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ER-2026-0143

REBUTTAL TESTIMONY

OF

DAVID MURRAY

Submitted on Behalf of the Office of the Public Counsel

**EVERGY METRO, INC. D/B/A
EVERGY MISSOURI METRO**

CASE NO. ER-2026-0143

August 11, 2026

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EVERGY METRO INC. D/B/A
EVERGY MISSOURI METRO
CASE NO. ER-2026-0143

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is David Murray and my business address is P.O. Box 2230, Jefferson City, Missouri 65102.

Q. Are you the same David Murray who previously filed Direct Testimony in this case?

A. Yes.

Q. To whom are you responding in your rebuttal testimony?

A. I am responding to the direct testimony of Evergy Metro Inc.'s ("Metro") witnesses, Ann E. Bulkley and Geoffrey Ley, as it relates to rate of return ("ROR") and capital structure. I also am responding to the direct testimony of Staff witness Seoung Joun Won, PhD.

Q. How is your rebuttal testimony organized?

A. First, I address Metro witness Mr. Ley's and Staff witness Dr. Won's recommended capital structures. Mr. Ley recommends the Commission adopt his *pro forma* estimate of Metro's capital structure as of the true-up period in this case, June 30, 2026. Dr. Won recommends the Commission adopt Metro's actual capital structure as of the update period, December 31, 2025, but plans to update his capital structure recommendation to Metro's actual capital structure as of the June 30, 2026, true-up date. Second, I will address Ms. Bulkley's and Dr. Won's return on equity ("ROE") recommendations.

II. CAPITAL STRUCTURE

Q. Summarized, what do the other parties recommend as the capital structure the Commission should use for setting Metro's rates?

A. Mr. Ley recommends his *pro forma* estimate of Metro's capital structure as of the June 30, 2026, true-up date the Commission ordered in this case. Mr. Ley estimates that Metro's capital structure at June 30, 2026, will consist of 52.07% common equity and 47.93% long-term debt.

Dr. Won recommends the use of Metro's per books capital structure. He claims it consists of 51.38% common equity and 48.62% long-term debt as of December 31, 2025. Dr. Won's recommended ratemaking common equity ratio is slightly lower than the approximate 52% ratio Evergy Inc. ("Evergy") has consistently requested for its utility subsidiaries for ratemaking since around 2022. Dr. Won intends to update his recommended ratemaking capital structure to Metro's per books capital structure as of June 30, 2026.

Q. Why has Evergy consistently requested an approximate 52% common equity ratio for its regulated utility subsidiaries?

A. I do not know, but Evergy's targeted common equity ratio is consistent with the 52% to 53% common equity ratios most of Missouri's other larger regulated utilities owned by holding companies target for ratemaking.

Q. Did Mr. Ley testify to Metro's actual capital structure as of June 30, 2025, the end of the test year, in his direct testimony?

A. Yes. In Schedule GL-1 Mr. Ley provides his calculation of Metro's capital structure as of June 30, 2025. Mr. Ley indicates Metro had a common equity balance of \$3,396,944,657 and a long-term debt balance of \$3,224,619,074 as of this date, which equates to 51.30% common equity and 48.70% long-term debt.

1 **Q. Is there a simple and reasonable way to determine a fair and reasonable ratemaking**
2 **capital structure for purposes of setting Metro's authorized ROR?**

3 A. Yes. The Commission can simply determine the ratios of capital it considers consistent
4 with the debt capacity afforded by the assets of Evergy's regulated utility subsidiaries. This
5 ensures Missouri's ratepayers share in the benefits of reduced business risk afforded by
6 Missouri's enactment of laws since 2018 that have allowed Missouri's electric utility
7 companies to avail themselves of explicit investment recovery mechanisms. If Metro were
8 not owned by a holding company taking advantage of the reduced business risk by issuing
9 holding company debt, Metro's reduced business risk could be offset by increased financial
10 risk (*i.e.* issue debt) without jeopardizing its credit rating. In my experience, the most
11 objective, fair, and reasonable approach to ensure the utility subsidiaries' ratemaking
12 capital structure ratios capture their additional debt capacity, is to consider the holding
13 company's consolidated leverage for purposes of adopting a reasonable ratemaking
14 common equity ratio.

15 **Q. If the Commission sets Metro's ratemaking common equity ratio consistent with your**
16 **recommendation, can Evergy adjust Metro's capital structure accordingly?**

17 A. Yes. Instead of Evergy issuing holding company debt to fund dividends to its shareholders,
18 Metro can distribute its proportional share of funds needed to pay Evergy's shareholder
19 dividends. In such a situation, if Metro's current free cash flow is not sufficient to fund its
20 proportional share of the dividend, then it would issue short-term debt to cover the
21 deficiency. This financing strategy would allow for a recalibration of Metro's capital
22 structure to be consistent with an approximate 45% common equity ratio, a ratio which is
23 more economical for Metro's ratepayers because the additional debt lowers the weighted
24 average cost of capital ("WACC").

1 **Q. Ms. Bulkley testifies that Metro’s requested ratemaking common equity ratio of**
2 **52.07% is reasonable because it is consistent with the common equity ratios of the**
3 **utility operating subsidiaries of her proxy group. Are utility operating companies’**
4 **capital structures a good proxy for market-based capital structures managed to**
5 **achieve a lower cost of capital?**

6 A. No. Evergy is not unique in its use of holding company debt to optimize its consolidated
7 capital structure. Ms. Bulkley, Dr. Won, and I estimate the cost of equity (“COE”) for
8 Metro based on proxy groups consisting of publicly-traded utility holding companies,
9 whose business risk is primarily that of their regulated electric utility operations. Our COE
10 estimates are based on our analysis of the consolidated risk profile of the holding company,
11 which captures the financial risk of all debt and/or hybrid securities issued at the
12 subsidiaries AND at the holding company. Investors in utility holding companies require
13 a higher ROE for investing in the consolidated holding company which has a more
14 leveraged (more debt, less equity) capital structure. Therefore, the appropriate capital
15 structures to observe to test the reasonableness of Metro’s requested ratemaking capital
16 structure is the consolidated holding companies’ capital structures which are matched to
17 our COE estimates for our respective proxy groups.

18 **Q. What was the average consolidated common equity ratio of Ms. Bulkley’s publicly-**
19 **traded proxy group for the 2025 calendar year?**

20 A. The average quarterly common equity ratios for 2025 were 39.12% excluding short-term
21 debt, and 38.22% including short-term debt.

22 **Q. Does the higher holding company financial risk (i.e. greater use of debt) increase**
23 **shareholders’ required returns for companies included in Ms. Bulkley’s proxy**
24 **group?**

25 A. Yes. Higher debt ratios increase the amount of fixed-obligations that must be paid before
26 determining residual cash flows/income available for shareholders. Therefore, if public-
27 utility holding companies are optimizing their consolidated capital structures at the holding
28 company level, although the COE may be higher, the increased use of lower-cost debt

1 reduces the WACC. This explains why most utility holding companies target credit metrics
2 (typically an FFO/debt ratio of approximately 15%) consistent with BBB ratings rather
3 than ratings of A or above.

4 **Q. Does Ms. Bulkley's proxy group include companies that do not issue long-term debt**
5 **at the holding company level?**

6 A. Yes. Portland General Electric Company ("Portland") and IDACORP, Inc. ("IDACORP")
7 do not issue long-term debt at the holding company level. In fact, Portland does not have
8 a holding company but rather owns its electric utility assets directly.

9 **Q. What was Portland's average common equity ratio in 2025?**

10 A. Approximately 42.4%.

11 **Q. What is the Oregon Public Utility Commission's allowed ratemaking common equity**
12 **ratio for Portland?**

13 A. 50%.

14 **Q. Why does the Oregon Public Utility Commission allow a higher common equity ratio**
15 **for ratemaking than Portland's actual common equity ratio?**

16 A. The Oregon Public Utility Commission ("OPUC") stated in its December 20, 2024, Order
17 in Docket No. UE 435 that it relied on its "Staff's testimony that PGE [Portland General
18 Electric] appears to be working towards a 50/50 capital structure based on the company's
19 consistent messaging in PGE's filings with the U.S. Securities and Exchange Commission
20 and with customers and investment banks in earnings calls."¹

21 **Q. What authorized ROE did the OPUC apply to the 50% common equity ratio?**

22 A. 9.34%.

¹ Oregon Public Utilities Commission, Docket No. UE 435, Order, December 20, 2024, p. 13
(<https://apps.puc.state.or.us/orders/2024ords/24-454.pdf>).

1 **Q. What was IDACORP's average common equity ratio in 2025?**

2 A. 49.42%.

3 **Q. What are the most recent ratemaking common equity ratios for IDACORP's rate**
4 **cases in Idaho and Oregon that you were able to find?**

5 A. IDACORP's last identified ratemaking common equity ratios were 51% in Idaho for a rate
6 case settled in 2025 and 50% in Oregon for a rate case settled in 2024.

7 **Q. What ROEs are implied by those settlements?**

8 A. 9.6% and 9.5%, respectively.

9 **Q. What are Portland's and IDACORP's S&P issuer credit ratings?**

10 A. 'BBB+' and 'BBB', respectively.

11 **Q. What does this information about these companies demonstrate?**

12 A. That Metro's ratemaking common equity ratio does not need to be any higher than 50%.
13 In fact, considering that Portland can maintain a 'BBB+' credit rating despite having a
14 42.4% common equity ratio demonstrates that my recommended common equity ratio of
15 45% is supportive of a stable investment grade credit rating if Metro were a true stand-
16 alone company, without an additional layer of holding company debt issued by its parent
17 company.

18 **Q. Did Evergy litigate ROR in its recent Evergy Kansas Central ("EKC") rate case?**

19 A. No. The parties executed a Unanimous Settlement Agreement on July 11, 2025, which the
20 KCC approved. The settlement resolved all revenue requirement issues without specifying
21 a capital structure or ROR for purposes of determining the revenue requirement (*i.e.* a
22 "black-box" settlement).

1 **Q. Did investors estimate the capital structure they believe was implied from the black-**
2 **box settlement in Kansas?**

3 A. Yes. Investors viewed the settlement as being consistent with an implied ratemaking
4 capital structure consisting of approximately 50% common equity and 50% long-term debt.
5 Investors also assumed a 9.7% ROE was applied to the 50% common equity ratio.²

6 **III. RETURN ON COMMON EQUITY**

7 **A. ANN E. BULKLEY'S RECOMMENDED ROE**

8 **Q. What ROE does Ms. Bulkley recommend that the Commission allow for Metro?**

9 A. Ms. Bulkley recommends the Commission allow Metro a ROE anywhere in the range of
10 10.25% to 11.25%. She testifies that the Company requests that its revenue requirement
11 be established based on a point ROE of 10.5%.³

12 **Q. What does Ms. Bulkley rely on for the allowed ROE she recommends?**

13 A. Her estimate of Metro's COE. Ms. Bulkley estimates the COE for Metro to be in the range
14 of 10.25% to 11.25% based on her application of three primary COE methodologies: (1)
15 the constant-growth discounted cash flow ("DCF") method, (2) the Capital Asset Pricing
16 Model ("CAPM") – a standard CAPM and an empirical CAPM, and (3) a Bond Yield Plus
17 Risk Premium analysis.

18 **Q. Before delving into details, what is your general reaction to Ms. Bulkley's approach**
19 **to estimating the utility industry's COE?**

20 A. First, I disagree with her that the utility industry's COE is in double digits. While
21 estimating a COE for the utility industry this high may be consistent with the utility
22 industry's attempt to increase authorized ROEs, they are not consistent with the discount
23 rates, *i.e.* the COE, that investors use for purposes of estimating the intrinsic value of utility

² Edward M. DeArias, et. al., "A Constructive Settlement – Focus Turns to Execution and Economic Development," BMO Capital Markets, July 16, 2025, p. 1; Ross Fowler, et. al., "Settles on 9.7% ROE, \$128 mn increase, and 50/50 cap structure," Bank of America Global Research, July 16, 2025.

³ Bulkley Direct, p. 5, Ins. 3-9.

1 common equity. The Commission need look no further than the discount rates (*i.e.* COE)
2 used by investors to dismiss the reliability of Ms. Bulkley's COE estimates.

