.04	0.11%			8.23%	0.01%
Wynn Resorts Ltd	WYNN	103.9745	128.68	13,379.44	0.03%	0.78%	0.00%	3.36%	0.00%
Live Nation Entertainment Inc	LYV	234.7413	131.45	30,856.74	0.07%			9.42%	0.01%
Assurant Inc	AIZ	50.08111	227.28	11,382.43		1.55%			
NRG Energy Inc	NRG	191.6394	169.49	32,480.96		1.04%			
Monster Beverage Corp	MNST	977.0212	74.99	73,266.82	0.18%			15.80%	0.03%
Regions Financial Corp	RF	876.8765	25.185	22,084.13	0.05%	4.21%	0.00%	9.55%	0.01%
Baker Hughes Co	BKR	986.7739	50.2	49,536.05	0.12%	1.83%	0.00%	11.14%	0.01%
Mosaic Co/The	MOS	317.4079	24.49	7,773.32		3.59%		20.91%	
Expedia Group Inc	EXPE	117.0091	255.69	29,918.05		0.63%		21.25%	
Kimberly-Clark Corp	KMB	331.8584	109.12	36,212.39	0.09%	4.62%	0.00%	3.40%	0.00%
CF Industries Holdings Inc	CF	155.9746	78.7	12,275.20		2.54%		-5.82%	
APA Corp	APA	354.6693	24.97	8,856.09		4.00%		-20.28%	
Leidos Holdings Inc	LDOS	127.8552	191.1	24,433.12	0.06%	0.90%	0.00%	11.62%	0.01%
Alphabet Inc	GOOG	5407	320.12	1,730,888.84	4.17%	0.26%	0.01%	15.88%	0.66%
TKO Group Holdings Inc	TKO	78.92236	193.89	15,302.26		1.57%			
First Solar Inc	FSLR	107.3081	272.92	29,286.54				42.42%	

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[1] Estimate of the S&P 500 Dividend Yield	1.27%
[2] Estimate of the S&P 500 Growth Rate	12.18%
[3] S&P 500 Estimated Required Market Return	13.53%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Visa Inc	V	1687.63	334.44	564,410.90	1.36%	0.80%	0.01%	16.33%	0.22%
Mid-America Apartment Communities Inc	MAA	117.0817	135.89	15,910.24		4.46%		-0.23%	
Xylem Inc/NY	XYL	243.4691	140.67	34,248.79		1.14%			
Marathon Petroleum Corp	MPC	300.6025	193.73	58,235.72	0.14%	2.06%	0.00%	17.86%	0.03%
Tractor Supply Co	TSCO	528.4036	54.78	28,945.95	0.07%	1.68%	0.00%	8.42%	0.01%
Advanced Micro Devices Inc	AMD	1628.042	217.53	354,147.88				42.01%	
ResMed Inc	RMD	145.9663	255.83	37,342.56	0.09%	0.94%	0.00%	8.39%	0.01%
Mettler-Toledo International Inc	MTD	20.42845	1476.72	30,167.10	0.07%			7.34%	0.01%
VICI Properties Inc	VICI	1068.811	28.82	30,803.14	0.07%	6.25%	0.00%	4.24%	0.00%
Copart Inc	CPRT	968.0177	38.98	37,733.33					
Jacobs Solutions Inc	J	118.7492	134.485	15,970.00	0.04%	0.95%	0.00%	13.06%	0.01%
Albemarle Corp	ALB	117.6975	129.99	15,299.50		1.25%		74.58%	
Fortinet Inc	FTNT	743.6481	81.13	60,332.17	0.15%			10.53%	0.02%
Moderna Inc	MRNA	390.6795	25.98	10,149.85	0.02%			17.47%	0.00%
Essex Property Trust Inc	ESS	64.40402	263.62	16,978.19	0.04%	3.90%	0.00%	2.44%	0.00%
CoStar Group Inc	CSGP	423.8228	68.8	29,159.01				40.85%	
Realty Income Corp	O	919.9058	57.61	52,995.77	0.13%	5.61%	0.01%	3.74%	0.00%
Westinghouse Air Brake Technologies Corp	WAB	170.9572	208.55	35,653.12	0.09%	0.48%	0.00%	14.51%	0.01%
Palantir Technologies Inc	PLTR	2284.334	168.45	384,796.06				48.77%	
Pool Corp	POOL	37.24948	243.6	9,073.97	0.02%	2.05%	0.00%	4.79%	0.00%
Western Digital Corp	WDC	341.8993	163.33	55,842.41		0.31%		22.71%	
PepsiCo Inc	PEP	1367.34	148.74	203,378.17	0.49%	3.83%	0.02%	3.70%	0.02%
TE Connectivity PLC	TEL	294.1893	226.15	66,530.90	0.16%	1.26%	0.00%	13.68%	0.02%
Diamondback Energy Inc	FANG	286.5256	152.59	43,720.94	0.11%	2.62%	0.00%	1.13%	0.00%
Palo Alto Networks Inc	PANW	697	190.13	132,520.61	0.32%			12.77%	0.04%
ServiceNow Inc	NOW	207.4815	812.41	168,560.05				25.00%	
Church & Dwight Co Inc	CHD	240.1301	85.16	20,449.48	0.05%	1.39%	0.00%	5.85%	0.00%
Federal Realty Investment Trust	FRT	86.27003	98.73	8,517.44	0.02%	4.58%	0.00%	4.78%	0.00%
MGM Resorts International	MGM	273.5064	35.29	9,652.04	0.02%			6.33%	0.00%
American Electric Power Co Inc	AEP	534.0945	123.77	66,104.88	0.16%	3.07%	0.00%	6.88%	0.01%
Invitation Homes Inc	INVH	613.0206	28.2	17,287.18	0.04%	4.11%	0.00%	3.76%	0.00%
PTC Inc	PTC	119.926	175.43	21,038.61	0.05%			6.41%	0.00%
JB Hunt Transport Services Inc	JBHT	95.21835	173.96	16,564.18	0.04%	1.01%	0.00%	14.90%	0.01%
Lam Research Corp	LRCX	1256.03	156	195,940.68	0.47%	0.67%	0.00%	15.48%	0.07%
Mohawk Industries Inc	MHK	61.82136	115.9	7,165.10	0.02%			2.23%	0.00%
GE HealthCare Technologies Inc	GEHC	455.5216	79.99	36,437.17	0.09%	0.18%	0.00%	6.48%	0.01%
Pentair PLC	PNR	163.6419	105.24	17,221.67	0.04%	0.95%	0.00%	9.34%	0.00%
Vertex Pharmaceuticals Inc	VRTX	253.7188	433.61	110,015.02					
Amcor PLC	AMCR	2308.36	8.52	19,667.23	0.05%	6.10%	0.00%	12.62%	0.01%
Meta Platforms Inc	META	2177.889	647.95	1,411,163.35	3.40%	0.32%	0.01%	14.08%	0.48%
T-Mobile US Inc	TMUS	1118.507	209.01	233,779.07		1.95%			
United Rentals Inc	URI	63.63015	815.18	51,870.03	0.12%	0.88%	0.00%	8.48%	0.01%
Alexandria Real Estate Equities Inc	ARE	172.8251	53.67	9,275.52		9.84%		-12.43%	
Honeywell International Inc	HON	634.8872	192.19	122,018.97	0.29%	2.48%	0.01%	5.09%	0.01%
Robinhood Markets Inc	HOOD	786.356	128.49	101,038.89				21.67%	
Delta Air Lines Inc	DAL	652.9628	64.1	41,854.91	0.10%	1.17%	0.00%	7.72%	0.01%
United Airlines Holdings Inc	UAL	327.7039	101.96	33,412.69	0.08%			11.76%	0.01%
Seagate Technology Holdings PLC	STX	213.5581	276.69	59,089.39		1.07%		24.58%	
News Corp	NWS	187.7097	29.43	5,524.30		0.68%			
Centene Corp	CNC	491.518	39.34	19,336.32				-17.68%	
Block Inc	XYZ	547.667	66.8	36,584.16				29.65%	
Apollo Global Management Inc	APO	580.4226	131.85	76,528.72	0.18%	1.55%	0.00%	13.01%	0.02%
Martin Marietta Materials Inc	MLM	60.30714	622.41	37,535.77		0.53%		-9.33%	
Teradyne Inc	TER	156.6083	181.89	28,485.48		0.26%		27.28%	
PayPal Holdings Inc	PYPL	935.652	62.69	58,656.02	0.14%	0.89%	0.00%	14.22%	0.02%
Tesla Inc	TSLA	3325.819	430.17	1,430,667.63					
Blackrock Inc	BLK	155.1509	1047.3	162,489.55	0.39%	1.99%	0.01%	14.53%	0.06%
KKR & Co Inc	KKR	891.3534	122.31	109,021.44		0.61%			
Arch Capital Group Ltd	ACGL	362.6259	93.92	34,057.83	0.08%			4.70%	0.00%
Dow Inc	DOW	705.7645	23.85	16,832.48		5.87%		-5.53%	
Everest Group Ltd	EG	41.97806	314.29	13,193.28		2.55%		25.35%	
Teledyne Technologies Inc	TDY	46.95099	499.52	23,452.96	0.06%			9.85%	0.01%
Domino's Pizza Inc	DPZ	33.78622	419.63	14,177.71	0.03%	1.66%	0.00%	10.59%	0.00%
GE Vernova Inc	GEV	271.3205	599.77	162,729.87		0.17%		104.10%	
News Corp	NWSA	374.1297	25.68	9,607.65		0.78%			
Exelon Corp	EXC	1009.536	47.12	47,569.32	0.11%	3.40%	0.00%	6.74%	0.01%
Global Payments Inc	GPN	236.7437	75.76	17,935.70		1.32%			
Crown Castle Inc	CCI	435.479	91.28	39,750.52		4.66%		32.91%	
Align Technology Inc	ALGN	71.75	147.19	10,560.88	0.03%			10.05%	0.00%
Kenvue Inc	KVUE	1915.802	17.35	33,239.17		4.78%			

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[1] Estimate of the S&P 500 Dividend Yield	1.27%
[2] Estimate of the S&P 500 Growth Rate	12.18%
[3] S&P 500 Estimated Required Market Return	13.53%

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Targa Resources Corp	TRGP	214.6586	175.31	37,631.79		2.28%		20.73%	
Bunge Global SA	BG	193.3611	96.07	18,576.20	0.04%	2.91%	0.00%	1.57%	0.00%
LKQ Corp	LKQ	255.966	29.69	7,599.63		4.04%			
Deckers Outdoor Corp	DECK	145.7448	88.03	12,829.92	0.03%			3.46%	0.00%
Workday Inc	WDAY	213	215.62	45,927.06					
Sandisk Corp/DE	SNDK	146.5532	223.28	32,722.39				93.06%	
Zoetis Inc	ZTS	440.6932	128.18	56,488.06	0.14%	1.56%	0.00%	8.20%	0.01%
Paramount Skydance Corp	PSKY	1071.667	16.02	17,168.11		1.25%			
Coinbase Global Inc	COIN	228.1625	272.82	62,247.29				-3.82%	
Equinix Inc	EQIX	98.18608	753.31	73,964.56	0.18%	2.49%	0.00%	19.85%	0.04%
Digital Realty Trust Inc	DLR	343.5016	160.12	55,001.47	0.13%	3.05%	0.00%	8.54%	0.01%
Molina Healthcare Inc	MOH	51.4	148.26	7,620.56				-9.14%	
Las Vegas Sands Corp	LVS	676.1345	68.16	46,085.33	0.11%	1.47%	0.00%	12.92%	0.01%

Notes:
[1] Equals sum of Col. [9]
[2] Equals sum of Col. [11]
[3] Equals ([1] x (1 + (0.5 x [2]))) + [2]
[4] Bloomberg Professional as of November 28, 2025
[5] Bloomberg Professional as of November 28, 2025
[6] Equals [4] x [5]
[7] Equals weight in S&P 500 based on market capitalization [6] if Growth Rate >0% and ≤20%
[8] Source: Bloomberg Professional, as of November 28, 2025
[9] Equals [7] x [8]
[10] Bloomberg Professional, as of November 28, 2025
[11] Equals [7] x [10]

Dr. Won's Incorrect Proposed Adjustment to
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	**1.27%**	
		Won Proposed Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

		[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
LyondellBasell Industries NV	LYB	321.87296	47.62	15,327.59		11.51%		-14.20%	
American Express Co	AXP	688.85165	365.27	251,616.84	0.61%	0.90%	0.01%	14.37%	0.09%
Verizon Communications Inc	VZ	4216.42549	41.11	173,337.25	0.42%	6.71%	0.03%	1.78%	0.01%
Texas Pacific Land Corp	TPL	22.97941	862.69	19,824.11		0.74%			
Broadcom Inc	AVGO	4722.36502	402.96	1,902,924.21		0.59%		40.05%	
Boeing Co/The	BA	760.09547	189	143,658.04				31.33%	
Solventum Corp	SOLV	173.44756	85.26	14,788.14	0.04%			1.57%	
Caterpillar Inc	CAT	467.9796	575.76	269,443.93	0.65%	1.05%	0.01%	11.06%	0.07%
JPMorgan Chase & Co	JPM	2722.2623	313.08	852,285.88	2.05%	1.92%	0.04%	9.66%	0.20%
Chevron Corp	CVX	2013.5216	151.13	304,303.52	0.73%	4.53%	0.03%	2.27%	0.02%
Coca-Cola Co/The	KO	4301.60885	72.61	312,339.82	0.75%	2.81%	0.02%	5.90%	0.04%
AbbVie Inc	ABBV	1767.38463	227.7	402,433.48	0.97%	3.04%	0.03%	15.90%	0.15%
Walt Disney Co/The	DIS	1785.28885	104.47	186,509.13	0.45%	1.44%	0.01%	10.91%	0.05%
Corpay Inc	CPAY	69.95806	295.8	20,693.59	0.05%			12.88%	
Extra Space Storage Inc	EXR	212.24758	133.17	28,265.01	0.07%	4.87%	0.00%	2.40%	0.00%
Exxon Mobil Corp	XOM	4217.16561	115.92	488,853.84	1.18%	3.55%	0.04%	11.51%	0.14%
Phillips 66	PSX	402.92114	136.96	55,184.08		3.50%		30.71%	
General Electric Co	GE	1054.81391	298.45	314,809.21		0.48%		21.74%	
HP Inc	HPQ	934.70185	24.42	22,825.42		4.91%		-2.43%	
Home Depot Inc/The	HD	995.51149	356.92	355,317.96	0.86%	2.58%	0.02%	3.91%	0.03%
Monolithic Power Systems Inc	MPWR	47.907	928.17	44,465.84		0.67%			
International Business Machines Corp	IBM	934.73521	308.58	288,440.59	0.69%	2.18%	0.02%	7.64%	0.05%
Johnson & Johnson	JNJ	2409.2951	206.92	498,531.34	1.20%	2.51%	0.03%	8.26%	0.10%
Lululemon Athletica Inc	LULU	113.46808	184.18	20,898.55	0.05%			1.24%	
McDonald's Corp	MCD	712.15435	309.96	220,739.36	0.53%	2.40%	0.01%	7.55%	0.04%
Merck & Co Inc	MRK	2482.02254	104.83	260,190.42	0.63%	3.24%	0.02%	13.82%	0.09%
3M Co	MMM	531.22505	172.05	91,397.27	0.22%	1.70%	0.00%	7.47%	0.02%
American Water Works Co Inc	AWK	195.12357	130.07	25,379.72	0.06%	2.54%	0.00%	6.77%	0.00%
Bank of America Corp	BAC	7302.49555	53.65	391,778.89		2.09%			
Pfizer Inc	PFE	5685.70755	25.74	146,350.11		6.68%		-1.83%	
Procter & Gamble Co/The	PG	2336.73355	148.16	346,210.44	0.83%	2.85%	0.02%	4.30%	0.04%
AT&T Inc	T	7089.4495	26.02	184,467.48	0.44%	4.27%	0.02%	8.30%	0.04%
Travelers Cos Inc/The	TRV	223.06342	292.86	65,326.35	0.16%	1.50%	0.00%	4.11%	0.01%
RTX Corp	RTX	1340.77194	174.91	234,514.42	0.56%	1.56%	0.01%	10.11%	0.06%
Analog Devices Inc	ADI	489.6541	265.34	129,924.82		1.49%			
Walmart Inc	WMT	7972.85112	110.51	881,079.78	2.12%	0.85%	0.02%	8.46%	0.18%
Cisco Systems Inc	CSCO	3951.09456	76.94	303,997.22	0.73%	2.13%	0.02%	8.02%	0.06%
Intel Corp	INTC	4770	40.56	193,471.20	0.47%			9.28%	
General Motors Co	GM	932.8613	73.52	68,583.96	0.17%	0.82%	0.00%	6.35%	0.01%
Microsoft Corp	MSFT	7432.37766	492.01	3,656,804.13	8.80%	0.74%	0.07%	14.24%	1.25%
Dollar General Corp	DG	220.10603	109.49	24,099.41	0.06%	2.16%	0.00%	5.24%	0.00%
Cigna Group/The	CI	267.12582	277.28	74,068.65	0.18%	2.18%	0.00%	9.43%	0.02%
Qnity Electronics Inc	Q	209.46319	81.09	16,985.37		0.30%			
Kinder Morgan Inc	KMI	2224.76039	27.32	60,780.45	0.15%	4.28%	0.01%	8.95%	0.01%
Citigroup Inc	C	1789.26616	103.6	185,367.97		2.32%		25.37%	
American International Group Inc	AIG	539.57605	76.16	41,094.11	0.10%	2.36%	0.00%	19.52%	0.02%
Altria Group Inc	MO	1678.67155	59.01	99,058.41	0.24%	7.19%	0.02%	3.83%	0.01%
HCA Healthcare Inc	HCA	228.1939	508.29	115,988.68	0.28%	0.57%	0.00%	10.65%	0.03%
Solstice Advanced Materials Inc	SOLS	158.72746	47.68	7,568.13					
International Paper Co	IP	528.03832	39.48	20,846.95		4.69%		46.71%	
Hewlett Packard Enterprise Co	HPE	1319.45006	21.87	28,856.37	0.07%	2.38%	0.00%	12.72%	0.01%
Abbott Laboratories	ABT	1738.87195	128.9	224,140.59	0.54%	1.83%	0.01%	9.99%	0.05%
Aflac Inc	AFL	524.11392	110.31	57,815.01		2.21%		25.35%	
Air Products and Chemicals Inc	APD	222.59024	261.05	58,107.18	0.14%	2.74%	0.00%	6.86%	0.01%
Super Micro Computer Inc	SMCI	596.97113	33.85	20,207.47				28.01%	
Royal Caribbean Cruises Ltd	RCL	272.71297	266.25	72,609.83		1.50%		21.23%	
Interactive Brokers Group Inc	IBKR	445.36372	64.94	28,921.92	0.07%	0.49%	0.00%	15.91%	0.01%
Lennox International Inc	LII	35.07278	498.87	17,496.76		1.04%			
Archer-Daniels-Midland Co	ADM	480.56974	60.74	29,189.81	0.07%	3.36%	0.00%	3.47%	0.00%
EMCOR Group Inc	EME	44.76586	615.07	27,534.14		0.16%			
Automatic Data Processing Inc	ADP	404.44874	255.3	103,255.76		2.66%			
Verisk Analytics Inc	VRSK	139.37257	225.07	31,368.58		0.80%			
AutoZone Inc	AZO	16.63266	3954.33	65,771.03	0.16%			13.66%	
Linde PLC	LIN	466.94893	410.32	191,598.48	0.46%	1.46%	0.01%	8.11%	0.04%
Avery Dennison Corp	AVY	77.29539	172.37	13,323.41	0.03%	2.18%	0.00%	7.76%	0.00%
MSCI Inc	MSCI	75.13954	563.72	42,357.66		1.28%			
Ball Corp	BALL	267.98721	49.33	13,219.81	0.03%	1.62%	0.00%	13.10%	0.00%
Axon Enterprise Inc	AXON	78.91047	540.14	42,622.70				24.88%	
Dayforce Inc	DAY	160.03496	69.1	11,058.42					
Carrier Global Corp	CARR	842.20978	54.88	46,220.47	0.11%	1.64%	0.00%	9.38%	0.01%

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Estimated Weighted Average Dividend Yield [1]	**1.27%**	
		Won Proposed Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

