FILED
November 9, 2026
Missouri Public
Service Commission

Exhibit No. 120

Staff – Exhibit 120
Direct Testimony of Seoung Joun Won, PhD
Case No. ER-2026-0143

Exhibit No.:
Issue(s): *Rate of Return*
Witness: *Seoung Joun Won, PhD*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Direct Testimony*
Case No.: *ER-2026-0143*
Date Testimony Prepared: *June 30, 2026*

MISSOURI PUBLIC SERVICE COMMISSION

FINANCIAL AND BUSINESS ANALYSIS DIVISION

FINANCIAL ANALYSIS DEPARTMENT

DIRECT TESTIMONY

OF

SEOUNG JOUN WON, PhD

EVERGY METRO, INC., d/b/a Evergy MISSOURI METRO

CASE NO. ER-2026-0143

Jefferson City, Missouri
June 2026

** Denotes Confidential Information **

TABLE OF CONTENTS OF

DIRECT TESTIMONY OF

SEOUNG JOUN WON, PhD

EVERGY METRO, INC., d/b/a EVERGY MISSOURI METRO

CASE NO. ER-2026-0143

I. EXECUTIVE SUMMARY 3

II. REGULATORY PRINCIPLES 6

III. MARKET ANALYSIS 10

1. Economic Condition 10

2. Capital Market Condition 22

IV. CORPORATE ANALYSIS 30

V. CAPITAL STRUCTURE 37

VI. RATE OF RETURN 47

1. Proxy Group 47

2. Cost of Common Equity 49

3. Bond Yield Plus Risk Premium 54

4. Authorized Return on Equity 57

5. Cost of Debt 61

VII. CONCLUSION 62

DIRECT TESTIMONY

OF

SEOUNG JOUN WON, PhD

EVERGY METRO, INC., d/b/a EVERGY MISSOURI METRO

CASE NO. ER-2026-0143

Q. Please state your name and business address.

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

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

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

Q. What is your educational and employment background?

A. I received my Bachelor of Arts, Master of Arts, and Doctor of Philosophy in Mathematics from Yonsei University and my Bachelor of Business Administration in Financial Accounting from Seoul Digital University in Seoul, South Korea, and earned my Doctor of Philosophy in Economics from the University of Missouri - Columbia. In addition, I passed several certificate examinations for Finance Specialist in South Korea for Accounting Management, Financial Risk Manager, Enterprise Resource Planning Accounting Consultant, Derivatives Investment Advisor, Securities Investment Advisor, and Financial Planner. Prior to joining the Commission, I taught both undergraduate and

graduate level mathematics at the Korean Air Force Academy and Yonsei University for 13 years. I served as the Director of the Education and Technology Research Center in NeoEdu for five years. A more detailed account of my educational background and occupational experience appears in Appendix 1, attached to this Direct Testimony.

Q. Have you previously filed testimony before the Commission?

A. Yes, I have appeared before the Commission numerous times. I have testified on rate of return ("ROR"), cost of capital, capital structure, finance issuance, financial capability, feasibility study, and valuation analysis on mergers and acquisitions, etc. Please refer to Appendix 1, attached to this Direct Testimony, for a list of my testimony, recommendations, or memorandums previously filed with the Commission and the associated issues.

Q. What is the purpose of your direct testimony?

A. On behalf of Staff, I am presenting evidence and providing a recommendation in this testimony regarding the appropriate ROR to be used in establishing electric service rates for Evergy Metro, Inc., d/b/a Evergy Missouri Metro ("EMM"), a wholly owned subsidiary of Evergy, Inc. ("Evergy"). Staff's analyses and conclusions are supported by the data presented in the attached Confidential Appendix 2, Schedules SJW-d2 through SJW-d17. Staff's workpapers will be provided to the parties at the time of the filing of this Direct Testimony.

I. EXECUTIVE SUMMARY

Q. Please provide a summary of your methodology and findings concerning the ROR that should be utilized in setting rates for EMM's electric utility operations in this proceeding.

A. To recommend a just and reasonable ROR for EMM's electric utility operations in this proceeding, Staff estimated cost of capital components, including the authorized return on equity ("ROE"), cost of preferred stock, cost of debt ("COD"), and an appropriate ratemaking capital structure for EMM.