3 Second, Ms. Bulkley testifies that it is important to estimate Metro's cost of capital based
4 on the "stand-alone" principle.⁴ She testifies that this "principle" means that it is
5 inappropriate to use Evergy's cost of capital as a proxy for Metro's cost of capital. Ms.
6 Bulkley's position is inconsistent with financial principles and her own logic for selecting
7 electric utility proxy groups in other rate cases. For example, in this rate case she includes
8 Ameren Missouri's parent company, Ameren Corp ("Ameren"), in her proxy group
9 because Ameren Corp's consolidated risk profile meets her screening criteria for an
10 appropriate proxy for Metro. And in the recently filed Ameren Missouri rate case, Case
11 No. ER-2026-0291, she includes Evergy Inc. in her proxy group because its consolidated
12 risk profile meets her screening criteria for an appropriate proxy for Ameren Missouri. It
13 is worthwhile to emphasize that Ms. Bulkley's COE estimates for Ameren and Evergy are
14 based on each holding company's total consolidated risk profile, which includes each
15 company's optimization of their holding company consolidated capital structures to
16 achieve a lower WACC. Publicly-traded holding companies' optimizations of their capital
17 structures allows for a more cost-efficient capital structure, which is more market-driven
18 because third-party shareholders directly own the publicly-traded holding company.

19 As I discuss below, because Ms. Bulkley believes it is important to consider her subjective
20 assessments that Metro has a higher risk profile than the average risk profile of her proxy
21 group, the most direct way to capture investors' views about risk differentials is to simply
22 perform COE analyses on the holding companies of Missouri's utility subsidiaries. Of
23 course, as was demonstrated when Evergy's stock price was more volatile during the period
24 in which it was uncertain if Evergy would continue as a stand-alone company or pursue a
25 strategic merger or acquisition, which was unrelated to business risks related to Evergy's
26 Missouri operations, these causes must be considered in determining a reasonable
27 authorized ROE for the risk related to Missouri's regulatory environment.

⁴ *Id.*, p. 8, lns. 4-12.

1 Finally, while she devotes approximately fifteen pages of testimony attempting to convince
2 the Commission that Metro is riskier than her proxy group's average risk profile, she
3 forgets that her proxy group contains companies that have riskier, non-regulated
4 operations. Additionally, as I testified earlier, her proxy group's capital structures contain
5 much more financial risk (*i.e.* debt) than Mr. Ley's recommended ratemaking capital
6 structure of approximately 52% common equity. Her opinions are also completely
7 contradicted by Evergy's actual increased investment in its Missouri utilities. This
8 increased capital spend is due directly to utility-friendly legislation passed in Missouri in
9 recent years.

10 **Q. Do you have any concerns about Ms. Bulkley's proxy group?**

11 A. Only to the extent she doesn't recognize or discuss the fact that some of her companies
12 have significant exposure to non-regulated operations. Cyclical industries, such as energy
13 companies, with exposure to changes in commodity prices are impacted to a much greater
14 extent by variations in economic/market conditions. This explains why companies with
15 exposure to cyclical industries typically have higher stock betas (indicating a higher
16 required equity risk premium) than pure-play regulated utility companies. The following
17 companies included in Ms. Bulkley's proxy group have significant (greater than 10%) non-
18 regulated business exposure at least as recently as 2024: Dominion Energy Inc. (contracted
19 non-regulated renewable generation and energy marketing), DTE Energy Company (non-
20 regulated renewable energy projects and energy marketing and trading), and NextEra
21 Energy Inc. (non-regulated generation, energy marketing and trading, etc.). Unfortunately,
22 Ms. Bulkley focuses on her perception that it is Missouri's regulatory ratemaking
23 shortcomings as compared to the regulatory environments of the companies in her proxy
24 group which cause Metro to have a higher cost of capital than the cost of capital of her
25 proxy companies.⁵

⁵ *Id.*, p. 34, ln. 8 – p. 50, ln. 9.

1 **Q. Does Ms. Bulkley discuss the impacts of data center/large load customers on any of**
2 **the companies in her proxy group?**

3 A. No. As I will testify below, because Ms. Bulkley includes companies in her proxy group
4 that are expected to experience higher CAGR in EPS over the next five years AND she
5 assumes in her constant-growth DCF that these higher CAGR translate into DPS growing
6 in perpetuity at the same rate, this causes her COE estimates to be higher due to large load
7 customers. To the extent data center exposure causes a higher cost of capital, this higher
8 cost of capital should not be charged to other rate classes. Otherwise, utility companies
9 would not be upholding their commitment to not charge existing ratepayers higher costs
10 associated with data center development.

11 **Q. Ms. Bulkley testifies that Metro being owned by Evergy did not influence her analysis**
12 **of Metro's cost of capital.⁶ Should it have?**

13 A. Yes. Metro is inextricably linked to its parent company, Evergy. Evergy's financial
14 strategies, such as the management of its capital structure, directly impact Metro.

15 Evergy's COE is based on the collective business risks of its various subsidiaries,
16 approximately 33% of which is related to its electric utility operations in Missouri, as well
17 as the financial risk it incurs at the consolidated level. Because Evergy's business
18 operations are predominately vertically integrated electric utilities in Missouri and Kansas,
19 its capital structure and COE are appropriate proxies for estimating Metro's cost of capital.

20 Therefore, because Ms. Bulkley did not consider Evergy in her assessment of Metro's cost
21 of capital, I consider her cost of capital analysis to be deficient.

⁶ *Id.*, p. 8, lns. 17-19.

1 **Q. Ms. Bulkley asserts that it is important to authorize Metro a ROR based on a ROE**
2 **and capital structure that will allow Metro to attract capital on a stand-alone basis**
3 **and within the Evergy system.⁷ Did Ms. Bulkley compare her recommended ROR**
4 **for Metro to Evergy's other electric utility subsidiaries?**

5 A. If she did, she did not provide that analysis in her direct testimony.

6 **Q. What is Evergy's projected 5-year capital expenditure plan for Metro as compared**
7 **to Evergy on a consolidated basis?**

8 A. Evergy projects investing \$5.932 billion in Metro's electric utility system over the next
9 five years.⁸ This represents 27.47% of Evergy's projected capital spend. As of December
10 31, 2025, Metro's net property, plant and equipment ("PP&E") represented 32.02% of
11 Evergy's consolidated PP&E.

12 **Q. Approximately how much value would this investment create for Evergy's**
13 **shareholders based on your recommended ROR compared to your estimate of**
14 **Metro's cost of capital?**

15 A. To estimate this value I made the following assumptions:

16 -Metro's cost of capital parameters:

17 -Common equity ratio – 45%

18 -Cost of equity – 8.0%

19 -Long-term debt ratio – 55%

20 -Current cost of long-term debt – 5.5%

21 -5 years of capex made in one lump sum;

22 -30-year depreciation period; and

23 -rates reset every year.

⁷ *Id.*

⁸ Evergy's Fourth Quarter 2025 Earnings and Business Update Call, February 19, 2026, p. 27.

1 Based on these assumptions and applying my recommended authorized ROE of 9.25% to
2 my recommended common equity ratio of 45%, Evergy would create \$304.233 million of
3 additional shareholder wealth over the shareholder's original investment of \$2.669 billion
4 (\$5.932 billion x 45% equity ratio = \$2.669 billion). To put it another way, if the
5 Commission authorized Metro a ROE of 8.0%, Evergy's equity investment in Metro would
6 not create additional returns over the COE to Evergy's shareholders. As I explained in my
7 direct testimony, this is the underlying logic for setting the authorized ROE at parity with
8 the COE – it neither over-incentivizes nor disincentivizes investment in utility
9 infrastructure.⁹

10 **Q. How much shareholder value would a \$5.932 billion investment in Kansas create for**
11 **Evergy's shareholders?**

12 A. Assuming a 50/50 implied capital structure from Evergy's Kansas settlement and a 9.7%
13 ROE, a \$5.932 billion lump sum investment with a 30-year life would create \$549.284
14 million of additional shareholder wealth over the shareholder's original investment of
15 \$2.669 billion.

16 **Q. What if the Commission adopted Staff's recommended capital structure and ROE?**

17 A. Under this scenario, an investment of \$5.932 billion in Metro creates \$596.233 million of
18 additional shareholder value.

19 **Q. Based on the capital budgeting examples you provided, if the Commission wants to**
20 **encourage Evergy to invest more in its Missouri operations than its Kansas**
21 **operations, would it adopt your or Staff's recommended ROR?**

22 A. Staff's higher ROE and equity ratio recommendation. However, Evergy's prospective
23 investments would only create the estimated additional shareholder value if Evergy is
24 confident that this Commission will continue to authorize a ROR with a margin over the
25 cost of capital similar to that of Staff's current recommended ROR.

⁹ Murray Direct Testimony, p. 26, lns. 1-9.

1 **Q. What is the most effective and efficient means for Kansas and Missouri to ensure**
2 **neither jurisdiction is over- or under-allocated capital?**

3 A. Both commissions should strive to authorize RORs as close to Evergy's cost of capital as
4 possible. Just as with the scale of investment, a holding company would be indifferent to
5 investing in one jurisdiction versus the other if both jurisdictions authorize RORs close to
6 the cost of capital.

7 I. DISCOUNTED CASH FLOW ASSUMPTIONS

8 **Q. What is the most consequential problem with Ms. Bulkley's constant-growth DCF**
9 **analysis?**

10 A. Her assumption that utility investors expect perpetual annual stock price gains at parity
11 with equity analysts' projected 3-5 year CAGR in EPS. For purposes of her mean constant-
12 growth DCF COE estimate of 10.47%, she assumes the perpetual stock price appreciation
13 will be 7.0%/year. Ms. Bulkley's assumption implies that utility investors expect
14 approximately 2/3 of their total returns to be in the form of capital gains, with the remaining
15 portion achieved through dividend returns. Historically, utility stock return attributes have
16 been the exact opposite – 2/3 from dividends (*i.e.* income return) and 1/3 from capital gains.
17 Although many vertically-integrated electric utility companies, including Evergy, are
18 planning to reduce their dividend payout ratios to as low as 50% during the current capital
19 expenditure cycle to meet increased electric demand from data centers, the increase in the
20 construction cycle will mature at some point, which logically dictates that due to lack of
21 investment opportunities, utilities' dividend payout ratios will return to levels more
22 consistent with historical averages.

23 **Q. How does the average projected CAGR in EPS for Ms. Bulkley's proxy group in this**
24 **case compare to her proxy group in Metro's 2022 rate case and EMW's 2024 rate**
25 **case?**

26 A. The average projected long-term CAGR in EPS for her proxy group for those cases and
27 this case were as follows: Case No. ER-2022-0129 - 5.8%, Case No. ER-2024-0189 –
28 5.90%, and 7.0% for this case.

1 **Q. What is causing this higher average projected CAGR in EPS for electric utilities?**

2 A. Projected electricity demand from data centers.

3 **Q. Does Ms. Bulkley's assumption that these higher projected CAGR in EPS will cause**
4 **DPS to grow in perpetuity at the same rate cause an upward bias in her COE**
5 **estimates?**

6 A. Yes.

7 **Q. Did Ms. Bulkley use the same proxy group in EMW's 2024 general rate case as she**
8 **did in this rate case?**

9 A. No.

10 **Q. Did she use the same selection criteria?**

11 A. Yes.

12 **Q. Do most of the companies in her proxy groups from both rate cases overlap?**

13 A. Yes. Ms. Bulkley's proxy group in this rate case includes thirteen companies she also used
14 in EMW's 2024 rate case.

15 **Q. Why is the make-up of the proxy groups important?**

16 A. Because using the same proxy group assures that variances between periods are limited to
17 changes in the proxy companies' underlying risk and growth profile rather than a change
18 in the composition of companies used to estimate the COE.

19 **Q. How much higher are Ms. Bulkley's constant-growth DCF COE estimates for the**
20 **common companies in this rate case compared to her constant-growth DCF COE**
21 **estimates in EMW's 2024 rate case?**

22 A. In the range of 21 to 67 basis points.

1 **Q. Did Ms. Bulkley approach her CAPM analysis in the case similarly to how she**
2 **approached it in EMW's 2024 rate case?**

3 A. Yes. However, in the 2024 rate case she used published Value Line betas, which were
4 skewed higher. Value Line's published betas at the time included market data from the
5 extreme market contractions that occurred in the spring of 2020 when the onset of the
6 Covid-19 pandemic caused a panic in the markets. However, Ms. Bulkley also included a
7 CAPM analysis that "normalized" electric utility betas by using an average of Value Line
8 betas over the past ten years. She included a long-term average of Value Line betas in her
9 CAPM analysis in this rate case as well. Her indicated long-term average beta of 0.73 in
10 the 2024 rate case is fairly similar to her long-term average beta of 0.77 in this case.

