Exhibit No. 245

Staff – Exhibit 245
Seoung Joun Won, PhD
Rebuttal
File No. ER-2024-0189

Exhibit No.:	
Issue(s):	*Rate of Return*
Witness:	*Seoung Joun Won, PhD*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Rebuttal Testimony*
Case No.:	*ER-2024-0189*
Date Testimony Prepared:	*August 6, 2024*

MISSOURI PUBLIC SERVICE COMMISSION

FINANCIAL AND BUSINESS ANALYSIS DIVISION

FINANCIAL ANALYSIS DEPARTMENT

REBUTTAL TESTIMONY

OF

SEOUNG JOUN WON, PhD

Evergy Missouri West, Inc.,
d/b/a Evergy Missouri West

Case No. ER-2024-0189

Jefferson City, Missouri
August 2024

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Q. Please state your name and business address.

A. My name is Seoung Joun Won and my business address is P.O. Box 360, Jefferson City, Missouri 65102.

Q. Who is your employer and what is your present position?

A. I am employed by the Missouri Public Service Commission ("Commission") as a member of the Commission's Staff ("Staff") and my title is Regulatory Compliance Manager for the Financial Analysis Department, in the Financial and Business Analysis Division.

Q. Are you the same Seoung Joun Won who filed Direct Testimony on June 27, 2024?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the direct testimonies of Ann E. Bulkley, Kirkland B. Andrews, and David Murray. Ms. Bulkley sponsored testimony on return on equity ("ROE") and overall rate of return ("ROR"), while Mr. Andrews sponsored capital structure testimony on behalf of Evergy Missouri West, Inc. ("Evergy Missouri West" or "EMW"), subsidiaries of Evergy, Inc. ("Evergy Inc." or "Evergy"). Mr. Murray sponsored testimony on ROE, capital structure, and ROR on behalf of the Missouri Office of the Public Counsel ("OPC"). Staff's analyses and conclusions are supported by the data presented in Staff's rebuttal workpapers.

I. EXECUTIVE SUMMARY

Q. What is the overview of your response to the testimonies of Evergy Missouri West's witnesses, Ms. Bulkley and Mr. Andrews?

A. The Staff's rebuttal will focus on the overall ROR, drawing from Ms. Bulkley's analysis of cost of capital components, such as ROE and the cost of long-term debt, as well as Mr. Andrews' proposed capital structure. Ms. Bulkley and Mr. Andrews proposed an ROR of 7.5661%, based on the projected standalone capital structure of EMW as of June 30, 2024.[1] This proposed ROR was comprised of 52.04% common equity with an ROE of 10.50%, within a range of 10.25% to 11.25%, and 47.96% long-term debt with a cost of debt of 4.38%.[2]

During the audit review process, Staff discerned that Ms. Bulkley introduced a series of biased estimates for her cost of equity ("COE"), resulting in an overstated ROE recommendation.[3] Ms. Bulkley overestimated her COE by using inflated input data and improper estimation methods in her direct testimony. In this rebuttal testimony, Staff will provide a detailed explanation of how Ms. Bulkley used unreasonable and upwardly-biased input data in the Constant Growth form of the Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), the Empirical Capital Asset Pricing Model ("ECAPM"), and the Bond Yield Risk Premium ("BYRP" or "Risk Premium") analysis.[4] For ratemaking purposes, Ms. Bulkley asserted that EMW's proposed weighted-average cost of debt of 4.38% is reasonable.[5] However, Staff will argue that

[1] Table 1 (p. 4) Andrews' Direct Testimony and Figure 14 (p. 71), Bulkley's Direct Testimony.
[2] Page 7, lines 26-27 and page 8, lines 1-11, Bulkley's Direct Testimony.
[3] Ms. Bulkley incorrectly used the terms ROE and COE interchangeably. As explained in Footnote No. 2 of Won's Direct Testimony, COE is the return required by investors; ROE is the return set by a regulatory utility commission.
[4] Page 3, Bulkley's Direct Testimony.
[5] Page 71, lines 2-7 and Figure 14, Bulkley's Direct Testimony.

her assertion is baseless, as it exceeds Missouri West's actual embedded cost of debt of 4.01% as of March 31, 2024.[6]

Mr. Andrews's proposed ROR is based on EMW's projected standalone capital structure and cost of debt as of June 30, 2024, along with Ms. Bulkley's recommended ROE. Mr. Andrews made a goodwill adjustment to Evergy Missouri West's capital structure in the amount of $168.97 million.[7] At this time, Staff will not address any major issues regarding the projected standalone capital structures of EMW. Currently, the updated changes to EMW's and Evergy Inc.'s true-up capital structures are under review. Staff will make a final recommendation in subsequent testimony filings after investigating the reasons for the changes in EMW's actual capital structure and its actual embedded cost of debt.

Q. What is the overview of your response to the testimony of Mr. Murray?

A. Mr. Murray recommended an ROE of 9.50% within a range of 9.25% to 9.75% and a ROR of 6.60% based on his recommended use of Evergy Inc.'s capital structure of 47.20% common equity and 52.80% long-term debt and applying EMW's embedded cost of long-term debt of 4.01%.[8] Mr. Murray's recommended common equity to total capital ratio ("equity ratio") of 47.20% is more than 480 basis points lower than EMW's projected common equity ratios of 52.04% as of June 30, 2024.[9] Mr. Murray's recommended equity ratio of 47.20% is much lower than EMW's recent common equity ratios.[10] Staff expresses concern with Mr. Murray's recommended capital structure using Evergy Inc.'s capital structure ratios instead of EMW's.

[6] Staff Data Request No. 0106.
[7] Page 4, lines, lines 17-18, Andrews' Direct Testimony.
[8] Schedule DM-D-8, Murray's Direct Testimony.
[9] Table 1 (p. 4) Andrews' Direct Testimony.
[10] Table 2 (p. 31) Won's Direct Testimony.

II. RESPONSE TO TESTIMONY OF EVERGY'S WITNESSES

Q. What are the specific areas in which Staff is responding to EMW's witnesses?

A. Staff is responding to the testimonies of Ms. Bulkley and Mr. Andrews. The areas in which Staff addresses issues of Ms. Bulkley's direct testimony include:

- Proposed ROE,
- Proxy Group Criteria,
- Growth Rates for DCF Model,
- Market Risk Premium for CAPM,
- Empirical CAPM Method,
- BYRP Analysis, and
- Regulatory and Business Risks.

Then, Staff will briefly address Mr. Andrews's recommended capital structure. Staff will discuss each in turn, below.

1. Proposed ROE

Q. What is Ms. Bulkley's proposed ROE for EMW in this proceeding?

A. Ms. Bulkley proposed an ROE of 10.50%, within a range of 10.25% to 11.25%, for use in this proceeding.[11]

Q. How did Ms. Bulkley determine her proposed ROE?

A. Ms. Bulkley determined her proposed ROE from a range of the results of her COE estimates. Ms. Bulkley calculated a COE estimate range of 9.07% to 11.94%.[12] For her proposed ROE, Ms. Bulkley considered company-specific risk factors along with current and prospective capital market conditions.[13] However, Ms. Bulkley did not precisely state her procedure for

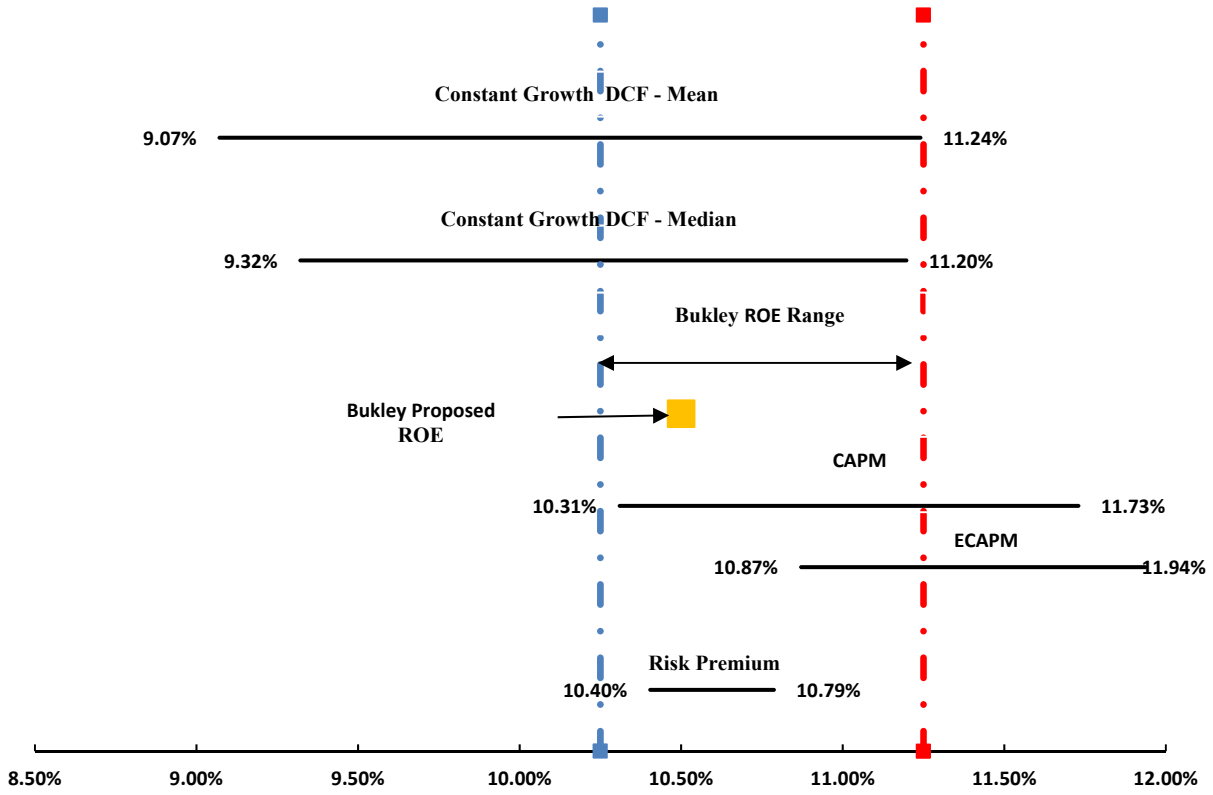
[11] Page 7, lines 26-27, Bulkley's Direct Testimony.
[12] Figure 15 (p. 72), Bulkley's Direct Testimony.
[13] Pages 6-7, Bulkley's Direct Testimony.

selecting the recommended ROE point estimation of 10.50% or the ends of her reasonable ROE range of 10.25% to 11.25% from within her COE estimate analytic results of 9.07% to 11.94%.[14]

Q. How did Ms. Bulkley estimate her COE?

A. Ms. Bulkley applied COE estimation models such as constant-growth DCF, the CAPM, the ECAPM, and the BYRP to her electric utility proxy group.[15] Ms. Bulkley's estimated COE for each analysis method and proposed ROE are summarized in Figure 1:[16]

Figure 1. Ms. Bulkley's COE Estimates and Proposed ROE



[14] Page 7, Bulkley's Direct Testimony.
[15] Pages 3-6, Bulkley's Direct Testimony.
[16] Schedule AEB-1, Bulkley's Direct Testimony.