		[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Bank of New York Mellon Corp/The	BK	697.34912	112.1	78,172.84	0.19%	1.89%	0.00%	14.97%	0.03%
Otis Worldwide Corp	OTIS	389.71585	88.85	34,626.25		1.89%			
Baxter International Inc	BAX	514.05581	18.74	9,633.41	0.02%	0.21%	0.00%	3.24%	0.00%
Becton Dickinson & Co	BDX	285.41855	194.02	55,376.91	0.13%	2.16%	0.00%	6.10%	0.01%
Berkshire Hathaway Inc	BRK/B	1378.54564	513.81	708,310.54					
Best Buy Co Inc	BBY	210.10127	79.28	16,656.83	0.04%	4.79%	0.00%	4.46%	0.00%
Boston Scientific Corp	BSX	1482.44204	101.58	150,586.46	0.36%			16.51%	
Bristol-Myers Squibb Co	BMY	2035.75303	49.2	100,159.05		5.04%			
Brown-Forman Corp	BF/B	303.60888	28.98	8,798.59	0.02%	3.19%	0.00%	2.43%	0.00%
Coterra Energy Inc	CTRA	761.37755	26.84	20,435.37		3.28%		27.81%	
Hilton Worldwide Holdings Inc	HLT	232.43517	285.03	66,251.00	0.16%	0.21%	0.00%	11.78%	0.02%
Carnival Corp	CCL	1167.54105	25.78	30,099.21				22.49%	
Builders FirstSource Inc	BLDR	110.58058	112.23	12,410.46				-11.47%	
UDR Inc	UDR	330.48582	36.42	12,036.29	0.03%	4.72%	0.00%	1.72%	0.00%
Clorox Co/The	CLX	121.98038	107.94	13,166.56		4.60%		-1.26%	
Paycom Software Inc	PAYC	56.26901	161.17	9,068.88	0.02%	0.93%	0.00%	9.57%	0.00%
CMS Energy Corp	CMS	304.31977	75.44	22,957.88	0.06%	2.88%	0.00%	7.55%	0.00%
Colgate-Palmolive Co	CL	806.06494	80.39	64,799.56	0.16%	2.59%	0.00%	4.00%	0.01%
EPAM Systems Inc	EPAM	55.24262	187	10,330.37					
Conagra Brands Inc	CAG	478.35164	17.85	8,538.58		7.84%		-7.51%	
Airbnb Inc	ABNB	425.29412	116.99	49,755.16	0.12%			12.55%	
Consolidated Edison Inc	ED	360.93561	100.36	36,223.50	0.09%	3.39%	0.00%	5.84%	0.01%
Corning Inc	GLW	857.3604	84.2	72,189.75		1.33%		21.00%	
GoDaddy Inc	GDDY	135.14159	127.86	17,279.20					
Cummins Inc	CMI	138.03625	497.98	68,739.29		1.61%			
Danaher Corp	DHR	706.34956	226.78	160,185.95	0.39%	0.56%	0.00%	6.95%	0.03%
Target Corp	TGT	452.80642	90.62	41,033.32		5.03%		-1.57%	
Williams-Sonoma Inc	WSM	119.38071	180.01	21,489.72	0.05%	1.47%	0.00%	4.68%	0.00%
Deere & Co	DE	270.32939	464.49	125,565.30	0.30%	1.40%	0.00%	14.47%	0.04%
Dominion Energy Inc	D	853.91328	62.77	53,600.14	0.13%	4.25%	0.01%	14.50%	0.02%
Trade Desk Inc/The	TTD	440.31893	39.56	17,419.02	0.04%			16.73%	
Dover Corp	DOV	137.15322	185.28	25,411.75	0.06%	1.12%	0.00%	11.85%	0.01%
Alliant Energy Corp	LNT	257.05369	69.47	17,857.52	0.04%	2.92%	0.00%	6.43%	0.00%
Steel Dynamics Inc	STLD	146.03486	167.83	24,509.03	0.06%	1.19%	0.00%	16.25%	0.01%
Duke Energy Corp	DUK	778	123.94	96,425.32	0.23%	3.44%	0.01%	6.72%	0.02%
Regency Centers Corp	REG	182.90098	71.16	13,015.23	0.03%	4.24%	0.00%	5.57%	0.00%
Eaton Corp PLC	ETN	388.4	345.89	134,343.68		1.20%			
Ecolab Inc	ECL	283.23565	275.16	77,935.12	0.19%	0.94%	0.00%	12.80%	0.02%
Revvity Inc	RVTY	113.37562	104.41	11,837.55	0.03%	0.27%	0.00%	6.16%	0.00%
Dell Technologies Inc	DELL	336.90462	133.35	44,926.23	0.11%	1.57%	0.00%	16.44%	0.02%
Emerson Electric Co	EMR	561.8	133.38	74,932.88		1.66%			
EOG Resources Inc	EOG	542.59846	107.85	58,519.24	0.14%	3.78%	0.01%	0.29%	0.00%
Aon PLC	AON	214.93527	353.92	76,069.89	0.18%	0.84%	0.00%	10.35%	0.02%
Entergy Corp	ETR	446.5969	97.52	43,552.13	0.10%	2.63%	0.00%	9.05%	0.01%
Equifax Inc	EFX	122.39404	212.37	25,992.82	0.06%	0.94%	0.00%	10.74%	0.01%
EQT Corp	EQT	624.067	60.86	37,980.72		1.08%		42.28%	
IQVIA Holdings Inc	IQV	170.3	230.01	39,170.70	0.09%			8.97%	
Gartner Inc	IT	72.07715	232.74	16,775.24					
FedEx Corp	FDX	235.95546	275.68	65,048.20	0.16%	2.10%	0.00%	9.35%	0.01%
Brown & Brown Inc	BRO	341.42079	80.43	27,460.47	0.07%	0.82%	0.00%	9.99%	0.01%
Ford Motor Co	F	3913.64649	13.28	51,973.23		4.52%			
NextEra Energy Inc	NEE	2082.60968	86.29	179,708.39	0.43%	2.63%	0.01%	7.85%	0.03%
Franklin Resources Inc	BEN	520.97058	22.59	11,768.73		5.67%			
Garmin Ltd	GRMN	192.33481	195.32	37,566.84	0.09%	1.84%	0.00%	10.79%	0.01%
Freeport-McMoRan Inc	FCX	1435.93066	42.98	61,716.30		1.40%		27.12%	
Expand Energy Corp	EXE	238.1697	121.93	29,040.03		1.89%		62.79%	
Dexcom Inc	DXCM	390.01627	63.47	24,754.33				22.55%	
General Dynamics Corp	GD	270.12044	341.63	92,281.25	0.22%	1.76%	0.00%	14.95%	0.03%
General Mills Inc	GIS	533.41642	47.35	25,257.27		5.15%		-2.94%	
Genuine Parts Co	GPC	139.1105	130.4	18,140.01		3.16%			
Atmos Energy Corp	ATO	161.69334	176.37	28,517.85	0.07%	2.27%	0.00%	7.98%	0.01%
WW Grainger Inc	GWW	47.54934	948.63	45,106.73	0.11%	0.95%	0.00%	4.61%	0.01%
Halliburton Co	HAL	841.62661	26.22	22,067.45		2.59%		-6.66%	
L3Harris Technologies Inc	LHX	187.05285	278.69	52,129.76	0.13%	1.72%	0.00%	13.68%	0.02%
Healthpeak Properties Inc	DOC	694.94982	18.26	12,689.78	0.03%	6.68%	0.00%	2.16%	0.00%
Insulet Corp	PODD	70.3469	327.19	23,016.80				32.05%	
Fortive Corp	FTV	317.61164	53.48	16,985.87		0.45%			
Hershey Co/The	HSY	148.17161	188.08	27,868.12		2.91%		-8.20%	
Synchrony Financial	SYF	360.1711	77.36	27,862.84	0.07%	1.55%	0.00%	15.68%	0.01%
Hormel Foods Corp	HRL	549.99843	23.21	12,765.46		5.04%		-1.07%	

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Estimated Weighted Average Dividend Yield [1]	**1.27%**	
		Won Proposed Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

		[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Arthur J Gallagher & Co	AJG	256.8	247.62	63,588.82		1.05%			
Mondelez International Inc	MDLZ	1290.35849	57.57	74,285.94	0.18%	3.47%	0.01%	0.89%	0.00%
CenterPoint Energy Inc	CNP	652.86827	39.98	26,101.67	0.06%	2.20%	0.00%	8.95%	0.01%
Humana Inc	HUM	120.27307	245.77	29,559.51	0.07%	1.44%	0.00%	8.51%	0.01%
Willis Towers Watson PLC	WTW	95.74861	321	30,735.30	0.07%	1.15%	0.00%	10.80%	0.01%
Illinois Tool Works Inc	ITW	290.1	249.28	72,316.13	0.17%	2.58%	0.00%	2.15%	0.00%
CDW Corp/DE	CDW	130.19366	144.22	18,776.53	0.05%	1.75%	0.00%	7.66%	0.00%
Trane Technologies PLC	TT	221.739	421.48	93,458.55	0.22%	0.89%	0.00%	14.47%	0.03%
International Flavors & Fragrances Inc	IFF	256.09638	69.48	17,793.58	0.04%	2.30%	0.00%	4.29%	0.00%
Generac Holdings Inc	GNRC	58.68407	151.63	8,898.27	0.02%			19.00%	
NXP Semiconductors NV	NXPI	251.67447	194.94	49,061.42	0.12%	2.08%	0.00%	4.27%	0.01%
Kellanova	K	347.93263	83.06	28,899.28	0.07%	2.79%	0.00%	1.95%	0.00%
Broadridge Financial Solutions Inc	BR	116.72756	228.09	26,624.39		1.71%			
Kimco Realty Corp	KIM	679.49863	20.66	14,038.44	0.03%	5.03%	0.00%	4.01%	0.00%
Oracle Corp	ORCL	2850.79261	201.95	575,717.57	1.39%	0.99%	0.01%	18.09%	0.25%
Kroger Co/The	KR	662.67821	67.28	44,584.99	0.11%	2.08%	0.00%	6.37%	0.01%
Lennar Corp	LEN	223.80353	131.3	29,385.40		1.52%		-9.37%	
Eli Lilly & Co	LLY	945.38376	1075.47	1,016,731.87	2.45%	0.56%	0.01%	20.00%	0.49%
Charter Communications Inc	CHTR	129.40937	200.12	25,897.40	0.06%			9.01%	
Loews Corp	L	206.65957	107.87	22,292.37		0.23%			
Lowe's Cos Inc	LOW	560.95146	242.48	136,019.51	0.33%	1.98%	0.01%	4.92%	0.02%
Hubbell Inc	HUBB	53.14475	431.43	22,928.24		1.32%			
IDEX Corp	IEX	74.84944	173.93	13,018.56		1.63%			
Marsh & McLennan Cos Inc	MMC	489.90968	183.45	89,873.93	0.22%	1.96%	0.00%	6.06%	0.01%
Masco Corp	MAS	207.69562	64.87	13,473.21	0.03%	1.91%	0.00%	6.16%	0.00%
S&P Global Inc	SPGI	310	498.83	154,637.30		0.77%			
Medtronic PLC	MDT	1282.01421	105.33	135,034.56	0.33%	2.70%	0.01%	6.49%	0.02%
Viatris Inc	VTRS	1151.76987	10.69	12,312.42		4.49%		-2.05%	
CVS Health Corp	CVS	1269.43249	80.36	102,011.59	0.25%	3.31%	0.01%	9.25%	0.02%
DuPont de Nemours Inc	DD	418.97532	39.77	16,662.65		2.01%		-14.43%	
Micron Technology Inc	MU	1125.34975	236.48	266,122.71		0.19%		28.55%	
Motorola Solutions Inc	MSI	166.555	369.68	61,572.05	0.15%	1.31%	0.00%	9.07%	0.01%
Cboe Global Markets Inc	CBOE	104.64451	258.17	27,016.07	0.07%	1.12%	0.00%	16.26%	0.01%
Newmont Corp	NEM	1091.26298	90.73	99,010.29		1.10%		23.72%	
NIKE Inc	NKE	1189.31361	64.22	76,377.72	0.18%	2.55%	0.00%	19.43%	0.04%
NiSource Inc	NI	477.19553	44.13	21,058.64	0.05%	2.54%	0.00%	8.27%	0.00%
Norfolk Southern Corp	NSC	224.38662	292.09	65,541.09		1.85%			
Principal Financial Group Inc	PFG	219.69384	84.82	18,634.43	0.04%	3.73%	0.00%	14.03%	0.01%
Eversource Energy	ES	375.18915	67.18	25,205.21	0.06%	4.48%	0.00%	4.70%	0.00%
Northrop Grumman Corp	NOC	142.72007	569.94	81,341.88	0.20%	1.62%	0.00%	5.99%	0.01%
Wells Fargo & Co	WFC	3139.08454	85.85	269,490.41	0.65%	2.10%	0.01%	15.67%	0.10%
Nucor Corp	NUE	228.85866	159.49	36,500.67	0.09%	1.38%	0.00%	17.05%	0.01%
Occidental Petroleum Corp	OXY	985.21043	42	41,378.84		2.29%			
Omnicom Group Inc	OMC	192.98357	71.62	13,821.48	0.03%	4.47%	0.00%	7.31%	0.00%
ONEOK Inc	OKE	629.23156	72.82	45,820.64	0.11%	5.66%	0.01%	3.06%	0.00%
Raymond James Financial Inc	RJF	196.67393	156.54	30,787.34	0.07%	1.28%	0.00%	16.32%	0.01%
PG&E Corp	PCG	2197.90743	16.12	35,430.27	0.09%	0.62%	0.00%	12.55%	0.01%
Parker-Hannifin Corp	PH	126.1867	861.7	108,735.08	0.26%	0.84%	0.00%	9.46%	0.02%
Rollins Inc	ROL	484.62881	61.48	29,794.98		1.19%			
PPL Corp	PPL	739.73918	36.9	27,296.38	0.07%	2.95%	0.00%	8.12%	0.01%
Aptiv PLC	APTV	216.07941	77.55	16,756.96	0.04%			17.33%	
ConocoPhillips	COP	1235.718	88.69	109,595.83		3.79%		-10.54%	
PulteGroup Inc	PHM	194.91688	127.19	24,791.48		0.82%		-5.07%	
Pinnacle West Capital Corp	PNW	119.6904	90.86	10,875.07	0.03%	4.01%	0.00%	7.00%	0.00%
PNC Financial Services Group Inc/The	PNC	392.15845	190.72	74,792.46	0.18%	3.57%	0.01%	11.15%	0.02%
PPG Industries Inc	PPG	224.4	100.04	22,448.98	0.05%	2.84%	0.00%	5.91%	0.00%
DoorDash Inc	DASH	406.33462	198.37	80,604.60					
Progressive Corp/The	PGR	586.39724	228.79	134,161.82	0.32%	0.17%	0.00%	12.58%	0.04%
Veralto Corp	VLTO	248.29735	101.22	25,132.66		0.43%			
Public Service Enterprise Group Inc	PEG	499.15398	83.52	41,689.34	0.10%	3.02%	0.00%	8.35%	0.01%
Cooper Cos Inc/The	COO	198.80892	77.93	15,493.18	0.04%			9.31%	
Edison International	EIX	384.78706	58.89	22,660.11	0.05%	5.62%	0.00%	5.10%	0.00%
SLB Ltd	SLB	1493.92364	36.24	54,139.79		3.15%		-3.83%	
Charles Schwab Corp/The	SCHW	1776.93677	92.73	164,775.35		1.16%		21.66%	
Sherwin-Williams Co/The	SHW	247.89351	343.69	85,198.52	0.21%	0.92%	0.00%	7.18%	0.01%
West Pharmaceutical Services Inc	WST	71.94341	277.25	19,946.31	0.05%	0.32%	0.00%	10.12%	0.00%
J M Smucker Co/The	SJM	106.69433	104.18	11,115.42	0.03%	4.22%	0.00%	2.19%	0.00%
Snap-on Inc	SNA	52.00756	340.05	17,685.17	0.04%	2.87%	0.00%	4.10%	0.00%
AMETEK Inc	AME	230.20387	197.89	45,555.04	0.11%	0.63%	0.00%	9.13%	0.01%
Uber Technologies Inc	UBER	2077.83038	87.54	181,893.27				-3.85%	

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Estimated Weighted Average Dividend Yield [1]	**1.27%**	
		Won Proposed Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
Southern Co/The	SO	1100.1936	91.12	100,249.64	0.24%	3.25%	0.01%	7.01%	0.02%
Truist Financial Corp	TFC	1279.24631	46.5	59,484.95	0.14%	4.47%	0.01%	11.73%	0.02%
Southwest Airlines Co	LUV	517.15508	34.81	18,002.17		2.07%		62.37%	
W R Berkley Corp	WRB	380.02117	77.69	29,523.84	0.07%	0.46%	0.00%	6.14%	0.00%
Stanley Black & Decker Inc	SWK	154.88496	70.69	10,948.82		4.70%			
Public Storage	PSA	175.46301	274.54	48,171.61	0.12%	4.37%	0.01%	3.01%	0.00%
Arista Networks Inc	ANET	1259.28507	130.68	164,563.37				20.08%	
Sysco Corp	SYY	478.86106	76.2	36,489.21		2.83%			
Corteva Inc	CTVA	683.01458	67.29	45,960.05	0.11%	1.07%	0.00%	15.70%	0.02%
Texas Instruments Inc	TXN	908.62302	168.27	152,894.00	0.37%	3.38%	0.01%	8.65%	0.03%
Textron Inc	TXT	176.22406	83.16	14,654.79	0.04%	0.10%	0.00%	10.03%	0.00%
Thermo Fisher Scientific Inc	TMO	375.70806	590.83	221,979.59	0.53%	0.29%	0.00%	7.82%	0.04%
TJX Cos Inc/The	TJX	1112.93875	151.92	169,077.65	0.41%	1.12%	0.00%	9.55%	0.04%
Globe Life Inc	GL	79.6058	134.73	10,725.29		0.80%			
Johnson Controls International plc	JCI	611.13566	116.31	71,081.19	0.17%	1.38%	0.00%	17.57%	0.03%
Ulta Beauty Inc	ULTA	44.83836	538.83	24,160.25	0.06%			4.39%	
Union Pacific Corp	UNP	593.16089	231.83	137,512.49	0.33%	2.38%	0.01%	7.53%	0.02%
Keysight Technologies Inc	KEYS	171.2	197.95	33,889.04	0.08%			13.32%	
UnitedHealth Group Inc	UNH	905.83862	329.77	298,718.40		2.68%		-18.25%	
Blackstone Inc	BX	738.45087	146.42	108,123.98		3.52%		24.20%	
Ventas Inc	VTR	469.73282	80.63	37,874.56	0.09%	2.38%	0.00%	11.40%	0.01%
Labcorp Holdings Inc	LH	82.9	268.78	22,281.86	0.05%	1.07%	0.00%	9.44%	0.01%
Vulcan Materials Co	VMC	132.13091	297.24	39,274.59	0.09%	0.66%	0.00%	14.51%	0.01%
Weyerhaeuser Co	WY	720.861	22.21	16,010.32		3.78%		-22.16%	
Williams Cos Inc/The	WMB	1221.21887	60.93	74,408.87	0.18%	3.28%	0.01%	17.57%	0.03%
Constellation Energy Corp	CEG	312.40558	364.36	113,828.10	0.27%	0.43%	0.00%	15.42%	0.04%
AppLovin Corp	APP	307.597	599.48	184,398.25				75.47%	
WEC Energy Group Inc	WEC	325.29425	112.07	36,455.73	0.09%	3.19%	0.00%	7.65%	0.01%
Adobe Inc	ADBE	418.6	320.13	134,006.42	0.32%			14.13%	
Vistra Corp	VST	338.82549	178.86	60,602.33	0.15%	0.51%	0.00%	11.67%	0.02%
AES Corp/The	AES	712.12094	14.06	10,012.42	0.02%	5.01%	0.00%	11.17%	0.00%
Expeditors International of Washington Inc	EXPD	134.02093	146.13	19,584.48	0.05%	1.05%	0.00%	8.47%	0.00%
Amgen Inc	AMGN	538.48067	345.46	186,023.53	0.45%	2.76%	0.01%	5.12%	0.02%
Apple Inc	AAPL	14776.353	278.85	4,120,386.03	9.92%	0.37%	0.04%	13.33%	1.32%
Autodesk Inc	ADSK	212	303.34	64,308.08	0.15%			15.94%	
Cintas Corp	CTAS	401.86668	186.02	74,755.24		0.97%			
Comcast Corp	CMCSA	3634.45013	26.69	97,003.47		4.95%			
Molson Coors Beverage Co	TAP	185.29788	46.51	8,618.20		4.04%		-1.02%	
KLA Corp	KLAC	131.39234	1175.47	154,447.75	0.37%	0.65%	0.00%	11.70%	0.04%
Marriott International Inc/MD	MAR	268.3518	304.79	81,790.95	0.20%	0.88%	0.00%	10.30%	0.02%
McCormick & Co Inc/MD	MKC	253.2399	67.48	17,088.63	0.04%	2.85%	0.00%	4.54%	0.00%
PACCAR Inc	PCAR	525.20436	105.42	55,367.04		1.25%		-3.95%	
Costco Wholesale Corp	COST	443.17918	913.59	404,884.07	0.97%	0.57%	0.01%	6.75%	0.07%
Stryker Corp	SYK	382.42365	371.18	141,948.01	0.34%	0.91%	0.00%	10.42%	0.04%
Tyson Foods Inc	TSN	283.04508	57.54	16,286.41	0.04%	3.55%	0.00%	11.30%	0.00%
Lamb Weston Holdings Inc	LW	139.35248	59.06	8,230.16		2.51%		-2.55%	
Applied Materials Inc	AMAT	796.64243	252.25	200,953.05	0.48%	0.73%	0.00%	9.83%	0.05%
Cardinal Health Inc	CAH	237.59504	212.26	50,431.92	0.12%	0.96%	0.00%	14.90%	0.02%
Cincinnati Financial Corp	CINF	156.01851	167.59	26,147.14	0.06%	2.08%	0.00%	5.30%	0.00%
DR Horton Inc	DHI	292.06054	159.01	46,440.55	0.11%	1.13%	0.00%	10.70%	0.01%
Electronic Arts Inc	EA	250.10613	202.03	50,528.94	0.12%	0.38%	0.00%	13.01%	0.02%
Erie Indemnity Co	ERIE	46.18907	295.49	13,648.41		1.85%			
Fair Isaac Corp	FICO	23.70905	1805.83	42,814.51					
Fastenal Co	FAST	1148.03572	40.4	46,380.64	0.11%	2.18%	0.00%	10.79%	0.01%
M&T Bank Corp	MTB	153.69078	188.72	29,004.52	0.07%	3.18%	0.00%	12.56%	0.01%
Xcel Energy Inc	XEL	591.53977	82.11	48,571.33		2.78%			
Fiserv Inc	FISV	537.85189	61.47	33,061.76					
Fifth Third Bancorp	FITB	661.01177	43.46	28,727.57		3.68%			
Gilead Sciences Inc	GILD	1240.67962	125.84	156,127.12		2.51%		29.92%	
Hasbro Inc	HAS	140.33702	82.6	11,591.84	0.03%	3.39%	0.00%	10.25%	0.00%
Huntington Bancshares Inc/OH	HBAN	1565.6203	16.3	25,519.61	0.06%	3.80%	0.00%	17.74%	0.01%
Welltower Inc	WELL	686.32804	208.22	142,907.22		1.42%		21.25%	
Biogen Inc	BIIB	146.70227	182.09	26,713.02	0.06%			0.86%	0.00%
Northern Trust Corp	NTRS	189.11737	131.34	24,838.68	0.06%	2.44%	0.00%	10.71%	0.01%
Packaging Corp of America	PKG	89.97707	204.07	18,361.62	0.04%	2.45%	0.00%	13.74%	0.01%
Paychex Inc	PAYX	359.89414	111.69	40,196.58		3.87%			
QUALCOMM Inc	QCOM	1071	168.09	180,024.39	0.43%	2.12%	0.01%	4.66%	0.02%
Ross Stores Inc	ROST	325.22627	176.36	57,356.90	0.14%	0.92%	0.00%	7.04%	0.01%
IDEXX Laboratories Inc	IDXX	79.85133	752.88	60,118.47	0.14%			14.93%	
Starbucks Corp	SBUX	1137.1	87.11	99,052.78		2.85%		20.21%	