11 **Q. Using the average long-term Value Line betas, how much higher are Ms. Bulkley's**
12 **CAPM COE estimates in this rate case compared to her CAPM COE estimates in**
13 **EMW's 2024 rate case?**

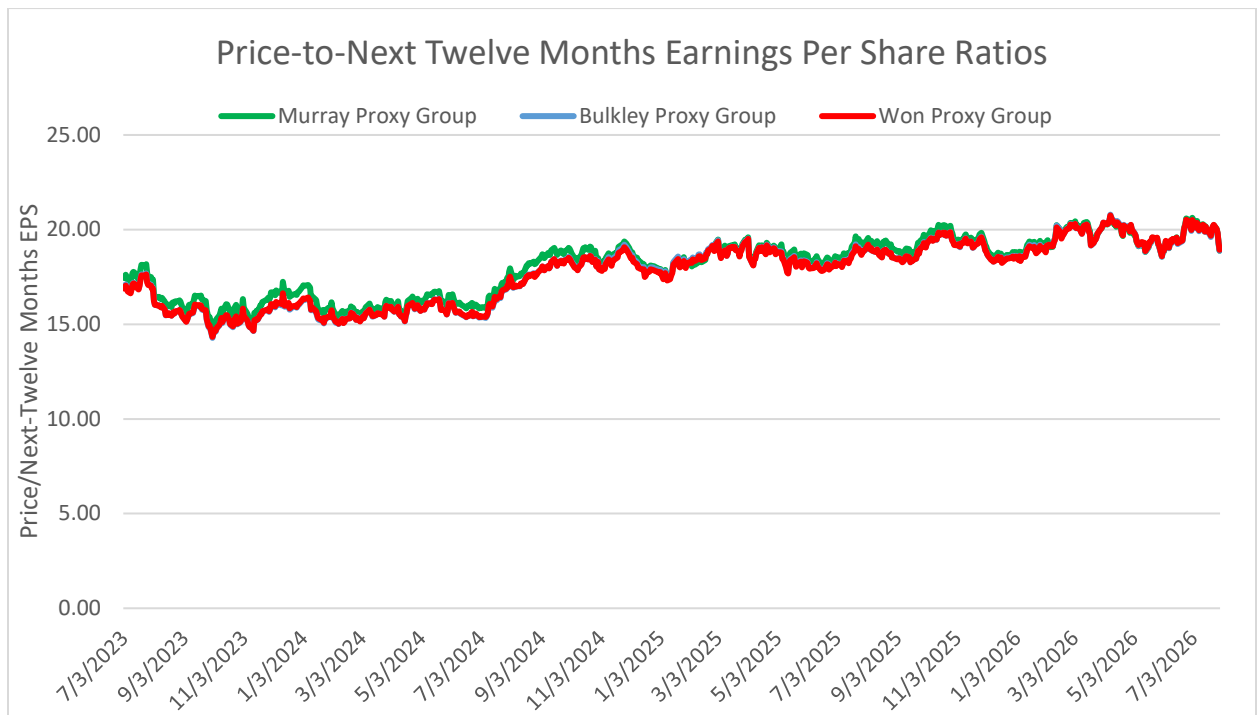
14 A. In the range of 103 to 113 basis points.

15 **Q. Do you agree with Ms. Bulkley that the electric utility industry's COE has increased**
16 **since EMW's 2024 rate case?**

17 A. No. Although the stock prices of some electric utility companies with more
18 exposure/opportunities related to data center demand have been more correlated with the
19 broader markets (*i.e.* less defensive than electric utilities without data center exposure), on
20 average, based on my multi-stage DDM COE analysis of the electric utility industry, I
21 estimate that the COE has declined by approximately 50 basis points since EMW's 2024
22 rate case.

23 **Q. Is your opinion that the COE has declined supported by changes in P/E ratios for the**
24 **electric utility industry over this time frame?**

25 A. Yes. Please see the below chart showing changes in the P/E ratios of my proxy group, Ms.
26 Bulkley's proxy group, and Dr. Won's proxy group:



As illustrated in the chart, our proxy groups traded very similarly over the period since EMW's rate case. In fact, Dr. Won's and Ms. Bulkley's proxy groups' P/E ratios are almost exactly the same. However, I should note that I removed Dominion Energy and NextEra Energy from Ms. Bulkley's proxy group because of their proposed merger, which causes her proxy group and Dr. Won's proxy group to vary by only one company. Dr. Won's proxy group included Duke Energy ("Duke"), but not PPL Corp. ("PPL"). Ms. Bulkley's proxy group included PPL, but not Duke.

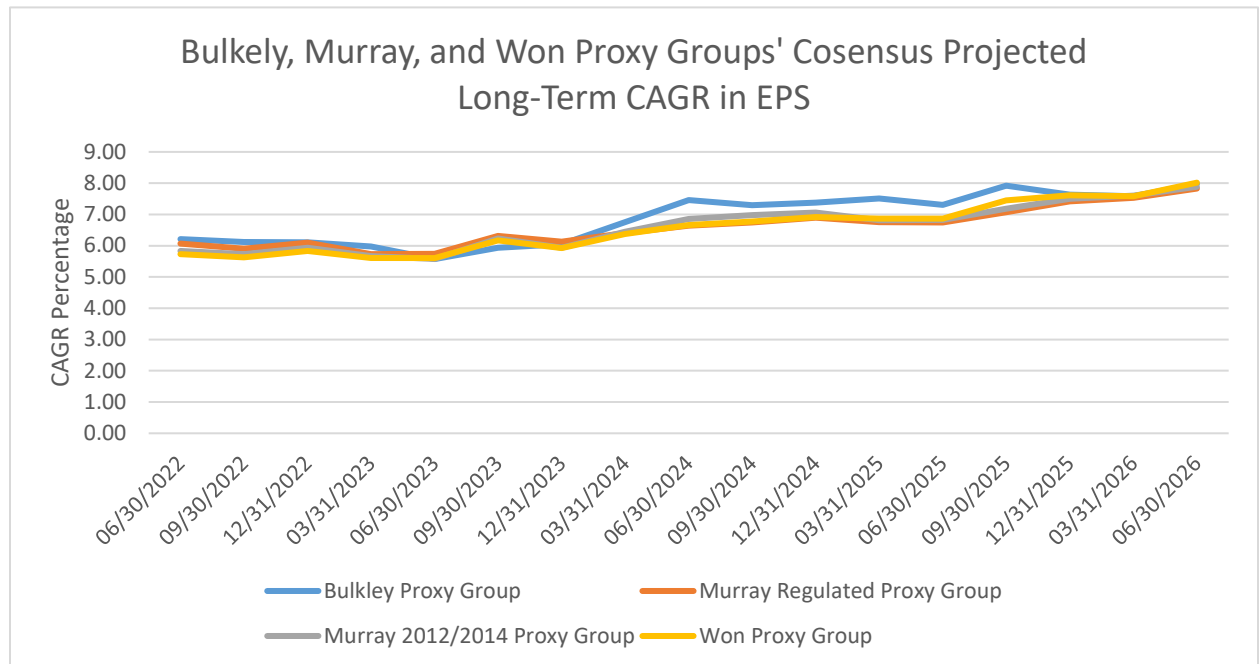
Q. Do investors view companies Ms. Bulkley included in her proxy group to be more exposed to the risks and opportunities of data centers?

A. Yes. According to Jefferies the following companies in Ms. Bulkley's proxy group are considered to be more exposed to data centers: Entergy, Alliant, and NextEra Energy.¹⁰

¹⁰ Julien Dumoulin-Smith, et. al., "So Much for a Sleepy Shoulder Quarter: Utilities 2Q26 Preview," Jefferies, July 23, 2026, p. 9.

Q. When did utility equity analysts start to project higher CAGR in EPS for electric utility companies that appeared to be well positioned to realize significant data center load growth?

A. At the end of 2023 into early 2024. The below chart shows the trend in analysts' consensus projections in long-term CAGR in EPS for Ms. Bulkley's proxy group, my proxy groups, and Dr. Won's proxy group for quarterly periods between June 30, 2022, through June 30, 2026:

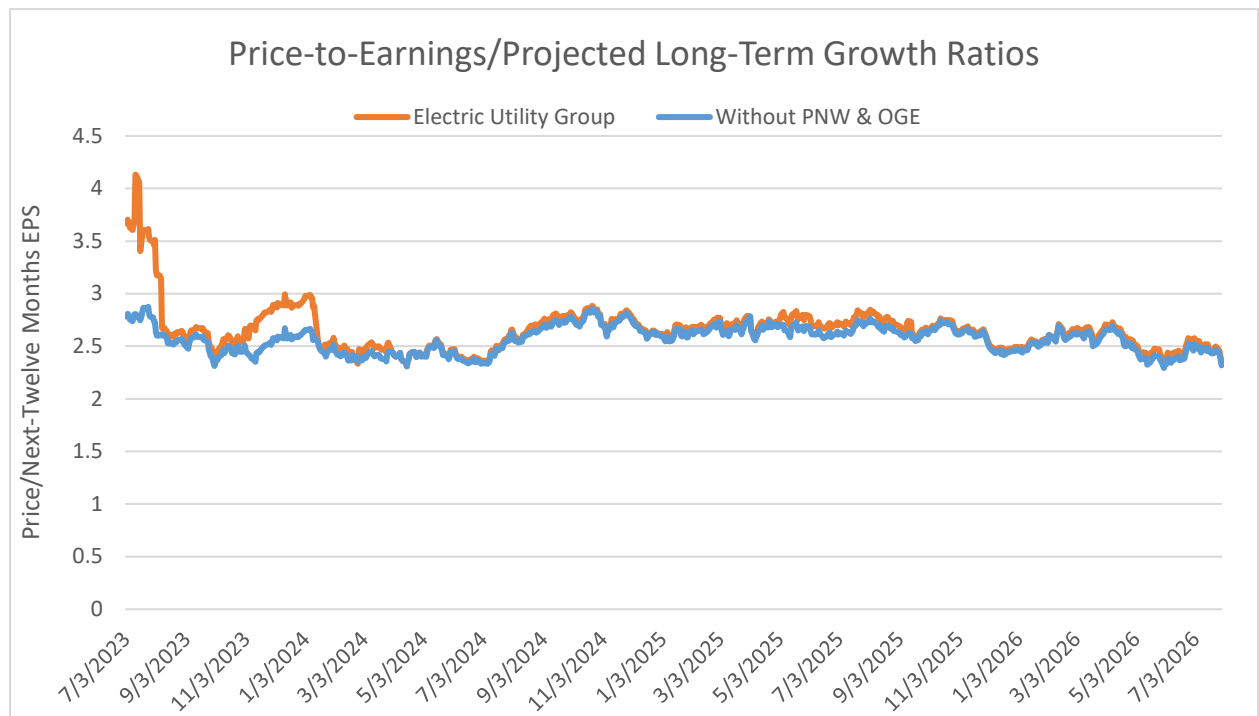


While the above chart shows an increase in the analysts' consensus projected CAGR in EPS for Ms. Bulkley's proxy group from around 6% to 8%, it shows a similar increase in the projected CAGR for Dr. Won's proxy group, and my proxy groups as well. While it is possible that the COEs for the companies in each of the proxy groups may be higher due to risks related to large load customers, a comparison of my multi-stage DCF COE estimates does not imply as large of a difference as implied by Ms. Bulkley's constant-growth DCF analysis. Although Ms. Bulkley's higher COE estimates are driven by her faulty assumptions that the near-term higher CAGR in EPS can continue in perpetuity, this faulty assumption is of greater consequence in the current environment because of the higher growth rates driven by large load customer demand.

Q. Could the higher growth projections for the electric utility industry be causing higher P/E ratios rather than a decline in the COE since EMW's 2024 rate case?

A. Yes, but it is more likely a combination of the two. At the time of EMW's last rate case (around the Fall of 2023), long-term bond yields had spiked to their highest levels in over 15 years. This spike in interest rates caused a decline in electric utility P/E ratios to around 15x after consistently trading around 20x for most of the post Covid-19 period (see pages 19-22 of my direct testimony).

However, I attempted to isolate the change in the P/E ratio due to increases in projected growth as compared to a decline in the COE by comparing the ratio of the P/E to projected long-term growth rates ("PEG" ratio). I did so in the following chart:



First, because of anomalous data related to Pinnacle West Corporation and OGE Energy during the second half of 2023, I removed these companies to provide a more reliable indication of the change in P/E ratios compared to projected long-term growth.¹¹ The blue

¹¹ OGE Energy was exiting its natural gas midstream operations, which caused extremely low projected CAGR in EPS during this period. Pinnacle West's average projected long-term CAGR in EPS dropped to 3.70% for the second quarter of 2023 from 6.5% during the first quarter of 2023 and returned to 6.48% on September 30, 2023.