Q. What are Staff's concerns with Ms. Bulkley's recommended ROE?

A. Staff's concern is that Ms. Bulkley's recommended ROE of 10.50% is too high compared to the average authorized ROE of 9.69% for electric utility rate cases completed in the first half of 2024.[17] Ms. Bulkley's recommended ROE is based on her overstated COE estimates. Ms. Bulkley presented unreasonable COE estimation procedures using exaggerated input values for her COE estimation models. Ms. Bulkley utilized a variety of data sources and analysis methods to produce inflated input values. The following summarizes the steps that led to Ms. Bulkley's overestimation of her COE:

1. Selecting inappropriate biased data,
2. Producing overestimated input values, and
3. Utilizing inadequate estimation methods.

Staff will describe how each of Ms. Bulkley's COE estimates are overstated by presenting detailed investigation results later in this testimony.

2. Proxy Group Criteria

Q. What is Ms. Bulkley's proxy group for estimating EMW's COE?

A. Ms. Bulkley selected sixteen (16) electric utility companies for her proxy group for EMW's COE estimation.[18] Ms. Bulkley selected her electric utility proxy group from thirty-six (36) publicly-traded companies classified by Value Line as electric utilities, using eight (8) screening criteria during the selection process.[19] The following is the list of Ms. Bulkley's electric utility proxy group, associated ticker symbols, and Standard & Poor's ("S&P") issuer credit ratings:

[17] S&P Capital IQ Pro, Retrieved on July 2, 2024.
[18] Figure 7 (p. 31) and Schedule AEB-2, Bulkley's Direct Testimony.
[19] Page 30, lines 1-16, Bulkley's Direct Testimony.

Table 1. Electric Utility Proxy Group and Ticker

	Company	Ticker	S&P
1	ALLETE, Inc.	ALE	BBB
2	Alliant Energy Corporation	LNT	A-
3	Ameren Corporation	AEE	BBB+
4	American Electric Power Company, Inc.	AEP	A-
5	Avista Corporation	AVA	BBB
6	CMS Energy Corporation	CMS	BBB+
7	Duke Energy Corporation	DUK	BBB+
8	Entergy Corporation	ETR	BBB+
9	IDACORP, Inc.	IDA	BBB
10	NextEra Energy, Inc.	NEE	A-
11	NorthWestern Corporation	NWE	BBB
12	OGE Energy Corporation	OGE	BBB+
13	Pinnacle West Capital Corporation	PNW	BBB+
14	Portland General Electric Company	POR	BBB+
15	Southern Company	SO	BBB+
16	Xcel Energy Inc.	XEL	A-

Q. What is Staff's concern with Ms. Bulkley's proxy group selection?

A. Staff's concern with Ms. Bulkley's proxy group is that she did not include within her screening criteria whether most of a company's assets are regulated. When selecting a proxy group for this proceeding, it is crucial to assess whether the proxy company is comparable to EMW. The portion of total assets that is not regulated can significantly impact the risk and financial performance of a company. For instance, Edison Electric Institute ("EEI") reported two categories of regulated electric utility companies: one is classified as 'Regulated,' where 80% or more of total assets are regulated, and the other is classified as 'Mostly Regulated,' where less than 80% of total assets are regulated.[20] Ms. Bulkley included ALLETE, Inc. ("ALE") and NextEra Energy, Inc. ("NEE") in her proxy group.[21] EEI classified ALE and NEE as 'Mostly Regulated,' whereas Evergy was classified as 'Regulated'.[22] According to EMW's response to Staff's data request,

[20] EEI, 2023 Financial Review: Annual Report of the U.S. Investor-Owned Electric Utility Industry.
[21] Figure 7 (p. 31) and Schedule AEB-2, Bulkley's Direct Testimony.
[22] EEI, 2023 Financial Review: Annual Report of the U.S. Investor-Owned Electric Utility Industry.

more than 95% of EMW's consolidated total assets were regulatory operation assets as of December 31, 2023.[23]

Q. Why is it important to consider the portion of total assets that are non-regulated when choosing a proxy group?

A. When constructing a proxy group for estimating the range of COEs to recommend an ROE, it is important to ensure that the included companies have similar regulatory profiles to facilitate meaningful comparisons. Companies facing similar regulatory constraints and operating conditions are more directly comparable in terms of financial metrics, valuation multiples, and risk factors.

Utilities operating in regulated industries are subject to oversight and regulation by governmental agencies. The regulatory environment can affect various aspects of a company's operations, including pricing, capital investment, and profit margins. By only including companies in the proxy group with a significant portion of regulated assets for the purpose of ratemaking of the utility, it ensures that the group reflects the stability and predictability inherent in regulated industries.

Considering the proportion of regulated assets when choosing a proxy group helps to ensure that the group accurately represents the characteristics, risk profile, and financial performance of companies operating within regulated industries like utilities. This approach enhances the reliability and relevance of estimating EMW's COE analysis conducted using the proxy group.

Q. What percentage of Evergy's and EMW's total assets are non-regulatory assets?

[23] Staff Data Request No. 0126.1.

A. The average percentage of non-regulated assets from Evergy Inc.'s and EMW's total assets has been less than 1.0% and 5.0%, respectively, for the past 3 years.[24]

Q. Are ALE and NEE comparable for estimating EMW's COE with commensurate risks?

A. No. EEI reported that ALE's and NEE's non-regulated assets are more than 20% of their total assets.[25] Their non-regulated assets provide a less stable source of revenue for companies compared to their regulated assets that typically involve long-term contracts or agreements with regulatory bodies. Utilities with a larger portion of non-regulated assets tend to have higher risk profiles compared to those with a lower proportion of unregulated assets, which may be subject to lower market volatility and more economic certainty.

The proportion of regulated assets can also impact the financial performance of companies within the proxy group. Regulated utilities, for example, may have more predictable cash flows and earnings due to the steady demand for essential services like electricity. Including utilities with a significant portion of regulated assets, such as EMW, can therefore provide stability and consistency in financial performance metrics such as revenue, earnings, and dividends. A lower risk associated with utilities leads to a lower required return from investors.

In contrast, a higher proportion of non-regulatory business requires a higher return, resulting in a higher estimated COE compared to regulatory business. Therefore, if ALE and NEE are included in the proxy group, the estimated COE for recommending EMW's authorized ROE will be unreasonably overstated. Later in this testimony, Staff will show how Ms. Bulkley's COE estimates are lowered when ALE and NEE are excluded from her proxy group.

[24] Staff Data Request Nos. 0126, 0126.1 and 0126.2.
[25] EEI, 2023 Financial Review: Annual Report of the U.S. Investor-Owned Electric Utility Industry.

3. Growth Rates for Discounted Cash Flow Models

Q. What is Staff's concern with Ms. Bulkley's constant-growth DCF model?

A. Ms. Bulkley used unreasonably high growth rates in her constant-growth DCF model, which overstated her COE estimates. While Ms. Bulkley utilized three sources of long-term projected earnings per share ("EPS") growth rates (Zacks Investment Research ("Zacks"); Yahoo! Finance; and Value Line), she exclusively used projected EPS growth rates, which she erroneously called long-term earnings growth rates.[26] Analysts' projected EPS growth rates are for periods of 3 to 5 years, which is considered short given the infinite investment horizon assumed in the DCF.[27] Because of the overstated growth rates, Ms. Bulkley's DCF COE estimates are unreasonably upward biased.

Q. What is wrong with using exclusively projected earnings growth rates for Ms. Bulkley's constant-growth DCF COE estimates?

A. Analysts' projected earnings growth rates are not suitable for use, exclusively, in the constant-growth DCF model because the growth rates that Ms. Bulkley utilized are not perpetual growth rates and are often shorter than five-year projected growth rates. The constant-growth DCF model assumes a perpetual investment horizon.[28] By exclusively using these analysts' projected earnings growth rates in the context of the constant-growth DCF model, Ms. Bulkley makes an unreasonable assumption that electric utilities will grow at these often high and precarious shorter-term growth rates, in perpetuity.

[26] Pages 36-37, Bulkley's Direct Testimony.
[27] Value Line, Inc., How to Read a Value Line Report (2017).
[28] Page 129, David C. Parcell in The Cost of Capital – A Practitioner's Guide prepared for SURFA.

Analysts are of the concurring opinion that long-term growth rates for utilities will eventually converge to the level of long-term gross domestic product ("GDP").[29] Staff has consistently held the view that while it is possible that a company or industry may grow at a rate faster than the GDP in the short to medium term, no company or industry will do so in perpetuity. Currently, the nominal GDP is projected to grow at a longer run rate of 3.80% and 4.10% as reported by the Federal Open Market Committee ("FOMC") and the Congressional Budget Office ("CBO"), respectively.[30] An example of Ms. Bulkley's unreasonably high growth rates is the Yahoo Finance Earnings growth rate of 11.00% with the 90-day average stock price that was used to produce Entergy Corporation's high DCF COE estimate of 16.01%.[31] Such high growth rates should not be used in constant-growth DCF COE estimates because no electric utility can sustain a growth rate of 11.00% perpetually.

Q. What growth rates should Ms. Bulkley have used?

A. As Staff alluded to above, appropriate growth rates for use in the constant-growth DCF model should give consideration to the long-term growth rates, represented by the projected long-term nominal GDP growth rates of 4.10%.[32] For example, the Federal Energy Regulatory Commission ("FERC") incorporates long-term GDP growth rates into calculations within the constant-growth DCF by using a ratio of 80% analyst projected long-term growth rates to 20% long-term GDP growth rates.[33] If Ms. Bulkley had used a similar approach with a proper GDP

[29] Page 302, Morin, R. A. (2006). New Regulatory Finance. Public Utilities Reports.
[30] Federal Open Market Committee, retrieved on June 12, 2024, (https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20240612.pdf).
An Update to the Economic Outlook: 2024 to 2034, Congressional Budget Office, February 2024, (https://www.cbo.gov/publication/59946).
[31] Schedule AEB-3, Bulkley's Direct Testimony.
[32] Page 66, Table 2-4, An Update to the Economic Outlook: 2024 to 2034, Congressional Budget Office, February 2024, (https://www.cbo.gov/publication/59946).
[33] *Entergy Arkansas, Inc*., Opinion No. 575, 175 FERC ¶ 61,136 (2021).

growth rate in the constant-growth DCF model and using only comparable proxy utilities, the mean of her DCF COE estimates for the 180-day average stock price would be 9.46% instead of 10.04%.[34] Therefore, reasonable DCF COE results are much lower than Ms. Bulkley's estimations.