Regarding the estimation of the authorized ROE of EMM in this proceeding, Staff estimated the market-based cost of common equity ("COE") for EMM using well-respected COE and ROE estimation methodologies such as the discounted cash flow ("DCF") model, the capital asset pricing model ("CAPM"), and the bond yield plus risk premium ("BY+RP") method.[1]

Staff's analysis also considers changes in economic and capital market conditions over time, as well as EMM's relative risk compared to a proxy group of electric service utilities. By utilizing estimated COEs, Staff calculated a reasonable range of authorized ROEs and recommended what Staff considers to be a just and reasonable ROE for EMM.[2]

[1] FERC ¶ 61,154 (2020), *order on reh'g,* Opinion No. 569-B, 173 FERC ¶ 61,159 (2020).
[2] COE is the return required by investors; ROE is the return set by a regulatory utility commission. Although some experts contend that COE and ROE are synonymous, Staff's position is that they need not be. Observed utility COEs have been generally significantly lower than authorized ROEs in recent years.

Q. Please summarize the result of Staff's ROR analysis and your recommendation in this proceeding.

A. Staff recommends an authorized ROE of 9.73%, within a reasonable range of 9.48% to 9.98%, which will fairly compensate EMM for its current market COE and balance the interests of all stakeholders. Staff found the current market COE estimates for EMM to be in the range of 7.11% to 10.34%.[3] At this time, Staff also recommends that the Commission use EMM's actual stand-alone capital structure as of December 31, 2025 (the end of the update period), which is composed of 51.38% common equity and 48.62% long-term debt, for the purpose of setting EMM's ROR in this proceeding.[4] Consistent with Staff's capital structure recommendation, Staff also recommends at this time that the Commission use EMM's embedded COD value of 4.58% as of December 31, 2025,[5] resulting in the overall midpoint ROR of 7.23%, taken from the calculated range of 7.10% to 7.36%.[6]

Q. Please explain how your direct testimony is organized.

A. The rest of my testimony is organized into seven sections. In Section II, Staff discusses the regulatory principles regarding the cost of capital and ROR analysis that support the determination of just and reasonable rates for EMM's electric service utility services. In Section III, Staff reviews the current economic environment and capital market conditions that impact the ROR analysis in this proceeding. In Section IV, Staff

[3] Schedule SJW-d15, Won's Direct Testimony.
[4] Schedule SJW-d6, Won's Direct Testimony.
[5] Schedule SJW-d7-1 Won's Direct Testimony.
[6] Schedule SJW-d16, Won's Direct Testimony.

investigates the corporate analysis of EMM and its parent company, Evergy, including their business and financial risk profiles as well as their credit ratings. In Section V, Staff investigates the appropriate ratemaking capital structure for EMM's ROR, including an examination of the financial relationship between EMM and Evergy. In Section VI, Staff presents its ROR analysis for EMM, including proxy group selection, the models used to estimate the COE and ROE, the recommended authorized ROE and its reasonable range, and other components of the cost of capital, including the cost of long-term debt. In Section VII, Staff concludes with its recommendation regarding EMM's allowed ROR for ratemaking in this proceeding.

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II. REGULATORY PRINCIPLES

Q. Please describe the regulatory principles that guide the determination of a just and reasonable ROR for a regulated utility.

A. The determination of a just and reasonable ROR is guided by principles of economic and financial theory, as well as certain minimum constitutional standards. Investor-owned public utilities are considered private property that the state may not confiscate without appropriate compensation; thus, EMM should have the opportunity to earn a sufficient return to avoid confiscatory ratemaking.

The United States Supreme Court described the minimum characteristics of a constitutionally acceptable ROR in two frequently cited cases: *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia* and *Federal Power Commission v. Hope Electric Co.*[7]

From these two decisions, Staff derives and applies the following principles to guide its recommendation of a just and reasonable ROR:

1. A return consistent with returns on investments of comparable risk;
2. A return that allows the utility to attract capital on reasonable terms; and
3. A return sufficient to assure confidence in the utility's financial integrity.

These standards are intended to balance investor and customer interests while ensuring that utilities retain the financial ability to provide safe and adequate service. Embodied in these three principles is the economic theory of the opportunity cost

[7] *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia,* 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923); *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1944).

of investment. This opportunity cost represents the return investors forgo by investing in a utility rather than in alternative investments of comparable risk. This required return fluctuates based on capital market conditions, interest rates, and company-specific business risks.

Regulatory environments and methodologies of financial analysis have advanced significantly since the *Bluefield* and *Hope* decisions.[8] Furthermore, today's utilities compete for capital in national and global markets rather than primarily local ones. Nevertheless, the parameters established in those cases are easily met using current methods and theories. The principle of a commensurate return is rooted in the concept of risk. Risk is a measure of the likelihood that an investment will not yield the expected returns. Financial theory posits that the return an investor anticipates corresponds to the level of risk inherent in the investment. Each line of business carries its own set of risks. Therefore, the return expected by EMM's shareholders is comparable to that required by shareholders of utility companies with similar risk profiles.