Dr. Won's Incorrect Proposed Adjustment to
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

		Won Proposed Weighting
Estimated Weighted Average Dividend Yield [1]	**1.27%**	
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
KeyCorp	KEY	1092.91959	18.1776	19,866.66		4.51%		22.71%	
Fox Corp	FOXA	208.3617	65.5	13,647.69		0.85%		-0.63%	
Fox Corp	FOX	235.58103	58.26	13,724.95		0.96%		-0.63%	
State Street Corp	STT	279.31244	119.02	33,243.77	0.08%	2.82%	0.00%	10.63%	0.01%
Norwegian Cruise Line Holdings Ltd	NCLH	455.25749	18.46	8,404.05	0.02%			16.59%	
US Bancorp	USB	1554.43407	49.05	76,244.99	0.18%	4.24%	0.01%	11.65%	0.02%
A O Smith Corp	AOS	113.37212	65.98	7,480.29		2.18%			
Gen Digital Inc	GEN	616.71611	26.37	16,262.80	0.04%	1.90%	0.00%	13.08%	0.01%
T Rowe Price Group Inc	TROW	218.237	102.38	22,343.10	0.05%	4.96%	0.00%	4.02%	0.00%
Waste Management Inc	WM	402.86705	217.87	87,772.64	0.21%	1.51%	0.00%	10.33%	0.02%
Constellation Brands Inc	STZ	175.01334	136.38	23,868.32		2.99%		-2.10%	
Invesco Ltd	IVZ	445.0929	24.45	10,882.52	0.03%	3.44%	0.00%	19.16%	0.01%
Intuit Inc	INTU	278.27408	634.08	176,448.03	0.42%	0.76%	0.00%	14.47%	0.06%
Morgan Stanley	MS	1589.30931	169.66	269,642.22	0.65%	2.36%	0.02%	12.46%	0.08%
Microchip Technology Inc	MCHP	540.44683	53.58	28,957.14		3.40%		27.10%	
Crowdstrike Holdings Inc	CRWD	250.95514	509.16	127,776.32				23.87%	
Chubb Ltd	CB	393.55086	296.18	116,561.89	0.28%	1.31%	0.00%	3.70%	0.01%
Hologic Inc	HOLX	222.90523	74.97	16,711.21	0.04%			8.55%	
Citizens Financial Group Inc	CFG	429.48619	54.1	23,235.20		3.40%		24.41%	
Jabil Inc	JBL	106.83734	210.71	22,511.70	0.05%	0.15%	0.00%	13.93%	0.01%
O'Reilly Automotive Inc	ORLY	844.10409	101.7	85,845.39	0.21%			10.54%	0.02%
Allstate Corp/The	ALL	261.68171	211.98	55,471.32	0.13%	1.89%	0.00%	18.89%	0.03%
Equity Residential	EQR	380.47472	61.75	23,494.31	0.06%	4.49%	0.00%	3.40%	0.00%
Keurig Dr Pepper Inc	KDP	1358.58313	27.9	37,904.47	0.09%	3.30%	0.00%	6.51%	0.01%
Host Hotels & Resorts Inc	HST	687.68948	17.63	12,123.97		4.54%		-0.96%	
Incyte Corp	INCY	196.3227	104.46	20,507.87					
Simon Property Group Inc	SPG	326.46206	186.32	60,826.41	0.15%	4.72%	0.01%	1.62%	0.00%
AvalonBay Communities Inc	AVB	141.59495	181.94	25,761.79	0.06%	3.85%	0.00%	3.79%	0.00%
Prudential Financial Inc	PRU	350	108.25	37,887.50	0.09%	4.99%	0.00%	8.46%	0.01%
United Parcel Service Inc	UPS	738.99005	95.79	70,787.86	0.17%	6.85%	0.01%	1.19%	0.00%
STERIS PLC	STE	98.14701	266.28	26,134.59		0.95%			
McKesson Corp	MCK	123.42665	880.3	108,652.48	0.26%	0.37%	0.00%	15.90%	0.04%
Lockheed Martin Corp	LMT	231.3978	454.41	105,149.47	0.25%	3.04%	0.01%	13.13%	0.03%
Cencora Inc	COR	193.99344	368.93	71,570.00	0.17%	0.65%	0.00%	9.17%	0.02%
Capital One Financial Corp	COF	635.73361	219.07	139,270.16		1.46%		22.97%	
Campbell's Company/The	CPB	297.70305	30.48	9,073.99		5.12%		-2.52%	
Waters Corp	WAT	59.53474	403.42	24,017.50	0.06%			8.33%	
Nordson Corp	NDSN	56.1863	237.66	13,353.24		1.38%			
Dollar Tree Inc	DLTR	203.96784	110.81	22,601.68	0.05%			10.33%	
Darden Restaurants Inc	DRI	116.31376	179.58	20,887.63	0.05%	3.34%	0.00%	10.59%	0.01%
Evergy Inc	EVRG	229.74594	77.65	17,839.77	0.04%	3.58%	0.00%	6.59%	0.00%
Match Group Inc	MTCH	236.07019	33.31	7,863.50	0.02%	2.28%	0.00%	15.49%	0.00%
NVR Inc	NVR	2.83943	7507.29	21,316.42	0.05%			1.76%	
NetApp Inc	NTAP	198.06035	111.56	22,095.61	0.05%	1.86%	0.00%	7.14%	0.00%
Old Dominion Freight Line Inc	ODFL	209.09844	135.29	28,288.93	0.07%	0.83%	0.00%	3.92%	0.00%
DaVita Inc	DVA	70.6	119.68	8,449.41	0.02%			10.54%	
Hartford Insurance Group Inc/The	HIG	278.65029	136.43	38,016.23	0.09%	1.76%	0.00%	8.62%	0.01%
Iron Mountain Inc	IRM	295.58949	86.35	25,524.15		4.00%			
Estee Lauder Cos Inc/The	EL	234.81821	94.07	22,089.35		1.49%		33.46%	
Cadence Design Systems Inc	CDNS	272.201	311.84	84,883.16	0.20%			14.87%	
Tyler Technologies Inc	TYL	43.02773	469.62	20,206.68					
Universal Health Services Inc	UHS	55.2337	243.43	13,445.54	0.03%	0.33%	0.00%	12.31%	0.00%
Skyworks Solutions Inc	SWKS	148.67977	65.95	9,805.43		4.31%		-4.84%	
Quest Diagnostics Inc	DGX	111.24236	189.18	21,044.83	0.05%	1.69%	0.00%	1.06%	0.00%
Rockwell Automation Inc	ROK	112.27357	395.86	44,444.62	0.11%	1.39%	0.00%	15.87%	0.02%
Kraft Heinz Co/The	KHC	1183.65558	25.51	30,195.05		6.27%		-5.53%	
American Tower Corp	AMT	468.14662	181.27	84,860.94		3.75%		23.18%	
Regeneron Pharmaceuticals Inc	REGN	103.28232	780.19	80,579.83	0.19%	0.45%	0.00%	8.68%	0.02%
Amazon.com Inc	AMZN	10690.21601	233.22	2,493,172.18	6.00%			18.83%	
Jack Henry & Associates Inc	JKHY	72.37713	173.899	12,586.31		1.33%			
Ralph Lauren Corp	RL	38.75938	367.33	14,237.48	0.03%	0.99%	0.00%	15.52%	0.01%
BXP Inc	BXP	158.46869	72.36	11,466.79	0.03%	3.87%	0.00%	1.55%	0.00%
Amphenol Corp	APH	1224.05551	140.9	172,469.42		0.71%		38.67%	
Howmet Aerospace Inc	HWM	402.06226	204.59	82,257.92		0.23%		20.01%	
Valero Energy Corp	VLO	305.00954	176.76	53,913.49	0.13%	2.56%	0.00%	19.41%	0.03%
Synopsys Inc	SNPS	185.74867	418.01	77,644.80	0.19%			9.76%	
CH Robinson Worldwide Inc	CHRW	118.13718	158.87	18,768.45	0.05%	1.59%	0.00%	15.78%	0.01%
Accenture PLC	ACN	620.13889	250	155,034.72		2.61%			
TransDigm Group Inc	TDG	56.31858	1360.17	76,602.84	0.18%			11.66%	
Yum! Brands Inc	YUM	277.65283	152.488	42,338.70	0.10%	1.86%	0.00%	8.81%	0.01%

Dr. Won's Incorrect Proposed Adjustment to Calculation of Market Return from Analysts' Long-Term Growth Estimates in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	**1.27%**	
		Won Proposed Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
Prologis Inc	PLD	926.175	128.53	119,041.27	0.29%	3.14%	0.01%	5.61%	0.02%
FirstEnergy Corp	FE	577.12618	47.72	27,540.46	0.07%	3.73%	0.00%	3.35%	0.00%
VeriSign Inc	VRSN	92.7	251.99	23,359.47		1.22%			
Quanta Services Inc	PWR	149.11589	464.88	69,320.99	0.17%	0.09%	0.00%	18.14%	0.03%
Henry Schein Inc	HSIC	117.72481	74.57	8,778.74	0.02%			8.41%	
Ameren Corp	AEE	270.5	106.35	28,767.68	0.07%	2.67%	0.00%	8.47%	0.01%
FactSet Research Systems Inc	FDS	37.41994	277.27	10,375.43		1.59%			
NVIDIA Corp	NVDA	24300	177	4,301,100.00		0.02%		48.04%	
Cognizant Technology Solutions Corp	CTSH	482.64647	77.71	37,506.46		1.60%			
Intuitive Surgical Inc	ISRG	354.49607	573.48	203,296.41	0.49%			14.54%	
Take-Two Interactive Software Inc	TTWO	184.77883	246.07	45,468.53				59.16%	
Republic Services Inc	RSG	309.5636	217.06	67,193.88	0.16%	1.15%	0.00%	9.49%	0.02%
eBay Inc	EBAY	452	82.79	37,421.08	0.09%	1.40%	0.00%	9.97%	0.01%
Goldman Sachs Group Inc/The	GS	299.92851	821.965	246,530.74	0.59%	1.95%	0.01%	15.51%	0.09%
SBA Communications Corp	SBAC	106.54687	194.27	20,698.86	0.05%	2.29%	0.00%	9.46%	0.00%
Sempra	SRE	652.68152	94.72	61,821.99	0.15%	2.72%	0.00%	8.07%	0.01%
Moody's Corp	MCO	178.4	490.78	87,555.15		0.77%			
ON Semiconductor Corp	ON	402.37841	50.24	20,215.49				-3.56%	
Booking Holdings Inc	BKNG	32.23382	4914.69	158,419.23	0.38%	0.78%	0.00%	17.83%	0.07%
F5 Inc	FFIV	58.08961	239.16	13,892.71	0.03%			2.69%	
Akamai Technologies Inc	AKAM	143.86524	89.52	12,878.82	0.03%			5.96%	
Charles River Laboratories International Inc	CRL	49.21547	178.14	8,767.24	0.02%			3.82%	
Devon Energy Corp	DVN	627.3	37.06	23,247.74	0.06%	2.59%	0.00%	2.43%	0.00%
Bio-Techne Corp	TECH	155.8127	64.51	10,051.48		0.50%			
Alphabet Inc	GOOGL	5818	320.18	1,862,807.24	4.48%	0.26%	0.01%	15.88%	0.71%
Allegion plc	ALLE	86.03195	166.03	14,283.88	0.03%	1.23%	0.00%	6.24%	0.00%
Netflix Inc	NFLX	4237.32334	107.58	455,851.24				26.73%	
Warner Bros Discovery Inc	WBD	2477.97451	24	59,471.39				40.66%	
Agilent Technologies Inc	A	283.05438	153.5	43,448.85	0.10%	0.66%	0.00%	5.81%	0.01%
Trimble Inc	TRMB	237.92096	81.42	19,371.52					
Elevance Health Inc	ELV	222.23876	338.26	75,174.48	0.18%	2.02%	0.00%	2.95%	0.01%
CME Group Inc	CME	360.59665	281.46	101,493.53	0.24%	1.78%	0.00%	3.88%	0.01%
DTE Energy Co	DTE	207.68301	137.03	28,458.80	0.07%	3.18%	0.00%	6.89%	0.00%
Nasdaq Inc	NDAQ	570.99543	90.92	51,914.90	0.12%	1.19%	0.00%	16.51%	0.02%
Philip Morris International Inc	PM	1556.63875	157.48	245,139.47	0.59%	3.73%	0.02%	11.14%	0.07%
Ingersoll Rand Inc	IR	395.1104	80.34	31,743.17		0.10%			
Salesforce Inc	CRM	952	230.54	219,474.08	0.53%	0.72%	0.00%	14.31%	0.08%
Roper Technologies Inc	ROP	107.63743	446.22	48,029.97		0.82%			
Huntington Ingalls Industries Inc	HII	39.24143	313.62	12,306.90	0.03%	1.76%	0.00%	16.46%	0.00%
MetLife Inc	MET	658.89166	76.56	50,444.75	0.12%	2.96%	0.00%	12.00%	0.01%
Tapestry Inc	TPR	204.64975	109.28	22,364.12	0.05%	1.46%	0.00%	8.71%	0.00%
CSX Corp	CSX	1862.13696	35.36	65,845.16	0.16%	1.47%	0.00%	6.33%	0.01%
Edwards Lifesciences Corp	EW	580.3	86.67	50,294.60	0.12%			8.69%	
Ameriprise Financial Inc	AMP	92.90571	455.74	42,340.85	0.10%	1.40%	0.00%	10.30%	0.01%
Zebra Technologies Corp	ZBRA	50.66024	252.75	12,804.38					
Zimmer Biomet Holdings Inc	ZBH	198.18156	97.52	19,326.67	0.05%	0.98%	0.00%	4.20%	0.00%
Camden Property Trust	CPT	106.39533	106.34	11,314.08	0.03%	3.95%	0.00%	1.82%	0.00%
CBRE Group Inc	CBRE	297.593	161.83	48,159.48					
Mastercard Inc	MA	891.25818	550.53	490,664.37	1.18%	0.55%	0.01%	14.89%	0.18%
Datadog Inc	DDOG	325.44337	160.01	52,074.19	0.13%			11.55%	
Intercontinental Exchange Inc	ICE	570.17859	157.3	89,689.09	0.22%	1.22%	0.00%	12.79%	0.03%
Fidelity National Information Services Inc	FIS	517.85076	65.77	34,059.04		2.43%			
Smurfit WestRock PLC	SW	522.18633	35.69	18,636.83		4.83%		66.90%	
Chipotle Mexican Grill Inc	CMG	1322.278	34.52	45,645.04	0.11%			8.23%	
Wynn Resorts Ltd	WYNN	103.97448	128.68	13,379.44	0.03%	0.78%	0.00%	3.36%	0.00%
Live Nation Entertainment Inc	LYV	234.74125	131.45	30,856.74	0.07%			9.42%	
Assurant Inc	AIZ	50.08111	227.28	11,382.43		1.55%			
NRG Energy Inc	NRG	191.63941	169.49	32,480.96		1.04%			
Monster Beverage Corp	MNST	977.02122	74.99	73,266.82	0.18%			15.80%	
Regions Financial Corp	RF	876.8765	25.185	22,084.13	0.05%	4.21%	0.00%	9.55%	0.01%
Baker Hughes Co	BKR	986.77388	50.2	49,536.05	0.12%	1.83%	0.00%	11.14%	0.01%
Mosaic Co/The	MOS	317.40788	24.49	7,773.32		3.59%		20.91%	
Expedia Group Inc	EXPE	117.00906	255.69	29,918.05		0.63%		21.25%	
Kimberly-Clark Corp	KMB	331.85842	109.12	36,212.39	0.09%	4.62%	0.00%	3.40%	0.00%
CF Industries Holdings Inc	CF	155.97464	78.7	12,275.20		2.54%		-5.82%	
APA Corp	APA	354.66925	24.97	8,856.09		4.00%		-20.28%	
Leidos Holdings Inc	LDOS	127.85517	191.1	24,433.12	0.06%	0.90%	0.00%	11.62%	0.01%
Alphabet Inc	GOOG	5407	320.12	1,730,888.84	4.17%	0.26%	0.01%	15.88%	0.66%
TKO Group Holdings Inc	TKO	78.92236	193.89	15,302.26		1.57%			
First Solar Inc	FSLR	107.30814	272.92	29,286.54				42.42%	

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Estimated Weighted Average Dividend Yield [1]	**1.27%**	
		Won Proposed Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