4. Market Return of Capital Asset Pricing Models

Q. Please explain Ms. Bulkley's CAPM COE estimation methods.

A. Ms. Bulkley employed the traditional CAPM and the ECAPM using Value Line Beta, Bloomberg Beta, and Value Line long-term average Beta of 0.89%, 0.79%, and 0.73% with three different risk-free rates of 4.77%, 4.48%, and 4.10% and a total market return of 12.56% resulting in three different market risk premiums ("MRP") of 7.78%, 8.08%, and 8.46%.[35] For her electric utility proxy group, the ranges of Ms. Bulkley's CAPM and ECAPM COE estimates are 10.31% to 11.73% and 10.87% to 11.94%, respectively.[36]

Q. What is Staff's concern with Ms. Bulkley's CAPM and ECAPM COE estimates?

A. Due to the use of overstated input variables, Ms. Bulkley's CAPM and ECAPM COE estimates are too high. Even compared to her average COE estimate of 10.09% using median results of constant-growth DCF, Ms. Bulkley's average CAPM and ECAPM COE estimate of 11.00% and 11.39%, respectively, are too high.[37] Staff found that Ms. Bulkley's CAPM COE estimates are too high mainly because she used unreasonably high market return. Ms. Bulkley's market return of 12.56% is much higher than the US financial service industry's regular market return estimates of around 7.00% to 10.00%.[38]

[34] Schedule SJW-r1, Won's Rebuttal Testimony and Schedule AEB-1, Bulkley's Direct Testimony.
[35] Schedules AEB-4 and AEB-6, Bulkley's Direct Testimony.
[36] Schedule AEB-4, Bulkley's Direct Testimony.
[37] 1 Summary, Won's Rebuttal Workpaper.
[38] *See* Figure 2, "MRP and corresponding COE".

Q. How were Ms. Bulkley's market return and MRPs estimated?

A. Ms. Bulkley utilized her market return as the expected market return on the S&P 500 Index, and calculated her MRPs as the difference between the expected market return on the S&P 500 Index and the risk-free rate. For estimating expected market return, Ms. Bulkley conducted several steps of calculations. First, using the data of companies on the S&P 500 Index, Ms. Bulkley calculated an estimated weighted average dividend yield of 1.69% and an estimated weighted average long-term growth rate of 10.78%.[39] Second, using the constant growth DCF model with her estimated dividend yield and growth rate, Ms. Bulkley estimated the required market return of 12.56%.[40] Finally, Ms. Bulkley calculated implied MRPs estimated as the difference between the implied expected equity market return and the various risk-free rates. Ms. Bulkley's implied MRP over the current 30-day average of the 30-year U.S. Treasury bond yield, and projected yields on the 30-year U.S. Treasury bond, range from 7.78% to 8.46%.[41] Table 2 shows Ms. Bulkley's three MRP estimates and their associated estimation methods:[42]

Table 2. Bulkley's Market Risk Premium Estimation

	Estimate Method	MRP
[1]	Current 30-day average of 30-year U.S. Treasury bond yield	7.78%
[2]	Near-term projected 30-year U.S. Treasury bond yield	8.08%
[3]	Blue Chip Projected 30-year U.S. Treasury bond yield	8.46%
	Average	8.10%

Q. What is wrong with Ms. Bulkley's constant-growth DCF model estimation of the required market return of 12.56%?

[39] Schedule AEB-6, Bulkley's Direct Testimony.
[40] Ibid.
[41] Schedule AEB-4, Bulkley's Direct Testimony.
[42] Ibid.

A. Ms. Bulkley's constant-growth DCF procedure has two critical faults. First, for her expected total market return estimation using the DCF model, Ms. Bulkley's data set included companies that do not pay dividends or for which dividend information was not available.[43] Dividend yield information is essential to utilizing the DCF model.[44] Second, consistent with Staff's position that the DCF model assumes a long-term investment horizon, Staff further finds that the growth rates that Ms. Bulkley used are short-term in horizon, which makes them unsuitable for the constant-growth DCF model she used to estimate her expected market return. Staff recalculated an expected total return, including only companies with available dividend yields, and found a reasonable total market return of 10.42%, which is 114 basis points lower than Ms. Bulkley's.[45] Taking into account all three risk-free rates that Ms. Bulkley used results in estimated MRPs of less than 7%.[46]

Q. What are other financial institutions' current MRP estimates?

A. Other financial institutions' MRP estimates range from 4.54% to 6.80%.[47] According to a 2021 survey research based on 1,794 responses from business and economic professors, the North America average MRP estimate is 5.55%.[48] The American Appraisal Risk Premium Quarterly, Value Line, and Duff & Phelps (now Kroll) calculated MRPs of 6.0%, 5.5%, and 5.0%, respectively.[49] On February 8, 2024, The Kroll recommended U.S. equity risk premium remains at 5.5%.[50] Kroll's current MRPs range from 4.54% (geometric average) to 5.94% (arithmetic average) using the historical Stocks, Bonds, Bills, and Inflation (SBBI®) Monthly

[43] Schedule AEB-6, Bulkley's Direct Testimony.
[44] David C. Parcell in The Cost of Capital – A Practitioner's Guide prepared for SURFA.
[45] 6 Market Return, Won's Rebuttal Workpaper.
[46] 4 CAPM, Won's Rebuttal Workpaper.
[47] *See* Figure 2, "MRP and corresponding COE".
[48] Fernandez, P., Bañuls, S., & Fernandez Acin, P. (2021). Survey: Market Risk Premium and Risk-Free Rate used for 88 countries in 2021. SSRN-Social Science Research Network, 1–17.
[49] FERC Opinion No. 569, 169 FERC ¶ 61,129.
[50] Kroll Cost of Capital Recommendations and Potential Upcoming Changes – February 8, 2024 Update.

Dataset from 1926 to 2023.[51] Professor Aswath Damodaran of NYU Stern School of Business, a noted equity valuation professor, currently estimates MRPs in the range of 5.23% (geometric average) to 6.80% (arithmetic average):[52]

Figure 2. MRP and corresponding COE

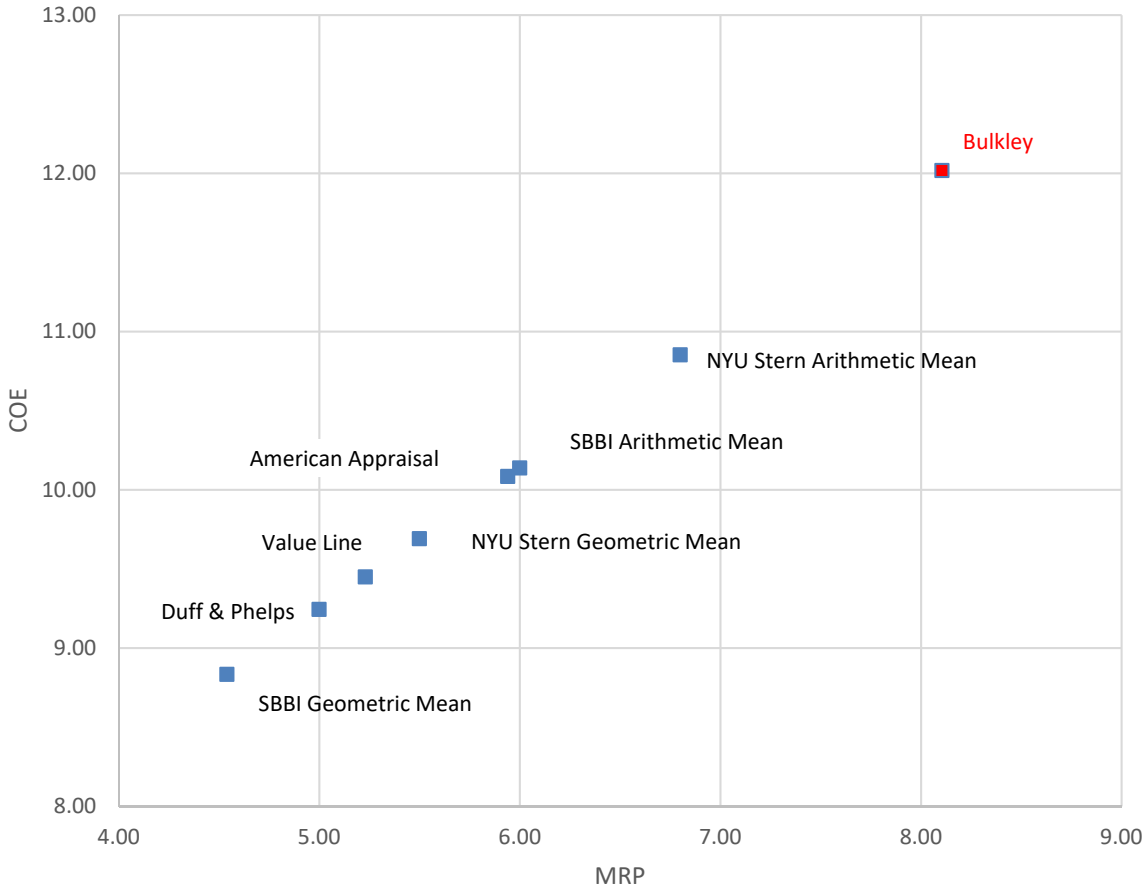


Figure 2 compares COE estimates with their corresponding MRPs, for Ms. Bulkley's electric proxy group, calculated with other reputable financial institution's reasonable MRPs and Ms. Bulkley's unreasonable MRPs, assuming the same projected 30-year U.S. Treasury bond yield

[51] Kroll, the Stocks, Bonds, Bills, and Inflation (SBBI®) Monthly Dataset.
[52] Risk Premium, Damodaran Online, Stern School of Business of New York University, updated January 1, 2024.

of 4.77% used in Ms. Bulkley's estimation.[53] As shown in Figure 2, Ms. Bulkley's CAPM COE estimate of 12.02%, with her corresponding average MRP of 8.10%, is an extreme outlier when compared with the other reliable published estimates. This clearly indicates that Ms. Bulkley's MRPs are too high resulting in her COE estimates being too high as well.

Q. Please summarize your concern with Ms. Bulkley's MRPs.

A. As presented in Table 2, Ms. Bulkley used three MRP estimates. As Staff already pointed out, all three MRP estimates are too high compared to other widely accepted MRP estimates in the financial industry. The unreasonably high MRPs are the result of Ms. Bulkley's miscalculated market return of 12.56%.

Q. What would Ms. Bulkley's CAPM COE estimates be if she had used proper input data?

A. With more reasonable assumptions, such as a market return of 10.42%, Ms. Bulkley's average CAPM COE estimate would be 9.25%.[54] This is well within the range of Staff's COE estimates of 8.31% to 10.03%,[55] and much lower than Ms. Bulkley's average CAPM COE estimate of 11.00%.

5. Empirical Capital Asset Pricing Model

Q. What is your concern with Ms. Bulkley's ECAPM model?

A. Like her average CAPM COE estimate of 11.00%, Ms. Bulkley's average ECAPM COE estimate of 11.39% is unreasonably high because she assumes an excessively high market return of 12.56%.[56] In addition, the ECAPM model itself overestimates COE because of an

[53] Schedule AEB-4, Bulkley's Direct Testimony.
[54] 4 CAPM Alt, Won's Rebuttal Workpaper.
[55] Schedule SJW-d15, Won's Direct Testimony.
[56] 1 Summary, Won's Rebuttal Workpaper.

adjustment to account for the supposed tendency of the CAPM method to underestimate COE for companies with low Beta coefficients.

Q. How did Ms. Bulkley adjust her CAPM COE to ECAPM COE?

A. Ms. Bulkley multiplied 75% of her MRPs by the Beta coefficient and added the remaining 25% MRPs, unadjusted.[57] This adjustment is consistent with Dr. Roger Morin's formula. Dr. Morin's formula was based on his finding, with data between 1926 and 1984, that the regular CAPM underestimated returns by about 2.00%.[58] The academic literature has estimated a fairly wide range of adjustment parameters, with much of the variation between studies arising from differences in methodology and time periods, so the alpha estimates are not strictly comparable.[59] Furthermore, Dr. Morin also cited other studies that found that the CAPM produced returns between -9.61% and 13.56%, meaning that the CAPM actually overestimated COE in some instances.[60] Such variations in findings do not lend credibility to Ms. Bulkley's use of the ECAPM.