1 line shows that before the spike in long-term bond yields in the Fall of 2023, electric utility
2 companies were trading at PEG ratios of around 2.75x. During the Fall of 2023, which
3 captured the spike in long-term bond yields, the PEG ratio dropped below 2.5x. For the
4 period I used to calculate my proxy groups' stock prices in the 2024 EMW rate case
5 (January 1, 2024, through May 31, 2024), the PEG ratio averaged slightly under 2.5x. For
6 the period I used to calculate stock prices in this case (January 1, 2026, through May 31,
7 2026), the PEG ratio averaged slightly over 2.5x. The higher the PEG ratio, the lower the
8 implied COE. As shown, the PEG ratio maintained a level closer to 2.75x for the second
9 half of 2024 through early 2026. While admittedly the PEG ratio has recently declined to
10 approximately 2.5x, recent PEG ratios corroborate a lower COE estimate rather than a
11 higher COE estimate, or at the very least, no higher than before increased projected long-
12 term growth rates caused investors to bid up stock prices of electric utility companies
13 expecting higher EPS growth from the increase in demand for electricity from data centers.

14 **Q. Using your multi-stage DCF methodology, what is the cost of equity for Ms. Bulkley's**
15 **proxy group?**

16 A. Approximately 8%, which is similar to my COE estimates for my proxy groups, which also
17 include companies expecting to benefit from higher demand from large load customers.
18 Therefore, the cause of Ms. Bulkley's higher COE estimates is primarily driven by Ms.
19 Bulkley's faulty assumption that analysts' consensus estimates of higher near-term CAGR
20 in EPS caused by data center demand translates into the same level of growth for a
21 perpetual/constant DPS growth rate.

22 **Q. Is it possible to determine whether investors are requiring a higher risk premium for**
23 **electric utilities that are more exposed to the risks of large-load customers?**

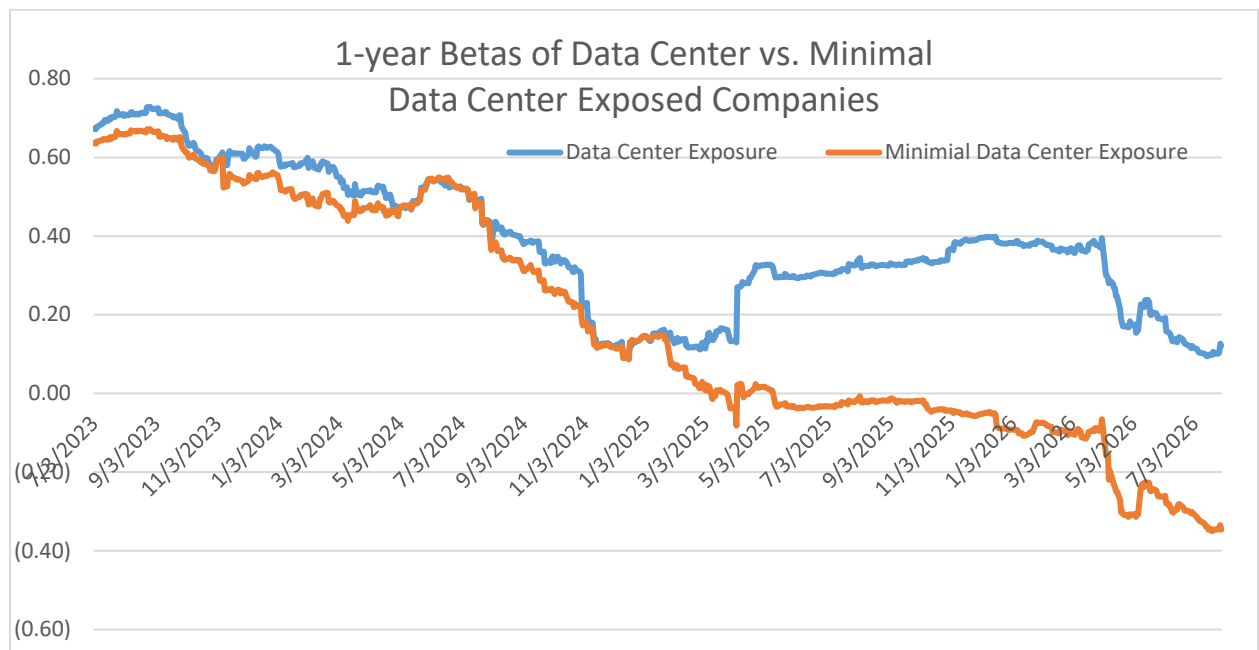
24 A. It is possible, but it is still a matter of judgment. Much like the deregulation of the electric
25 utility wholesale markets in the late 1990s to early 2000s, it is possible that investors are
26 not requiring a much higher return even if they are exposed to higher risk. Metro's sister
27 subsidiary, EMW (then named Aquila Inc.), was a perfect example of investors realizing
28 significant losses due to their exposure to non-regulated energy markets.

Q. Are investors seeking to limit or hedge their exposure to utilities with data center demand exposure?

A. Yes. For example, Jefferies reported that they are increasingly receiving investor inquiries as to what utilities would allow them to “hide” from data center exposure. Jefferies considers Consolidated Edison (a T&D electric utility), American Water Works Company, and Atmos Energy Corporation, as “more defensive ways to invest in non-data center stories for investors pursuing that orientation.”¹²

Q. Are investors assigning more risk to electric utility companies exposed to data center load growth?

A. Yes. I compared recent betas of the companies Jefferies considered to be “data center plays” as compared to the companies it suggested to investors as defensive plays against data center exposure. The rolling 1-year betas of these companies since July 3, 2023, are as follows:



As shown, starting around the spring of 2025 (which includes the past 12 months of stock market trading data), betas for the high data center exposed companies versus the minimal

¹² *Id.*

1 data center exposed companies diverged. A higher beta corresponds to more market risk,
2 which is logical considering that AI and its supporting data centers have been a primary
3 driver of macro-economic activity. However, not only have the more defensive companies
4 with minimal data center exposure traded at less of a correlation to the market, they have
5 actually traded at a negative correlation to the market, which would be attractive to
6 investors seeking to hedge data center exposure.

7 **Q. Is it possible to use a control group of electric utilities that are not exposed to the**
8 **higher business risks associated with the concentration of large load customers?**

9 A. No. Almost all electric utility holding companies have some exposure to large load
10 customers. However, it is possible to attempt to screen companies based on the magnitude
11 of the exposure, but I am not aware of a generally accepted metric used to rank large load
12 exposure. For example, while the expected energy load from large load customers as a
13 percentage of total load would seem to be the most relevant metric, the amount of
14 investment needed to connect expected load and new generation capacity to the grid
15 measures the true capital at risk for investors. Therefore, a company that requires a higher
16 percentage of capital investment to meet the projected load is likely to be considered riskier
17 than a company that has excess capacity that can be connected easily, or is already
18 connected, which translates into lower incremental capital costs to serve large load
19 customers.

20 **Q. Are you aware of readily-available financial data that disaggregates the amount of**
21 **capital that can be directly attributed to large load customers?**

22 A. No.

23 **Q. Do you plan to research this matter further before you file surrebuttal testimony?**

24 A. Yes. To the extent I have access to the resources and have the time needed to determine
25 the information investors use to assess electric utility companies' exposure/opportunities
26 on a continuum, I will provide my findings in my surrebuttal testimony.

1 **Q. Without the benefit of this further knowledge, do you consider the composition of Ms.**
2 **Bulkley's proxy group or the assumptions she applied in her DCF analysis of this**
3 **proxy group to be the bigger driver of her high COE estimates?**

4 A. Her assumptions. Ms. Bulkley mis-specifies a reasonable constant growth rate for her
5 constant-growth DCF analysis. Even for the companies, such as Entergy, that have high
6 exposure to data center load, if the assumed perpetual growth rate is reasonable, my
7 estimate of its COE is approximately 25 basis points greater than the average for the electric
8 utility proxy group. Because Ms. Bulkley assumes Entergy can perpetually grow its DPS
9 at a CAGR of 8%, her COE estimate of 10.9% is approximately 40 to 50 basis points over
10 her already inflated proxy group average COE of approximately 10.5% to 10.7%.

11 **Q. Can you provide an additional example of a company in Ms. Bulkley's proxy group**
12 **that has a high projected CAGR in EPS due to data center load, which causes Ms.**
13 **Bulkley to determine a much higher than reasonable COE in her constant-growth**
14 **DCF?**

15 A. Yes. Ms. Bulkley estimates Xcel Energy has a COE of 11.23% because she assumes that
16 investors expect Xcel's DPS to grow in perpetuity at a CAGR of 8.29%. Xcel's projected
17 electric utility sales from data centers is expected to achieve a CAGR of 3% for the period
18 2025 to 2030, which is approximately 60% of Xcel's projected total CAGR of 5%.
19 Similarly to other electric utility companies expecting significant increase in demand for
20 electricity from data centers, Xcel will be required to invest significant capital in generation
21 and infrastructure to connect the generation and load to the grid. Xcel expects a CAGR in
22 rate base of approximately 11% over the 2025 to 2030 period. Because of Xcel's
23 significant need for investment, it has guided investors to expect a lower DPS growth rate
24 (4-6%) as compared to its EPS growth rate. Ms. Bulkley's constant-growth DCF does not
25 capture these realities. My multi-stage DDM does.

1 **Q. What COE did you estimate for Xcel?**

2 A. 8.24%, which again, while higher than the average for my proxy group, is not as high as
3 Ms. Bulkley's implied spread of 76 to 88 basis points over her estimated average COE for
4 her proxy group.

5 **Q. Are those the only companies in Ms. Bulkley's proxy group that have higher projected**
6 **near-term CAGR in EPS due to data center demand growth causing Ms. Bulkley's**
7 **COE estimates to be inflated?**

8 A. No. There are several others, such as Dominion Resources Inc. and NextEra Energy, but I
9 do not believe it is necessary to discuss each example since I have made my point. While
10 it is inappropriate to assume utilities' DPS can grow in perpetuity at the same CAGR as a
11 3-5-year projected CAGR in EPS in any environment, the current higher projected CAGR
12 in EPS magnifies the flaw and unreliability of COE estimates when making such an
13 assumption.

14 **Q. Although your COE estimates for electric utilities exposed to data center risk are**
15 **lower than Ms. Bulkley's estimates, does this mean that you conclude that the higher**
16 **risks due to data centers are insignificant when evaluating a fair and reasonable ROR**
17 **for purposes of this case?**

18 A. No. Therefore, if the Large Load Power Service ("LLPS") tariffs are not changed in this
19 case, it is important to ensure that Metro's authorized ROR is not set higher due to
20 increased risks caused by data center exposure. At the very least, I maintain that unless
21 there is clear and substantiated evidence that Metro's previous authorized ROE of 9.5% is
22 no longer fair due to risks unrelated to data center exposure, this should be the ceiling of a
23 fair and reasonable authorized ROE to determine the revenue requirement for this case.

24 **Q. Has the electric utility industry undergone past increased construction cycles that can**
25 **guide investors and utility companies about growth expectations related to the**
26 **current increased construction cycle?**

27 A. Yes. As a Staff witness in the 2011 Ameren Missouri rate case, Case No. ER-2011-0028,
28 I, along with my colleagues, Shana Atkinson and Zephania Marevangeo, researched the

1 electric utility industry's historical financial experience during the electric utility industry's
2 last large construction cycle in the 1970s to 1980s. At the time we performed our study,
3 the Financial Analysis Department had access to financial data dating back to 1968
4 published by Value Line for *Central* region electric utility companies.¹³ Although the
5 Financial Analysis Department's files did not contain financial data prior to 1968, we
6 considered this to be a good starting point to analyze the complete construction cycles
7 because the early 1970s is generally considered to be the start of the last large construction
8 cycle for increasing generating capacity through the construction of several large nuclear
9 generating plants, which included Kansas City Power & Light Company's ("KCPL")
10 participation in constructing the Wolf Creek Nuclear plant and Union Electric Company's
11 construction of the Callaway Nuclear plant.

12 **Q. What was KCPL's CAGR in net plant for the 11-year period capturing much of the**
13 **construction cycle that ended with Wolf Creek commencing operations in 1985?**

14 A. 13.45%.

15 **Q. How does this compare to Evergy's projected CAGR in rate base through 2030?**

16 A. Evergy projects an 11.5% CAGR in rate base for the period 2025 to 2030.

17 **Q. Why didn't you compare the same asset metric for the two periods?**

18 A. I am not aware of readily available historical rate base data for the historical period. Evergy
19 does not provide projected CAGR in net plant through 2030. Because net plant is typically
20 the largest share of rate base (in fact, net plant in service is over 100% of Staff's and
21 Metro's estimates of rate base in this case), I consider a comparison of the growth in the
22 two asset values to be a reasonable proxy for growth in investment which would generate
23 earnings for the utility, due to the fact that the weighted ROE is applied to rate base, which
24 is predominately and consistently the utility's net plant. Additionally, this comparison is

¹³ Value Line has classified and still classifies electric utility companies based on three regions – East, West, and Central. The Value Line data included financial information for Missouri's major publicly-traded electric utility companies as they existed during this period. Missouri's major electric utility systems at the time were owned by Kansas City Power & Light Company, The Empire District Electric Company, St. Joseph Light & Power Company, and Union Electric Company.