		[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Visa Inc	V	1687.62977	334.44	564,410.90	1.36%	0.80%	0.01%	16.33%	0.22%
Mid-America Apartment Communities Inc	MAA	117.08174	135.89	15,910.24		4.46%		-0.23%	
Xylem Inc/NY	XYL	243.46906	140.67	34,248.79		1.14%			
Marathon Petroleum Corp	MPC	300.60248	193.73	58,235.72	0.14%	2.06%	0.00%	17.86%	0.03%
Tractor Supply Co	TSCO	528.4036	54.78	28,945.95	0.07%	1.68%	0.00%	8.42%	0.01%
Advanced Micro Devices Inc	AMD	1628.04154	217.53	354,147.88				42.01%	
ResMed Inc	RMD	145.96629	255.83	37,342.56	0.09%	0.94%	0.00%	8.39%	0.01%
Mettler-Toledo International Inc	MTD	20.42845	1476.72	30,167.10	0.07%			7.34%	
VICI Properties Inc	VICI	1068.81137	28.82	30,803.14	0.07%	6.25%	0.00%	4.24%	0.00%
Copart Inc	CPRT	968.01768	38.98	37,733.33					
Jacobs Solutions Inc	J	118.74916	134.485	15,970.00	0.04%	0.95%	0.00%	13.06%	0.01%
Albemarle Corp	ALB	117.69754	129.99	15,299.50		1.25%		74.58%	
Fortinet Inc	FTNT	743.6481	81.13	60,332.17	0.15%			10.53%	
Moderna Inc	MRNA	390.67951	25.98	10,149.85	0.02%			17.47%	
Essex Property Trust Inc	ESS	64.40402	263.62	16,978.19	0.04%	3.90%	0.00%	2.44%	0.00%
CoStar Group Inc	CSGP	423.82279	68.8	29,159.01				40.85%	
Realty Income Corp	O	919.90577	57.61	52,995.77	0.13%	5.61%	0.01%	3.74%	0.00%
Westinghouse Air Brake Technologies Corp	WAB	170.95719	208.55	35,653.12	0.09%	0.48%	0.00%	14.51%	0.01%
Palantir Technologies Inc	PLTR	2284.33401	168.45	384,796.06				48.77%	
Pool Corp	POOL	37.24948	243.6	9,073.97	0.02%	2.05%	0.00%	4.79%	0.00%
Western Digital Corp	WDC	341.89928	163.33	55,842.41		0.31%		22.71%	
PepsiCo Inc	PEP	1367.34012	148.74	203,378.17	0.49%	3.83%	0.02%	3.70%	0.02%
TE Connectivity PLC	TEL	294.18925	226.15	66,530.90	0.16%	1.26%	0.00%	13.68%	0.02%
Diamondback Energy Inc	FANG	286.52561	152.59	43,720.94	0.11%	2.62%	0.00%	1.13%	0.00%
Palo Alto Networks Inc	PANW	697	190.13	132,520.61	0.32%			12.77%	
ServiceNow Inc	NOW	207.48151	812.41	168,560.05				25.00%	
Church & Dwight Co Inc	CHD	240.13007	85.16	20,449.48	0.05%	1.39%	0.00%	5.85%	0.00%
Federal Realty Investment Trust	FRT	86.27003	98.73	8,517.44	0.02%	4.58%	0.00%	4.78%	0.00%
MGM Resorts International	MGM	273.50644	35.29	9,652.04	0.02%			6.33%	
American Electric Power Co Inc	AEP	534.09453	123.77	66,104.88	0.16%	3.07%	0.00%	6.88%	0.01%
Invitation Homes Inc	INVH	613.02059	28.2	17,287.18	0.04%	4.11%	0.00%	3.76%	0.00%
PTC Inc	PTC	119.92595	175.43	21,038.61	0.05%			6.41%	
JB Hunt Transport Services Inc	JBHT	95.21835	173.96	16,564.18	0.04%	1.01%	0.00%	14.90%	0.01%
Lam Research Corp	LRCX	1256.03	156	195,940.68	0.47%	0.67%	0.00%	15.48%	0.07%
Mohawk Industries Inc	MHK	61.82136	115.9	7,165.10	0.02%			2.23%	
GE HealthCare Technologies Inc	GEHC	455.52159	79.99	36,437.17	0.09%	0.18%	0.00%	6.48%	0.01%
Pentair PLC	PNR	163.64188	105.24	17,221.67	0.04%	0.95%	0.00%	9.34%	0.00%
Vertex Pharmaceuticals Inc	VRTX	253.71883	433.61	110,015.02					
Amcor PLC	AMCR	2308.35994	8.52	19,667.23	0.05%	6.10%	0.00%	12.62%	0.01%
Meta Platforms Inc	META	2177.88927	647.95	1,411,163.35	3.40%	0.32%	0.01%	14.08%	0.48%
T-Mobile US Inc	TMUS	1118.50663	209.01	233,779.07		1.95%			
United Rentals Inc	URI	63.63015	815.18	51,870.03	0.12%	0.88%	0.00%	8.48%	0.01%
Alexandria Real Estate Equities Inc	ARE	172.82506	53.67	9,275.52		9.84%		-12.43%	
Honeywell International Inc	HON	634.88721	192.19	122,018.97	0.29%	2.48%	0.01%	5.09%	0.01%
Robinhood Markets Inc	HOOD	786.35603	128.49	101,038.89				21.67%	
Delta Air Lines Inc	DAL	652.96277	64.1	41,854.91	0.10%	1.17%	0.00%	7.72%	0.01%
United Airlines Holdings Inc	UAL	327.70387	101.96	33,412.69	0.08%			11.76%	
Seagate Technology Holdings PLC	STX	213.55811	276.69	59,089.39		1.07%		24.58%	
News Corp	NWS	187.70971	29.43	5,524.30		0.68%			
Centene Corp	CNC	491.518	39.34	19,336.32				-17.68%	
Block Inc	XYZ	547.667	66.8	36,584.16				29.65%	
Apollo Global Management Inc	APO	580.42257	131.85	76,528.72	0.18%	1.55%	0.00%	13.01%	0.02%
Martin Marietta Materials Inc	MLM	60.30714	622.41	37,535.77		0.53%		-9.33%	
Teradyne Inc	TER	156.6083	181.89	28,485.48		0.26%		27.28%	
PayPal Holdings Inc	PYPL	935.65195	62.69	58,656.02	0.14%	0.89%	0.00%	14.22%	0.02%
Tesla Inc	TSLA	3325.81917	430.17	1,430,667.63					
Blackrock Inc	BLK	155.15091	1047.3	162,489.55	0.39%	1.99%	0.01%	14.53%	0.06%
KKR & Co Inc	KKR	891.35341	122.31	109,021.44		0.61%			
Arch Capital Group Ltd	ACGL	362.62594	93.92	34,057.83	0.08%			4.70%	0.00%
Dow Inc	DOW	705.76446	23.85	16,832.48		5.87%		-5.53%	
Everest Group Ltd	EG	41.97806	314.29	13,193.28		2.55%		25.35%	
Teledyne Technologies Inc	TDY	46.95099	499.52	23,452.96	0.06%			9.85%	
Domino's Pizza Inc	DPZ	33.78622	419.63	14,177.71	0.03%	1.66%	0.00%	10.59%	0.00%
GE Vernova Inc	GEV	271.32046	599.77	162,729.87		0.17%		104.10%	
News Corp	NWSA	374.12973	25.68	9,607.65		0.78%			
Exelon Corp	EXC	1009.53563	47.12	47,569.32	0.11%	3.40%	0.00%	6.74%	0.01%
Global Payments Inc	GPN	236.74372	75.76	17,935.70		1.32%			
Crown Castle Inc	CCI	435.47901	91.28	39,750.52		4.66%		32.91%	
Align Technology Inc	ALGN	71.75	147.19	10,560.88	0.03%			10.05%	
Kenvue Inc	KVUE	1915.80217	17.35	33,239.17		4.78%			

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Estimated Weighted Average Dividend Yield [1]	**1.27%**	
		Won Proposed Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**10.44%**	**80% weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20% weighting**
Total [4]	**9.11%**	
S&P 500 Estimated Required Market Return [5]	**10.44%**	

		[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Targa Resources Corp	TRGP	214.65856	175.31	37,631.79		2.28%		20.73%	
Bunge Global SA	BG	193.36105	96.07	18,576.20	0.04%	2.91%	0.00%	1.57%	0.00%
LKQ Corp	LKQ	255.96601	29.69	7,599.63		4.04%			
Deckers Outdoor Corp	DECK	145.74483	88.03	12,829.92	0.03%			3.46%	
Workday Inc	WDAY	213	215.62	45,927.06					
Sandisk Corp/DE	SNDK	146.55318	223.28	32,722.39				93.06%	
Zoetis Inc	ZTS	440.69321	128.18	56,488.06	0.14%	1.56%	0.00%	8.20%	0.01%
Paramount Skydance Corp	PSKY	1071.66698	16.02	17,168.11		1.25%			
Coinbase Global Inc	COIN	228.16247	272.82	62,247.29				-3.82%	
Equinix Inc	EQIX	98.18608	753.31	73,964.56	0.18%	2.49%	0.00%	19.85%	0.04%
Digital Realty Trust Inc	DLR	343.50155	160.12	55,001.47	0.13%	3.05%	0.00%	8.54%	0.01%
Molina Healthcare Inc	MOH	51.4	148.26	7,620.56				-9.14%	
Las Vegas Sands Corp	LVS	676.13449	68.16	46,085.33	0.11%	1.47%	0.00%	12.92%	0.01%

Notes:
[1] Equals sum of Col. [11]
[2] Equals sum of Col. [13]
[3] Dr. Won's proposed GDP growth rate
[4] Equals ([2] x 80%) + ([3] x 20%)
[5] Equals ([1] x (1 + (0.5 x [4]))) + [4]
[6] Bloomberg Professional as of November 28, 2025
[7] Bloomberg Professional as of November 28, 2025
[8] Equals [6] x [7]
[9] Equals weight in S&P 500 based on market capitalization [6] if growth rate >0% and ≤20% and dividend yield > 0%
[10] Source: Bloomberg Professional, as of November 28, 2025
[11] Equals [9] x [10]
[12] Bloomberg Professional, as of November 28, 2025
[13] Equals [9] x [12]

Correction to Dr. Won's Adjustment to the
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	**1.44%**		**1.44%**		**1.44%**	
		Won Proposed Weighting		**Won Proposed Weighting**		**FERC Method No Weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**11.77%**	**80.00%**	**11.77%**	**80.00%**	**11.77%**	**100.00%**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20.00%**	**5.28%**	**20.00%**	**n/a**	**n/a**
Total [4]	**10.18%**		**10.47%**		**11.77%**	
S&P 500 Estimated Required Market Return [5]	**11.69%**		**11.99%**		**13.29%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
LyondellBasell Industries NV	LYB	321.87296	47.62	15,328		11.51%		-14.20%	
American Express Co	AXP	688.85165	365.27	251,617	0.68%	0.90%	0.01%	14.37%	0.10%
Verizon Communications Inc	VZ	4216.4255	41.11	173,337	0.47%	6.71%	0.03%	1.78%	0.01%
Texas Pacific Land Corp	TPL	22.97941	862.69	19,824		0.74%			
Broadcom Inc	AVGO	4722.365	402.96	1,902,924		0.59%		40.05%	
Boeing Co/The	BA	760.09547	189	143,658				31.33%	
Solventum Corp	SOLV	173.44756	85.26	14,788				1.57%	
Caterpillar Inc	CAT	467.9796	575.76	269,444	0.73%	1.05%	0.01%	11.06%	0.08%
JPMorgan Chase & Co	JPM	2722.2623	313.08	852,286	2.32%	1.92%	0.04%	9.66%	0.22%
Chevron Corp	CVX	2013.5216	151.13	304,304	0.83%	4.53%	0.04%	2.27%	0.02%
Coca-Cola Co/The	KO	4301.6089	72.61	312,340	0.85%	2.81%	0.02%	5.90%	0.05%
AbbVie Inc	ABBV	1767.3846	227.7	402,433	1.09%	3.04%	0.03%	15.90%	0.17%
Walt Disney Co/The	DIS	1785.2889	104.47	186,509	0.51%	1.44%	0.01%	10.91%	0.06%
Corpay Inc	CPAY	69.95806	295.8	20,694				12.88%	
Extra Space Storage Inc	EXR	212.24758	133.17	28,265	0.08%	4.87%	0.00%	2.40%	0.00%
Exxon Mobil Corp	XOM	4217.1656	115.92	488,854	1.33%	3.55%	0.05%	11.51%	0.15%
Phillips 66	PSX	402.92114	136.96	55,184		3.50%		30.71%	
General Electric Co	GE	1054.8139	298.45	314,809		0.48%		21.74%	
HP Inc	HPQ	934.70185	24.42	22,825		4.91%		-2.43%	
Home Depot Inc/The	HD	995.51149	356.92	355,318	0.97%	2.58%	0.02%	3.91%	0.04%
Monolithic Power Systems Inc	MPWR	47.907	928.17	44,466		0.67%			
International Business Machines Corp	IBM	934.73521	308.58	288,441	0.78%	2.18%	0.02%	7.64%	0.06%
Johnson & Johnson	JNJ	2409.2951	206.92	498,531	1.36%	2.51%	0.03%	8.26%	0.11%
Lululemon Athletica Inc	LULU	113.46808	184.18	20,899				1.24%	
McDonald's Corp	MCD	712.15435	309.96	220,739	0.60%	2.40%	0.01%	7.55%	0.05%
Merck & Co Inc	MRK	2482.0225	104.83	260,190	0.71%	3.24%	0.02%	13.82%	0.10%
3M Co	MMM	531.22505	172.05	91,397	0.25%	1.70%	0.00%	7.47%	0.02%
American Water Works Co Inc	AWK	195.12357	130.07	25,380	0.07%	2.54%	0.00%	6.77%	0.00%
Bank of America Corp	BAC	7302.4956	53.65	391,779		2.09%			
Pfizer Inc	PFE	5685.7076	25.74	146,350		6.68%		-1.83%	
Procter & Gamble Co/The	PG	2336.7336	148.16	346,210	0.94%	2.85%	0.03%	4.30%	0.04%
AT&T Inc	T	7089.4495	26.02	184,467	0.50%	4.27%	0.02%	8.30%	0.04%
Travelers Cos Inc/The	TRV	223.06342	292.86	65,326	0.18%	1.50%	0.00%	4.11%	0.01%
RTX Corp	RTX	1340.7719	174.91	234,514	0.64%	1.56%	0.01%	10.11%	0.06%
Analog Devices Inc	ADI	489.6541	265.34	129,925		1.49%			
Walmart Inc	WMT	7972.8511	110.51	881,080	2.40%	0.85%	0.02%	8.46%	0.20%
Cisco Systems Inc	CSCO	3951.0946	76.94	303,997	0.83%	2.13%	0.02%	8.02%	0.07%
Intel Corp	INTC	4770	40.56	193,471				9.28%	
General Motors Co	GM	932.8613	73.52	68,584	0.19%	0.82%	0.00%	6.35%	0.01%
Microsoft Corp	MSFT	7432.3777	492.01	3,656,804	9.95%	0.74%	0.07%	14.24%	1.42%
Dollar General Corp	DG	220.10603	109.49	24,099	0.07%	2.16%	0.00%	5.24%	0.00%
Cigna Group/The	CI	267.12582	277.28	74,069	0.20%	2.18%	0.00%	9.43%	0.02%
Qnity Electronics Inc	Q	209.46319	81.09	16,985		0.30%			
Kinder Morgan Inc	KMI	2224.7604	27.32	60,780	0.17%	4.28%	0.01%	8.95%	0.01%
Citigroup Inc	C	1789.2662	103.6	185,368		2.32%		25.37%	
American International Group Inc	AIG	539.57605	76.16	41,094	0.11%	2.36%	0.00%	19.52%	0.02%
Altria Group Inc	MO	1678.6716	59.01	99,058	0.27%	7.19%	0.02%	3.83%	0.01%
HCA Healthcare Inc	HCA	228.1939	508.29	115,989	0.32%	0.57%	0.00%	10.65%	0.03%
Solstice Advanced Materials Inc	SOLS	158.72746	47.68	7,568					
International Paper Co	IP	528.03832	39.48	20,847		4.69%		46.71%	
Hewlett Packard Enterprise Co	HPE	1319.4501	21.87	28,856	0.08%	2.38%	0.00%	12.72%	0.01%
Abbott Laboratories	ABT	1738.872	128.9	224,141	0.61%	1.83%	0.01%	9.99%	0.06%
Aflac Inc	AFL	524.11392	110.31	57,815		2.21%		25.35%	
Air Products and Chemicals Inc	APD	222.59024	261.05	58,107	0.16%	2.74%	0.00%	6.86%	0.01%
Super Micro Computer Inc	SMCI	596.97113	33.85	20,207				28.01%	
Royal Caribbean Cruises Ltd	RCL	272.71297	266.25	72,610		1.50%		21.23%	
Interactive Brokers Group Inc	IBKR	445.36372	64.94	28,922	0.08%	0.49%	0.00%	15.91%	0.01%
Lennox International Inc	LII	35.07278	498.87	17,497		1.04%			
Archer-Daniels-Midland Co	ADM	480.56974	60.74	29,190	0.08%	3.36%	0.00%	3.47%	0.00%
EMCOR Group Inc	EME	44.76586	615.07	27,534		0.16%			
Automatic Data Processing Inc	ADP	404.44874	255.3	103,256		2.66%			
Verisk Analytics Inc	VRSK	139.37257	225.07	31,369		0.80%			
AutoZone Inc	AZO	16.63266	3954.33	65,771				13.66%	
Linde PLC	LIN	466.94893	410.32	191,598	0.52%	1.46%	0.01%	8.11%	0.04%
Avery Dennison Corp	AVY	77.29539	172.37	13,323	0.04%	2.18%	0.00%	7.76%	0.00%
MSCI Inc	MSCI	75.13954	563.72	42,358		1.28%			
Ball Corp	BALL	267.98721	49.33	13,220	0.04%	1.62%	0.00%	13.10%	0.00%
Axon Enterprise Inc	AXON	78.91047	540.14	42,623				24.88%	
Dayforce Inc	DAY	160.03496	69.1	11,058					
Carrier Global Corp	CARR	842.20978	54.88	46,220	0.13%	1.64%	0.00%	9.38%	0.01%

Correction to Dr. Won's Adjustment to the Calculation of Market Return from Analysts' Long-Term Growth Estimates in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	**1.44%**		**1.44%**		**1.44%**	
		Won Proposed Weighting		**Won Proposed Weighting**		**FERC Method No Weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**11.77%**	**80.00%**	**11.77%**	**80.00%**	**11.77%**	**100.00%**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20.00%**	**5.28%**	**20.00%**	**n/a**	**n/a**
Total [4]	**10.18%**		**10.47%**		**11.77%**	
S&P 500 Estimated Required Market Return [5]	**11.69%**		**11.99%**		**13.29%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
Bank of New York Mellon Corp/The	BK	697.34912	112.1	78,173	0.21%	1.89%	0.00%	14.97%	0.03%
Otis Worldwide Corp	OTIS	389.71585	88.85	34,626		1.89%			
Baxter International Inc	BAX	514.05581	18.74	9,633	0.03%	0.21%	0.00%	3.24%	0.00%
Becton Dickinson & Co	BDX	285.41855	194.02	55,377	0.15%	2.16%	0.00%	6.10%	0.01%
Berkshire Hathaway Inc	BRK/B	1378.5456	513.81	708,311					
Best Buy Co Inc	BBY	210.10127	79.28	16,657	0.05%	4.79%	0.00%	4.46%	0.00%
Boston Scientific Corp	BSX	1482.442	101.58	150,586				16.51%	
Bristol-Myers Squibb Co	BMY	2035.753	49.2	100,159		5.04%			
Brown-Forman Corp	BF/B	303.60888	28.98	8,799	0.02%	3.19%	0.00%	2.43%	0.00%
Coterra Energy Inc	CTRA	761.37755	26.84	20,435		3.28%		27.81%	
Hilton Worldwide Holdings Inc	HLT	232.43517	285.03	66,251	0.18%	0.21%	0.00%	11.78%	0.02%
Carnival Corp	CCL	1167.5411	25.78	30,099				22.49%	
Builders FirstSource Inc	BLDR	110.58058	112.23	12,410				-11.47%	
UDR Inc	UDR	330.48582	36.42	12,036	0.03%	4.72%	0.00%	1.72%	0.00%
Clorox Co/The	CLX	121.98038	107.94	13,167		4.60%		-1.26%	
Paycom Software Inc	PAYC	56.26901	161.17	9,069	0.02%	0.93%	0.00%	9.57%	0.00%
CMS Energy Corp	CMS	304.31977	75.44	22,958	0.06%	2.88%	0.00%	7.55%	0.00%
Colgate-Palmolive Co	CL	806.06494	80.39	64,800	0.18%	2.59%	0.00%	4.00%	0.01%
EPAM Systems Inc	EPAM	55.24262	187	10,330					
Conagra Brands Inc	CAG	478.35164	17.85	8,539		7.84%		-7.51%	
Airbnb Inc	ABNB	425.29412	116.99	49,755				12.55%	
Consolidated Edison Inc	ED	360.93561	100.36	36,223	0.10%	3.39%	0.00%	5.84%	0.01%
Corning Inc	GLW	857.3604	84.2	72,190		1.33%		21.00%	
GoDaddy Inc	GDDY	135.14159	127.86	17,279					
Cummins Inc	CMI	138.03625	497.98	68,739		1.61%			
Danaher Corp	DHR	706.34956	226.78	160,186	0.44%	0.56%	0.00%	6.95%	0.03%
Target Corp	TGT	452.80642	90.62	41,033		5.03%		-1.57%	
Williams-Sonoma Inc	WSM	119.38071	180.01	21,490	0.06%	1.47%	0.00%	4.68%	0.00%
Deere & Co	DE	270.32939	464.49	125,565	0.34%	1.40%	0.00%	14.47%	0.05%
Dominion Energy Inc	D	853.91328	62.77	53,600	0.15%	4.25%	0.01%	14.50%	0.02%
Trade Desk Inc/The	TTD	440.31893	39.56	17,419				16.73%	
Dover Corp	DOV	137.15322	185.28	25,412	0.07%	1.12%	0.00%	11.85%	0.01%
Alliant Energy Corp	LNT	257.05369	69.47	17,858	0.05%	2.92%	0.00%	6.43%	0.00%
Steel Dynamics Inc	STLD	146.03486	167.83	24,509	0.07%	1.19%	0.00%	16.25%	0.01%
Duke Energy Corp	DUK	778	123.94	96,425	0.26%	3.44%	0.01%	6.72%	0.02%
Regency Centers Corp	REG	182.90098	71.16	13,015	0.04%	4.24%	0.00%	5.57%	0.00%
Eaton Corp PLC	ETN	388.4	345.89	134,344		1.20%			
Ecolab Inc	ECL	283.23565	275.16	77,935	0.21%	0.94%	0.00%	12.80%	0.03%
Revvity Inc	RVTY	113.37562	104.41	11,838	0.03%	0.27%	0.00%	6.16%	0.00%
Dell Technologies Inc	DELL	336.90462	133.35	44,926	0.12%	1.57%	0.00%	16.44%	0.02%
Emerson Electric Co	EMR	561.8	133.38	74,933		1.66%			
EOG Resources Inc	EOG	542.59846	107.85	58,519	0.16%	3.78%	0.01%	0.29%	0.00%
Aon PLC	AON	214.93527	353.92	76,070	0.21%	0.84%	0.00%	10.35%	0.02%
Entergy Corp	ETR	446.5969	97.52	43,552	0.12%	2.63%	0.00%	9.05%	0.01%
Equifax Inc	EFX	122.39404	212.37	25,993	0.07%	0.94%	0.00%	10.74%	0.01%
EQT Corp	EQT	624.067	60.86	37,981		1.08%		42.28%	
IQVIA Holdings Inc	IQV	170.3	230.01	39,171				8.97%	
Gartner Inc	IT	72.07715	232.74	16,775					
FedEx Corp	FDX	235.95546	275.68	65,048	0.18%	2.10%	0.00%	9.35%	0.02%
Brown & Brown Inc	BRO	341.42079	80.43	27,460	0.07%	0.82%	0.00%	9.99%	0.01%
Ford Motor Co	F	3913.6465	13.28	51,973		4.52%			
NextEra Energy Inc	NEE	2082.6097	86.29	179,708	0.49%	2.63%	0.01%	7.85%	0.04%
Franklin Resources Inc	BEN	520.97058	22.59	11,769		5.67%			
Garmin Ltd	GRMN	192.33481	195.32	37,567	0.10%	1.84%	0.00%	10.79%	0.01%
Freeport-McMoRan Inc	FCX	1435.9307	42.98	61,716		1.40%		27.12%	
Expand Energy Corp	EXE	238.1697	121.93	29,040		1.89%		62.79%	
Dexcom Inc	DXCM	390.01627	63.47	24,754				22.55%	
General Dynamics Corp	GD	270.12044	341.63	92,281	0.25%	1.76%	0.00%	14.95%	0.04%
General Mills Inc	GIS	533.41642	47.35	25,257		5.15%		-2.94%	
Genuine Parts Co	GPC	139.1105	130.4	18,140		3.16%			
Atmos Energy Corp	ATO	161.69334	176.37	28,518	0.08%	2.27%	0.00%	7.98%	0.01%
WW Grainger Inc	GWW	47.54934	948.63	45,107	0.12%	0.95%	0.00%	4.61%	0.01%
Halliburton Co	HAL	841.62661	26.22	22,067		2.59%		-6.66%	
L3Harris Technologies Inc	LHX	187.05285	278.69	52,130	0.14%	1.72%	0.00%	13.68%	0.02%
Healthpeak Properties Inc	DOC	694.94982	18.26	12,690	0.03%	6.68%	0.00%	2.16%	0.00%
Insulet Corp	PODD	70.3469	327.19	23,017				32.05%	
Fortive Corp	FTV	317.61164	53.48	16,986		0.45%			
Hershey Co/The	HSY	148.17161	188.08	27,868		2.91%		-8.20%	
Synchrony Financial	SYF	360.1711	77.36	27,863	0.08%	1.55%	0.00%	15.68%	0.01%
Hormel Foods Corp	HRL	549.99843	23.21	12,765		5.04%		-1.07%	