Q. What is Staff's conclusion regarding Ms. Bulkley's ECAPM?

A. Considering the fact that there is no consensus on a reliable adjustment factor of ECAPM among researchers, Staff recommends that the Commission not consider Ms. Bulkley's ECAPM COE estimation method as reliable information for determining a just and reasonable authorized ROE.

6. Bond Yield Risk Premium Analysis

Q. What is BYRP analysis?

[57] Original CAPM COE estimate equals Risk-Free Rate + Beta × MRP but ECAMP COE estimate equals Risk Free Rate + 0.25 × MRP + 0.75 × Beta × MRP or Risk-Free Rate + Alpha + Beta × (MRP – Alpha) where Alpha = 0.25 × MRP.
[58] Page 190, Morin, R. A. (2006). New Regulatory Finance. Public Utilities Reports.
[59] Page 20, The Brattle Group, Estimating the Cost of Equity for Regulated Companies.
[60] Page 190, Morin, R. A. (2006). New Regulatory Finance. Public Utilities Reports.

A. The conventional BYRP analysis is based on the idea that since investors in stocks take greater risks than investors in bonds, the former expect to earn a return on a stock investment that reflects a premium over and above the return they expect to earn on a bond investment.[61] This premium required by investors for an investment in common stock over an investment in corresponding debt is called the risk premium.[62] Multiple approaches have been developed to determine the risk-premium for a utility. Ms. Bulkley's BYRP is different from the conventional method.

Q. What is Ms. Bulkley's BYRP method?

A. Ms. Bulkley's BYRP used a regression analysis based on authorized ROEs for utility companies relative to risk-free rates (30-year Treasury bond yields).[63] Ms. Bulkley used quarterly average data of risk-free rates and authorized ROEs derived from electric utility rate cases from 1980 through 2023 as reported by Regulatory Research Associates ("RRA").[64] Ms. Bulkley's regression analysis results in the following equation:

$$\text{Risk Premium (\%)} = 8.08\% - 0.433 \text{ Risk-Free Rate (\%)}.$$[65]

Because Ms. Bulkley defined the risk premium as the authorized ROE minus the risk-free rate, Ms. Bulkley's BYRP ROE estimates are only determined by 30-year Treasury bond yields. While in contrast, DCF and CAPM are able to estimate COE using multiple input variables. For example, Ms. Bulkley's CAPM COE estimates are determined by not only the risk-free rate

[61] Brigham, E. F., Shome, D. K., & Vinson, S. R. (1985). The risk premium approach to measuring a utility's cost of equity. Financial Management, 33-45.
[62] Morin, R. A. (2006). New Regulatory Finance. Public Utilities Reports, page 108.
[63] Page 46, lines 5-15, Bulkley's Direct Testimony.
[64] Page 46, Bulkley's Direct Testimony.
[65] Figure 11 (p. 47), Bulkley's Direct Testimony.

(30-year Treasury bond yield) but also the total market risk (MRP) and a stock's risk (Beta). The major determinant of 30-year Treasury bond yields is government intervention through the Federal Reserve's ("Fed") monetary policy, not solely the financial market. Therefore, Ms. Bulkley's BYRP is a biased method for estimating a fair ROE, considering the 30-year Treasury bond yields have changed extremely in recent years.[66]

Q. What are Ms. Bulkley's BYRP ROE estimates?

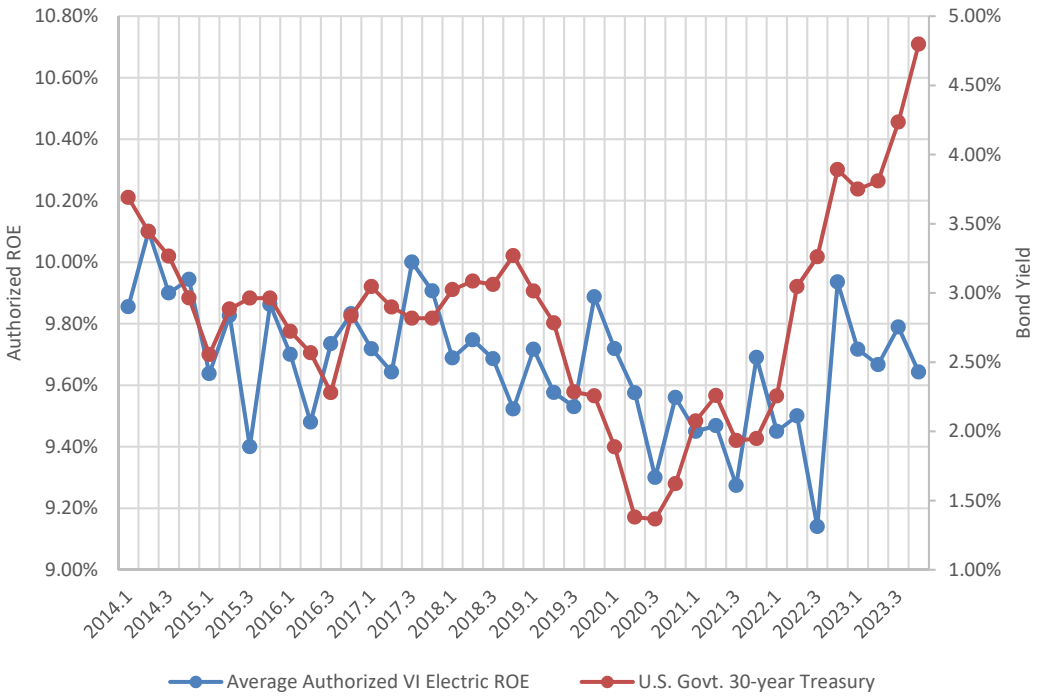
A. Ms. Bulkley's BYRP ROE estimates range from 10.40% to 10.79%, with a mean of 10.60%.[67] For her BYRP ROE estimation, Ms. Bulkley used three risk-free rates: 30-day average of the 30-year U.S. Treasury bond yield (i.e., 4.77%), the near-term (Q1 2024 – Q1 2025) projections of the 30-year U.S. Treasury bond yield (i.e., 4.48%), and a longer-term (2025 – 2029) projection of the 30-year U.S. Treasury bond yield (i.e., 4.10%).[68]

Q. What are Staff's concerns with Ms. Bulkley's BYRP ROE estimates?

A. Staff has multiple concerns with Ms. Bulkley's BYRP model. First, Ms. Bulkley used a risk premium defined as the difference between authorized ROEs of electric utilities and 30-year Treasury bond yields. In her regression analysis for her BYRP estimation method, Ms. Bulkley assumed a linear relationship between authorized ROEs of electric utilities and 30-year Treasury bond yields for the period from 1980 to 2023.[69] However, the relationship between authorized ROEs of vertically integrated electric utilities and 30-year Treasury bond yields changed significantly after the COVID-19 pandemic as shown in Figure 3. Therefore, Ms. Bulkley's BYRP analysis is not capable of providing a reliable ROE estimation.

[66] 30-year Treasury yields increased by 295 bps from 1.69% on December 3, 2021, to 4.64% on July 1, 2024.
[67] Figure 12 (p. 47), Bulkley's Direct Testimony.
[68] Figure 12 (p. 47) and AEB-7, Bulkley's Direct Testimony.
[69] AEB-7, Bulkley's Direct Testimony.

Figure 3. Authorized ROE of Electric Utility and 30-year Treasury Bond Yield



Second, the 30-year Treasury yield increased too much to accurately estimate an ROE as a result of the COVID-19 pandemic. Intended to combat the highest inflation in four decades, the Fed increased interest rates with unusual speed from March 17, 2022 to July 26, 2023. For example, the aggregate effect of the Fed's actions was an increase in 30-year Treasury yields from 1.69% on December 3, 2021, to a high of 5.09% on October 25, 2023.[70] Because Ms. Bulkley's estimates are literally only determined by the 30-year Treasury yield, these significant changes results in unreliable BYRP ROE estimates.

Third, as mentioned above, Ms. Bulkley's regression analysis for BYRP was conducted based on a period of more than 40 years, from 1980 to 2023. Staff has not found any statistical

[70] Federal Reserve Economic Data, Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, https://fred.stlouisfed.org/series/DGS30.

evidences or theoretical conclusions that the relationship between the 30-year Treasury yield and authorized ROEs is constant over time. These stale authorized ROEs might not provide a proper up to date COE estimate.

Staff agrees with FERC that the BYRP is likely to provide a less accurate current COE estimate than the DCF or CAPM models because it relies on previous ROE determinations, whose resulting ROE may not necessarily be directly determined by a market-based method.[71] Ms. Bulkley's use of unusually inflated risk-free rates should be rejected because it introduces significant biased speculation in ratemaking. In conclusion, Staff recommends that the Commission not consider Ms. Bulkley's BYRP COE estimate as reliable information to determine a just and reasonable authorized ROE.

7. Recalculated Ms. Bulkley's COE Estimates

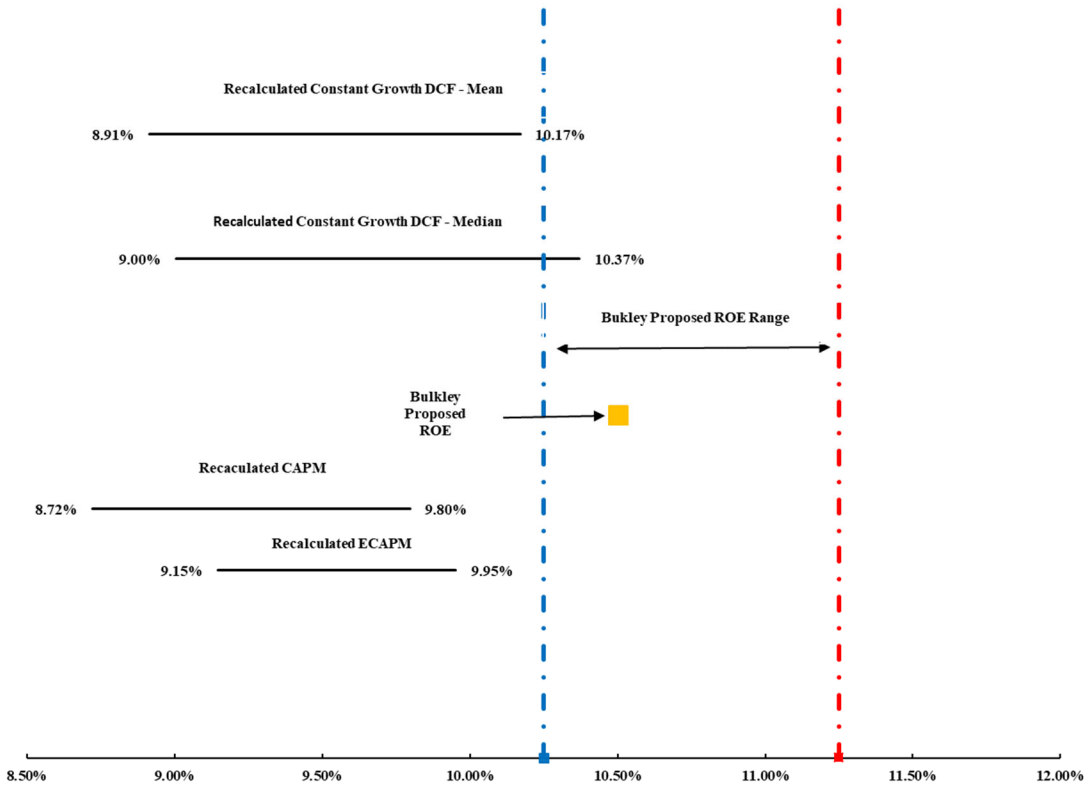
Q. Has Staff recalculated Ms. Bulkley's COE estimate for EMW using proper inputs and models?