1 also consistent with the financial relationship that dictates that over the long-term, book
2 value per share ("BVPS"), earnings per share ("EPS"), and dividends per share ("DPS")
3 should grow at similar rates. This is true because under the utility ratemaking model,
4 authorized earnings/income are generated by multiplying the authorized ROE times the
5 book value of the equity supporting rate base. In turn, dividends are paid from available
6 earnings. If the dividend payout ratio (DPS/EPS) is maintained, then BVPS, EPS and DPS
7 will grow at the same CAGR over the long-term.

8 **Q. What was KCPL's CAGR in net plant for the period 1985 through 1999?**

9 A. -0.35%.

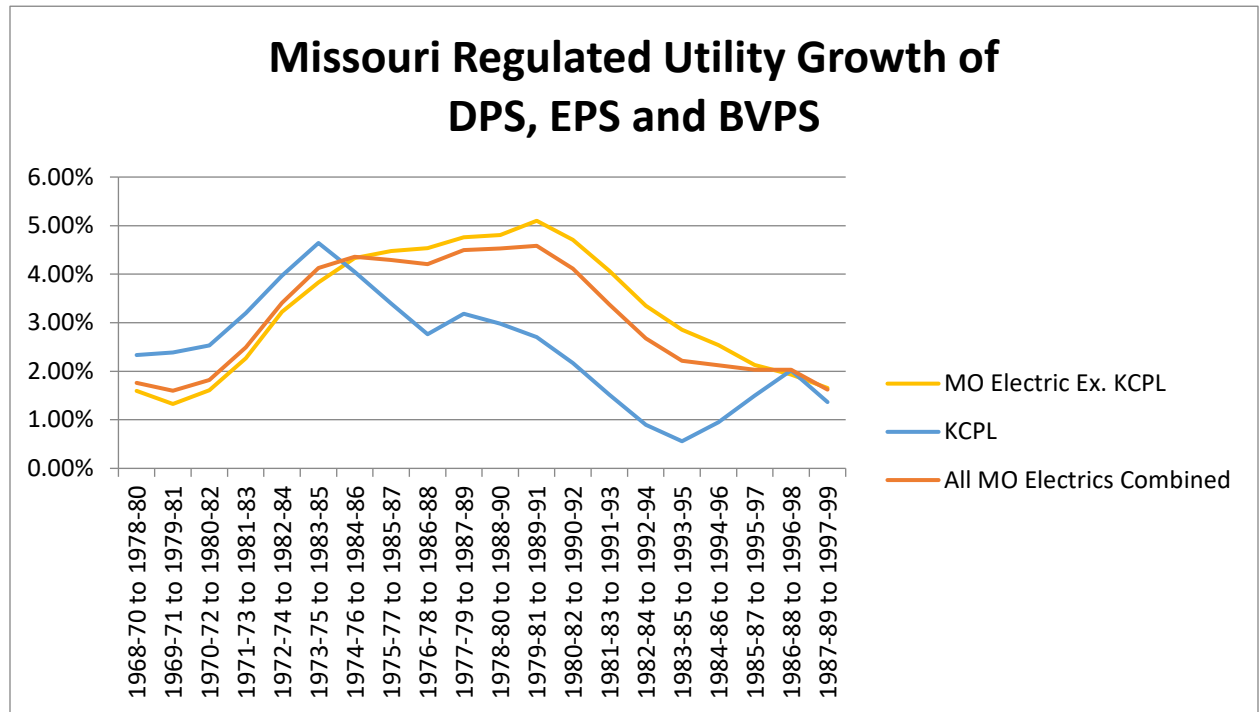
10 **Q. What was KCPL's CAGR in net plant for the 1974 to 1999 period?**

11 A. 5.50%.

12 **Q. Did KCPL's EPS, DPS, and BVPS grow at the same rate as its net plant did?**

13 A. No. During KCPL's construction cycle, it issued additional common equity to partially
14 fund its investment. The additional common equity caused dilution in aggregate book
15 value, earnings and dividend growth. In the following chart, I compare the average of
16 KCPL's EPS, DPS, and BVPS to that of other Missouri electric utility companies during

the same period:



Based on the data shown in the above chart, investors would not reasonably expect capital gains of 7%/year in perpetuity. At most, investors may assume a perpetual growth rate similar to the CAGR in the per share metrics for the entire investment cycle. However, as I testified in my direct testimony, the Commission needs to look no further than Evergy's own internal analyses for reasonable perpetual growth rates that are more consistent with sustainable capital gains.

Q. Are you aware of any studies that analyzed the attribution of shareholder returns from dividends and capital gains for a similar period?

A. Yes. As I testified in my direct testimony, Hugh Wynne, analyst with Bernstein Research at the time, analyzed the period from 1974 to 2010 and found that investors' total returns in electric utility stocks comprised of approximately 68% from dividends and the remaining from capital gains.

Q. Are you aware of any equity analysts that assume a utility's DPS can grow in perpetuity at the same rate as their own projected 3-to-5 year CAGR in EPS?

A. No.

2. CAPM ASSUMPTIONS

Q. Why are Ms. Bulkley's CAPM cost of equity estimates so high?

A. Because she uses irrational expected market returns. Ms. Bulkley estimates a total compound annual market return for the S&P 500 of 13.53% for the foreseeable future (perpetually based on her use of a constant-growth DCF to estimate S&P 500 returns).¹⁴ Subtracting long-term risk-free rates from Ms. Bulkley's estimated market return results in her market risk premium estimates of 8.88% to 8.93%.¹⁵

Q. Why are Ms. Bulkley's market risk premium estimates so high?

A. Because she assumes that the S&P 500 can grow its earnings at a compound annual rate of 12.18% in perpetuity.¹⁶ Ms. Bulkley's assumed CAGR in earnings for the S&P 500 is over double the 5.4% CAGR Goldman Sachs projected in 2023 that the S&P 500 could achieve over the next 20 years if widespread adoption of artificial intelligence improved productivity.¹⁷

Q. How do Ms. Bulkley's estimates of the S&P 500 total return and CAGR in earnings in this case compare to her estimates in EMW's 2024 rate case?

A. They are higher. In EMW's 2024 rate case Ms. Bulkley estimated the S&P 500 would achieve a long-term total return of 12.56%, which attributed 10.78% of the total return to capital gains because this was her assumption for perpetual earnings growth for the S&P 500.¹⁸

¹⁴ *Id.*, p. 28, lns. 17-20.

¹⁵ *Id.*, Schedule AEB-4.

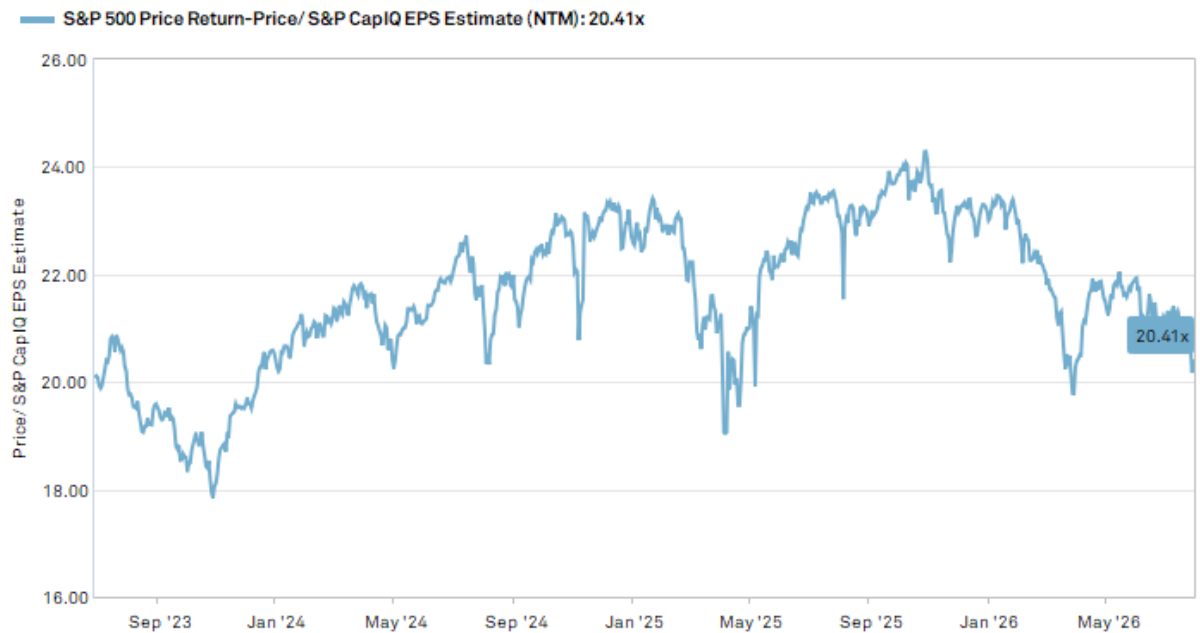
¹⁶ *Id.*, p. 28, lns. 17-20.

¹⁷ Allison Nathan, et. al., "Generative AI: Hype, Or Truly Transformative," Goldman Sachs, July 5, 2023, p. 16.

¹⁸ Case No. ER-2024-0189, Bulkley Direct Testimony, p. 41, lns. 16-18 and Schedule AEB-4.

1 **Q. Are her estimates of a higher market risk premium now versus 2024 logical**
2 **considering the changes in the valuation levels for the S&P 500 since EMW's 2024**
3 **rate case?**

4 A. No, as illustrated below, but for the brief sell off of stocks during the U.S. Administration's
5 announcement of "reciprocal" tariffs in the Spring of 2025 and the beginning of the war
6 with Iran, the S&P 500 P/E ratios have generally traded in the range of 21x to 24x, which
7 is higher than the S&P 500 P/E levels at the time of EMW's 2024 rate case.



8
9 **Q. Are you aware of any authoritative sources, academic or practical, that use Ms.**
10 **Bulkley's approach for estimating market returns?**

11 A. No. I know of no authoritative source that suggests this is a rational or reasonable approach
12 for purposes of estimating market returns. In fact, I know of several authoritative sources
13 that recommend against using a growth rate higher than GDP for purposes of determining
14 the long-term expected return for a broad index, such as the S&P 500.

15 **Q. What are those academic sources?**

16
17 A. The 2010 curriculum for Level III of the Chartered Financial Analyst ("CFA") Program
18 discusses how analysts often use the Gordon growth model (synonymous with the constant

1 growth DCF model used in utility ratemaking) to formulate the long-term expected return
2 for the broader equity markets. In the case of a broad-based equity index, such as the S&P
3 500, it is reasonable to estimate the long-term potential capital gains for the index by using
4 estimated nominal GDP over a long-term period. The curriculum specifically provides the
5 following formula for estimating the constant growth rate with an explanation that follows:

6 Earnings growth rate = GDP growth rate + Excess corporate growth (for the
7 index companies)
8

9 where the term *excess corporate growth* may be positive or negative
10 depending on whether the sectoral composition of the index companies is
11 viewed as higher or lower growth than that of the overall economy. If the
12 analyst has chosen a broad-based equity index, the excess corporate growth
13 adjustment, if any, should be small.¹⁹
14

15 Considering that the S&P 500's recent dividend yield was only 1.13% and economic
16 growth constraints on a sustainable long-term CAGR for the S&P, the likelihood of the
17 S&P 500 experiencing annual returns in the long run consistent with historical actual
18 returns seems small.

19 **Q. Are you aware of any common valuation metrics that illustrate how unreasonable Ms.**
20 **Bulkley's market growth rate expectations are?**

21 A. Yes. A comparison of a broad equity market capitalization amount to that of the total size
22 of the U.S. economy. This valuation metric provides a sanity check on potential growth for
23 capital markets. Warren Buffett made it popular when he provided insight on how high
24 the market, as measured by the Wilshire 5000, became valued as compared to U.S. GDP
25 at the time of the "dot com" bubble around March 2000. In fact, it is colloquially referred
26 to as "The Buffet Indicator." At the time of the "dot com" bubble, the Wilshire 5000 was
27 around 1.4x that of GDP. As of July 15, 2026, it had reached an all-time high of
28 approximately 2.3x, which demonstrates investors are currently requiring very low market
29 risk premiums.²⁰

¹⁹ 2010 CFA® Program Curriculum, Level III, Volume 3, p. 34.