Correction to Dr. Won's Adjustment to the Calculation of Market Return from Analysts' Long-Term Growth Estimates in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	**1.44%**		**1.44%**		**1.44%**	
		Won Proposed Weighting		**Won Proposed Weighting**		**FERC Method No Weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**11.77%**	**80.00%**	**11.77%**	**80.00%**	**11.77%**	**100.00%**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20.00%**	**5.28%**	**20.00%**	**n/a**	**n/a**
Total [4]	**10.18%**		**10.47%**		**11.77%**	
S&P 500 Estimated Required Market Return [5]	**11.69%**		**11.99%**		**13.29%**	

		[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Name	Ticker	Shares Outst'g	Price	Market Capitalization	Weight in Index	Estimated Dividend Yield	Cap-Weighted Dividend Yield	Bloomberg Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
Arthur J Gallagher & Co	AJG	256.8	247.62	63,589		1.05%			
Mondelez International Inc	MDLZ	1290.3585	57.57	74,286	0.20%	3.47%	0.01%	0.89%	0.00%
CenterPoint Energy Inc	CNP	652.86827	39.98	26,102	0.07%	2.20%	0.00%	8.95%	0.01%
Humana Inc	HUM	120.27307	245.77	29,560	0.08%	1.44%	0.00%	8.51%	0.01%
Willis Towers Watson PLC	WTW	95.74861	321	30,735	0.08%	1.15%	0.00%	10.80%	0.01%
Illinois Tool Works Inc	ITW	290.1	249.28	72,316	0.20%	2.58%	0.01%	2.15%	0.00%
CDW Corp/DE	CDW	130.19366	144.22	18,777	0.05%	1.75%	0.00%	7.66%	0.00%
Trane Technologies PLC	TT	221.739	421.48	93,459	0.25%	0.89%	0.00%	14.47%	0.04%
International Flavors & Fragrances Inc	IFF	256.09638	69.48	17,794	0.05%	2.30%	0.00%	4.29%	0.00%
Generac Holdings Inc	GNRC	58.68407	151.63	8,898				19.00%	
NXP Semiconductors NV	NXPI	251.67447	194.94	49,061	0.13%	2.08%	0.00%	4.27%	0.01%
Kellanova	K	347.93263	83.06	28,899	0.08%	2.79%	0.00%	1.95%	0.00%
Broadridge Financial Solutions Inc	BR	116.72756	228.09	26,624		1.71%			
Kimco Realty Corp	KIM	679.49863	20.66	14,038	0.04%	5.03%	0.00%	4.01%	0.00%
Oracle Corp	ORCL	2850.7926	201.95	575,718	1.57%	0.99%	0.02%	18.09%	0.28%
Kroger Co/The	KR	662.67821	67.28	44,585	0.12%	2.08%	0.00%	6.37%	0.01%
Lennar Corp	LEN	223.80353	131.3	29,385		1.52%		-9.37%	
Eli Lilly & Co	LLY	945.38376	1075.47	1,016,732	2.77%	0.56%	0.02%	20.00%	0.55%
Charter Communications Inc	CHTR	129.40937	200.12	25,897				9.01%	
Loews Corp	L	206.65957	107.87	22,292		0.23%			
Lowe's Cos Inc	LOW	560.95146	242.48	136,020	0.37%	1.98%	0.01%	4.92%	0.02%
Hubbell Inc	HUBB	53.14475	431.43	22,928		1.32%			
IDEX Corp	IEX	74.84944	173.93	13,019		1.63%			
Marsh & McLennan Cos Inc	MMC	489.90968	183.45	89,874	0.24%	1.96%	0.00%	6.06%	0.01%
Masco Corp	MAS	207.69562	64.87	13,473	0.04%	1.91%	0.00%	6.16%	0.00%
S&P Global Inc	SPGI	310	498.83	154,637		0.77%			
Medtronic PLC	MDT	1282.0142	105.33	135,035	0.37%	2.70%	0.01%	6.49%	0.02%
Viatris Inc	VTRS	1151.7699	10.69	12,312		4.49%		-2.05%	
CVS Health Corp	CVS	1269.4325	80.36	102,012	0.28%	3.31%	0.01%	9.25%	0.03%
DuPont de Nemours Inc	DD	418.97532	39.77	16,663		2.01%		-14.43%	
Micron Technology Inc	MU	1125.3498	236.48	266,123		0.19%		28.55%	
Motorola Solutions Inc	MSI	166.555	369.68	61,572	0.17%	1.31%	0.00%	9.07%	0.02%
Cboe Global Markets Inc	CBOE	104.64451	258.17	27,016	0.07%	1.12%	0.00%	16.26%	0.01%
Newmont Corp	NEM	1091.263	90.73	99,010		1.10%		23.72%	
NIKE Inc	NKE	1189.3136	64.22	76,378	0.21%	2.55%	0.01%	19.43%	0.04%
NiSource Inc	NI	477.19553	44.13	21,059	0.06%	2.54%	0.00%	8.27%	0.00%
Norfolk Southern Corp	NSC	224.38662	292.09	65,541		1.85%			
Principal Financial Group Inc	PFG	219.69384	84.82	18,634	0.05%	3.73%	0.00%	14.03%	0.01%
Eversource Energy	ES	375.18915	67.18	25,205	0.07%	4.48%	0.00%	4.70%	0.00%
Northrop Grumman Corp	NOC	142.72007	569.94	81,342	0.22%	1.62%	0.00%	5.99%	0.01%
Wells Fargo & Co	WFC	3139.0845	85.85	269,490	0.73%	2.10%	0.02%	15.67%	0.11%
Nucor Corp	NUE	228.85866	159.49	36,501	0.10%	1.38%	0.00%	17.05%	0.02%
Occidental Petroleum Corp	OXY	985.21043	42	41,379		2.29%			
Omnicom Group Inc	OMC	192.98357	71.62	13,821	0.04%	4.47%	0.00%	7.31%	0.00%
ONEOK Inc	OKE	629.23156	72.82	45,821	0.12%	5.66%	0.01%	3.06%	0.00%
Raymond James Financial Inc	RJF	196.67393	156.54	30,787	0.08%	1.28%	0.00%	16.32%	0.01%
PG&E Corp	PCG	2197.9074	16.12	35,430	0.10%	0.62%	0.00%	12.55%	0.01%
Parker-Hannifin Corp	PH	126.1867	861.7	108,735	0.30%	0.84%	0.00%	9.46%	0.03%
Rollins Inc	ROL	484.62881	61.48	29,795		1.19%			
PPL Corp	PPL	739.73918	36.9	27,296	0.07%	2.95%	0.00%	8.12%	0.01%
Aptiv PLC	APTV	216.07941	77.55	16,757				17.33%	
ConocoPhillips	COP	1235.718	88.69	109,596		3.79%		-10.54%	
PulteGroup Inc	PHM	194.91688	127.19	24,791		0.82%		-5.07%	
Pinnacle West Capital Corp	PNW	119.6904	90.86	10,875	0.03%	4.01%	0.00%	7.00%	0.00%
PNC Financial Services Group Inc/The	PNC	392.15845	190.72	74,792	0.20%	3.57%	0.01%	11.15%	0.02%
PPG Industries Inc	PPG	224.4	100.04	22,449	0.06%	2.84%	0.00%	5.91%	0.00%
DoorDash Inc	DASH	406.33462	198.37	80,605					
Progressive Corp/The	PGR	586.39724	228.79	134,162	0.36%	0.17%	0.00%	12.58%	0.05%
Veralto Corp	VLTO	248.29735	101.22	25,133		0.43%			
Public Service Enterprise Group Inc	PEG	499.15398	83.52	41,689	0.11%	3.02%	0.00%	8.35%	0.01%
Cooper Cos Inc/The	COO	198.80892	77.93	15,493				9.31%	
Edison International	EIX	384.78706	58.89	22,660	0.06%	5.62%	0.00%	5.10%	0.00%
SLB Ltd	SLB	1493.9236	36.24	54,140		3.15%		-3.83%	
Charles Schwab Corp/The	SCHW	1776.9368	92.73	164,775		1.16%		21.66%	
Sherwin-Williams Co/The	SHW	247.89351	343.69	85,199	0.23%	0.92%	0.00%	7.18%	0.02%
West Pharmaceutical Services Inc	WST	71.94341	277.25	19,946	0.05%	0.32%	0.00%	10.12%	0.01%
J M Smucker Co/The	SJM	106.69433	104.18	11,115	0.03%	4.22%	0.00%	2.19%	0.00%
Snap-on Inc	SNA	52.00756	340.05	17,685	0.05%	2.87%	0.00%	4.10%	0.00%
AMETEK Inc	AME	230.20387	197.89	45,555	0.12%	0.63%	0.00%	9.13%	0.01%
Uber Technologies Inc	UBER	2077.8304	87.54	181,893				-3.85%	

Correction to Dr. Won's Adjustment to the
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	**1.44%**		**1.44%**		**1.44%**	
		Won Proposed Weighting		**Won Proposed Weighting**		**FERC Method No Weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	11.77%	**80.00%**	**11.77%**	**80.00%**	**11.77%**	**100.00%**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20.00%**	**5.28%**	**20.00%**	**n/a**	**n/a**
Total [4]	**10.18%**		**10.47%**		**11.77%**	
S&P 500 Estimated Required Market Return [5]	**11.69%**		**11.99%**		**13.29%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
Southern Co/The	SO	1100.1936	91.12	100,250	0.27%	3.25%	0.01%	7.01%	0.02%
Truist Financial Corp	TFC	1279.2463	46.5	59,485	0.16%	4.47%	0.01%	11.73%	0.02%
Southwest Airlines Co	LUV	517.15508	34.81	18,002		2.07%		62.37%	
W R Berkley Corp	WRB	380.02117	77.69	29,524	0.08%	0.46%	0.00%	6.14%	0.00%
Stanley Black & Decker Inc	SWK	154.88496	70.69	10,949		4.70%			
Public Storage	PSA	175.46301	274.54	48,172	0.13%	4.37%	0.01%	3.01%	0.00%
Arista Networks Inc	ANET	1259.2851	130.68	164,563				20.08%	
Sysco Corp	SYY	478.86106	76.2	36,489		2.83%			
Corteva Inc	CTVA	683.01458	67.29	45,960	0.13%	1.07%	0.00%	15.70%	0.02%
Texas Instruments Inc	TXN	908.62302	168.27	152,894	0.42%	3.38%	0.01%	8.65%	0.04%
Textron Inc	TXT	176.22406	83.16	14,655	0.04%	0.10%	0.00%	10.03%	0.00%
Thermo Fisher Scientific Inc	TMO	375.70806	590.83	221,980	0.60%	0.29%	0.00%	7.82%	0.05%
TJX Cos Inc/The	TJX	1112.9388	151.92	169,078	0.46%	1.12%	0.01%	9.55%	0.04%
Globe Life Inc	GL	79.6058	134.73	10,725		0.80%			
Johnson Controls International plc	JCI	611.13566	116.31	71,081	0.19%	1.38%	0.00%	17.57%	0.03%
Ulta Beauty Inc	ULTA	44.83836	538.83	24,160				4.39%	
Union Pacific Corp	UNP	593.16089	231.83	137,512	0.37%	2.38%	0.01%	7.53%	0.03%
Keysight Technologies Inc	KEYS	171.2	197.95	33,889				13.32%	
UnitedHealth Group Inc	UNH	905.83862	329.77	298,718		2.68%		-18.25%	
Blackstone Inc	BX	738.45087	146.42	108,124		3.52%		24.20%	
Ventas Inc	VTR	469.73282	80.63	37,875	0.10%	2.38%	0.00%	11.40%	0.01%
Labcorp Holdings Inc	LH	82.9	268.78	22,282	0.06%	1.07%	0.00%	9.44%	0.01%
Vulcan Materials Co	VMC	132.13091	297.24	39,275	0.11%	0.66%	0.00%	14.51%	0.02%
Weyerhaeuser Co	WY	720.861	22.21	16,010		3.78%		-22.16%	
Williams Cos Inc/The	WMB	1221.2189	60.93	74,409	0.20%	3.28%	0.01%	17.57%	0.04%
Constellation Energy Corp	CEG	312.40558	364.36	113,828	0.31%	0.43%	0.00%	15.42%	0.05%
AppLovin Corp	APP	307.597	599.48	184,398				75.47%	
WEC Energy Group Inc	WEC	325.29425	112.07	36,456	0.10%	3.19%	0.00%	7.65%	0.01%
Adobe Inc	ADBE	418.6	320.13	134,006				14.13%	
Vistra Corp	VST	338.82549	178.86	60,602	0.16%	0.51%	0.00%	11.67%	0.02%
AES Corp/The	AES	712.12094	14.06	10,012	0.03%	5.01%	0.00%	11.17%	0.00%
Expeditors International of Washington Inc	EXPD	134.02093	146.13	19,584	0.05%	1.05%	0.00%	8.47%	0.00%
Amgen Inc	AMGN	538.48067	345.46	186,024	0.51%	2.76%	0.01%	5.12%	0.03%
Apple Inc	AAPL	14776.353	278.85	4,120,386	11.21%	0.37%	0.04%	13.33%	1.49%
Autodesk Inc	ADSK	212	303.34	64,308				15.94%	
Cintas Corp	CTAS	401.86668	186.02	74,755		0.97%			
Comcast Corp	CMCSA	3634.4501	26.69	97,003		4.95%			
Molson Coors Beverage Co	TAP	185.29788	46.51	8,618		4.04%		-1.02%	
KLA Corp	KLAC	131.39234	1175.47	154,448	0.42%	0.65%	0.00%	11.70%	0.05%
Marriott International Inc/MD	MAR	268.3518	304.79	81,791	0.22%	0.88%	0.00%	10.30%	0.02%
McCormick & Co Inc/MD	MKC	253.2399	67.48	17,089	0.05%	2.85%	0.00%	4.54%	0.00%
PACCAR Inc	PCAR	525.20436	105.42	55,367		1.25%		-3.95%	
Costco Wholesale Corp	COST	443.17918	913.59	404,884	1.10%	0.57%	0.01%	6.75%	0.07%
Stryker Corp	SYK	382.42365	371.18	141,948	0.39%	0.91%	0.00%	10.42%	0.04%
Tyson Foods Inc	TSN	283.04508	57.54	16,286	0.04%	3.55%	0.00%	11.30%	0.01%
Lamb Weston Holdings Inc	LW	139.35248	59.06	8,230		2.51%		-2.55%	
Applied Materials Inc	AMAT	796.64243	252.25	200,953	0.55%	0.73%	0.00%	9.83%	0.05%
Cardinal Health Inc	CAH	237.59504	212.26	50,432	0.14%	0.96%	0.00%	14.90%	0.02%
Cincinnati Financial Corp	CINF	156.01851	167.59	26,147	0.07%	2.08%	0.00%	5.30%	0.00%
DR Horton Inc	DHI	292.06054	159.01	46,441	0.13%	1.13%	0.00%	10.70%	0.01%
Electronic Arts Inc	EA	250.10613	202.03	50,529	0.14%	0.38%	0.00%	13.01%	0.02%
Erie Indemnity Co	ERIE	46.18907	295.49	13,648		1.85%			
Fair Isaac Corp	FICO	23.70905	1805.83	42,815					
Fastenal Co	FAST	1148.0357	40.4	46,381	0.13%	2.18%	0.00%	10.79%	0.01%
M&T Bank Corp	MTB	153.69078	188.72	29,005	0.08%	3.18%	0.00%	12.56%	0.01%
Xcel Energy Inc	XEL	591.53977	82.11	48,571		2.78%			
Fiserv Inc	FISV	537.85189	61.47	33,062					
Fifth Third Bancorp	FITB	661.01177	43.46	28,728		3.68%			
Gilead Sciences Inc	GILD	1240.6796	125.84	156,127		2.51%		29.92%	
Hasbro Inc	HAS	140.33702	82.6	11,592	0.03%	3.39%	0.00%	10.25%	0.00%
Huntington Bancshares Inc/OH	HBAN	1565.6203	16.3	25,520	0.07%	3.80%	0.00%	17.74%	0.01%
Welltower Inc	WELL	686.32804	208.22	142,907		1.42%		21.25%	
Biogen Inc	BIIB	146.70227	182.09	26,713				0.86%	
Northern Trust Corp	NTRS	189.11737	131.34	24,839	0.07%	2.44%	0.00%	10.71%	0.01%
Packaging Corp of America	PKG	89.97707	204.07	18,362	0.05%	2.45%	0.00%	13.74%	0.01%
Paychex Inc	PAYX	359.89414	111.69	40,197		3.87%			
QUALCOMM Inc	QCOM	1071	168.09	180,024	0.49%	2.12%	0.01%	4.66%	0.02%
Ross Stores Inc	ROST	325.22627	176.36	57,357	0.16%	0.92%	0.00%	7.04%	0.01%
IDEXX Laboratories Inc	IDXX	79.85133	752.88	60,118				14.93%	
Starbucks Corp	SBUX	1137.1	87.11	99,053		2.85%		20.21%	