Q. How did Staff estimate a just and reasonable authorized ROE considering commensurate return and comparable risk?

A. Staff employed COE estimation methods based on a proxy group to develop its recommendation for a just and reasonable authorized ROE. COE represents the minimum return investors are willing to accept for an investment in a company

[8] Neither the Discounted Cash Flow ("DCF") nor the Capital Asset Pricing Model ("CAPM") methods were in use when those decisions were issued.

relative to other available investments of comparable risk and can be directly estimated using market data.

In contrast, an authorized ROE is established by the Commission for regulated monopoly utilities, granting them the opportunity to earn just and reasonable compensation for their investments in the rate base. While stock market data cannot directly determine an authorized ROE, such data can provide important insight into the returns required by investors for companies with similar risk characteristics.

Accordingly, Staff estimated a reasonable range of market-based COEs for a comparable proxy group and considered those results in conjunction with previously determined Commission-authorized ROEs to recommend a just and reasonable ROE for EMM.

Q. What conclusions has Staff drawn regarding the regulatory principles guiding the determination of a just and reasonable ROE in this proceeding?

A. Staff primarily relied on an analysis of a comparable group of companies to estimate EMM's COE, applying both the DCF and CAPM methods within a comparable-company framework. Properly applied under appropriate circumstances, both the DCF and CAPM methods can provide reasonable estimates of utilities' COE.

Economic and financial theory generally recognize that a company earning its cost of capital will be able to attract capital and maintain financial integrity.[9] To recommend a specific authorized ROE and a range of reasonable ROEs for ratemaking in this

[9] Whittaker, W. (1991). The Discounted Cash Flow Methodology: Its Use in Estimating a Utility's Cost of Equity. Energy LJ, 12, 265.

proceeding, Staff also utilized a BY+RP method to directly estimate ROE. The BY+RP analysis relied on a 12-year historical relationship between authorized ROEs and utility bond yields for companies with similar risks to EMM. Staff compared the results of the BY+RP analysis to the COE estimates derived from its DCF and CAPM analyses to evaluate the reasonableness of the recommended authorized ROE.

Considering all of its methodologies and analytical procedures, Staff concludes that its recommended authorized ROE is commensurate with returns on investments in companies of comparable risk. Accordingly, Staff's recommended authorized ROE, which reflects market-based COE estimates, ROEs currently authorized by commissions across the United States, and appropriate risk premiums, is consistent with the principles established in the *Bluefield* and *Hope* decisions.

continued on next page

III. MARKET ANALYSIS

Q. Why is consideration of economic and capital market conditions important for ROR analysis?

A. Ensuring that an authorized ROE estimated by COE models is just and reasonable requires a thorough understanding of current economic and capital market conditions, because the inputs used in COE models are significantly influenced by those conditions. For example, higher interest rates and lower stock prices may result in an overestimation of COE in the CAPM and DCF models, respectively.

Accordingly, Staff emphasizes that estimates of a utility's COE, which influence an authorized ROE recommendation, should be evaluated in context of broader economic and capital market conditions and consistent with common-sense financial considerations.

1. Economic Condition

Q. Please summarize the current economic conditions regarding the COE.

A. To estimate the COE of EMM's electric service, it is necessary to understand how economic conditions have evolved over the past several years. The COVID-19 pandemic profoundly impacted global economies, leading to significant shifts in financial markets and investment dynamics. As economies recover, a proper assessment of the current state of the COE for the ROR analysis in this proceeding requires an understanding of the post-COVID-19 economic changes. Supply chain disruptions were exacerbated, and the fragility of the world's supply chains has

persisted, further exacerbated by the complexity of recent international politics and trade policies.[10]

While the COVID-19 pandemic initiated significant shifts in investment dynamics, the current state of the COE is dictated by a compounding series of ”black swan” events that have redefined the risk-free rate and utility risk premiums.[11] Supply chain disruptions, originally sparked by pandemic-era lockdowns and the invasion of Ukraine, reached a new inflection point in early 2026 with the military escalation in the Middle East and the closure of the Strait of Hormuz.[12] This conflict has fundamentally altered the global energy and logistics landscape, stranding nearly 20% of the world’s seaborne oil and liquefied natural gas supply and forcing the rerouting of global trade, which has doubled maritime insurance premiums and extended lead times for critical grid infrastructure by several months.[13]

In the U.S., recent indicators suggest that economic activity has been expanding at a solid pace, with labor market conditions remaining strong and the unemployment rate stabilizing at a low level in recent months, but inflation remains somewhat elevated.[14] For the 12 months ending March 2026, the energy index increased 17.9% and