²⁰ <https://www.longtermtrends.com/market-cap-to-gdp-the-buffett-indicator/>

1 **Q. What would this ratio be in 50 years if the market grew at the 12.18% compound**
2 **annual growth rate Ms. Bulkley suggests is appropriate?**

3 A. The Wilshire 5000 index would be approximately 89x times the GDP level. Based on the
4 market capitalization of the Wilshire 5000 of approximately \$64.26 trillion as of March 31,
5 2026, the Wilshire 5000 would have a market capitalization of slightly over \$20 quadrillion
6 in 50 years. U.S. GDP was \$31.87 trillion as of the same date. Based on a 4.0% long-term
7 growth rate for the U.S. economy, GDP would be approximately \$226.46 trillion in 50
8 years. It is not rational to assume corporate wealth will become much larger than the
9 economy in which it operates, let alone 89x the size of the economy. This explains why
10 the CFA Program advises not using a perpetual growth rate much, if any, higher than the
11 GDP growth rate of the economy(ies) in which a company operates.

12 **Q. Why are Ms. Bulkley's Empirical CAPM ("ECAPM") results higher than her**
13 **standard CAPM results?**

14 A. The results are higher because in her ECAPM she gives 25% weight to the unadjusted
15 market risk premium and 75% weight to the utility beta adjusted market risk premium.
16 Being that Ms. Bulkley's utility betas at least reduce her high equity risk premium estimates
17 by 10% to 30%, because her ECAPM allows for a 25% weighting to an unadjusted risk
18 premium, this amplifies the bias inherent in Mr. Bulkley's high risk premiums.

19 **Q. Does this mean that the larger the market risk premium estimate, the more widely**
20 **divergent the ECAPM results will be compared to the standard CAPM?**

21 A. Yes.

22 **Q. Would you illustrate?**

23 A. Yes. Ms. Bulkley assumes a market risk premium of approximately 8.88% to 8.93%
24 compared to more rational estimates of around 5.0%. If Ms. Bulkley had used a more
25 reasonable market risk premium of 5.0%, her ECAPM adjustment would have been
26 approximately 22 to 25 basis points lower as compared to her standard CAPM.

1 3. BOND YIELD PLUS RISK PREMIUM ANALYSIS

2 **Q. What is your reaction to Ms. Bulkley's Bond-Yield-Plus Risk Premium ("BYPRP")**
3 **analysis?**

4 A. Ms. Bulkley's BYPRP is a regression analysis of allowed ROEs to interest rates. Ms.
5 Bulkley concludes from her regression analysis that because allowed ROEs haven't
6 changed as much as interest rates, an adjustment needs to be made to recognize that
7 regulators have been hesitant to adjust allowed ROEs as much as interest rates would
8 suggest. This approach is circular in that the regression coefficient is dependent on
9 commissions' regulatory decisions rather than on market-required returns. As I testified in
10 my direct testimony, the investment community recognizes that authorized ROEs did not
11 decline along with the COE.

12 4. CONSIDERATION FOR SPECIFIC BUSINESS AND REGULATORY RISK

13 **Q. Ms. Bulkley devotes approximately 15 pages of her direct testimony to justifying her**
14 **view that Metro's 100% pure-play regulated vertically integrated electric utilities in**
15 **Missouri cause its cost of equity to be higher than that of her proxy group.²¹ Does**
16 **Ms. Bulkley recognize in her testimony that her proxy group includes companies with**
17 **significant non-regulated business-risk exposure?**

18 A. No. As I indicated when discussing Ms. Bulkley's proxy group, she includes the following
19 companies that have significant non-regulated business exposure: Dominion Energy Inc.,
20 DTE Energy, and NextEra Energy Inc. Non-regulated generation operations expose the
21 companies to commodity price volatility. While electric utilities rely on commodities (*i.e.*
22 natural gas, coal, nuclear fuel, renewable power projects, etc.), they are not exposed to
23 gains and losses from changes in prices of commodities. This is not true for companies
24 engaged in non-regulated aspects of the electric utility industry.

25 Therefore, Ms. Bulkley's focus on only the selected proxy companies' regulated operations
26 compared to Metro's pure-play regulated utility operations to attempt to convince the

²¹ Bulkley Direct, pgs. 34-50.

Commission that Metro has higher risk, and therefore, deserves a higher ROE, should be duly noted in the weight to be given to her comparative analysis.

Q. What is your response to Ms. Bulkley's testimony on Metro's specific business and regulatory risks?

A. Ms. Bulkley essentially maintains that because Metro plans to invest more in its system over the next few years, which now includes increased capital expenditures to meet increased demand from large load customers, *all* customers should pay a higher ROR because of the higher risk from those expenditures. Evergy's current and planned scale of investment in its Missouri electric utility systems will create a significant amount of wealth for Evergy's shareholders. As the scale of investment increases, the higher the allowed ROR over the cost of capital, the higher the net present value created for shareholders. I addressed this issue with examples in my direct testimony. As I explained in my direct testimony, because ratepayers will be servicing the capital supporting the increased scale of investment, the Commission should set the authorized ROR at a lower margin over the cost of capital rather than a higher margin.

Q. Ms. Bulkley also claims that Metro's anticipated elevated capital expenditures may cause pressure on Metro's credit ratings.²² What has been the major driver of Metro's recent increase in near-term planned capital expenditures?

A. Capital expenditures for new generation to serve data centers. Since 2022, Metro's projected total capex over the next five years has increased by approximately 69%. The majority of this increase is attributed to a 239% increase in capex for new generation, which equates into approximately 60% of the 69% increase.

Q. Why is it important to establish the major cause of increases in Metro's projected capex?

A. Because, as I explained when discussing Ms. Bulkley's COE analysis, increased demand from data centers is driving Metro's increase of capital expenditures over the next five

²² *Id.*, p. 35, l. 5 – p. 41, l. 2.

1 years, both in amount and percentage. Again, while utility companies may be making soft
2 pledges not to pass increased costs from data centers onto residential ratepayers, arguing
3 for a higher revenue requirement because of perceived risks related to increased capex is
4 an example of the subjectiveness of such pledges. If the LLPS tariff rates are not changed
5 in this case, then the ROR authorized in this case should not be set higher because of risks
6 borne from data center exposure.

7 **Q. Are there mechanisms other than charging ratepayers a higher ROR that can be**
8 **employed to address concerns with impacts on Metro's credit metrics caused by the**
9 **magnitude in the increase in its capex?**

10 A. Yes. Metro (then named Kansas City Power & Light Company) expressed credit rating
11 concerns when it proposed to build Iatan 2 and other projects in 2005. Therefore, Staff,
12 OPC, and other intervening parties agreed to a ratemaking mechanism, which allowed
13 additional cash flows for the period of construction if Metro provided consideration to
14 ratepayers in the form of an offset to rate base when the plant started providing service.

15 Additionally, although Missouri law does not currently contemplate the use of
16 securitization for a period of heightened capital expenditures, the fact that securitization is
17 being used to allow Missouri utility companies to raise off-balance sheet debt to accelerate
18 their recovery of their investment in stranded assets, the same concept could apply to rate
19 base already on utilities' books. This mechanism would serve several purposes – (1) ensure
20 investors full recovery of their previous investments, (2) reduce strain on utility company
21 credit metrics, and (3) reduce the rates charged to ratepayers because they would no longer
22 be charged a higher ROR to fund corporate equity and debt investors.

23 **Q. Are there drawbacks to this option?**

24 A. The tariff charged to ratepayers to ensure recovery of revenues sufficient to service the
25 securitized debt is not elastic. Therefore, ratepayers have little control over the charge by
26 varying their usage. However, if ratepayers were adequately informed that, over time,
27 they would pay more if the rate base had not been securitized because they are no longer
28 paying a return to equity investors, then ratepayers might welcome such a mechanism.

1 **Q. Are you aware of any other states that have securitized rate base to create headroom**
2 **for additional capital expenditures?**

3 A. Yes. This mechanism has been implemented in California and considered in New England.
4 Jefferies stated the following about such considerations:

5 **Securitization of capex has begun in California and New England**
6 **stakeholders are discussing it as a way to reduce customer bills.** This is
7 a dangerous precedent that effectively breaks the cost of service business
8 model but has a clear benefit for ratepayers in these scenarios. Some utilities
9 have brought up the concept of securitizing operating costs like vegetation
10 management as a tool for affordability but this has its drawbacks as well.
11 (bold in original)²³

12 **Q. Ms. Bulkley asserts that PISA does not reduce Metro's cost of capital.²⁴ Does her**
13 **assertion make sense to you?**

14 A. No. The investors' 2022 initiative caused Evergy to cease buying back stock by issuing
15 holding company debt and instead, invest in its utilities. A primary factor driving Evergy's
16 change in strategy was the additional value Evergy could create for its shareholders by
17 pursuing increased rate base growth in each of its jurisdictions, but specifically Missouri
18 because of the incentives related to utility supportive legislative measures, which included
19 PISA.

20 **Q. Did Ms. Bulkley attempt to minimize the favorability of the original PISA law in**
21 **Metro's 2022 rate case?**

22 A. Yes. She testified in that case that because Metro was not assured it could continue to
23 utilize PISA past 2023 (unless the Commission approved an extension through 2028) and
24 because PISA limited Metro's compound annual growth rate ("CAGR") in retail rates to
25 no more than 3%, this exposed Metro to additional risk than if these limitations weren't in
26 place.²⁵

²³ Julien Dumoulin-Smith, et. al, "North America-Power & Utilities: 26 Themes for 2026: Data Center Honeymoon is Over as DCs Become the Villain," Jefferies Equity Research, January 5, 2026, p. 35.

²⁴ *Id.*, p. 39, l. 18 – p. 40, l. 16.

²⁵ Case No. ER-2022-0129, Bulkley Direct, p. 51, l. 3 – p. 53, l. 15.

Q. Has the PISA law been amended since Metro's 2022 rate case?

A. Yes, twice. First, during the 2022 Missouri legislative session when Missouri's legislature passed Senate Bill 745. The first amended PISA law allowed Missouri electric utility companies to continue to use PISA through December 31, 2028, without being required to petition the Commission to do so. Second, during the 2025 Missouri legislative session, Missouri's legislature passed Senate Bill 5, which extended electric utility companies' ability to adopt PISA without Commission explicit authorization through December 31, 2035.

Q. Did the first amendment to the PISA law include language explicitly acknowledging potential ratemaking consideration (through the allowed return) for changes in business risk due to the ability to elect PISA?

A. Yes. SB 745 specifically states the following:

The commission may take into account any change in business risk to the corporation resulting from implementation of the deferrals in setting the corporation's allowed return in any rate proceeding, in addition to any other changes in business risk experienced by the corporation.

Q. Did Ms. Bulkley give any credit to Missouri's more investor-friendly legislative and regulatory environment in estimating a fair and reasonable ROR for Metro?

A. No.

Q. What ROE did the Commission authorize Evergy's Missouri utilities before the risk reducing mechanisms of PISA, securitization, and now the potential allowance of construction work in progress ("CWIP") for natural gas generating plants in rate base became available?

A. 9.5%.

1 **Q. How do you recommend the Commission recognize Metro's reduced business risk**
2 **due to a more utility investor-friendly legislative and regulatory environment in**
3 **Missouri?**

4 A. By setting Metro's authorized ROR based on capital structure ratios more consistent with
5 Evergy's more cost-efficient capital structure. Evergy clearly understands that it can
6 optimize its capital structure (*i.e.* issue more debt) due to reduced business risks at its
7 subsidiaries, but it does not want to share the relatively lower cost of capital with its
8 ratepayers by optimizing its utility subsidiaries' capital structures, including Metro. In
9 Metro's 2018 rate case, Case No. ER-2018-0145, which occurred prior to the passage of
10 the PISA law, Metro requested its authorized ROE be applied to a 50.03% common equity
11 ratio. In this case, Metro requests its authorized ROE be applied to a 52.07% common
12 equity ratio. This is illogical because reduced business risk increases a company's debt
13 capacity, while allowing it to maintain the same credit rating. Given that many Evergy
14 investors consider Missouri's regulatory environment to be more shareholder-friendly,
15 Metro's ratepayers should be compensated for this reduced business risk by paying a ROR
16 consistent with Evergy's more optimized capital structure, which had an average adjusted
17 common equity ratio of approximately 45%, after excluding short-term debt, for the
18 quarterly periods July 1, 2024, through December 31, 2025.

19 **Q. Ms. Bulkley implies that the ROE the Commission authorizes for Metro should be**
20 **higher because Metro is part owner of the Wolf Creek nuclear plant. What is your**
21 **response?**

22 A The Commission should dismiss that implication. Ms. Bulkley did not identify Ameren
23 Missouri wholly-owning the Callaway nuclear plant as a risk factor for setting Ameren
24 Missouri's authorized ROE in her testimony in Ameren Missouri's recently filed general
25 rate case, Case No. ER-2026-0291.