A. Staff's recalculated results of Ms. Bulkley's COE estimates, using proper inputs and models, are summarized in Table 3:

Table 3. Bulkley's Estimation and Staff's Recalculation[72]

	Cost of Equity - Average	
COE Estimation Methods	Bulkley Estimation	Staff Recalculation
DCF	10.15%	9.53%
CAPM	11.00%	9.27%
Average	10.57%	9.40%

[71] Paragraph 342, FERC Opinion No. 569, 169 FERC ¶ 61,129.
[72] 1 Summary, Won's Rebuttal Workpaper.



As is evident in Table 3, Ms. Bulkley's COE estimates are too high compared to Staff's recalculation of Ms. Bulkley's COE, which uses more reasonable inputs. Although DCF and CAPM are reliable COE estimation methods, Ms. Bulkley's COE estimates are unreasonably high due to her choice of biased input values in the model. Staff recommends that Ms. Bulkley's DCF and CAPM COE estimates should not be utilized for calculating a just and reasonable authorized ROE.

8. Authorized ROEs

Q. Do you agree with Ms. Bulkley's statement: "As shown in Witness Ives's testimony, while the 2022 rate determination resulted in an authorized ROE of 9.50 percent, the actual earned return was less than 6.00 percent."?[73]

[73] Page 12, lines 4-6, Bulkley's Direct Testimony.

A. No, I do not. In the 2022 EMW rate case, Case No. ER-2022-0130, the Commission approved a black box settlement without determining an authorized ROE.[74] Therefore, Ms. Bulkley's statement that "[t]he 2022 rate determination resulted in an authorized ROE of 9.50 percent" is not accurate.[75]

Furthermore, Ms. Bulkley's statement confuses readers about the difference between ROE and ROR. In her statement, Ms. Bulkley compared an authorized ROE of 9.5% with an actual return of 6.0%, which is the actual ROR. ROE and ROR are not directly comparable concepts. ROE only considers return on common equity, but ROR is a weighted average cost of capital that considers both ROE and the costs of other forms of capital, such as long-term debts and preferred stocks. For example, Ms. Bulkley proposed an ROE of 10.50% and an ROR of 7.57% for ratemaking in this proceeding.[76]

Additionally, Staff wants to note that the Commission's authorized ROE does not guarantee an actual earned return for utilities but allows for a potential ROR. Even if two utilities were allowed the same ROE and ROR, their actual returns could still differ due to various reasons. For example, in the 2022 Evergy Missouri Metro rate case, Case No. ER-2022-0129, the Commission approved a stipulation and agreement for both cases, ER-2022-0129 and ER-2022-0130,[77] yet Evergy Missouri Metro earned a return more than 200 basis points higher than EMW in 2023.[78]

[74] *Order Approving Four Partial Stipulations and Agreements*, Case Nos. ER-2022-0129 and ER-2022-0130.
[75] Page 12, lines 4-6, Bulkley's Direct Testimony.
[76] Figure 14 (p. 71), Bulkley's Direct Testimony.
[77] *Order Approving Four Partial Stipulations and Agreements*, Case Nos. ER-2022-0129 and ER-2022-0130.
[78] Surveillance Reports, BFQR-2024-0534 and BFQR-2024-0535.

Q. Why do authorized ROEs in other jurisdictions necessarily need to be considered when recommending a just and reasonable authorized ROE for EMW?

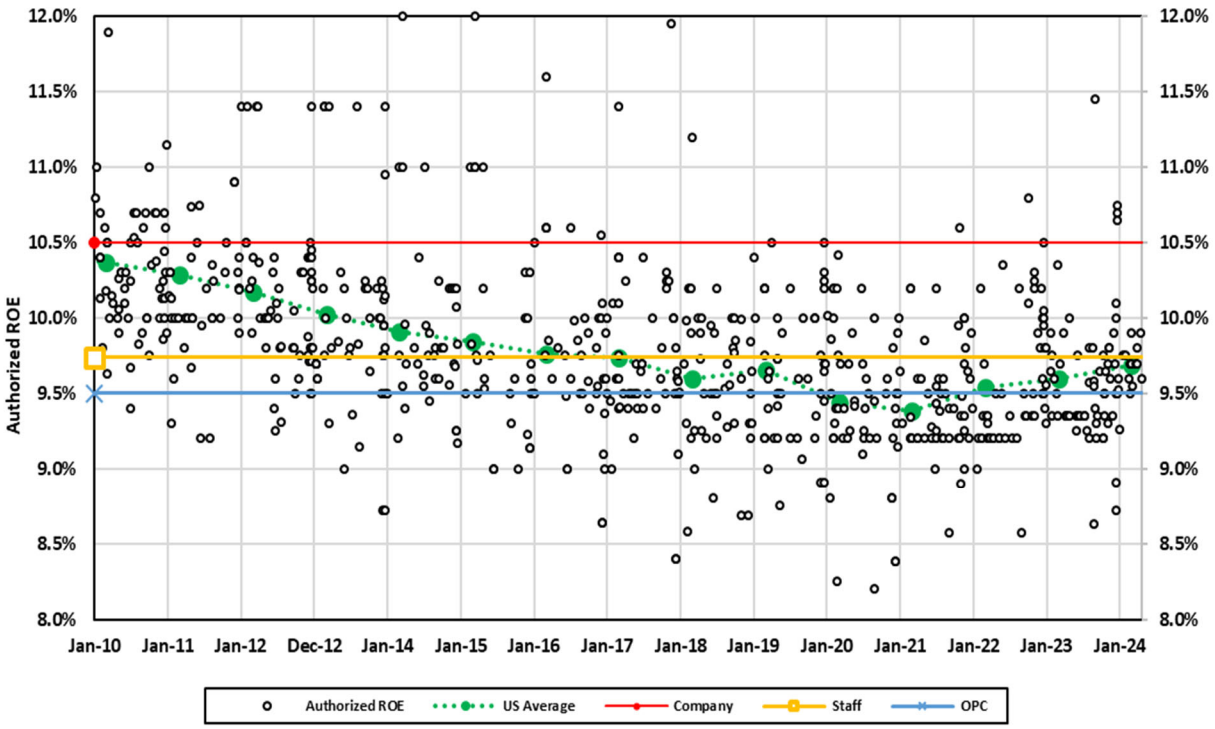
A. According to the regulatory principles established by the *Hope* and *Bluefield* cases, an authorized ROE of a utility should be comparable to other investments of commensurate risk.[79] As investors evaluate the authorized ROE of one utility in comparison to the returns offered by other regulated utilities with similar risk profiles, the regulatory decisions of other commissions serve as a fundamental test of a just and reasonable authorized ROE. Staff conducted a comparative analysis of authorized ROEs to assess the reasonableness of Ms. Bulkley's proposed ROE of 10.50%.

Q. Please explain Staff's comparative analysis of authorized ROEs.

A. Staff utilized the 'Rate Case History' dataset reported by Regulatory Research Associates, a group within S&P Global Market Intelligence, to analyze the authorized ROEs of US utilities from January 2010 to June 2024. Figure 4 displays the authorized ROE for electric utilities in the US, alongside Ms. Bulkley's proposed ROE of 10.50% and the ROE recommendations of 9.74% and 9.50% from Staff and Mr. Murray, respectively. In the first half of 2024, recently authorized comparable ROEs ranged from 9.26% to 9.94%, with an average of 9.69% for all 20 electric utility cases and an average of 9.74% for the 10 vertically integrated electric utility cases.[80]

[79] *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia,* 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923); *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1944).
[80] S&P Global Market Intelligence, Retrieved in July 2, 2024.

Figure 4. Authorized ROE – Electric Utilities in the US (2010-2024)



Of the 20 electric rate case decisions regarding authorized ROEs in the US in the first half (ending June 30) of 2024, none fall within Ms. Bulkley's reasonable ROE range of 10.25% to 11.25%,[81] while 18 authorized ROEs fall within Staff's zone of reasonableness, ranging from 9.49% to 9.99%.[82] Two exceptions outside Staff's zone of reasonableness is the authorized ROE of 9.23% and 9.40% for Public Service Co. of New Mexico ("PNN"), as decided by the New Mexico Public Regulation Commission, and Fitchburg Gas & Electric Light, as decided by the Department of Public Utilities of Massachusetts, respectively.[83]

Q. What is the conclusion of Staff's comparative analysis of authorized ROEs?

[81] Page 7, lines 26-27, Bulkley's Direct Testimony.
[82] Page 40, line 20, Won's Direct Testimony.
[83] RRA, S&P Capital IQ Pro.

A. Based on the regulatory principles established by the *Hope* and *Bluefield* cases, Ms. Bulkley's proposed ROE of 10.50% is not comparable to the authorized ROEs of other electric utilities of commensurate risk in the US.

9. Business and Regulatory Risks

Q. What adjustments to COE did Ms. Bulkley make in her recommendation of authorized ROE regarding EMW's business and regulatory risks?