[10] Thompson Reuters, 2025’s supply chain challenge: Confronting complexity and disruption in global trade, published February 23, 2025, https://tax.thomsonreuters.com/blog/2025s-supply-chain-challenge-confronting-complexity-and-disruption-in-global-trade-tri/.
[11] Antipova, T. (2020, May). Coronavirus pandemic as black swan event. In International conference on integrated science (pp. 356-366). Cham: Springer International Publishing.
[12] International Energy Agency (IEA), The 2026 Energy Security Challenge: Impact of the Hormuz Blockade, published March 12, 2026.
[13] S&P Global Market Intelligence, Regional Supply Chain Exposures to Middle East Conflict, published April 2, 2026.
[14] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published March 18, 2026, https://www.federalreserve.gov/monetarypolicy/files/monetary20260318a1.pdf.

the all-items index rose 3.8%, exceeding the Federal Open Market Committee ("FOMC")'s 2% target.[15] However, the FOMC judged that the risks to achieving its employment and inflation goals are roughly in balance but remains attentive to the risks to both sides of its dual mandate.[16] One of the most important factors in the economic conditions that impact the COE is the interest rate, orchestrated by the Federal Reserve ("Fed") monetary policy. The Fed has set goals of achieving maximum employment and returning inflation to a rate of two percent over the longer run.[17] In light of the progress on inflation and the balance of risks, on September 18, 2024, the FOMC decided to lower the target range for the federal funds rate by a half percentage point, from 5.25%–5.50%, as set by the FOMC on July 26, 2023, to 4.75%–5.00%.[18] Additionally, the FOMC lowered the target range for the federal funds rate by 25 basis points in November and December 2024, and again in September, October, and December 2025, resulting in a current range of 3.50%–3.75%, while continuing to reduce its holdings of Treasury securities, agency debt, and agency mortgage-backed securities to support maximum employment and return inflation to its 2% objective.[19]

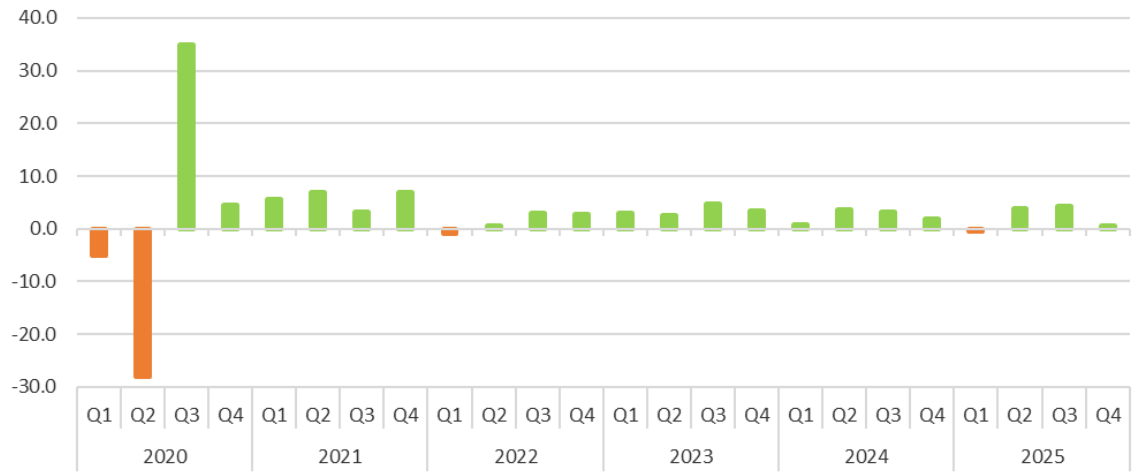
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[15] Bureau of Labor Statistics, Consumer Price Index, published May 12, 2026, retrieved June 2, 2026, https://www.bls.gov/news.release/pdf/cpi.pdf.
[16] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published March 18, 2026, https://www.federalreserve.gov/monetarypolicy/files/monetary20260318a1.pdf.
[17] Boards of Governors of the Federal Reserve System, Statement on Longer-Run Goals and Monetary Policy Strategy, https://www.federalreserve.gov/monetarypolicy/files/FOMC_LongerRunGoals_202201.pdf.
[18] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published September 18, 2024, https://www.federalreserve.gov/monetarypolicy/files/monetary20240918a1.pdf.
[19] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published November 7, 2024, https://www.federalreserve.gov/monetarypolicy/files/monetary20241107a1.pdf.
Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published December 18, 2024,

Q. Please explain the economic conditions over the past several years using U.S. Gross Domestic Product ("GDP").

A. Since 2020, the economy has experienced enormous volatility. Real GDP fell by 28.0% in the second quarter of 2020, after a 5.2% decline in the first quarter.[20] Real GDP increased by 34.9% and 4.6% in the third and fourth quarters of 2020, respectively, followed by quarterly growth rates of 5.7%, 7.0%, 3.3%, and 7.0% in 2021.[21] Real GDP decreased at an annual rate of 1.0% in the first quarter and increased by 0.6%, 2.9%, and 2.8% in the subsequent three quarters of 2022, respectively.[22]

Figure 1. Real GDP – Percentage Change from Preceding Quarter[23]



https://www.federalreserve.gov/monetarypolicy/files/monetary20241218a1.pdf.
Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published December 10, 2025,
https://www.federalreserve.gov/monetarypolicy/files/monetary20251210a1.pdf.
Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published March 18, 2026,
https://www.federalreserve.gov/monetarypolicy/files/monetary20260318a1.pdf.