1 **Q. Regardless, does your COE analysis support Ms. Bulkley's position that Metro's**
2 **nuclear generation causes it to be exposed to higher risk, and therefore, Metro**
3 **requires a higher COE than electric utility companies that do not own nuclear**
4 **generating facilities?**

5 A. No. My multi-stage DCF COE estimates do not support Ms. Bulkley's position. For Ms.
6 Bulkley's proxy companies that have nuclear generation, my COE estimate is 7.96%. My
7 COE estimate for Ms. Bulkley's proxy companies that do not have nuclear operations is
8 8.03%.

9 **Q. What do Ms. Bulkley's constant-growth DCF COE estimates for companies with and**
10 **without nuclear generation show about nuclear generation increasing risk?**

11 A. Because of Ms. Bulkley's mis-specification of a sustainable perpetuity growth rate in her
12 constant-growth DCF, this flaw causes unreliable and widely variable COE estimates for
13 the electric utility companies in her proxy group. An example of the unreliability of her
14 analysis is the fact that the spread between her highest and lowest COE estimate for
15 companies in her proxy group is 325 basis points, where the spread between the highest
16 and lowest COE estimate in my multi-stage DCF COE estimate is 129 basis points.
17 Although I consider her COE analysis to be unreliable, her constant-growth DCF COE
18 results imply that the electric utility companies with nuclear generation have a COE of
19 10.54% compared to a 10.26% COE for electric utility companies without nuclear
20 generation.

21 **Q. Which company in your regulated utility proxy group had the highest COE?**

22 A. Portland General Electric ("Portland") with my COE estimate of 8.71%.

23 **Q. Why does Portland have the highest COE in your regulated utility proxy group?**

24 A. Because investors in Portland require a higher equity risk premium due to its exposure to
25 wildfire risk.

1 **Q. Does Ms. Bulkley identify companies in her proxy group that are exposed to wildfire**
2 **risk?**

3 A. No.

4 **Q. What other companies in her proxy group have wildfire risk?**

5 A. Avista Corp., IDACORP Inc., Pinnacle West Capital Corporation, and Xcel Energy Inc.

6 **Q. Has S&P Global Ratings assigned any of these companies a higher business risk**
7 **profile due to significant exposure to wildfire risk?**

8 A. Yes. S&P Global Ratings assigns Portland, Avista, and IDACORP a business risk profile
9 of 'Strong' rather than 'Excellent' due to their exposure to wildfire risk. Because S&P
10 Global Ratings assigns these companies a riskier business risk profile than vertically
11 integrated electric utility companies without wildfire risk, S&P Global Ratings applies
12 more stringent financial credit metric thresholds to these companies than Metro and
13 Ameren Missouri. Put another way, if the companies with wildfire risk maintained the same
14 amount of leverage in their capital structures as Metro and Ameren Missouri, they would
15 have lower credit ratings.

16 **Q. Does S&P Global Ratings assign a riskier business risk profile to electric utility**
17 **companies with nuclear generation?**

18 A. No, not to my knowledge.

19 **Q. Do you have an opinion of how Ms. Bulkley is selecting the risk factors to which she**
20 **testifies?**

21 A. My opinion is that she is conveniently highlighting risk factors that she believes bolster her
22 attempt to support a higher than reasonable ROE to determine Metro's revenue
23 requirement. Just as she chose to deconsolidate her proxy companies' consolidated capital
24 structures to justify Metro's less leveraged capital structure as being reasonable, she is
25 selective about the business risks she claims cause Metro to have a higher cost of capital.
26 Due to the extreme bias in her analysis, Ms. Bulkley's recommended ROR should be
27 summarily dismissed.

B. SEOUNG JOUN WON'S RECOMMENDED ROE

Q. What allowed ROE does Dr. Won recommend?

A. Dr. Won recommends a ROE of 9.74%, which is the mid-point of his ROE range of 9.48% to 9.98%.

Q. How does Dr. Won's recommended allowed ROE of 9.74% compare to his recommended ROE for electric utility rate cases filed in Missouri since 2024?

A. It is the same. Dr. Won has recommended the following authorized ROEs for electric utility rate cases since 2024:

- Ameren Missouri, Case No. ER-2024-0319: 9.74%, based on a range of 9.49% - 9.99%; and
- Evergy Missouri West, Case No. ER-2024-0189: 9.74%, based on a range of 9.49% - 9.99%.

Q. Why are Staff's recommended ROE and range of ROEs essentially unchanged since 2024?

A. Because Staff is relying on a regression analysis of average authorized ROEs and utility bond yields since 2014 to quantify whether recent changes in bond yields justify a movement in authorized ROEs.

Q. Is Staff's approach problematic?

A. Yes, because it is circular. As I testified extensively in my direct testimony, commissions have not adjusted authorized ROEs to achieve parity with the COE. However, this is not necessarily due to commissions rejecting expert opinions that the COE is lower than authorized ROEs, but rather due to receiving ROR testimony that is upwardly-biased in estimating the COE. For example, Mark Ellis, author of the article I attached as Schedule DM-D-2 to my direct testimony, recently summed up the determination of ROR in utility rate cases as follows:

In today's rate cases, ROE determination "is a charade that is not calculated consistently or accurately," Ellis continued. "The utility says it should be

1 11% and the consumer advocate says it should be 9% and the regulators
2 compromise at 10% and move to the next proceeding.”²⁶

3 While Mr. Ellis’ comment is somewhat of an over-simplification of the process, Dr. Won’s
4 regression analysis confirms Mr. Ellis’ opinion. However, to Dr. Won’s credit, he does
5 recognize that the COE and authorized ROEs are not synonymous.

6 **Q. Does Ms. Bulkley consider authorized ROEs to be synonymous with the COE when**
7 **she performs her regression analyses of authorized ROEs against bond yields?**

8 A. Yes. Ms. Bulkley testifies in direct that “[she] use[s] actual authorized returns for
9 vertically-integrated utility companies as the historical measure of the **cost of equity** to
10 determine the risk premium” (emphasis added).²⁷ Ms. Bulkley also testifies as follows as
11 to why she considers the relevance of this analysis to investors:

12 Investors are aware of authorized ROEs in other jurisdictions, and they
13 consider those authorizations as a benchmark for a reasonable level of
14 equity returns for utilities of comparable risk operating in other
15 jurisdictions. Because my Bond Yield Plus Risk Premium analysis is based
16 on authorized ROEs for utility companies relative to corresponding
17 Treasury yields, it provides relevant information to assess the return
18 expectations of investors.²⁸

19 **Q. Do you agree with Ms. Bulkley that authorized ROEs provide information that**
20 **assesses the “return expectations of investors?”**

21 A. Yes. However, Ms. Bulkley again seems to be implying the investors’ return expectations
22 and required returns are synonymous. I can confidently state that investors differentiate
23 the return they “expect” to be authorized in rate cases and the return they “require” (*i.e.* the
24 cost of equity) on their investments. I have provided numerous examples over the years of
25 practical investment analyses which clearly show that investors estimate fair stock prices
26 based on earnings projections premised on an authorized ROE consistent with the
27 respective commission’s recent authorized ROE for that company (whether it is above,
28 below, or similar to an average authorized ROE). However, investors discount the

²⁶ Herman K. Trabish, “Utility profits in the crosshairs amid affordability concerns,” Utility Dive, July 27, 2026 (link: <https://www.utilitydive.com/news/utility-profits-in-the-crosshairs-amid-affordability-concerns/825610/>).

²⁷ Bulkley Direct, p. 31, l. 16 – p. 32, l. 2.

²⁸ *Id.*, p. 32, l. 16 – p. 33, l. 2.

1 projected cash flows based on these estimated authorized ROEs based on a COE that is
2 lower than the authorized ROE. In fact, in past rate cases, I provided evidence from
3 Evercore ISI that showed that they expected a normalized spread between authorized ROEs
4 and the COE to be approximately 225 basis points. In competitive markets, companies
5 give priority to projects that are expected to achieve a margin over its cost of capital
6 because doing so maximizes shareholder value. However, in monopoly-based markets,
7 where regulators are attempting to achieve economic efficiency, economic theory dictates
8 that the ROR underlying rates charged customers should be set at or near parity with the
9 cost of capital to mitigate over-investment.

10 **Q. Can you provide an example that demonstrates that prospective investors in a utility**
11 **authorized a ROE of 9.7% compared to a utility authorized an ROE of 8% could**
12 **realize the same required return?**

13 A. Yes. A shareholder's return depends on the price at which the shareholder buys the stock.
14 A simple example is to assume an initial investment of \$100 with returns to the shareholder
15 of \$8/year based on applying an 8% ROE to the \$100 non-depreciating investment.
16 Because the ROE and the COE are equal, the market value of the investment will remain
17 equal to the initial book value of the \$100 investment until the capital is returned (in my
18 simple example, after 10 years). Now, let's assume a jurisdiction decides it wants to
19 attempt to appeal to investors so it decides to increase the ROE to 9.7% at the mid-point of
20 the investment horizon. From that point forward, the investors who provided the \$100 to
21 earn 8% realized an unanticipated additional annual cash flow of \$1.7 for the next five
22 years, which increases the earned return for the entire period to 8.68%. However, because
23 the COE is still 8%, they could choose to sell the investment to another investor for \$106.79
24 because doing so allows the new investor to achieve their required return of 8% for the
25 remaining five years.

26 **Q. Back to Dr. Won's regression analysis, does his correlation coefficient demonstrate**
27 **how little impact changes in the cost of capital have had on authorized ROEs?**

28 A. Yes. Investors typically factored in the "stickiness" of authorized ROEs despite clear
29 evidence for the period from 2010 through 2022 that the cost of capital, which includes the

COE, for utility companies experienced a significant secular decline. Dr. Won's regression of average authorized ROEs against the secular decline in interest rates over this period demonstrates this stickiness. Dr. Won's correlation coefficients indicate that while utility companies' cost of debt exhibited a spread of approximately 355 to 360 basis points since 2014, authorized ROEs only varied by approximately 30 basis points. While I did not advocate for dramatic reductions in authorized ROEs during this period, I did advocate for the Commission to at least gradually start reducing authorized ROEs for Missouri's utilities over this period. My position was consistent with investors' expectations that commissions would likely eventually reduce authorized ROEs, even if at a lag, since overwhelming evidence—lower bond yields, lower dividend yields and high utility P/E ratios—became too obvious to dismiss. However, as demonstrated by Dr. Won's regression analysis, whether wittingly or unwittingly, commissions did not reduce authorized ROEs much even though the COE was in the 5-6% range in late 2019/early 2020. Considering such experience and circularity, the Commission should set Metro's authorized ROE at 9.25%, or at the very least hold the line on Metro's last authorized ROE of 9.5%, as these ROEs are still above the COE.

Q. Does Dr. Won's recommended authorized ROE appear to be influenced by his other COE methods?

A. No. As I highlighted, his recommended authorized ROEs for the electric utility industry are solely based on his regression of authorized ROEs to bond yields. While Dr. Won has applied COE methods, such as the DCF and a CAPM, since he started completely relying on his "authorized ROE regression analysis" for his recommended authorized ROE, changes in his COE estimates have not influenced his final ROE recommendation. For example, despite Dr. Won's constant-growth DCF and CAPM COE estimates being approximately 50 basis points lower in this case versus EMW's rate case in 2024, Dr. Won recommends the same authorized ROE in both cases.

1 **Q. Although Dr. Won did not rely on his COE estimates for his recommended ROE, how**
2 **did he approach his COE analyses?**

3 A. Dr. Won performed a proxy group COE analysis based on a subset of publicly-traded
4 electric utility companies that met his screening criteria. He performed a COE analysis
5 using two COE methods/models – a constant-growth DCF and the Capital Asset Pricing
6 Model. Using these two COE methods, Dr. Won estimated the electric utility industry's
7 COE to be in the range of 7.11% to 10.34%, with a mean of 8.67%.

8 **Q. How did Dr. Won determine how he would approach his DCF analysis?**

9 A. Dr. Won took guidance from FERC decisions for purposes of determining how he
10 approached estimating the COE for his proxy group using a DCF methodology. For
11 example, Dr. Won cites FERC Opinion No. 575 as support for the approach he used to
12 calculate a “sustainable” growth rate for his proxy group.

13 **Q. What approach did FERC use to determine a “sustainable” growth rate for the**
14 **constant growth DCF?**

15 A. FERC applied 80% weighting to near-term projected CAGR in EPS and 20% weighting to
16 a projected long-term GDP growth rate.