A. Ms. Bulkley did not make specific adjustments to the COE in her recommendation of an authorized ROE when estimating the effects of EMW's business and regulatory risks.[84] However, Ms. Bulkley did consider business and regulatory risks when determining where EMW's required ROE falls within the range of COE estimates based on her analytical results.[85]

Q. What are Staff's concerns regarding Ms. Bulkley's consideration of EMW's business and regulatory risks?

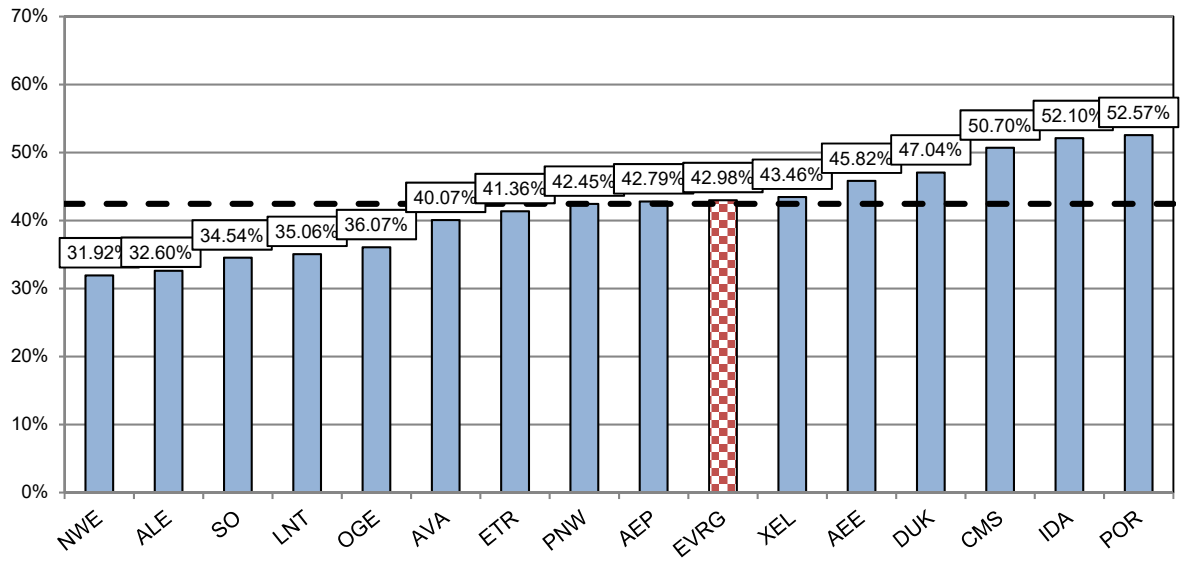
A. While Staff also considers EMW's business and regulatory risks when recommending an authorized ROE to the Commission, Staff is concerned about Ms. Bulkley's biased approach, which inflates EMW's business and regulatory risks, adding to her already overstated range of COE estimates. As a result, Ms. Bulkley's proposed ROE of 10.50% exceeds the average authorized ROE in electric utility rate cases completed in the first half of 2024 (9.69%) by 81 basis points.[86] Even when considering only vertically integrated electric utility decisions in the first half of 2024, the average authorized ROE stands at 9.74%.[87]

[84] Page 3, lines 21-22 and page 4, lines 1-2, Bulkley's Direct Testimony.
[85] Page 4, lines 1-2 and 13-18, Bulkley's Direct Testimony.
[86] S&P Capital IQ Pro, Retrieved on July 2, 2024.
[87] Schedule SJW-r2-1, Won's Rebuttal Testimony.

Q. Do you agree with Ms. Bulkley that the risk level for EMW is greater than her proxy group companies because of their capital expenditure requirements?[88]

A. No. Ms. Bulkley's argument is that the ratio of expected capital expenditures as a percentage of net utility plant ("capital expenditure ratio") for EMW are higher compared to her proxy group companies and as a result, their risk profiles are adversely affected.[89] Ms. Bulkley cited S&P's explanation of the importance of regulatory support for utilities' significant capital expenditures.[90] While Staff agrees with S&P's explanation, Staff disagrees with Ms. Bulkley's argument that EMW should have a higher authorized ROE due to higher capital expenditure requirements, for several reasons.

Figure 5. 2024-2027 Projected CAPEX to 2022 Net Plant[91]



[88] Pages 48-50, Bulkley's Direct Testimony.
[89] Page 49, lines 3-7, Bulkley's Direct Testimony.
[90] Pages 49, lines 14-27, Bulkley's Direct Testimony.
[91] Schedule AEB-8, Bulkley's Direct Testimony.

First, as shown in Figure 5, EMW's current projection of capital expenditure ratio for 2024 through 2027 of approximately 43% is not significantly higher than the average ratio of capital expenditures for Ms. Bulkley's proxy group companies of 41.90%.[92]

Second, EMW's capital expenditures ratio of 43% does not mean that EMW faces a higher risk of under-recovery than the proxy group and warranting a higher authorized ROE. EMW, like other utilities in Missouri, benefit from an improved regulatory environment.[93] EMW elected to use Plant in Service Accounting ("PISA"), which allows electric utilities in Missouri to defer for future recovery 85% of their depreciation expense and returns from plant and equipment placed in service between rate cases.[94] In addition. EMW also has a renewable energy standard rate adjustment mechanism ("RESRAM").[95] While the Commission does not allow all possible cost recovery mechanisms included in Ms. Bulkley's Schedule AEB-9, Staff disagrees with Ms. Bulkley that the use of PISA and RESRAM does not reduce the Company's regulatory risk relative to its peers.[96]

Third, EMW's significant capital expenditures are related to the Sustainability Transformation Plan ("STP") by Evergy Inc. that began on January 21, 2020, when a letter from Elliott Management ("Elliott") to Evergy Inc. was made public by Elliott.[97] According to Evergy Inc.'s notice of filing for the STP, Evergy did not contemplate the possibility of a cost increase, but instead focused on addressing a cost reduction resulting from the STP.[98] While STP projects may have a secondary benefit to EMW ratepayers, the primary benefit is to Evergy, Inc and

[92] 8 CapEX 2, Won's Rebuttal Workpaper.
[93] Moody's Investors Service. Credit Opinion, Evergy Missouri West, Inc., December 21, 2023.
[94] Section 393.1400.2(1) and related provisions of the Missouri Revised Statutes.
[95] Page 52, lines 7-8, Bulkley's Direct Testimony.
[96] Page 53, lines 1-15, Bulkley's Direct Testimony.
[97] Staff Report, EO-2021-0032.
[98] Evergy Notice of Filing of Sustainability Transformation Plan, EO-2021-0032.

its shareholders. Even though it may be appropriate for these projects to be included in rate base, to increase the allowed return because of these investments is neither fair nor just since the benefits to ratepayers are tangential at best. Therefore, Staff disagrees with Ms. Bulkley that EMW should request a higher authorized ROE solely because of a higher ratio of capital expenditures due to its STP.

Fourth, if Ms. Bulkley's assertion is true, then EMW's risk profiles were affected by their significant capital expenditures and their credit rating should have been changed. However, Evergy Inc. and EMW's credit ratings did not change before or after the STP had been implemented.[99] Evergy Inc. and EMW are currently rated by Moody's and S&P. The corporate credit ratings assigned to Evergy by Moody's and S&P are 'Baa2' and 'BBB+', respectively.[100] The corporate credit ratings assigned to EMW by Moody's and S&P are also 'Baa2' and 'BBB+', respectively.[101]

Q. Do you agree with Ms. Bulkley that EMW has greater risk than the proxy group?[102]

A. No. EMW takes advantage of several alternative regulatory mechanisms such as PISA and RESRAM. It is true there are some regulatory lag and time limits, but Staff does not find any evidence that EMW has a significantly greater risk than the proxy group that requires an upward adjustment to the ROE to reflect any incremental risk. Even Ms. Bulkley recognized and stated, "As shown in Schedule AEB-9, the majority of the operating utilities of the proxy group companies (i.e., approximately 66 percent) also have some form of a capital cost recovery

[99] S&P Capital IQ Pro and Staff's Data Request No. 0028, Moody's Credit Opinion, page 1, EO-2021-0032.
[100] S&P Rating Report – Evergy, Inc.
[101] S&P Rating Report - Evergy Missouri West, Inc.
[102] Page 54, lines 7-8, Bulkley's Direct Testimony.

mechanism."[103] The topic of EMW's regulatory lag is also addressed in the rebuttal testimony of Staff witness Keith Majors.

Q. Do you agree with Ms. Bulkley that the RRA jurisdictional ranking and the S&P credit supportiveness ranking for Missouri indicates greater risk than the average for the proxy group?[104]

A. No, I do not. According to S&P Global Ratings' article, "North American Utility Regulatory Jurisdictions Update," recently published on March 11, 2024, Missouri is classified in the category of "Very Credit Supportive," with a "Strong and Adequate" utility regulatory environment in jurisdictions among U.S. states and Canadian provinces.[105] Therefore, Ms. Bulkley's regulatory risk consideration is meaningless for EMW operations as a whole with her upwardly-biased COE estimates.

As Ms. Bulkley stated, "Both Moody's and S&P have identified the supportiveness of the regulatory environment as an important consideration in developing their overall credit ratings for regulated utilities."[106] In other words, utilities' overall credit ratings already account for regulatory risks. Ms. Bulkley's proxy group consisted of 16 utilities comparable to EMW, with 8 utilities sharing the same credit rating of BBB+, 4 utilities rated one notch higher at A-, and 4 utilities rated one notch lower at BBB.[107] Therefore, if regulatory risks are reconsidered for recommending ROE using COE estimates by a proxy group constructed with similar credit ratings, it would entail double consideration of regulatory risks.

[103] Page 53, lines 7-9, Bulkley's Direct Testimony.
[104] Page 63, lines 1-2, Bulkley's Direct Testimony.
[105] S&P Global Ratings, North American Utility Regulatory Jurisdictions Update: Ontario Remains Unchanged, Notable Developments Elsewhere, published March 11, 2024.
[106] Page 62, lines 18-20, Bulkley's Direct Testimony.
[107] Schedule AEB-2, Bulkley's Direct Testimony.

Furthermore, the Commission has approved several favorable regulatory mechanisms for EMW's electric utility service. Considering the series of favorable regulatory mechanisms and accounting authority orders granted by the Commission to EMW, Ms. Bulkley's arguments alleging greater risk than the average for the proxy group are baseless.

10. Cost of Debt and Capital Structure

Q. What cost of debt and capital structure for the ROR did Mr. Andrews propose for EMW in this proceeding?

A. For EMW, Mr. Andrews proposed an authorized ROR of 7.5661%, calculated using Ms. Bulkley's proposed ROE of 10.50% and a cost of debt of 4.3826%, applied to a projected capital structure, as of June 30, 2024, consisting of 52.04% common equity and 47.96% long-term debt.[108]

Q. Does Staff have concerns about the cost of the long-term debt proposed by EMW's witness?

A. Mr. Andrews stated that the requested cost of debt is based on EMW's projected capital structure on June 30, 2024.[109] According to Mr. Andrews, Ms. Bulkley's review and analysis demonstrates EMW's 4.38% cost of debt is reasonable.[110] Ms. Bulkley stated that "EMW's embedded cost of long-term cost of 4.38 percent is consistent with the market cost of debt at the time of issuance and is thus reasonable."[111]

Staff has multiple concerns with Ms. Bulkley's statement. First, there is no evidence that Ms. Bulkley's projected cost of debt of 4.38% as of June 30, 2024, will be EMW's actual cost of

[108] Table 1 (p. 4), Andrews' Direct Testimony.
[109] Page 4, lines 9-10, Andrews' Direct Testimony.
[110] Page 7, lines 2-5, Andrews' Direct Testimony.
[111] Page 8, lines 10-11, Bulkley's Direct Testimony.

debt at June 30, 2024. Second, Ms. Bulkley did not provide evidence that her requested cost of long-term debt of 4.38% was consistent with the market cost of debt at the time of issuance. For her comparison analysis, Ms. Bulkley used the issuance cost compared to the index yield at the time of debt issuances, which occurred in 2013 and 2022.[112] In other words, Ms. Bulkley's cost of debt does not reflect EMW's current actual cost of debt. As of December 31, 2023, EMW's actual embedded cost of debt is 4.01%.[113]

Q. Does Staff have concerns about the capital structure proposed by EMW's witness?

A. Staff is investigating how EMW's proposed capital structure, as of June 30, 2024, is achievable. Also, Staff is investigating how Evergy Inc.'s and EMW's actual true-up capital structures, as of June 30, 2024, are attained from the previously provided capital structures. From 2020 to 2023, Evergy Inc.'s average capital structure was approximately 48.49% common equity and 51.51% long-term debt, and EMW's average capital structure was 51.13% common equity and 48.87% long-term debt.[114] As of December 31, 2023, Evergy Inc. reported approximately 47% common equity and 53% long-term debt, and EMW reported approximately 55% common equity and 45% long-term debt.[115] Currently, Staff is reviewing the changes in EMW's actual capital structure and cost of debt through June 30, 2024, the end of the true-up period. Staff will address its final recommended capital structure in its surrebuttal and true-up testimony at a later point in the case.