**Correction to Dr. Won's Adjustment to the
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony**

Estimated Weighted Average Dividend Yield [1]	**1.44%**		**1.44%**		**1.44%**	
		Won Proposed Weighting		**Won Proposed Weighting**		**FERC Method No Weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**11.77%**	**80.00%**	**11.77%**	**80.00%**	**11.77%**	**100.00%**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20.00%**	**5.28%**	**20.00%**	**n/a**	**n/a**
Total [4]	**10.18%**		**10.47%**		**11.77%**	
S&P 500 Estimated Required Market Return [5]	**11.69%**		**11.99%**		**13.29%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
KeyCorp	KEY	1092.9196	18.1776	19,867		4.51%		22.71%	
Fox Corp	FOXA	208.3617	65.5	13,648		0.85%		-0.63%	
Fox Corp	FOX	235.58103	58.26	13,725		0.96%		-0.63%	
State Street Corp	STT	279.31244	119.02	33,244	0.09%	2.82%	0.00%	10.63%	0.01%
Norwegian Cruise Line Holdings Ltd	NCLH	455.25749	18.46	8,404				16.59%	
US Bancorp	USB	1554.4341	49.05	76,245	0.21%	4.24%	0.01%	11.65%	0.02%
A O Smith Corp	AOS	113.37212	65.98	7,480		2.18%			
Gen Digital Inc	GEN	616.71611	26.37	16,263	0.04%	1.90%	0.00%	13.08%	0.01%
T Rowe Price Group Inc	TROW	218.237	102.38	22,343	0.06%	4.96%	0.00%	4.02%	0.00%
Waste Management Inc	WM	402.86705	217.87	87,773	0.24%	1.51%	0.00%	10.33%	0.02%
Constellation Brands Inc	STZ	175.01334	136.38	23,868		2.99%		-2.10%	
Invesco Ltd	IVZ	445.0929	24.45	10,883	0.03%	3.44%	0.00%	19.16%	0.01%
Intuit Inc	INTU	278.27408	634.08	176,448	0.48%	0.76%	0.00%	14.47%	0.07%
Morgan Stanley	MS	1589.3093	169.66	269,642	0.73%	2.36%	0.02%	12.46%	0.09%
Microchip Technology Inc	MCHP	540.44683	53.58	28,957		3.40%		27.10%	
Crowdstrike Holdings Inc	CRWD	250.95514	509.16	127,776				23.87%	
Chubb Ltd	CB	393.55086	296.18	116,562	0.32%	1.31%	0.00%	3.70%	0.01%
Hologic Inc	HOLX	222.90523	74.97	16,711				8.55%	
Citizens Financial Group Inc	CFG	429.48619	54.1	23,235		3.40%		24.41%	
Jabil Inc	JBL	106.83734	210.71	22,512	0.06%	0.15%	0.00%	13.93%	0.01%
O'Reilly Automotive Inc	ORLY	844.10409	101.7	85,845				10.54%	
Allstate Corp/The	ALL	261.68171	211.9801	55,471	0.15%	1.89%	0.00%	18.89%	0.03%
Equity Residential	EQR	380.47472	61.75	23,494	0.06%	4.49%	0.00%	3.40%	0.00%
Keurig Dr Pepper Inc	KDP	1358.5831	27.9	37,904	0.10%	3.30%	0.00%	6.51%	0.01%
Host Hotels & Resorts Inc	HST	687.68948	17.63	12,124		4.54%		-0.96%	
Incyte Corp	INCY	196.3227	104.46	20,508					
Simon Property Group Inc	SPG	326.46206	186.32	60,826	0.17%	4.72%	0.01%	1.62%	0.00%
AvalonBay Communities Inc	AVB	141.59495	181.94	25,762	0.07%	3.85%	0.00%	3.79%	0.00%
Prudential Financial Inc	PRU	350	108.25	37,888	0.10%	4.99%	0.01%	8.46%	0.01%
United Parcel Service Inc	UPS	738.99005	95.79	70,788	0.19%	6.85%	0.01%	1.19%	0.00%
STERIS PLC	STE	98.14701	266.28	26,135		0.95%			
McKesson Corp	MCK	123.42665	880.3	108,652	0.30%	0.37%	0.00%	15.90%	0.05%
Lockheed Martin Corp	LMT	231.3978	454.41	105,149	0.29%	3.04%	0.01%	13.13%	0.04%
Cencora Inc	COR	193.99344	368.93	71,570	0.19%	0.65%	0.00%	9.17%	0.02%
Capital One Financial Corp	COF	635.73361	219.07	139,270		1.46%		22.97%	
Campbell's Company/The	CPB	297.70305	30.48	9,074		5.12%		-2.52%	
Waters Corp	WAT	59.53474	403.42	24,018				8.33%	
Nordson Corp	NDSN	56.1863	237.66	13,353		1.38%			
Dollar Tree Inc	DLTR	203.96784	110.81	22,602				10.33%	
Darden Restaurants Inc	DRI	116.31376	179.58	20,888	0.06%	3.34%	0.00%	10.59%	0.01%
Evergy Inc	EVRG	229.74594	77.65	17,840	0.05%	3.58%	0.00%	6.59%	0.00%
Match Group Inc	MTCH	236.07019	33.31	7,863	0.02%	2.28%	0.00%	15.49%	0.00%
NVR Inc	NVR	2.83943	7507.29	21,316				1.76%	
NetApp Inc	NTAP	198.06035	111.56	22,096	0.06%	1.86%	0.00%	7.14%	0.00%
Old Dominion Freight Line Inc	ODFL	209.09844	135.29	28,289	0.08%	0.83%	0.00%	3.92%	0.00%
DaVita Inc	DVA	70.6	119.68	8,449				10.54%	
Hartford Insurance Group Inc/The	HIG	278.65029	136.4299	38,016	0.10%	1.76%	0.00%	8.62%	0.01%
Iron Mountain Inc	IRM	295.58949	86.35	25,524		4.00%			
Estee Lauder Cos Inc/The	EL	234.81821	94.07	22,089		1.49%		33.46%	
Cadence Design Systems Inc	CDNS	272.201	311.84	84,883				14.87%	
Tyler Technologies Inc	TYL	43.02773	469.62	20,207					
Universal Health Services Inc	UHS	55.2337	243.43	13,446	0.04%	0.33%	0.00%	12.31%	0.00%
Skyworks Solutions Inc	SWKS	148.67977	65.95	9,805		4.31%		-4.84%	
Quest Diagnostics Inc	DGX	111.24236	189.18	21,045	0.06%	1.69%	0.00%	1.06%	0.00%
Rockwell Automation Inc	ROK	112.27357	395.86	44,445	0.12%	1.39%	0.00%	15.87%	0.02%
Kraft Heinz Co/The	KHC	1183.6556	25.51	30,195		6.27%		-5.53%	
American Tower Corp	AMT	468.14662	181.27	84,861		3.75%		23.18%	
Regeneron Pharmaceuticals Inc	REGN	103.28232	780.19	80,580	0.22%	0.45%	0.00%	8.68%	0.02%
Amazon.com Inc	AMZN	10690.216	233.22	2,493,172				18.83%	
Jack Henry & Associates Inc	JKHY	72.37713	173.899	12,586		1.33%			
Ralph Lauren Corp	RL	38.75938	367.33	14,237	0.04%	0.99%	0.00%	15.52%	0.01%
BXP Inc	BXP	158.46869	72.36	11,467	0.03%	3.87%	0.00%	1.55%	0.00%
Amphenol Corp	APH	1224.0555	140.9	172,469		0.71%		38.67%	
Howmet Aerospace Inc	HWM	402.06226	204.59	82,258		0.23%		20.01%	
Valero Energy Corp	VLO	305.00954	176.76	53,913	0.15%	2.56%	0.00%	19.41%	0.03%
Synopsys Inc	SNPS	185.74867	418.01	77,645				9.76%	
CH Robinson Worldwide Inc	CHRW	118.13718	158.87	18,768	0.05%	1.59%	0.00%	15.78%	0.01%
Accenture PLC	ACN	620.13889	250	155,035		2.61%			
TransDigm Group Inc	TDG	56.31858	1360.17	76,603				11.66%	
Yum! Brands Inc	YUM	277.65283	152.4879	42,339	0.12%	1.86%	0.00%	8.81%	0.01%

Correction to Dr. Won's Adjustment to the Calculation of Market Return from Analysts' Long-Term Growth Estimates in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	1.44%		1.44%		1.44%	
		Won Proposed Weighting		Won Proposed Weighting		FERC Method No Weighting
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	11.77%	80.00%	11.77%	80.00%	11.77%	100.00%
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	3.80%	20.00%	5.28%	20.00%	n/a	n/a
Total [4]	10.18%		10.47%		11.77%	
S&P 500 Estimated Required Market Return [5]	11.69%		11.99%		13.29%	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
Prologis Inc	PLD	926.175	128.53	119,041	0.32%	3.14%	0.01%	5.61%	0.02%
FirstEnergy Corp	FE	577.12618	47.72	27,540	0.07%	3.73%	0.00%	3.35%	0.00%
VeriSign Inc	VRSN	92.7	251.99	23,359		1.22%			
Quanta Services Inc	PWR	149.11589	464.88	69,321	0.19%	0.09%	0.00%	18.14%	0.03%
Henry Schein Inc	HSIC	117.72481	74.57	8,779				8.41%	
Ameren Corp	AEE	270.5	106.35	28,768	0.08%	2.67%	0.00%	8.47%	0.01%
FactSet Research Systems Inc	FDS	37.41994	277.27	10,375		1.59%			
NVIDIA Corp	NVDA	24300	177	4,301,100		0.02%		48.04%	
Cognizant Technology Solutions Corp	CTSH	482.64647	77.71	37,506		1.60%			
Intuitive Surgical Inc	ISRG	354.49607	573.48	203,296				14.54%	
Take-Two Interactive Software Inc	TTWO	184.77883	246.07	45,469				59.16%	
Republic Services Inc	RSG	309.5636	217.06	67,194	0.18%	1.15%	0.00%	9.49%	0.02%
eBay Inc	EBAY	452	82.79	37,421	0.10%	1.40%	0.00%	9.97%	0.01%
Goldman Sachs Group Inc/The	GS	299.92851	821.965	246,531	0.67%	1.95%	0.01%	15.51%	0.10%
SBA Communications Corp	SBAC	106.54687	194.27	20,699	0.06%	2.29%	0.00%	9.46%	0.01%
Sempra	SRE	652.68152	94.72	61,822	0.17%	2.72%	0.00%	8.07%	0.01%
Moody's Corp	MCO	178.4	490.78	87,555		0.77%			
ON Semiconductor Corp	ON	402.37841	50.24	20,215				-3.56%	
Booking Holdings Inc	BKNG	32.23382	4914.69	158,419	0.43%	0.78%	0.00%	17.83%	0.08%
F5 Inc	FFIV	58.08961	239.16	13,893				2.69%	
Akamai Technologies Inc	AKAM	143.86524	89.52	12,879				5.96%	
Charles River Laboratories International Inc	CRL	49.21547	178.14	8,767				3.82%	
Devon Energy Corp	DVN	627.3	37.06	23,248	0.06%	2.59%	0.00%	2.43%	0.00%
Bio-Techne Corp	TECH	155.8127	64.51	10,051		0.50%			
Alphabet Inc	GOOGL	5818	320.18	1,862,807	5.07%	0.26%	0.01%	15.88%	0.80%
Allegion plc	ALLE	86.03195	166.03	14,284	0.04%	1.23%	0.00%	6.24%	0.00%
Netflix Inc	NFLX	4237.3233	107.58	455,851				26.73%	
Warner Bros Discovery Inc	WBD	2477.9745	24	59,471				40.66%	
Agilent Technologies Inc	A	283.05438	153.5	43,449	0.12%	0.66%	0.00%	5.81%	0.01%
Trimble Inc	TRMB	237.92096	81.42	19,372					
Elevance Health Inc	ELV	222.23876	338.26	75,174	0.20%	2.02%	0.00%	2.95%	0.01%
CME Group Inc	CME	360.59665	281.46	101,494	0.28%	1.78%	0.00%	3.88%	0.01%
DTE Energy Co	DTE	207.68301	137.03	28,459	0.08%	3.18%	0.00%	6.89%	0.01%
Nasdaq Inc	NDAQ	570.99543	90.92	51,915	0.14%	1.19%	0.00%	16.51%	0.02%
Philip Morris International Inc	PM	1556.6388	157.48	245,139	0.67%	3.73%	0.02%	11.14%	0.07%
Ingersoll Rand Inc	IR	395.1104	80.34	31,743		0.10%			
Salesforce Inc	CRM	952	230.54	219,474	0.60%	0.72%	0.00%	14.31%	0.09%
Roper Technologies Inc	ROP	107.63743	446.22	48,030		0.82%			
Huntington Ingalls Industries Inc	HII	39.24143	313.62	12,307	0.03%	1.76%	0.00%	16.46%	0.01%
MetLife Inc	MET	658.89166	76.56	50,445	0.14%	2.96%	0.00%	12.00%	0.02%
Tapestry Inc	TPR	204.64975	109.28	22,364	0.06%	1.46%	0.00%	8.71%	0.01%
CSX Corp	CSX	1862.137	35.36	65,845	0.18%	1.47%	0.00%	6.33%	0.01%
Edwards Lifesciences Corp	EW	580.3	86.67	50,295				8.69%	
Ameriprise Financial Inc	AMP	92.90571	455.74	42,341	0.12%	1.40%	0.00%	10.30%	0.01%
Zebra Technologies Corp	ZBRA	50.66024	252.75	12,804					
Zimmer Biomet Holdings Inc	ZBH	198.18156	97.52	19,327	0.05%	0.98%	0.00%	4.20%	0.00%
Camden Property Trust	CPT	106.39533	106.34	11,314	0.03%	3.95%	0.00%	1.82%	0.00%
CBRE Group Inc	CBRE	297.593	161.83	48,159					
Mastercard Inc	MA	891.25818	550.53	490,664	1.33%	0.55%	0.01%	14.89%	0.20%
Datadog Inc	DDOG	325.44337	160.01	52,074				11.55%	
Intercontinental Exchange Inc	ICE	570.17859	157.3	89,689	0.24%	1.22%	0.00%	12.79%	0.03%
Fidelity National Information Services Inc	FIS	517.85076	65.77	34,059		2.43%			
Smurfit WestRock PLC	SW	522.18633	35.69	18,637		4.83%		66.90%	
Chipotle Mexican Grill Inc	CMG	1322.278	34.52	45,645				8.23%	
Wynn Resorts Ltd	WYNN	103.97448	128.68	13,379	0.04%	0.78%	0.00%	3.36%	0.00%
Live Nation Entertainment Inc	LYV	234.74125	131.45	30,857				9.42%	
Assurant Inc	AIZ	50.08111	227.28	11,382		1.55%			
NRG Energy Inc	NRG	191.63941	169.49	32,481		1.04%			
Monster Beverage Corp	MNST	977.02122	74.99	73,267				15.80%	
Regions Financial Corp	RF	876.8765	25.185	22,084	0.06%	4.21%	0.00%	9.55%	0.01%
Baker Hughes Co	BKR	986.77388	50.2	49,536	0.13%	1.83%	0.00%	11.14%	0.02%
Mosaic Co/The	MOS	317.40788	24.49	7,773		3.59%		20.91%	
Expedia Group Inc	EXPE	117.00906	255.69	29,918		0.63%		21.25%	
Kimberly-Clark Corp	KMB	331.85842	109.12	36,212	0.10%	4.62%	0.00%	3.40%	0.00%
CF Industries Holdings Inc	CF	155.97464	78.7	12,275		2.54%		-5.82%	
APA Corp	APA	354.66925	24.97	8,856		4.00%		-20.28%	
Leidos Holdings Inc	LDOS	127.85517	191.1	24,433	0.07%	0.90%	0.00%	11.62%	0.01%
Alphabet Inc	GOOG	5407	320.12	1,730,889	4.71%	0.26%	0.01%	15.88%	0.75%
TKO Group Holdings Inc	TKO	78.92236	193.89	15,302		1.57%			
First Solar Inc	FSLR	107.30814	272.92	29,287				42.42%	

Correction to Dr. Won's Adjustment to the
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony

Estimated Weighted Average Dividend Yield [1]	**1.44%**		**1.44%**		**1.44%**	
		Won Proposed Weighting		**Won Proposed Weighting**		**FERC Method No Weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	**11.77%**	**80.00%**	**11.77%**	**80.00%**	**11.77%**	**100.00%**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20.00%**	**5.28%**	**20.00%**	**n/a**	**n/a**
Total [4]	**10.18%**		**10.47%**		**11.77%**	
S&P 500 Estimated Required Market Return [5]	**11.69%**		**11.99%**		**13.29%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
Visa Inc	V	1687.6298	334.44	564,411	1.54%	0.80%	0.01%	16.33%	0.25%
Mid-America Apartment Communities Inc	MAA	117.08174	135.89	15,910		4.46%		-0.23%	
Xylem Inc/NY	XYL	243.46906	140.67	34,249		1.14%			
Marathon Petroleum Corp	MPC	300.60248	193.73	58,236	0.16%	2.06%	0.00%	17.86%	0.03%
Tractor Supply Co	TSCO	528.4036	54.78	28,946	0.08%	1.68%	0.00%	8.42%	0.01%
Advanced Micro Devices Inc	AMD	1628.0415	217.53	354,148				42.01%	
ResMed Inc	RMD	145.96629	255.83	37,343	0.10%	0.94%	0.00%	8.39%	0.01%
Mettler-Toledo International Inc	MTD	20.42845	1476.72	30,167				7.34%	
VICI Properties Inc	VICI	1068.8114	28.82	30,803	0.08%	6.25%	0.01%	4.24%	0.00%
Copart Inc	CPRT	968.01768	38.98	37,733					
Jacobs Solutions Inc	J	118.74916	134.4852	15,970	0.04%	0.95%	0.00%	13.06%	0.01%
Albemarle Corp	ALB	117.69754	129.99	15,300		1.25%		74.58%	
Fortinet Inc	FTNT	743.6481	81.13	60,332				10.53%	
Moderna Inc	MRNA	390.67951	25.98	10,150				17.47%	
Essex Property Trust Inc	ESS	64.40402	263.62	16,978	0.05%	3.90%	0.00%	2.44%	0.00%
CoStar Group Inc	CSGP	423.82279	68.8	29,159				40.85%	
Realty Income Corp	O	919.90577	57.61	52,996	0.14%	5.61%	0.01%	3.74%	0.01%
Westinghouse Air Brake Technologies Corp	WAB	170.95719	208.55	35,653	0.10%	0.48%	0.00%	14.51%	0.01%
Palantir Technologies Inc	PLTR	2284.334	168.45	384,796				48.77%	
Pool Corp	POOL	37.24948	243.6	9,074	0.02%	2.05%	0.00%	4.79%	0.00%
Western Digital Corp	WDC	341.89928	163.33	55,842		0.31%		22.71%	
PepsiCo Inc	PEP	1367.3401	148.74	203,378	0.55%	3.83%	0.02%	3.70%	0.02%
TE Connectivity PLC	TEL	294.18925	226.15	66,531	0.18%	1.26%	0.00%	13.68%	0.02%
Diamondback Energy Inc	FANG	286.52561	152.59	43,721	0.12%	2.62%	0.00%	1.13%	0.00%
Palo Alto Networks Inc	PANW	697	190.13	132,521				12.77%	
ServiceNow Inc	NOW	207.48151	812.41	168,560				25.00%	
Church & Dwight Co Inc	CHD	240.13007	85.16	20,449	0.06%	1.39%	0.00%	5.85%	0.00%
Federal Realty Investment Trust	FRT	86.27003	98.73	8,517	0.02%	4.58%	0.00%	4.78%	0.00%
MGM Resorts International	MGM	273.50644	35.29	9,652				6.33%	
American Electric Power Co Inc	AEP	534.09453	123.77	66,105	0.18%	3.07%	0.01%	6.88%	0.01%
Invitation Homes Inc	INVH	613.02059	28.2	17,287	0.05%	4.11%	0.00%	3.76%	0.00%
PTC Inc	PTC	119.92595	175.43	21,039				6.41%	
JB Hunt Transport Services Inc	JBHT	95.21835	173.96	16,564	0.05%	1.01%	0.00%	14.90%	0.01%
Lam Research Corp	LRCX	1256.03	156	195,941	0.53%	0.67%	0.00%	15.48%	0.08%
Mohawk Industries Inc	MHK	61.82136	115.9	7,165				2.23%	
GE HealthCare Technologies Inc	GEHC	455.52159	79.99	36,437	0.10%	0.18%	0.00%	6.48%	0.01%
Pentair PLC	PNR	163.64188	105.24	17,222	0.05%	0.95%	0.00%	9.34%	0.00%
Vertex Pharmaceuticals Inc	VRTX	253.71883	433.61	110,015					
Amcor PLC	AMCR	2308.3599	8.52	19,667	0.05%	6.10%	0.00%	12.62%	0.01%
Meta Platforms Inc	META	2177.8893	647.95	1,411,163	3.84%	0.32%	0.01%	14.08%	0.54%
T-Mobile US Inc	TMUS	1118.5066	209.01	233,779		1.95%			
United Rentals Inc	URI	63.63015	815.18	51,870	0.14%	0.88%	0.00%	8.48%	0.01%
Alexandria Real Estate Equities Inc	ARE	172.82506	53.67	9,276		9.84%		-12.43%	
Honeywell International Inc	HON	634.88721	192.19	122,019	0.33%	2.48%	0.01%	5.09%	0.02%
Robinhood Markets Inc	HOOD	786.35603	128.49	101,039				21.67%	
Delta Air Lines Inc	DAL	652.96277	64.1	41,855	0.11%	1.17%	0.00%	7.72%	0.01%
United Airlines Holdings Inc	UAL	327.70387	101.96	33,413				11.76%	
Seagate Technology Holdings PLC	STX	213.55811	276.69	59,089		1.07%		24.58%	
News Corp	NWS	187.70971	29.43	5,524		0.68%			
Centene Corp	CNC	491.518	39.34	19,336				-17.68%	
Block Inc	XYZ	547.667	66.8	36,584				29.65%	
Apollo Global Management Inc	APO	580.42257	131.85	76,529	0.21%	1.55%	0.00%	13.01%	0.03%
Martin Marietta Materials Inc	MLM	60.30714	622.41	37,536		0.53%		-9.33%	
Teradyne Inc	TER	156.6083	181.89	28,485		0.26%		27.28%	
PayPal Holdings Inc	PYPL	935.65195	62.69	58,656	0.16%	0.89%	0.00%	14.22%	0.02%
Tesla Inc	TSLA	3325.8192	430.17	1,430,668					
Blackrock Inc	BLK	155.15091	1047.3	162,490	0.44%	1.99%	0.01%	14.53%	0.06%
KKR & Co Inc	KKR	891.35341	122.31	109,021		0.61%			
Arch Capital Group Ltd	ACGL	362.62594	93.92	34,058				4.70%	
Dow Inc	DOW	705.76446	23.85	16,832		5.87%		-5.53%	
Everest Group Ltd	EG	41.97806	314.29	13,193		2.55%		25.35%	
Teledyne Technologies Inc	TDY	46.95099	499.52	23,453				9.85%	
Domino's Pizza Inc	DPZ	33.78622	419.63	14,178	0.04%	1.66%	0.00%	10.59%	0.00%
GE Vernova Inc	GEV	271.32046	599.77	162,730		0.17%		104.10%	
News Corp	NWSA	374.12973	25.68	9,608		0.78%			
Exelon Corp	EXC	1009.5356	47.12	47,569	0.13%	3.40%	0.00%	6.74%	0.01%
Global Payments Inc	GPN	236.74372	75.76	17,936		1.32%			
Crown Castle Inc	CCI	435.47901	91.28	39,751		4.66%		32.91%	
Align Technology Inc	ALGN	71.75	147.19	10,561				10.05%	
Kenvue Inc	KVUE	1915.8022	17.35	33,239		4.78%			

**Correction to Dr. Won's Adjustment to the
Calculation of Market Return from Analysts' Long-Term Growth Estimates
in Bulkley Direct Testimony**

Estimated Weighted Average Dividend Yield [1]	**1.44%**		**1.44%**		**1.44%**	
		Won Proposed Weighting		**Won Proposed Weighting**		**FERC Method No Weighting**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 1 [2]	11.77%	**80.00%**	**11.77%**	**80.00%**	**11.77%**	**100.00%**
Estimated Wgtd. Avg Long-Term Gwth Rate - Step 2 [3]	**3.80%**	**20.00%**	5.28%	**20.00%**	n/a	n/a
Total [4]	**10.18%**		**10.47%**		**11.77%**	
S&P 500 Estimated Required Market Return [5]	**11.69%**		**11.99%**		**13.29%**	