17 **Q. What was FERC's underlying economic logic for this approach to estimating a**
18 **perpetual growth rate for utilities' DPS?**

19 A. I do not know.

20 **Q. Are you aware of any practical investment analysis that estimates the value of a utility**
21 **company's stock based on FERC's approach?**

22 A. No. I have NEVER seen this approach used to estimate utility stock prices.

23 **Q. If a ROR witness is attempting to estimate investors' COE, is it important for the**
24 **methodology and assumptions to be grounded in reality?**

25 A. Yes.

1 **Q. Does FERC frequently change its policy guidance for deciding the appropriate ROE**
2 **to apply to determine a revenue requirement?**

3 A. Yes. FERC relies on policies/guidance that may produce desired outcomes for one case,
4 but if that policy/guidance no longer provides consistent results, FERC issues a decision
5 that revises the previous guidance.

6 **Q. Do investors change the way they approach fundamental valuation?**

7 A. No. The economic and finance principles underlying valuation do not change over time.
8 However, assumptions used to estimate value can change over time based on
9 macroeconomic conditions, industry conditions, and/or company-specific conditions.

10 **Q. Is it possible to employ a DCF analysis that allows an analyst to achieve the**
11 **assumptions underlying the constant-growth stage, which requires a company's DPS,**
12 **BVPS and EPS to grow at the same rate without being required to access the third-**
13 **party capital markets?**

14 A. Yes. Simply perform a multi-stage DCF/DDM analysis, that transitions higher growth
15 stages to the mature stage in which a company would not grow at a rate faster than the
16 growth rate of the economy in which it operates.

17 **Q. How does Dr. Won approach his CAPM cost of equity estimate?**

18 A. Dr. Won calculates the beta-adjusted risk premium for his proxy group and adds the beta-
19 adjusted risk premium to a 30-year UST bond yield.

20 **Q. Do you accept Dr. Won's representation of an average beta for his electric utility**
21 **proxy group?**

22 A. Yes. Although he uses somewhat dated Value Line published-betas (some of Value Line's
23 betas were calculated approximately six months ago in December 2025), these betas appear
24 to have excluded the anomalous period during Covid-19, which skewed utility betas toward
25 1.0. The average beta of 0.74 of Dr. Won's proxy group is fairly consistent with the typical
26 electric utility beta of around 0.70 to 0.75, which is consistent with Ms. Bulkley's 10-year
27 average betas of 0.77 for her proxy group and the median of 0.74. Based on my experience,

1 I consider a beta in the range of 0.70 to 0.75 to be reasonable for purposes of determining
2 the electric utility industry's beta-adjusted risk premiums.

3 **Q. Do you have any comments about Dr. Won's application of his various equity risk**
4 **premium estimates to a 30-year UST bond yield?**

5 A. Yes. As I testified in my direct testimony,²⁹ the appropriate tenor of the risk-free rate is
6 driven by the tenor used to estimate the market risk premium. Dr. Won relied on Dr.
7 Damodaran's implied risk premium estimate and Dr. Damodaran's online database of
8 earned annual market risk premiums for the period 1928 to 2025. Dr. Damodaran's implied
9 and realized risk premiums are based on the 10-year UST note, which consistently have a
10 lower yield than 30-year UST bonds. Dr. Won utilized a 4.71% 30-year UST yield based
11 on the average 30-year UST yields for the fourth quarter of 2025. The average 10-year
12 UST yield for the same period was 4.1%, which causes an approximate 60 basis point
13 upward bias to Dr. Won's COE estimates using Dr. Damodaran's market risk premium
14 data.

15 **Q. Is there anything else related to Dr. Damodaran's implied equity risk premium**
16 **estimates that Dr. Won failed to consider?**

17 A. Yes. Beginning in June 2025, Dr. Damodaran began adjusting the 10-year UST yield for
18 a default premium due to Moody's downgrade of UST debt by one notch from Aaa (the
19 strongest possible credit rating) to Aa1. If an analyst uses Dr. Damodaran's implied risk
20 premium data to estimate the cost of equity for an industry or company, it is important to
21 ensure that if the analyst uses an adjusted implied risk premium, which Dr. Won did with
22 his use of Dr. Damodaran's implied risk premium of 5.03% as of April 2026, that the
23 adjusted implied risk premium is added to the adjusted 10-year UST yield, which Dr.
24 Damodaran determined was 26 basis points in April 2026. Dr. Won's failure to make this
25 adjustment caused an additional 26 basis point upward bias in his COE estimate using Dr.
26 Damodaran's implied risk premium estimate.

²⁹ Murray Direct Testimony, p. 38, ll. 3-12.

1 **Q. After making the necessary adjustments, what COE would Dr. Won have calculated**
2 **if he used Dr. Damodaran's data as intended?**

3 A. Dr. Won's calculation of his proxy groups' COE using Dr. Damodaran's implied risk
4 premium estimate would have been 7.61% compared to the 8.41% included in Dr. Won's
5 Schedule SJW-d13.

6 **Q. In your opinion, should the Commission give much weight to Dr. Won's COE**
7 **estimates using the arithmetic average of realized arithmetic market risk premium**
8 **for the period 1928 to 2025?**

9 A. No. As I explained in detail in my direct testimony, past realized returns were not
10 consistent with required returns, but rather a matter of realized "excess returns" or as
11 described by Dimson, Marsh, and Staunton "good fortune." This effect was especially
12 pronounced in the second half of the last century, which was even more pronounced during
13 the last 20 years of the last century.

14 **Q. Do the recent valuation levels of the S&P 500 support the view that projected returns**
15 **will be lower than historical returns?**

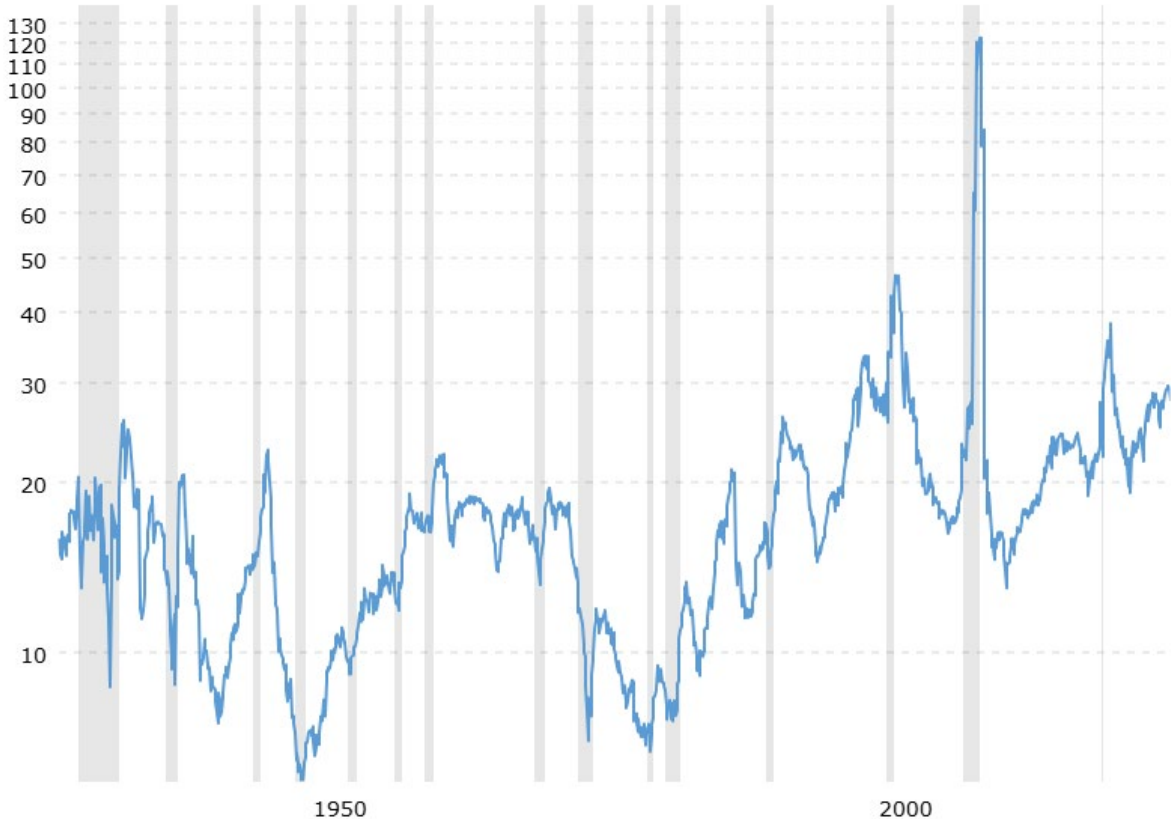
16 A. Yes. The S&P 500 has been trading at consistently higher valuation levels (*i.e.*
17 approximately 20-22x P/E) during the last couple of years. It would be foolish to assume
18 that there could be sustainable further expansion in the P/E ratios for the S&P 500, since
19 but for the "dot com" bubble, the S&P 500 has never traded at recent levels. The following
20 chart shows the S&P 500 P/E ratios since 1985:



Q. Can you also provide the S&P 500's P/E ratios for a longer historical period to show the trend in the expansion of the P/E back to 1980?

A. Yes, but only based on historical earnings for the S&P 500. The following chart shows the S&P 500 P/E ratio for the past 90 years. As shown, the S&P 500 P/E ratios in 1980 were in single digits, until they peaked around the dot com bubble. While it would appear the S&P 500's valuation levels were extremely high around the Spring of 2009, this was a function of depressed historical earnings during the financial crises in 2008 and the S&P 500 increasing in anticipation of a recovery in earnings.

S&P 500 P/E Ratios for Last 90 Years:



IV. SUMMARY AND CONCLUSIONS

Q. Would you summarize your main conclusions in this rebuttal testimony?

A. Yes. The Commission must be careful not to set Metro's authorized ROE higher than otherwise would be considered fair and reasonable without risks related to data center exposure. The increase in near-term projected CAGR in EPS due to anticipated demand and investment for data centers causes Ms. Bulkley's constant-growth DCF estimates to be upwardly biased. The upward-bias in Ms. Bulkley's constant-growth DCF COE estimates is exacerbated due to her assumption that investors expect electric utilities' DPS to grow in perpetuity at a CAGR similar to higher near-term projected EPS growth. At the very least, the Commission should not increase Metro's previous authorized ROE of 9.5% due

³⁰ <https://www.macrotrends.net/2577/sp-500-pe-ratio-price-to-earnings-chart>>S&P 500 PE Ratio - 90 Year Historical Chart

1 to current industry conditions. This is especially true in this case if a higher ROR is not
2 assigned to the LLPS rate class. Staff's recommended ROE of 9.74% has been static since
3 2024 because of the circularity of Staff's approach. If all commissions adopted Staff's
4 approach to recommending a fair and reasonable ROE, authorized ROEs would never
5 change due to changes in the cost of capital. This approach does not comply with the
6 principles established in *Hope* and *Bluefield*. The Commission should adopt my
7 recommended ROE of 9.25% because it allows Metro to create value for its shareholders,
8 but at the same time compresses the margin over the COE to encourage capital efficiency.

9 Metro recommends the Commission set its authorized ROR based on an approximate 52%
10 common equity ratio. Evergy is targeting a higher-cost capital structure for Metro than it
11 targets for itself on a consolidated basis. Evergy's strategy is to optimize the use of debt
12 at the consolidated level rather than at its subsidiaries. This strategy increases shareholder
13 wealth at ratepayers' expense. Before GPE and Westar merged, Metro's previous parent
14 company, GPE, did not issue holding company debt. Under GPE's ownership, Metro and
15 EMW funded GPE's dividend obligations and issued their own debt capital to fund
16 liquidity needs. Under Evergy's ownership, Evergy uses holding company debt to fund
17 dividends, causing Metro to not be financed as a stand-alone entity. Under GPE's
18 ownership, Metro accepted the use of GPEs' consolidated capital structure for ratemaking
19 because it was not more levered/optimized than the ratios maintained at the subsidiaries.
20 Under GPE's ownership, Metro's authorized common equity ratios were typically around
21 50% or lower. The most market-based capital structure is Evergy's on a consolidated basis.
22 Therefore, the Commission should consider Evergy's common equity ratio when deciding
23 a fair and reasonable ratemaking common equity ratio for purposes of setting Metro's
24 authorized ROR.

25 **Q. Does this conclude your testimony?**

26 **A.** Yes.

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

STATE OF MISSOURI)
) SS
COUNTY OF COLE)

1. My name is David Murray. I am a Utility Regulatory Manager for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.


David Murray
Utility Regulatory Manager

TIFFANY HILDEBRAND
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES AUGUST 8, 2027
COLE COUNTY
COMMISSION #15637121


Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2027.