[20] Real GDP is GDP adjusted for inflation. Percentage change from the preceding quarter.

[21] Bureau of Economic Analysis, retrieved October 20, 2022,
https://www.bea.gov/news/2021/gross-domestic-product-first-quarter-2021-advance-estimate.

[22] Bureau of Economic Analysis, Gross Domestic Product, Retrieved March 20, 2023,
https://www.bea.gov/news/2023/gross-domestic-product-second-quarter-2023-advance-estimate.

[23] FRED, Economic Data, Real Gross Domestic Product (A191RL1Q225SBEA),
https://fred.stlouisfed.org/series/A191RL1Q225SBEA.

The quarterly real GDP growth rates were 2.9%, 2.5%, 4.7%, and 3.4% in 2023; 0.8%, 3.6%, 3.3%, and 1.9% in 2024; and 1.9%, −0.6%, 3.8%, and 4.4% in 2025, respectively.[24]

In February 2026, the Congressional Budget Office ("CBO") projected real GDP growth of 1.8%, real potential GDP growth of 2.0%, and a long-term nominal GDP growth rate of 3.8% for the decade from 2026 to 2036.[25] The CBO's projected long-term nominal GDP growth rate will be used to calculate the projected growth rate in the DCF model. All else being equal, the current projection of a relatively higher long-term nominal GDP growth rate will lead to higher COE estimates.

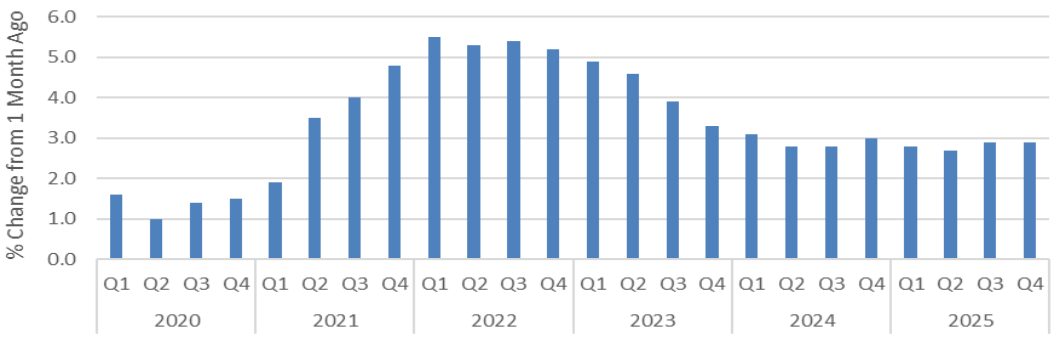
Q. Please explain the economic conditions over the past several years using U.S. inflation rates.

A. While GDP growth rates and unemployment rates have returned to pre-COVID-19 levels, inflation rates have not yet reached the Fed's target level of 2%. When COVID-19 hit in 2020, it caused massive volatility in the financial markets.[26] As shown above, GDP fell sharply, followed by an equally sharp recovery through 2020.[27] Regarding COVID-19, there has been increased availability of vaccines, higher vaccination rates, and in March 2022, the Fed provided assurances that indicators of

[24] FRED, Economic Data, Real Gross Domestic Product (A191RL1Q225SBEA), https://fred.stlouisfed.org/series/A191RL1Q225SBEA.
[25] Table D-2 (p.156), Congressional Budget Office, The Budget and Economic Outlook: 2026 to 2036, https://www.cbo.gov/system/files/2026-02/61882-Outlook-2026.pdf.
[26] Federal Reserve Economic Data, retrieved October 20, 2022, https://fred.stlouisfed.org/series/VIXCLS.
[27] Bureau of Economic Analysis, U.S. Department of Commerce, retrieved October 12, 2022, https://www.bea.gov/news/2022/gross-domestic-product-first-quarter-2022-advance-estimate.

economic activity and employment continued to strengthen.`[28] The recovery from the COVID-19 pandemic spurred fears of higher inflation and, consequently, increased market risk.[29] The quarterly percent change from a year ago in personal consumption expenditures, excluding food and energy, is shown in Figure 2.