[112] Schedule AEB-13, Bulkley's Direct Testimony.
[113] Staff's Data Request No. 0106.
[114] Schedule SJW-d5-2, Won's Direct Testimony.
[115] Schedule SJW-d6, Won's Direct Testimony.

III. RESPONSE TO TESTIMONY OF OPC WITNESS

Q. What are the specific areas in which Staff is responding to OPC's witness?

A. Staff is responding to the testimony of Mr. Murray. The areas in which Staff addresses issues of Mr. Murray's direct testimony include:

- Recommended ROE, and
- Capital Structure.

Staff will discuss each in turn, below.

1. Recommended ROE

Q. What is Mr. Murray's recommended ROE for use in this proceeding?

A. Mr. Murray recommended that the Commission set EMW's authorized ROE for its electric utility operations at 9.50% based on a range of 9.25% to 9.75%.[116]

Q. Please explain how Mr. Murray's recommended ROE was determined.

A. Mr. Murray asserted that his ROE recommendation is based on his COE analysis and awareness of the electric utility industry's COE, investor expectations on allowed ROEs, average electric utility authorized ROEs, and Evergy Inc.'s authorized returns for its Kansas electric utility operations.[117] Mr. Murray estimated EMW's COE of 8.50% to 8.75% and 8.00% to 8.50% using a multi-stage DCF approach and a CAPM analysis, respectively.[118] Mr. Murray conducted a reasonableness test using a simple rule of thumb the Chartered Financial Analyst ("CFA") suggests in its curriculum to estimate the COE by adding a 3% risk premium to a range of recent yield-to-mutuality ("YTM") of EMW's long-term bonds of around 5.3% to 5.7% implies a COE of approximately 8.3% to 8.7%.[119]

[116] Page 2, lines 18-19, Murray's Direct Testimony.
[117] Page 29, lines 11-15, Murray's Direct Testimony.
[118] Page 23, lines 6-8, and page 28, lines 11-12, Murray's Direct Testimony.
[119] Page 28, lines 14-22, Murray's Direct Testimony.

Q. What are Staff's concerns with Mr. Murray's recommended ROE?

A. Staff does not have any major concerns with Mr. Murray's recommended ROE of 9.50% because it is within Staff's recommended range of ROE of 9.49% to 9.99%.[120] Although Staff does not agree with Mr. Murray's detailed estimation procedures for his recommended ROE, Staff found no substantial deficiency in Mr. Murray's ROE recommendation.

2. Capital Structure

Q. What is Mr. Murray's recommended capital structure for use in this proceeding?

A. For EMW, Mr. Murray recommends a capital structure that consists of 47.2% common equity and 52.8% long-term debt based on his analysis of Evergy Inc.'s and EMW's quarterly capital structures from the beginning of the test year (July 1, 2022) through the end of the update period (December 31, 2023).[121]

Q. What is Staff's concern with Mr. Murray's capital structure recommendation?

A. Staff has one major concern with Mr. Murray's recommendation. Mr. Murray's recommended capital structure was developed based on Evergy Inc.'s consolidated capital structure, instead of EMW's.[122] Mr. Murray asserts that Evergy Inc. focuses only on EMW's long-term capital balances (i.e. common equity and long-term debt) to target a common equity ratio of around 52% for ratemaking purposes and that Evergy Inc. manages its own internal accounting records (not available to the public) for purposes of targeting the capital structure it desires for purposes of setting its authorized ROR.[123] Based on his presumption, Mr. Murray

[120] Schedule SJW-d16, Won's Direct Testimony.
[121] Page 30, lines 17-20, Murray's Direct Testimony.
[122] Page 31, lines 4-5, Murray's Direct Testimony.
[123] Page 30, lines 22-28, Murray's Direct Testimony.

concluded that the proportion of the common equity ratio would be lowered by around 10% (e.g., from 52% to 42%) if EMW's consistent balance of short-term debt were included in its ratemaking capital structure.[124]

However, as of the end of the test year, December 31, 2023, EMW has common equity ratios of approximately 54.59%.[125] According to EMW's response to Staff's data request, EMW does not have a target capital structure of a 52.0% common equity ratio but is seeking to maintain a balance just over a 50% common equity ratio.[126] Neither actual nor target capital structures support Mr. Murray's recommended common equity ratio of 47.2%. Also, the recent average equity ratio for other electric utility companies throughout the U.S. is approximately 50%.[127]

Q. Please explain more about equity ratios used in other electric utility rate cases.

A. According to RRA, there were 20 electric rate cases that reported specific equity ratios in the first half of 2024. The average equity ratios from fully litigated and settled rate cases have been 50.50% and 47.84%, respectively, and the average equity ratio of all 20 electric rate cases in the first half of 2024 is 49.72%. Considering the historical average equity ratio of approximately 50% used for calculating the allowed ROR for electric utility rate cases, Mr. Murray's recommended equity ratio of 47.2% appears to be low. Table 4 presents information compiled and published by RRA, which details the average equity ratios from Commissions around the U.S. in the years 2010 to the second quarter of 2024, along with the number of cases considered:

[124] Page 31, lines 1-2, Murray's Direct Testimony.
[125] Staff's Data Request No. 0105.2.
[126] Staff's Data Request No. 0110.
[127] S&P Capital IQ Pro: Regulatory Research Association, retrieved July 2, 2024.

Table 4. Equity Ratios of Electric Utility Rate Cases (2010-2024)[128]

Fully Litigated		Electric Settled		Electric Total	
Equity (%)	Case (No.)	Equity (%)	Case (No.)	Equity (%)	Case (No.)
47.68	27	49.49	34	48.63	61
48.17	26	48.01	16	48.11	42
49.98	29	51.40	29	50.62	58
48.25	17	49.70	32	49.14	49
50.14	21	50.26	17	50.19	38
48.98	16	49.28	15	49.12	31
49.75	25	47.51	17	48.85	42
49.23	24	49.30	29	49.26	53
48.70	22	49.76	26	49.27	48
51.07	27	49.66	20	50.62	47
49.87	32	50.45	23	50.12	55
50.71	30	49.79	25	50.31	55
51.25	32	50.32	21	50.93	53
52.10	39	50.57	24	51.59	63
50.50	12	47.84	8	49.72	20

Q. Does Mr. Murray's recommendation to use the parent company's capital structure meet the standard of generally-accepted utility ratemaking procedures?

A. No. Mr. Murray's recommendation is not compatible 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. The Society of Utility and Regulatory Financial Analysts ("SURFA") lists the following four guidelines for determining when to use a parent company's capital structure in its guidebook, The Cost of Capital – A Practitioner's Guide ("CRRA Guide"):

1. Whether the subsidiary utility obtains **all** of its capital from its parent, or issues its own debt and preferred stock;

[128] S&P Capital IQ Pro, Retrieved on July 2, 2024.

2. Whether the parent guarantees **any** of the securities issued by the subsidiary;

3. Whether the subsidiary's capital structure is independent of its parent (i.e., existence of double leverage, absence of proper relationship between risk and leverage of utility and **non**-utility subsidiaries); and,

4. Whether the parent (or consolidated enterprise) is diversified into **non**-utility operations [emphasis added].[129]

There is nothing in these guidelines that suggests that it is appropriate to use Evergy Inc.'s (the parent company of EMW) capital structure to set EMW's ROR.

For the first guideline, except for common stock and equity contributions, EMW has not received any other long-term financing or preferred stock from Evergy Inc. since January 1, 2023.[130] Although EMW has predominantly issued commercial paper to external investors for short-term funds, it has borrowed from affiliates via the utility money pool from time to time.[131] This is a usual financial relationship between the holding company and its subsidiaries. Also, EMW's standalone capital structure supports its own bond rating.[132] EMW and Evergy Inc. are rated by S&P and Moody's.[133] Therefore, EMW meets the first criterion.

For the second guideline, neither Evergy Inc. nor Evergy Inc.'s other subsidiaries guarantee the securities issued by EMW.[134] Also, EMW's assets have not secured Evergy Inc. or its subsidiaries' debts, nor do they secure each other's debts.[135] For the third guideline, Staff has not

[129] David C. Parcell in The Cost of Capital – A Practitioner's Guide prepared for SURFA.
[130] Staff's Data Request No. 0124 (1).
[131] Staff's Data Request No. 0124 (2).
[132] Evergy Missouri West Inc, Ratings Score Snapshot, RatingsDirect, S&P Global Ratings. December 14, 2023.
[133] S&P Capital IQ Pro.
[134] Staff's Data Request No. 0124 (5).
[135] Staff's Data Request No. 0124 (6).

found the existence of double leverage, or an absence of a proper relationship between risk and leverage of utility and non-utility subsidiaries.[136] For the fourth guideline, according to Evergy Inc.'s consolidated balance sheet in 2023, Evergy Inc.'s non-utility assets and revenue are less than 1.0% of Evergy Inc.'s total assets and total revenue.[137] This is not concerning because Evergy Inc.'s non-utility operations are insignificant.

Q Do you agree with Mr. Murray's statement, "Based on its recent rate cases, Evergy appears to be targeting an approximate 52% equity ratio for ratemaking purposes"?[138]

A. No, I do not. Staff understands why Mr. Murray speculated Evergy appears to be targeting an approximate 52% equity ratio because of his investigation of Evergy's recently requested ratemaking common equity ratios. Table 5 presented below displays Mr. Murray's summary of Evergy's requested ratemaking common equity ratios for its utility subsidiaries since 2022.

Table 5. Evergy's Requested Ratemaking Common Equity Ratios

Company	Case/Docket No.	Equity Ratio (%)
Evergy Metro Missouri	ER-2022-0129	51.19
Evergy Missouri West	ER-2022-0130	51.81
Evergy Missouri West	ER-2024-0189	52.04
Evergy Kansas Central	23-EKCE-775-RTS	52.04
Evergy Metro Kansas	23-EKCE-775- RTS	52.00
Average		51.82

[136] Staff's Data Request No. 0125.
[137] Staff's Data Request No. 0126.1.
[138] Page 3, lines 11-13, Murray's Direct Testimony.

While it is true that Evergy's recent requested ratemaking common equity ratios are close to 52%, the results presented in Table 5 are not conclusive evidence that Evergy is targeting an approximate 52% equity ratio. EMW's witness Mr. Andrews stated,

> We continually evaluate the capital structure and seek to maintain a balance just over 50% equity and slightly less than 50% debt optimized over the long-term for the timing of financing, capital plans, rating agency views and alignment with peer companies' capital structures with which we compete for investor capital.[139]

In other words, it is possible that Evergy aimed for just over a 50% equity ratio, but the result deviated from this target. Evergy might just be requesting operating subsidiaries' actual standalone equity ratios for ratemaking capital structures.