Name	Ticker	[6] Shares Outst'g	[7] Price	[8] Market Capitalization	[9] Weight in Index	[10] Estimated Dividend Yield	[11] Cap-Weighted Dividend Yield	[12] Bloomberg Long-Term Growth Est.	[13] Cap-Weighted Long-Term Growth Est.
Targa Resources Corp	TRGP	214.65856	175.31	37,632		2.28%		20.73%	
Bunge Global SA	BG	193.36105	96.07	18,576	0.05%	2.91%	0.00%	1.57%	0.00%
LKQ Corp	LKQ	255.96601	29.69	7,600		4.04%			
Deckers Outdoor Corp	DECK	145.74483	88.03	12,830				3.46%	
Workday Inc	WDAY	213	215.62	45,927					
Sandisk Corp/DE	SNDK	146.55318	223.28	32,722				93.06%	
Zoetis Inc	ZTS	440.69321	128.18	56,488	0.15%	1.56%	0.00%	8.20%	0.01%
Paramount Skydance Corp	PSKY	1071.667	16.02	17,168		1.25%			
Coinbase Global Inc	COIN	228.16247	272.82	62,247				-3.82%	
Equinix Inc	EQIX	98.18608	753.31	73,965	0.20%	2.49%	0.01%	19.85%	0.04%
Digital Realty Trust Inc	DLR	343.50155	160.12	55,001	0.15%	3.05%	0.00%	8.54%	0.01%
Molina Healthcare Inc	MOH	51.4	148.26	7,621				-9.14%	
Las Vegas Sands Corp	LVS	676.13449	68.16	46,085	0.13%	1.47%	0.00%	12.92%	0.02%

Notes:
[1] Equals sum of Col. [11]
[2] Equals sum of Col. [13]
[3] Dr. Won's proposed GDP growth rate / GDP growth based on Morningstar methodology / No GDP growth rate per FERC approach
[4] Equals ([2] x 80%) + ([3] x 20%)
[5] Equals ([1] x (1 + (0.5 x [4]))) + [4]
[6] Bloomberg Professional as of November 28, 2025
[7] Bloomberg Professional as of November 28, 2025
[8] Equals [6] x [7]
[9] Equals weight in S&P 500 based on market capitalization [6] if growth rate >0% and ≤20% and dividend yield > 0%
[10] Source: Bloomberg Professional, as of November 28, 2025
[11] Equals [9] x [10]
[12] Bloomberg Professional, as of November 28, 2025
[13] Equals [9] x [12]

Summary of CAPM Results
Based on Correction of Dr. Won's Adjustment to
My Forward-Looking Market Return

Assumed Market Return of: 11.69% (Schedule 2SR, page 17)

Assumes:

- Correction to Dr. Won's adjustment to my market return
- Dr. Won's as-filed two-step DCF approach to calculating the market return
- Dr. Won's as-filed GDP growth rate for second step of two-step DCF approach

	30-Year Treasury Bond Yield		
	Current 30-Day Avg	Near-Term Projected	Long-Term Projected
CAPM:			
Current Value Line Beta	9.93%	9.92%	9.92%
Long-term Avg. Value Line Beta	10.08%	10.07%	10.07%
Average Cost of Equity		**10.00%**	
ECAPM:			
Current Value Line Beta	10.37%	10.36%	10.36%
Long-term Avg. Value Line Beta	10.48%	10.47%	10.47%
Average Cost of Equity		**10.42%**	

Summary of CAPM Results
Based on Correction of Dr. Won's Adjustment to
My Forward-Looking Market Return

Assumed Market Return of: 11.99% (Schedule 2SR, page 17)

Assumes:

- Correction to Dr. Won's adjustment to my market return
- Dr. Won's as-filed two-step DCF approach to calculating the market return
- GDP growth rate per *Morningstar* approach for second step of two-step DCF approach

	30-Year Treasury Bond Yield		
	Current 30-Day Avg	Near-Term Projected	Longer-Term Projected
CAPM:			
Current Value Line Beta	10.15%	10.14%	10.14%
Long-term Avg. Value Line Beta	10.31%	10.30%	10.30%
Average Cost of Equity		**10.22%**	
ECAPM:			
Current Value Line Beta	10.61%	10.60%	10.60%
Long-term Avg. Value Line Beta	10.73%	10.72%	10.72%
Average Cost of Equity		**10.66%**	

Summary of CAPM Results
Based on Correction of Dr. Won's Adjustment to
My Forward-Looking Market Return

Assumed Market Return of: 13.29% (Schedule 2SR, page 17)

Assumes:

- Correction to Dr. Won's adjustment to my market return
- Constant growth DCF approach to calculating market return consistent with FERC approach

	30-Year Treasury Bond Yield		
	Current 30-Day Avg	Near-Term Projected	Longer-Term Projected
CAPM:			
Current Value Line Beta	11.13%	11.12%	11.12%
Long-term Avg. Value Line Beta	11.32%	11.31%	11.31%
Average Cost of Equity		**11.22%**	
ECAPM:			
Current Value Line Beta	11.67%	11.66%	11.66%
Long-term Avg. Value Line Beta	11.81%	11.80%	11.80%
Average Cost of Equity		**11.74%**	

CAPITAL ASSET PRICING MODEL
CURRENT RISK FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.66%	0.75	11.69%	7.03%	9.93%	10.37%
Ameren Corporation	AEE	4.66%	0.75	11.69%	7.03%	9.93%	10.37%
American Electric Power Company, Inc.	AEP	4.66%	0.65	11.69%	7.03%	9.23%	9.84%
Avista Corporation	AVA	4.66%	0.75	11.69%	7.03%	9.93%	10.37%
CMS Energy Corporation	CMS	4.66%	0.70	11.69%	7.03%	9.58%	10.11%
Dominion Resources, Inc.	D	4.66%	0.80	11.69%	7.03%	10.28%	10.63%
DTE Energy Company	DTE	4.66%	0.80	11.69%	7.03%	10.28%	10.63%
Entergy Corporation	ETR	4.66%	0.75	11.69%	7.03%	9.93%	10.37%
IDACORP, Inc.	IDA	4.66%	0.65	11.69%	7.03%	9.23%	9.84%
NextEra Energy, Inc.	NEE	4.66%	0.90	11.69%	7.03%	10.99%	11.16%
OGE Energy Corporation	OGE	4.66%	0.85	11.69%	7.03%	10.63%	10.90%
Pinnacle West Capital Corporation	PNW	4.66%	0.75	11.69%	7.03%	9.93%	10.37%
Portland General Electric Company	POR	4.66%	0.75	11.69%	7.03%	9.93%	10.37%
PPL Corporation	PPL	4.66%	0.80	11.69%	7.03%	10.28%	10.63%
Southern Company	SO	4.66%	0.65	11.69%	7.03%	9.23%	9.84%
Xcel Energy Inc.	XEL	4.66%	0.70	11.69%	7.03%	9.58%	10.11%
Mean						9.93%	10.37%
Median						9.93%	10.37%

Notes:
[1] Bloomberg Professional 30-day average as of November 28, 2025
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
NEAR TERM PROJECTED RISK-FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2026 - Q1 2027)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
Ameren Corporation	AEE	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
American Electric Power Company, Inc.	AEP	4.60%	0.65	11.69%	7.09%	9.21%	9.83%
Avista Corporation	AVA	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
CMS Energy Corporation	CMS	4.60%	0.70	11.69%	7.09%	9.56%	10.09%
Dominion Resources, Inc.	D	4.60%	0.80	11.69%	7.09%	10.27%	10.63%
DTE Energy Company	DTE	4.60%	0.80	11.69%	7.09%	10.27%	10.63%
Entergy Corporation	ETR	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
IDACORP, Inc.	IDA	4.60%	0.65	11.69%	7.09%	9.21%	9.83%
NextEra Energy, Inc.	NEE	4.60%	0.90	11.69%	7.09%	10.98%	11.16%
OGE Energy Corporation	OGE	4.60%	0.85	11.69%	7.09%	10.63%	10.89%
Pinnacle West Capital Corporation	PNW	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
Portland General Electric Company	POR	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
PPL Corporation	PPL	4.60%	0.80	11.69%	7.09%	10.27%	10.63%
Southern Company	SO	4.60%	0.65	11.69%	7.09%	9.21%	9.83%
Xcel Energy Inc.	XEL	4.60%	0.70	11.69%	7.09%	9.56%	10.09%
Mean						9.92%	10.36%
Median						9.92%	10.36%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 2
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
LONG-TERM PROJECTED RISK-FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2027 - 2031)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
Ameren Corporation	AEE	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
American Electric Power Company, Inc.	AEP	4.60%	0.65	11.69%	7.09%	9.21%	9.83%
Avista Corporation	AVA	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
CMS Energy Corporation	CMS	4.60%	0.70	11.69%	7.09%	9.56%	10.09%
Dominion Resources, Inc.	D	4.60%	0.80	11.69%	7.09%	10.27%	10.63%
DTE Energy Company	DTE	4.60%	0.80	11.69%	7.09%	10.27%	10.63%
Entergy Corporation	ETR	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
IDACORP, Inc.	IDA	4.60%	0.65	11.69%	7.09%	9.21%	9.83%
NextEra Energy, Inc.	NEE	4.60%	0.90	11.69%	7.09%	10.98%	11.16%
OGE Energy Corporation	OGE	4.60%	0.85	11.69%	7.09%	10.63%	10.89%
Pinnacle West Capital Corporation	PNW	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
Portland General Electric Company	POR	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
PPL Corporation	PPL	4.60%	0.80	11.69%	7.09%	10.27%	10.63%
Southern Company	SO	4.60%	0.65	11.69%	7.09%	9.21%	9.83%
Xcel Energy Inc.	XEL	4.60%	0.70	11.69%	7.09%	9.56%	10.09%
Mean						9.92%	10.36%
Median						9.92%	10.36%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 14
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
CURRENT RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.66%	0.78	11.69%	7.03%	10.11%	10.50%
Ameren Corporation	AEE	4.66%	0.75	11.69%	7.03%	9.96%	10.39%
American Electric Power Company, Inc.	AEP	4.66%	0.70	11.69%	7.03%	9.55%	10.08%
Avista Corporation	AVA	4.66%	0.81	11.69%	7.03%	10.34%	10.68%
CMS Energy Corporation	CMS	4.66%	0.72	11.69%	7.03%	9.70%	10.19%
Dominion Resources, Inc.	D	4.66%	0.73	11.69%	7.03%	9.81%	10.28%
DTE Energy Company	DTE	4.66%	0.79	11.69%	7.03%	10.22%	10.59%
Entergy Corporation	ETR	4.66%	0.78	11.69%	7.03%	10.17%	10.55%
IDACORP, Inc.	IDA	4.66%	0.75	11.69%	7.03%	9.93%	10.37%
NextEra Energy, Inc.	NEE	4.66%	0.78	11.69%	7.03%	10.14%	10.52%
OGE Energy Corporation	OGE	4.66%	0.95	11.69%	7.03%	11.37%	11.45%
Pinnacle West Capital Corporation	PNW	4.66%	0.77	11.69%	7.03%	10.08%	10.48%
Portland General Electric Company	POR	4.66%	0.78	11.69%	7.03%	10.14%	10.52%
PPL Corporation	PPL	4.66%	0.86	11.69%	7.03%	10.69%	10.94%
Southern Company	SO	4.66%	0.70	11.69%	7.03%	9.61%	10.13%
Xcel Energy Inc.	XEL	4.66%	0.69	11.69%	7.03%	9.49%	10.04%
Mean						10.08%	10.48%
Median						10.09%	10.49%

Notes:
[1] Bloomberg Professional 30-day average as of November 28, 2025
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
NEAR-TERM PROJECTED RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2026 - Q1 2027)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.78	11.69%	7.09%	10.09%	10.49%
Ameren Corporation	AEE	4.60%	0.75	11.69%	7.09%	9.95%	10.38%
American Electric Power Company, Inc.	AEP	4.60%	0.70	11.69%	7.09%	9.53%	10.07%
Avista Corporation	AVA	4.60%	0.81	11.69%	7.09%	10.33%	10.67%
CMS Energy Corporation	CMS	4.60%	0.72	11.69%	7.09%	9.68%	10.18%
Dominion Resources, Inc.	D	4.60%	0.73	11.69%	7.09%	9.80%	10.27%
DTE Energy Company	DTE	4.60%	0.79	11.69%	7.09%	10.21%	10.58%
Entergy Corporation	ETR	4.60%	0.78	11.69%	7.09%	10.15%	10.54%
IDACORP, Inc.	IDA	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
NextEra Energy, Inc.	NEE	4.60%	0.78	11.69%	7.09%	10.12%	10.51%
OGE Energy Corporation	OGE	4.60%	0.95	11.69%	7.09%	11.36%	11.45%
Pinnacle West Capital Corporation	PNW	4.60%	0.77	11.69%	7.09%	10.06%	10.47%
Portland General Electric Company	POR	4.60%	0.78	11.69%	7.09%	10.12%	10.51%
PPL Corporation	PPL	4.60%	0.86	11.69%	7.09%	10.68%	10.94%
Southern Company	SO	4.60%	0.70	11.69%	7.09%	9.59%	10.12%
Xcel Energy Inc.	XEL	4.60%	0.69	11.69%	7.09%	9.47%	10.03%
Mean						10.07%	10.47%
Median						10.08%	10.48%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 2
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
LONG-TERM PROJECTED RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2027 - 2031)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.78	11.69%	7.09%	10.09%	10.49%
Ameren Corporation	AEE	4.60%	0.75	11.69%	7.09%	9.95%	10.38%
American Electric Power Company, Inc.	AEP	4.60%	0.70	11.69%	7.09%	9.53%	10.07%
Avista Corporation	AVA	4.60%	0.81	11.69%	7.09%	10.33%	10.67%
CMS Energy Corporation	CMS	4.60%	0.72	11.69%	7.09%	9.68%	10.18%
Dominion Resources, Inc.	D	4.60%	0.73	11.69%	7.09%	9.80%	10.27%
DTE Energy Company	DTE	4.60%	0.79	11.69%	7.09%	10.21%	10.58%
Entergy Corporation	ETR	4.60%	0.78	11.69%	7.09%	10.15%	10.54%
IDACORP, Inc.	IDA	4.60%	0.75	11.69%	7.09%	9.92%	10.36%
NextEra Energy, Inc.	NEE	4.60%	0.78	11.69%	7.09%	10.12%	10.51%
OGE Energy Corporation	OGE	4.60%	0.95	11.69%	7.09%	11.36%	11.45%
Pinnacle West Capital Corporation	PNW	4.60%	0.77	11.69%	7.09%	10.06%	10.47%
Portland General Electric Company	POR	4.60%	0.78	11.69%	7.09%	10.12%	10.51%
PPL Corporation	PPL	4.60%	0.86	11.69%	7.09%	10.68%	10.94%
Southern Company	SO	4.60%	0.70	11.69%	7.09%	9.59%	10.12%
Xcel Energy Inc.	XEL	4.60%	0.69	11.69%	7.09%	9.47%	10.03%
Mean						10.07%	10.47%
Median						10.08%	10.48%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 14
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
CURRENT RISK FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.66%	0.75	11.99%	7.33%	10.15%	10.61%
Ameren Corporation	AEE	4.66%	0.75	11.99%	7.33%	10.15%	10.61%
American Electric Power Company, Inc.	AEP	4.66%	0.65	11.99%	7.33%	9.42%	10.06%
Avista Corporation	AVA	4.66%	0.75	11.99%	7.33%	10.15%	10.61%
CMS Energy Corporation	CMS	4.66%	0.70	11.99%	7.33%	9.79%	10.34%
Dominion Resources, Inc.	D	4.66%	0.80	11.99%	7.33%	10.52%	10.89%
DTE Energy Company	DTE	4.66%	0.80	11.99%	7.33%	10.52%	10.89%
Entergy Corporation	ETR	4.66%	0.75	11.99%	7.33%	10.15%	10.61%
IDACORP, Inc.	IDA	4.66%	0.65	11.99%	7.33%	9.42%	10.06%
NextEra Energy, Inc.	NEE	4.66%	0.90	11.99%	7.33%	11.25%	11.44%
OGE Energy Corporation	OGE	4.66%	0.85	11.99%	7.33%	10.89%	11.16%
Pinnacle West Capital Corporation	PNW	4.66%	0.75	11.99%	7.33%	10.15%	10.61%
Portland General Electric Company	POR	4.66%	0.75	11.99%	7.33%	10.15%	10.61%
PPL Corporation	PPL	4.66%	0.80	11.99%	7.33%	10.52%	10.89%
Southern Company	SO	4.66%	0.65	11.99%	7.33%	9.42%	10.06%
Xcel Energy Inc.	XEL	4.66%	0.70	11.99%	7.33%	9.79%	10.34%
Mean						10.15%	10.61%
Median						10.15%	10.61%

Notes:
[1] Bloomberg Professional 30-day average as of November 28, 2025
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, Morningstar GDP)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
NEAR TERM PROJECTED RISK-FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2026 - Q1 2027)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
Ameren Corporation	AEE	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
American Electric Power Company, Inc.	AEP	4.60%	0.65	11.99%	7.39%	9.40%	10.05%
Avista Corporation	AVA	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
CMS Energy Corporation	CMS	4.60%	0.70	11.99%	7.39%	9.77%	10.32%
Dominion Resources, Inc.	D	4.60%	0.80	11.99%	7.39%	10.51%	10.88%
DTE Energy Company	DTE	4.60%	0.80	11.99%	7.39%	10.51%	10.88%
Entergy Corporation	ETR	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
IDACORP, Inc.	IDA	4.60%	0.65	11.99%	7.39%	9.40%	10.05%
NextEra Energy, Inc.	NEE	4.60%	0.90	11.99%	7.39%	11.25%	11.43%
OGE Energy Corporation	OGE	4.60%	0.85	11.99%	7.39%	10.88%	11.16%
Pinnacle West Capital Corporation	PNW	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
Portland General Electric Company	POR	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
PPL Corporation	PPL	4.60%	0.80	11.99%	7.39%	10.51%	10.88%
Southern Company	SO	4.60%	0.65	11.99%	7.39%	9.40%	10.05%
Xcel Energy Inc.	XEL	4.60%	0.70	11.99%	7.39%	9.77%	10.32%
Mean						10.14%	10.60%
Median						10.14%	10.60%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 2
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, Morningstar GDP)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
LONG-TERM PROJECTED RISK-FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2027 - 2031)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
Ameren Corporation	AEE	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
American Electric Power Company, Inc.	AEP	4.60%	0.65	11.99%	7.39%	9.40%	10.05%
Avista Corporation	AVA	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
CMS Energy Corporation	CMS	4.60%	0.70	11.99%	7.39%	9.77%	10.32%
Dominion Resources, Inc.	D	4.60%	0.80	11.99%	7.39%	10.51%	10.88%
DTE Energy Company	DTE	4.60%	0.80	11.99%	7.39%	10.51%	10.88%
Entergy Corporation	ETR	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
IDACORP, Inc.	IDA	4.60%	0.65	11.99%	7.39%	9.40%	10.05%
NextEra Energy, Inc.	NEE	4.60%	0.90	11.99%	7.39%	11.25%	11.43%
OGE Energy Corporation	OGE	4.60%	0.85	11.99%	7.39%	10.88%	11.16%
Pinnacle West Capital Corporation	PNW	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
Portland General Electric Company	POR	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
PPL Corporation	PPL	4.60%	0.80	11.99%	7.39%	10.51%	10.88%
Southern Company	SO	4.60%	0.65	11.99%	7.39%	9.40%	10.05%
Xcel Energy Inc.	XEL	4.60%	0.70	11.99%	7.39%	9.77%	10.32%
Mean						10.14%	10.60%
Median						10.14%	10.60%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 14
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, Morningstar GDP)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
CURRENT RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.66%	0.78	11.99%	7.33%	10.34%	10.75%
Ameren Corporation	AEE	4.66%	0.75	11.99%	7.33%	10.18%	10.64%
American Electric Power Company, Inc.	AEP	4.66%	0.70	11.99%	7.33%	9.76%	10.31%
Avista Corporation	AVA	4.66%	0.81	11.99%	7.33%	10.58%	10.93%
CMS Energy Corporation	CMS	4.66%	0.72	11.99%	7.33%	9.91%	10.43%
Dominion Resources, Inc.	D	4.66%	0.73	11.99%	7.33%	10.03%	10.52%
DTE Energy Company	DTE	4.66%	0.79	11.99%	7.33%	10.46%	10.84%
Entergy Corporation	ETR	4.66%	0.78	11.99%	7.33%	10.40%	10.80%
IDACORP, Inc.	IDA	4.66%	0.75	11.99%	7.33%	10.15%	10.61%
NextEra Energy, Inc.	NEE	4.66%	0.78	11.99%	7.33%	10.37%	10.77%
OGE Energy Corporation	OGE	4.66%	0.95	11.99%	7.33%	11.65%	11.74%
Pinnacle West Capital Corporation	PNW	4.66%	0.77	11.99%	7.33%	10.31%	10.73%
Portland General Electric Company	POR	4.66%	0.78	11.99%	7.33%	10.37%	10.77%
PPL Corporation	PPL	4.66%	0.86	11.99%	7.33%	10.95%	11.21%
Southern Company	SO	4.66%	0.70	11.99%	7.33%	9.82%	10.36%
Xcel Energy Inc.	XEL	4.66%	0.69	11.99%	7.33%	9.70%	10.27%
Mean						10.31%	10.73%
Median						10.32%	10.74%