Figure 2. Change of Personal Consumption Expenditures[30]



The resurgence of aggregate demand in late 2021, coupled with a tight labor market and disruptions to energy supplies and supply chains for other inputs in subsequent years, may have all contributed to the persistently elevated inflation.[31]

In early 2022, the Consumer Price Index ("CPI") for all urban consumers soared at an annual rate of 9.1%, a new 40-year high driven by increases in the cost of energy, mainly due to a 98% increase in fuel oil prices.[32] Following the Fed's policy intervention

[28] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published March 16, 2022, https://www.federalreserve.gov/monetarypolicy/files/monetary20220316a1.pdf.
[29] S&P Global, Markets in Motion, retrieved October 12, 2022, https://www.spglobal.com/en/research-insights/featured/inflation.
[30] U.S. Bureau of Economic Analysis, Personal Consumption Expenditures Excluding Food and Energy (Chain-Type Price Index) [BPCCRO1Q156NBEA], retrieved from FRED, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/BPCCRO1Q156NBEA.
[31] Gordon, Matthew V., and Todd E. Clark. 2023. "The Impacts of Supply Chain Disruptions on Inflation." Federal Reserve Bank of Cleveland, Economic Commentary 2023-08. https://doi.org/10.26509/frbc-ec-202308.
[32] Bureau of Labor Statistics, Consumer Price Index News Release, published July 13, 2022, https://www.bls.gov/news.release/archives/cpi_07132022.htm.

in March 2022, the annual U.S. inflation rate declined to 2.8% by the second quarter of 2024, remaining above the 2.0% target.[33] Despite ongoing geopolitical instability in the Middle East, Personal Consumption Expenditures ("PCE"), excluding food and energy, moderated to approximately 3% in the first quarter of 2026.[34]

Notably, the inflation rate for electric utility services continues to outpace the headline CPI.[35] Utility electric service rates nationwide increased by an average of 4.6% year-over-year in March 2026, compared with March 2025.[36] This is a faster increase than the overall CPI, which increased by 0.9% year-over-year.[37] The gap between the two was 3.7%.

Q. Please explain how recent inflation dynamics influence the COE estimation.

A. In response to rapid inflation, central banks raised interest rates.[38] The effects of high inflation fears have increased market risk. Increased market volatility, sectoral shifts in investor expectations, and changes in correlations among assets have heightened the sensitivity of utility assets' returns to overall market changes, as represented by beta in the CAPM framework. Consequently, this has pushed the estimate

[33] FRED, Economic Data, Source: U.S. Bureau of Economic Analysis, https://fred.stlouisfed.org/series/BPCCRO1Q156NBEA.
[34] Bureau of Economic Analysis, Personal Consumption Expenditures Price Index, Excluding Food and Energy, https://www.bea.gov/data/personal-consumption-expenditures-price-index-excluding-food-and-energy.
[35] U.S. Bureau of Labor Statistics, Consumer Price Index, retrieved April 10, 2026, https://www.bls.gov/cpi/.
[36] Table 2, News Release, The U.S. Bureau of Labor Statistics, published April 10, 2026, https://www.bls.gov/news.release/pdf/cpi.pdf.
[37] U.S. Bureau of Labor Statistics, Consumer Price Index, retrieved April 10, 2026, https://www.bls.gov/cpi/.
[38] World Economic Forum, Financial and Monetary Systems, published August 16, 2022, https://www.weforum.org/agenda/2022/08/central-banks-hike-interest-rates-inflation-pressures/.

of utilities' COE higher. In other words, all else being equal, higher market risk leads to higher CAPM COE estimate.[39]

Furthermore, utilities often underperform the broader market during economic recovery, leading to a higher COE estimate for utilities.[40] This trend is compounded by current concerns regarding sustained inflation rates exceeding the Fed's target of 2.0%. As a result, the share prices of electric service utility equities are currently depressed, resulting in increased dividend yields and elevated COE estimates from the discount rate used in DCF analysis.[41]

Q. Please explain the economic conditions over the past several years using U.S. interest rates and Fed monetary policy.

A. The Fed has a dual mandate: maximum employment and stable prices.[42] In early 2020, the emergence of the COVID-19 pandemic led to an unprecedented economic downturn, marked by widespread business closures, job losses, and financial market volatility.[43] In April 2020, the unemployment rate spiked to 14.8% from 3.5% in February 2020.[44] In response to the pandemic's adverse economic effects, which