Q. What is Staff's conclusion regarding Mr. Murray's capital structure?

A. Mr. Murray's recommendation to use Evergy Inc.'s capital structure is based on conjectures that are not supported by conclusive evidence. Staff recommends that the Commission not consider Mr. Murray's recommendation to use Evergy Inc.'s capital structure for the ratemaking capital structure of EMW.

continued on next page

[139] Page 6, lines 17-22, Andrews' Direct Testimony.

IV. SUMMARY AND CONCLUSIONS

Q. Please summarize the conclusions of your rebuttal testimony.

A. Ms. Bulkley's recommended ROE of 10.50% for EMW is not just and reasonable considering her inappropriate reliance on unreasonable inputs to her DCF and CAPM analyses. Staff asserts that a single independent input, the 30-year Treasury yield, used in Ms. Bulkley's BYRP method is inappropriate for estimating proper COE estimates. Staff has no major concerns with OPC witness Murray's recommended authorized ROE of 9.50%. Considering the interest rate remaining at its current level, Staff recommends that the reasonable authorized ROE to use in this proceeding is 9.74%, in a reasonable range of 9.49% to 9.99%. Staff is reviewing EMW's true-up capital structure and cost of debt and will make its final recommendation of ROR in its surrebuttal testimony and true-up testimony in this proceeding.

Q. Does this conclude your rebuttal testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement A General Rate Increase for Electric Service	))))	Case No. ER-2024-0189

AFFIDAVIT OF SEOUNG JOUN WON, PhD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SEOUNG JOUN WON, PhD and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Rebuttal Testimony of Seoung Joun Won, PhD*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

SEOUNG JOUN WON, PhD

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 31st day of July 2024.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

Notary Public

Evergy Missouri West, Inc.
Case No. ER-2024-0189

STAFF's RECALCULATED ANN BULKLEY's
COST OF EQUITY ANALYSES
SUMMARY OF RESULTS

Constant Growth DCF

	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Mean Results:			
30-Day Avg. Stock Price	8.22%	9.74%	10.75%
90-Day Avg. Stock Price	8.25%	9.77%	10.78%
180-Day Avg. Stock Price	8.19%	9.72%	10.72%
Average	8.22%	9.74%	10.75%
Median Results:			
30-Day Avg. Stock Price	9.20%	9.44%	9.85%
90-Day Avg. Stock Price	9.26%	9.50%	9.91%
180-Day Avg. Stock Price	9.07%	9.31%	9.72%
Average	9.18%	9.42%	9.83%

CAPM / ECAPM / Bond Yield Risk Premium

	30-Year Treasury Bond Yield		
	Current 30-Day Avg	Near-Term Projected	Longer-Term Projected
CAPM:			
Current *Value Line* Beta	9.86%	9.83%	9.79%
Current Bloomberg Beta	9.15%	9.08%	9.00%
Long-term Avg. *Value Line* Beta	8.47%	8.37%	8.24%
ECAPM:			
Current *Value Line* Beta	10.00%	9.98%	9.95%
Current Bloomberg Beta	9.47%	9.42%	9.35%
Long-term Avg. *Value Line* Beta	8.96%	8.88%	8.79%

Evergy Missouri West, Inc.
Case No. ER-2024-0189

Authorized ROE and Equity Ratio of the U.S Utility by Sector
2010-2024

Electric

	Fully Litigated			Settled			Electric Total		
Year	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)
2010	10.35	47.68	27	10.39	49.49	34	10.37	48.63	61
2011	10.39	48.17	26	10.12	48.01	16	10.29	48.11	42
2012	10.28	49.98	29	10.06	51.40	29	10.17	50.62	58
2013	9.85	48.25	17	10.12	49.70	32	10.03	49.14	49
2014	10.05	50.14	21	9.73	50.26	17	9.91	50.19	38
2015	9.66	48.98	16	10.04	49.28	15	9.84	49.12	31
2016	9.74	49.75	25	9.80	47.51	17	9.77	48.85	42
2017	9.73	49.23	24	9.75	49.30	29	9.74	49.26	53
2018	9.63	48.70	22	9.57	49.76	26	9.60	49.27	48
2019	9.58	51.07	27	9.76	49.66	20	9.66	50.62	47
2020	9.43	49.87	32	9.46	50.45	23	9.44	50.12	55
2021	9.23	50.71	30	9.57	49.79	25	9.38	50.31	55
2022	9.48	51.25	32	9.62	50.32	21	9.54	50.93	53
2023	9.64	52.10	39	9.52	50.57	24	9.60	51.59	63
2024	9.64	50.50	12	9.77	47.84	8	9.69	49.72	20

Vertically Integrated Electric

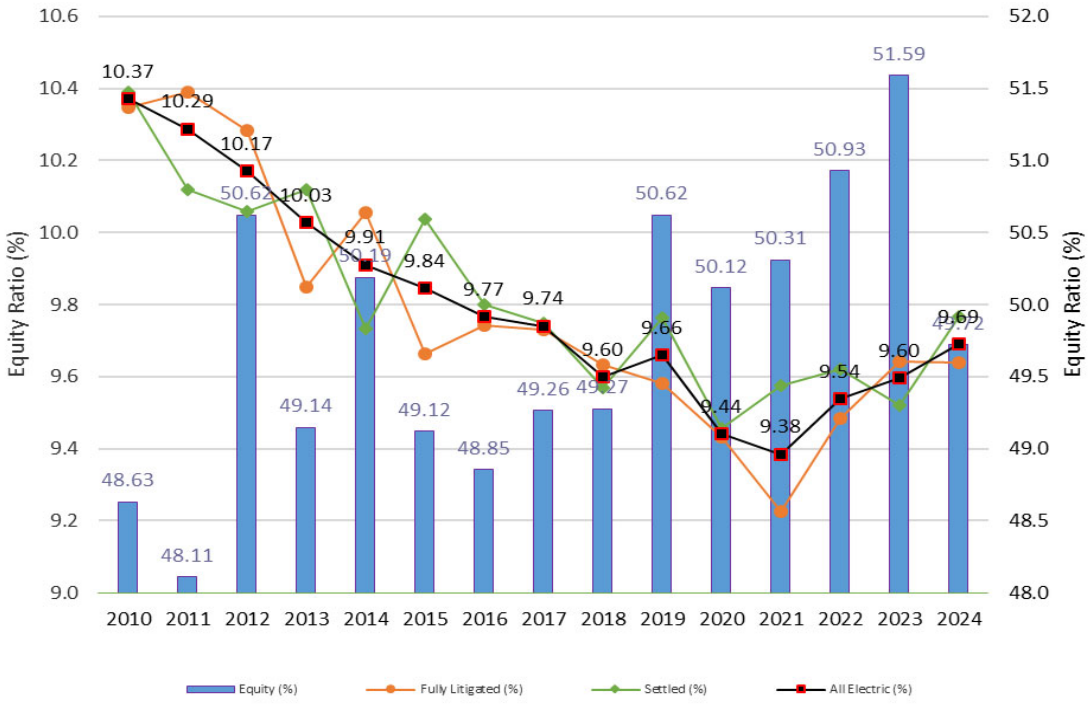
	Fully Litigated			Settled			Electric Total		
Year	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)
2010	10.32	47.37	16	10.49	49.63	25	10.42	48.65	41
2011	10.46	48.51	17	10.14	48.47	11	10.33	48.50	28
2012	10.10	49.69	16	10.10	52.34	23	10.10	51.09	39
2013	9.91	46.46	9	9.96	50.90	22	9.95	49.42	31
2014	10.03	51.39	9	9.86	51.03	10	9.94	51.24	19
2015	9.74	49.03	13	9.78	52.00	4	9.75	49.59	17
2016	9.62	49.47	9	9.88	47.21	11	9.77	48.28	20
2017	9.69	47.89	8	9.85	49.06	20	9.80	48.68	28
2018	9.62	46.44	9	9.72	48.76	14	9.68	47.89	23
2019	9.74	50.83	10	9.74	47.65	15	9.74	49.10	25
2020	9.52	48.71	15	9.57	49.78	12	9.55	49.25	27
2021	9.24	49.03	8	9.67	48.87	17	9.53	48.93	25
2022	9.82	50.85	12	9.68	48.76	13	9.75	49.80	25
2023	9.96	52.93	19	9.61	49.72	17	9.80	51.52	36
2024	9.62	49.10	4	9.82	43.80	6	9.74	46.45	10

Note:

Source: S&P Global Market Intelligence, Retrieved in July 2, 2024

Evergy Missouri West, Inc.
Case No. ER-2024-0189

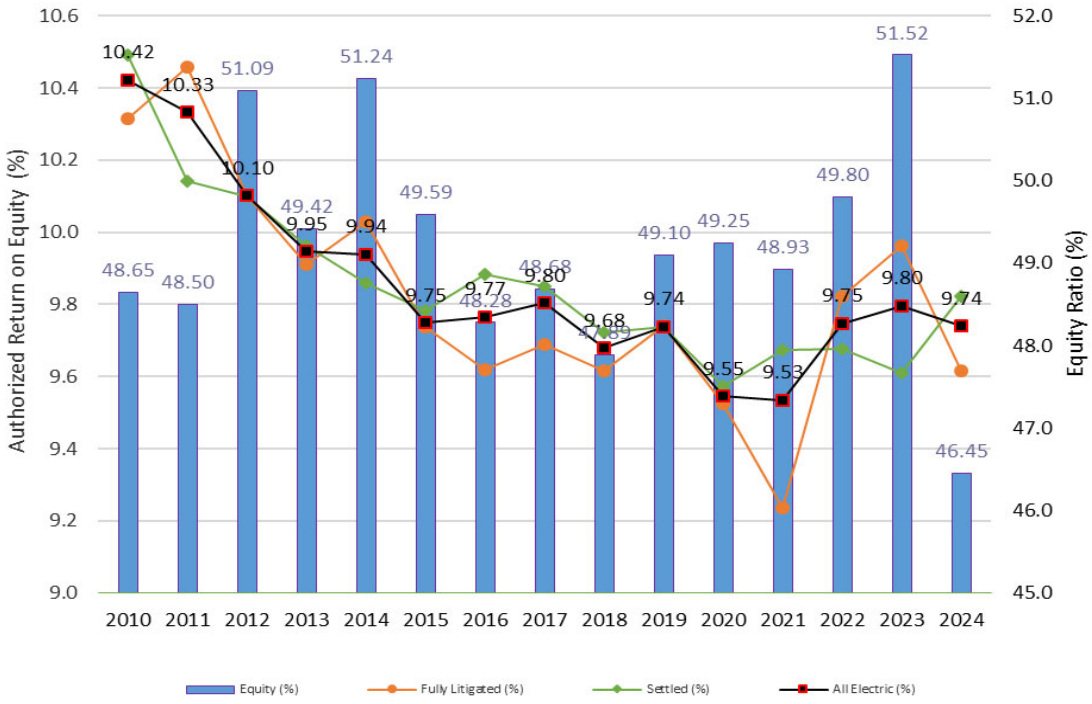
Authorized ROE and Equity Ratio of the U.S Utility by Sector
Electric Utility
2010-2024



Note:
Source: S&P Global Market Intelligence, Retrieved in July 2, 2024

Evergy Missouri West, Inc.
Case No. ER-2024-0189

Authorized ROE and Equity Ratio of the U.S Utility by Sector
Vertically Integrated Electric Utility
2010-2024



Note:
Source: S&P Global Market Intelligence, Retrieved in July 2, 2024