Notes:
[1] Bloomberg Professional 30-day average as of November 28, 2025
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, Morningstar GDP)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
NEAR-TERM PROJECTED RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2026 - Q1 2027)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.78	11.99%	7.39%	10.32%	10.74%
Ameren Corporation	AEE	4.60%	0.75	11.99%	7.39%	10.17%	10.63%
American Electric Power Company, Inc.	AEP	4.60%	0.70	11.99%	7.39%	9.74%	10.30%
Avista Corporation	AVA	4.60%	0.81	11.99%	7.39%	10.57%	10.93%
CMS Energy Corporation	CMS	4.60%	0.72	11.99%	7.39%	9.89%	10.42%
Dominion Resources, Inc.	D	4.60%	0.73	11.99%	7.39%	10.02%	10.51%
DTE Energy Company	DTE	4.60%	0.79	11.99%	7.39%	10.45%	10.83%
Entergy Corporation	ETR	4.60%	0.78	11.99%	7.39%	10.39%	10.79%
IDACORP, Inc.	IDA	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
NextEra Energy, Inc.	NEE	4.60%	0.78	11.99%	7.39%	10.36%	10.76%
OGE Energy Corporation	OGE	4.60%	0.95	11.99%	7.39%	11.65%	11.73%
Pinnacle West Capital Corporation	PNW	4.60%	0.77	11.99%	7.39%	10.29%	10.72%
Portland General Electric Company	POR	4.60%	0.78	11.99%	7.39%	10.36%	10.76%
PPL Corporation	PPL	4.60%	0.86	11.99%	7.39%	10.94%	11.20%
Southern Company	SO	4.60%	0.70	11.99%	7.39%	9.80%	10.35%
Xcel Energy Inc.	XEL	4.60%	0.69	11.99%	7.39%	9.68%	10.26%
Mean						10.30%	10.72%
Median						10.31%	10.73%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 2
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, Morningstar GDP)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
LONG-TERM PROJECTED RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2027 - 2031)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.78	11.99%	7.39%	10.32%	10.74%
Ameren Corporation	AEE	4.60%	0.75	11.99%	7.39%	10.17%	10.63%
American Electric Power Company, Inc.	AEP	4.60%	0.70	11.99%	7.39%	9.74%	10.30%
Avista Corporation	AVA	4.60%	0.81	11.99%	7.39%	10.57%	10.93%
CMS Energy Corporation	CMS	4.60%	0.72	11.99%	7.39%	9.89%	10.42%
Dominion Resources, Inc.	D	4.60%	0.73	11.99%	7.39%	10.02%	10.51%
DTE Energy Company	DTE	4.60%	0.79	11.99%	7.39%	10.45%	10.83%
Entergy Corporation	ETR	4.60%	0.78	11.99%	7.39%	10.39%	10.79%
IDACORP, Inc.	IDA	4.60%	0.75	11.99%	7.39%	10.14%	10.60%
NextEra Energy, Inc.	NEE	4.60%	0.78	11.99%	7.39%	10.36%	10.76%
OGE Energy Corporation	OGE	4.60%	0.95	11.99%	7.39%	11.65%	11.73%
Pinnacle West Capital Corporation	PNW	4.60%	0.77	11.99%	7.39%	10.29%	10.72%
Portland General Electric Company	POR	4.60%	0.78	11.99%	7.39%	10.36%	10.76%
PPL Corporation	PPL	4.60%	0.86	11.99%	7.39%	10.94%	11.20%
Southern Company	SO	4.60%	0.70	11.99%	7.39%	9.80%	10.35%
Xcel Energy Inc.	XEL	4.60%	0.69	11.99%	7.39%	9.68%	10.26%
Mean						10.30%	10.72%
Median						10.31%	10.73%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 14
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, Morningstar GDP)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
CURRENT RISK FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.66%	0.75	13.29%	8.64%	11.13%	11.67%
Ameren Corporation	AEE	4.66%	0.75	13.29%	8.64%	11.13%	11.67%
American Electric Power Company, Inc.	AEP	4.66%	0.65	13.29%	8.64%	10.27%	11.03%
Avista Corporation	AVA	4.66%	0.75	13.29%	8.64%	11.13%	11.67%
CMS Energy Corporation	CMS	4.66%	0.70	13.29%	8.64%	10.70%	11.35%
Dominion Resources, Inc.	D	4.66%	0.80	13.29%	8.64%	11.57%	12.00%
DTE Energy Company	DTE	4.66%	0.80	13.29%	8.64%	11.57%	12.00%
Entergy Corporation	ETR	4.66%	0.75	13.29%	8.64%	11.13%	11.67%
IDACORP, Inc.	IDA	4.66%	0.65	13.29%	8.64%	10.27%	11.03%
NextEra Energy, Inc.	NEE	4.66%	0.90	13.29%	8.64%	12.43%	12.65%
OGE Energy Corporation	OGE	4.66%	0.85	13.29%	8.64%	12.00%	12.32%
Pinnacle West Capital Corporation	PNW	4.66%	0.75	13.29%	8.64%	11.13%	11.67%
Portland General Electric Company	POR	4.66%	0.75	13.29%	8.64%	11.13%	11.67%
PPL Corporation	PPL	4.66%	0.80	13.29%	8.64%	11.57%	12.00%
Southern Company	SO	4.66%	0.65	13.29%	8.64%	10.27%	11.03%
Xcel Energy Inc.	XEL	4.66%	0.70	13.29%	8.64%	10.70%	11.35%
Mean						11.13%	11.67%
Median						11.13%	11.67%

Notes:
[1] Bloomberg Professional 30-day average as of November 28, 2025
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, CGDCF)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
NEAR TERM PROJECTED RISK-FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Near-term projected 30-year U.S. Treasury bond yield (Q1 2026 - Q1 2027)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
Ameren Corporation	AEE	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
American Electric Power Company, Inc.	AEP	4.60%	0.65	13.29%	8.69%	10.25%	11.01%
Avista Corporation	AVA	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
CMS Energy Corporation	CMS	4.60%	0.70	13.29%	8.69%	10.69%	11.34%
Dominion Resources, Inc.	D	4.60%	0.80	13.29%	8.69%	11.56%	11.99%
DTE Energy Company	DTE	4.60%	0.80	13.29%	8.69%	11.56%	11.99%
Entergy Corporation	ETR	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
IDACORP, Inc.	IDA	4.60%	0.65	13.29%	8.69%	10.25%	11.01%
NextEra Energy, Inc.	NEE	4.60%	0.90	13.29%	8.69%	12.42%	12.64%
OGE Energy Corporation	OGE	4.60%	0.85	13.29%	8.69%	11.99%	12.32%
Pinnacle West Capital Corporation	PNW	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
Portland General Electric Company	POR	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
PPL Corporation	PPL	4.60%	0.80	13.29%	8.69%	11.56%	11.99%
Southern Company	SO	4.60%	0.65	13.29%	8.69%	10.25%	11.01%
Xcel Energy Inc.	XEL	4.60%	0.70	13.29%	8.69%	10.69%	11.34%
Mean						11.12%	11.66%
Median						11.12%	11.66%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 2
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, CGDCF)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
LONG-TERM PROJECTED RISK-FREE RATE AND VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2027 - 2031)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
Ameren Corporation	AEE	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
American Electric Power Company, Inc.	AEP	4.60%	0.65	13.29%	8.69%	10.25%	11.01%
Avista Corporation	AVA	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
CMS Energy Corporation	CMS	4.60%	0.70	13.29%	8.69%	10.69%	11.34%
Dominion Resources, Inc.	D	4.60%	0.80	13.29%	8.69%	11.56%	11.99%
DTE Energy Company	DTE	4.60%	0.80	13.29%	8.69%	11.56%	11.99%
Entergy Corporation	ETR	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
IDACORP, Inc.	IDA	4.60%	0.65	13.29%	8.69%	10.25%	11.01%
NextEra Energy, Inc.	NEE	4.60%	0.90	13.29%	8.69%	12.42%	12.64%
OGE Energy Corporation	OGE	4.60%	0.85	13.29%	8.69%	11.99%	12.32%
Pinnacle West Capital Corporation	PNW	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
Portland General Electric Company	POR	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
PPL Corporation	PPL	4.60%	0.80	13.29%	8.69%	11.56%	11.99%
Southern Company	SO	4.60%	0.65	13.29%	8.69%	10.25%	11.01%
Xcel Energy Inc.	XEL	4.60%	0.70	13.29%	8.69%	10.69%	11.34%
Mean						11.12%	11.66%
Median						11.12%	11.66%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 14
[2] Value Line
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, CGDCF)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
CURRENT RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Current 30-day average of 30-year U.S. Treasury bond yield	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.66%	0.78	13.29%	8.64%	11.35%	11.84%
Ameren Corporation	AEE	4.66%	0.75	13.29%	8.64%	11.17%	11.70%
American Electric Power Company, Inc.	AEP	4.66%	0.70	13.29%	8.64%	10.67%	11.32%
Avista Corporation	AVA	4.66%	0.81	13.29%	8.64%	11.64%	12.05%
CMS Energy Corporation	CMS	4.66%	0.72	13.29%	8.64%	10.85%	11.46%
Dominion Resources, Inc.	D	4.66%	0.73	13.29%	8.64%	10.99%	11.57%
DTE Energy Company	DTE	4.66%	0.79	13.29%	8.64%	11.49%	11.94%
Entergy Corporation	ETR	4.66%	0.78	13.29%	8.64%	11.42%	11.89%
IDACORP, Inc.	IDA	4.66%	0.75	13.29%	8.64%	11.13%	11.67%
NextEra Energy, Inc.	NEE	4.66%	0.78	13.29%	8.64%	11.39%	11.86%
OGE Energy Corporation	OGE	4.66%	0.95	13.29%	8.64%	12.90%	13.00%
Pinnacle West Capital Corporation	PNW	4.66%	0.77	13.29%	8.64%	11.31%	11.81%
Portland General Electric Company	POR	4.66%	0.78	13.29%	8.64%	11.39%	11.86%
PPL Corporation	PPL	4.66%	0.86	13.29%	8.64%	12.07%	12.38%
Southern Company	SO	4.66%	0.70	13.29%	8.64%	10.74%	11.38%
Xcel Energy Inc.	XEL	4.66%	0.69	13.29%	8.64%	10.59%	11.27%
Mean						11.32%	11.81%
Median						11.33%	11.82%

Notes:
[1] Bloomberg Professional 30-day average as of November 28, 2025
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, CGDCF)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
NEAR-TERM PROJECTED RISK FREE RATE AND LONG-TERM VALUE LINE BETA

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q1 2026 - Q1 2027)	[2] Beta	[3] Market Return	[4] Market Risk Premium	[5] Cost of Equity: CAPM	[6] Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.78	13.29%	8.69%	11.34%	11.83%
Ameren Corporation	AEE	4.60%	0.75	13.29%	8.69%	11.16%	11.69%
American Electric Power Company, Inc.	AEP	4.60%	0.70	13.29%	8.69%	10.65%	11.31%
Avista Corporation	AVA	4.60%	0.81	13.29%	8.69%	11.63%	12.04%
CMS Energy Corporation	CMS	4.60%	0.72	13.29%	8.69%	10.83%	11.45%
Dominion Resources, Inc.	D	4.60%	0.73	13.29%	8.69%	10.98%	11.56%
DTE Energy Company	DTE	4.60%	0.79	13.29%	8.69%	11.48%	11.94%
Entergy Corporation	ETR	4.60%	0.78	13.29%	8.69%	11.41%	11.88%
IDACORP, Inc.	IDA	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
NextEra Energy, Inc.	NEE	4.60%	0.78	13.29%	8.69%	11.37%	11.85%
OGE Energy Corporation	OGE	4.60%	0.95	13.29%	8.69%	12.90%	13.00%
Pinnacle West Capital Corporation	PNW	4.60%	0.77	13.29%	8.69%	11.30%	11.80%
Portland General Electric Company	POR	4.60%	0.78	13.29%	8.69%	11.37%	11.85%
PPL Corporation	PPL	4.60%	0.86	13.29%	8.69%	12.06%	12.37%
Southern Company	SO	4.60%	0.70	13.29%	8.69%	10.72%	11.37%
Xcel Energy Inc.	XEL	4.60%	0.69	13.29%	8.69%	10.58%	11.26%
Mean						11.31%	11.80%
Median						11.32%	11.81%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 2
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, CGDCF)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

CAPITAL ASSET PRICING MODEL
LONG-TERM PROJECTED RISK FREE RATE AND LONG-TERM VALUE LINE BETA

		[1]	[2]	[3]	[4]	[5]	[6]
Company	Ticker	Projected 30-year U.S. Treasury bond yield (2027 - 2031)	Beta	Market Return	Market Risk Premium	Cost of Equity: CAPM	Cost of Equity: ECAPM
Alliant Energy Corporation	LNT	4.60%	0.78	13.29%	8.69%	11.34%	11.83%
Ameren Corporation	AEE	4.60%	0.75	13.29%	8.69%	11.16%	11.69%
American Electric Power Company, Inc.	AEP	4.60%	0.70	13.29%	8.69%	10.65%	11.31%
Avista Corporation	AVA	4.60%	0.81	13.29%	8.69%	11.63%	12.04%
CMS Energy Corporation	CMS	4.60%	0.72	13.29%	8.69%	10.83%	11.45%
Dominion Resources, Inc.	D	4.60%	0.73	13.29%	8.69%	10.98%	11.56%
DTE Energy Company	DTE	4.60%	0.79	13.29%	8.69%	11.48%	11.94%
Entergy Corporation	ETR	4.60%	0.78	13.29%	8.69%	11.41%	11.88%
IDACORP, Inc.	IDA	4.60%	0.75	13.29%	8.69%	11.12%	11.66%
NextEra Energy, Inc.	NEE	4.60%	0.78	13.29%	8.69%	11.37%	11.85%
OGE Energy Corporation	OGE	4.60%	0.95	13.29%	8.69%	12.90%	13.00%
Pinnacle West Capital Corporation	PNW	4.60%	0.77	13.29%	8.69%	11.30%	11.80%
Portland General Electric Company	POR	4.60%	0.78	13.29%	8.69%	11.37%	11.85%
PPL Corporation	PPL	4.60%	0.86	13.29%	8.69%	12.06%	12.37%
Southern Company	SO	4.60%	0.70	13.29%	8.69%	10.72%	11.37%
Xcel Energy Inc.	XEL	4.60%	0.69	13.29%	8.69%	10.58%	11.26%
Mean						11.31%	11.80%
Median						11.32%	11.81%

Notes:
[1] Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, at 14
[2] Schedule AEB-5
[3] Schedule AEB-2SR (Cor. Excl. of Non-Dividend Paying Companies, CGDCF)
[4] Equals [3]-[1]
[5] Equals [1] + [2] x [4]
[6] Equals [1] + 0.25 x ([4]) + 0.75 x ([2] x [4])

Market Value of the Capital Structure of the Proxy Group

Expressed in ($000s)

		Debt											
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Company	Ticker	Current Assets	Current Liabilities	Current Long-Term Debt and Leases	Net Working Capital	Short-Term Debt	Short-Term Debt Adj'd for Net Working Capital	Long-Term Debt	Book Value of Total Debt	Market Value of Long-Term Debt	Carrying Amount of Long-Term Debt	Adjustment to Book Value of Long-Term Debt	Market Value of Total Debt
Alliant Energy Corp.	LNT	$1,697,000	$2,123,000	$1,076,000	$650,000	$88,000	$0	$ 11,163,000	$12,239,000	$12,028,000	$11,748,000	$280,000	$12,519,000
Ameren Corp.	AEE	$2,571,000	$3,907,000	$976,000	-$360,000	$643,000	$360,000	$ 18,287,000	$19,623,000	$17,992,000	$19,187,000	-$1,195,000	$18,428,000
American Electric Power	AEP	$6,052,000	$13,314,000	$3,353,000	-$3,909,000	$1,508,000	$1,508,000	$ 44,831,000	$49,692,000	$44,930,000	$47,322,000	-$2,392,000	$47,300,000
Avista Corp	AVA	$729,000	$878,000	$9,000	-$140,000	$388,000	$140,000	$ 2,921,000	$3,070,000	$2,358,000	$2,862,000	-$504,000	$2,566,000
CMS Energy Corp.	CMS	$3,472,000	$3,548,000	$959,000	$883,000	$0	$0	$ 17,964,000	$18,923,000	$17,645,000	$18,757,000	-$1,112,000	$17,811,000
DTE Energy Company	DTE	$4,348,000	$5,409,000	$1,388,000	$327,000	$882,000	$0	$ 24,020,000	$25,408,000	$23,840,000	$25,123,000	-$1,283,000	$24,125,000
Entergy Corp.	ETR	$5,806,851	$7,822,968	$2,463,094	$446,977	$657,774	$0	$ 28,207,995	$30,671,089	$28,208,822	$30,277,161	-$2,068,339	$28,602,750
IDACORP, Inc.	IDA	$833,404	$897,835	$122,461	$58,030	$0	$0	$ 3,547,733	$3,670,194	$3,270,200	$3,447,338	-$177,138	$3,493,056
OGE Energy Corp.	OGE	$857,900	$1,094,100	$4,300	-$231,900	$292,000	$231,900	$ 5,394,100	$5,630,300	$5,179,300	$5,369,200	-$189,900	$5,440,400
Pinnacle West Capital	PNW	$1,703,709	$3,161,026	$788,586	-$668,731	$757,005	$668,731	$ 12,754,041	$14,211,358	$8,651,000	$9,355,000	-$704,000	$13,507,358
Portland General Electric	POR	$1,072,000	$993,000	$53,000	$132,000	$0	$0	$ 5,233,000	$5,286,000	$4,311,000	$4,662,000	-$351,000	$4,935,000
PPL Corporation	PPL	$3,931,000	$4,546,000	$925,000	$310,000	$456,000	$0	$ 18,135,000	$19,060,000	$18,488,000	$18,894,000	-$406,000	$18,654,000
Southern Co.	SO	$10,917,000	$16,888,000	$6,417,000	$446,000	$722,000	$0	$ 66,936,000	$73,353,000	$67,200,000	$71,100,000	-$3,900,000	$69,453,000
Xcel Energy, Inc.	XEL	$5,014,000	$7,089,000	$650,000	-$1,425,000	$1,550,000	$1,425,000	$ 33,882,000	$35,957,000	$29,943,000	$32,333,000	-$2,390,000	$33,567,000

		Preferred Equity		Common Equity		Market Value			
		[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]
Company	Ticker	Book Value of Preferred Equity	Market Value of Preferred Equity	Book Value of Common Equity	Market Value of Common Equity	Market Value Of the Firm	Debt Ratio	Preferred Equity Ratio	Common Equity Ratio
Alliant Energy Corp.	LNT	$0	$0	$ 7,334,000	$ 16,711,060	$29,230,060	42.83%	0.00%	57.17%
Ameren Corp.	AEE	$0	$0	$ 13,401,000	$ 27,011,622	$45,439,622	40.55%	0.00%	59.45%
American Electric Power	AEP	$0	$0	$ 31,138,000	$ 61,586,440	$108,886,440	43.44%	0.00%	56.56%
Avista Corp	AVA	$0	$0	$ 2,709,000	$ 3,136,067	$5,702,067	45.00%	0.00%	55.00%
CMS Energy Corp.	CMS	$224,000	$224,000	$ 8,920,000	$ 21,281,081	$39,316,081	45.30%	0.57%	54.13%
DTE Energy Company	DTE	$0	$0	$ 12,303,000	$ 26,786,955	$50,911,955	47.39%	0.00%	52.61%
Entergy Corp.	ETR	$0	$0	$ 16,923,076	$ 41,805,119	$70,407,869	40.62%	0.00%	59.38%
IDACORP, Inc.	IDA	$0	$0	$ 3,571,874	$ 6,839,964	$10,333,020	33.80%	0.00%	66.20%
OGE Energy Corp.	OGE	$0	$0	$ 4,977,300	$ 8,827,683	$14,268,083	38.13%	0.00%	61.87%
Pinnacle West Capital	PNW	$0	$0	$ 7,046,458	$ 10,616,538	$24,123,896	55.99%	0.00%	44.01%
Portland General Electric	POR	$0	$0	$ 4,133,000	$ 5,398,345	$10,333,345	47.76%	0.00%	52.24%
PPL Corporation	PPL	$0	$0	$ 14,881,000	$ 25,905,666	$44,559,666	41.86%	0.00%	58.14%
Southern Co.	SO	$0	$0	$ 36,016,000	$ 96,016,342	$165,469,342	41.97%	0.00%	58.03%
Xcel Energy, Inc.	XEL	$0	$0	$ 23,609,000	$ 43,691,128	$77,258,128	43.45%	0.00%	56.55%
						AVERAGE:	**43.44%**	**0.04%**	**56.52%**

Notes:
[1] S&P Capital IQ Pro.
[2] S&P Capital IQ Pro.
[3] S&P Capital IQ Pro.
[4] Equals [1] - ([2] -[3])
[5] S&P Capital IQ Pro.
[6] Equals:
[A] 0 if [4] > 0
[B] ABS of [4] if [4] < 0 and ABS of [4] < [5]
[C] [5] if [4] < 0 and ABS of [4] > [5]
[7] S&P Capital IQ Pro.
[8] Equals [3] + [6] + [7]
[9] Company 10-Ks
[10] Company 10-Ks
[11] Equals [9] - [10]
[12] Equals [8] + [11]
[13] S&P Capital IQ Pro.
[14] Equals [13]
[15] S&P Capital IQ Pro.
[16] S&P Capital IQ Pro.
[17] Equals [12] + [14] + [16]
[18] Equals [12] / [17]
[19] Equals [14] / [17]
[20] Equals [16] / [17]