[39] The relationship between CAPM COE estimate and interest rate will be explained in the CAPM section.
[40] Morningstar, As Long as Inflation Worries Persist, We Expect Utilities to Underperform, published on July 6, 2022, https://www.morningstar.com/economy/long-inflation-worries-persist-we-expect-utilities-underperform.
[41] The relationship between DCF COE estimate and stock price will be explained in the DCF section.
[42] Fed, What economic goals does the Federal Reserve seek to achieve through its monetary policy? https://www.federalreserve.gov/faqs/what-economic-goals-does-federal-reserve-seek-to-achieve-through-monetary-policy.htm.
[43] BLS, Monthly Labor Review, COVID-19 ends longest employment recovery and expansion in CES history, causing unprecedented job losses in 2020, June 2021, https://www.bls.gov/opub/mlr/2021/article/covid-19-ends-longest-employment-expansion-in-ces-history.htm.
[44] Federal Reserve Economic Data, Unemployment Rate, Percent, Monthly, Seasonally Adjusted, https://fred.stlouisfed.org/series/UNRATE/.

included significant financial market disruption, the Fed intervened in March 2020 by cutting the federal discount rate to a range of 0% to 0.25%.[45] This move was part of a broader strategy by the Fed, which swiftly lowered interest rates to near zero and implemented massive stimulus measures. These measures included asset purchases and lending programs aimed at supporting the economy and stabilizing financial markets.[46] Additionally, the Fed provided forward guidance, indicating that interest rates would remain low for an extended period to facilitate the recovery.[47]

As vaccination efforts progressed and economic activity resumed, the U.S. experienced a strong rebound in growth in 2021.[48] However, this recovery was accompanied by rising inflationary pressures, driven by supply chain disruptions, pent-up demand, and fiscal stimulus measures.[49] In response to concerns about inflation, the Fed began signaling plans to taper its asset purchases and eventually tighten monetary policy by raising interest rates, aiming to achieve its dual mandate of maximum employment and price stability while avoiding overheating the economy.[50]

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[45] Federal Reserve, Press Release, March 15, 2020, https://www.federalreserve.gov/monetarypolicy/files/monetary20200315a1.pdf.
[46] Fed, Monetary Policy and Central Banking in the Covid Era, published on June 3, 2021, https://www.federalreserve.gov/econres/feds/files/2021035pap.pdf.
[47] Federal Reserve Bank of Cleveland, Wesley Janson and Chengcheng Jia, Forward Guidance during the Pandemic: Has It Changed the Public's Expectations?, published on December 1, 2020, https://www.clevelandfed.org/publications/economic-commentary/2020/ec-202027-forward-guidance-during-the-pandemic.
[48] Fiori, Giuseppe, and Matteo Iacoviello (2021). "What Did we Learn from 2 billion jabs? Early Cross-Country Evidence on the Effect of COVID-19 Vaccinations on Deaths, Mobility, and Economic Activity," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, published on September 01, 2021,https://doi.org/10.17016/2380-7172.2984.
[49] Ana Maria Santacreu and Jesse LaBelle (2022). "Global Supply Chain Disruptions and Inflation During the COVID-19 Pandemic," Federal Reserve Bank of St. Louis Review, https://research.stlouisfed.org/publications/review/2022/02/07/global-supply-chain-disruptions-and-inflation-during-the-covid-19-pandemic.
[50] Federal Reserve issues Federal Open Market Committee Statement, published November 3, 2021,

The Fed held the federal funds rate at around zero as recently as the first quarter of 2022, despite 40-year highs in various measures of U.S. inflation.[51] Before the FOMC decided to raise the target range for the federal funds rate on March 17, 2022, it was at 0.00% to 0.25%.[52] In July 2022, the unemployment rate declined to 3.5%. Once the Fed made the decision to raise the target range for the federal funds rate, the FOMC raised the federal funds rate by more than 5% over the course of 16 months.[53] On July 31, 2024, the FOMC decided to maintain the target range for the federal funds rate at 5.25% to 5.50%.[54]

Table 1 displays the 17 instances when the FOMC decided to raise and lower the federal funds rate in order to tame the inflation rate. From late 2024 through early 2026, the FOMC transitioned from a restrictive policy stance to a more accommodative and then data-dependent approach, reflecting evolving economic conditions. The shift began on September 18, 2024, with a 50-basis-point rate cut, the first reduction since 2020, signaling growing confidence that inflation was easing.[55]

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https://www.federalreserve.gov/monetarypolicy/files/monetary20211103a1.pdf.
The New York Times, Fed Officials Tamp Down Overheating Worries as Investors Fret, May 5, 2021, https://www.nytimes.com/2021/05/05/business/economy/federal-reserve-overheating-worries.html.

[51] Forbes Advisor, Federal Funds Rate History 1990 to 2023, updated Jan 26, 2024, https://www.forbes.com/advisor/investing/fed-funds-rate-history/.

[52] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published March 16, 2022, https://www.federalreserve.gov/monetarypolicy/files/monetary20220316a1.pdf.

[53] New York Times, Fed Raises Rates Again, published on July 26, 2023, https://www.nytimes.com/live/2023/07/26/business/fed-interest-rates.

[54] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published July 31, 2024, https://www.federalreserve.gov/monetarypolicy/files/monetary20240731a1.pdf.

[55] Wall Street Journal, Fed Cuts Rates by Half Percentage Point, published September 18, 2024, https://www.wsj.com/economy/central-banking/fed-cuts-rates-by-half-percentage-point-03566d82?mod=article_inline.

Table 1: Fed Rate Changes 2022-2025[56]

FOMC Meeting Date	Rate Change (bps)	Federal Funds Rate
17-Mar-22	25	0.25% to 0.50%
5-May-22	50	0.75% to 1.00%
16-Jun-22	75	1.50% to 1.75%
27-Jul-22	75	2.25% to 2.50%
21-Sep-22	75	3.00% to 3.25%
2-Nov-22	75	3.75% to 4.00%
14-Dec-22	50	4.25% to 4.50%
1-Feb-23	25	4.50% to 4.75%
22-Mar-23	25	4.75% to 5.00%
3-May-23	25	5.00% to 5.25%
26-Jul-23	25	5.25% to 5.50%
18-Sep-24	-50	5.00% to 5.25%
7-Nov-24	-25	4.50% to 4.75%
18-Dec-24	-25	4.25% to 4.50%
17-Sep-25	-25	4.00% to 4.25%
29-Oct-25	-25	3.75% to 4.00%
10-Dec-25	-25	3.50% to 3.75%

The FOMC followed with two additional 25-basis-point cuts at its November 7 and December 18, 2024, meetings, bringing the federal funds target range to 4.25%–4.50%, while continuing balance sheet runoff to support its dual mandate of maximum employment and price stability.[57] The FOMC again decided to make three additional 25-basis-point cuts on September 17, October 29, and December 10, 2025, lowering the

[56] Forbes Advisor, Federal Funds Rate History 1990 to 2023, updated Jan 26, 2024, https://www.forbes.com/advisor/investing/fed-funds-rate-history/.

[57] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published November 7, 2024, https://www.federalreserve.gov/monetarypolicy/files/monetary20241107a1.pdf.
Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published December 18, 2024, https://www.federalreserve.gov/monetarypolicy/files/monetary20241218a1.pdf.

federal funds target range to 3.50%–3.75%.[58] By March 18, 2026, the FOMC had paused further rate changes, maintaining the target range at 3.50%–3.75%.[59]

Q. Please explain how the Fed's monetary policy impacts COE estimation.

A. After COVID-19, the Fed's monetary policy significantly impacted the U.S. financial market, including interest rates such as 30-Year Treasury yields that are used for the risk-free rate in CAPM. The aggregate effect of the Fed's actions was an increase in 30-Year Treasury yields from 1.69% on December 3, 2021, to a high of 5.09% on October 25, 2023.[60] The difference between the two is 340 basis points. Although the Fed has reduced its benchmark interest rate six times, totaling 125 basis points, since September 18, 2024,[61] 30-year Treasury yields stood at 5.18% as of May 19, 2026, 349 basis points higher than the 1.69% recorded on December 3, 2021.[62] Hence, all else being equal, higher inflation rates lead to higher CAPM COE estimates due to the elevated interest rate set by the Fed's monetary policy.[63]

[58] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published September 17, 2025, https://www.federalreserve.gov/monetarypolicy/files/monetary20250917a1.pdf.
Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published October 29, 2025, https://www.federalreserve.gov/monetarypolicy/files/monetary20251029a1.pdf.
Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published December 10, 2025, https://www.federalreserve.gov/monetarypolicy/files/monetary20251210a1.pdf.
[59] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published March 18, 2026, https://www.federalreserve.gov/monetarypolicy/files/monetary20260318a1.pdf.
[60] Federal Reserve Economic Data, Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, https://fred.stlouisfed.org/series/DGS30.
[61] Table 1: Fed Rate Changes 2022-2024, Won's Direct Testimony.
[62] Federal Reserve Economic Data, Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, https://fred.stlouisfed.org/series/DGS30.
[63] The relationship between CAPM COE estimate and interest rate will be explained in the CAPM section.

2. Capital Market Condition

Q. Why is the consideration of capital market conditions important for COE analyses?

A. Capital market conditions are fundamental to the estimation of the COE because they dictate the real-time opportunity costs and risk premiums that investors demand. Since a utility company's cost of capital is derived from its specific mix of equity and debt financing, shifts in broader financial markets directly alter the primary inputs for standard valuation models. For instance, in the DCF, equity market fluctuations impact the dividend yield and expected growth rates, while debt market movements redefine the risk-free rate used in the CAPM. Consequently, failing to account for these shifting market dynamics can lead to an authorized ROE that is disconnected from the actual economic environment, potentially impairing a utility's ability to attract necessary investment capital.

2.1 Utility Equity Market

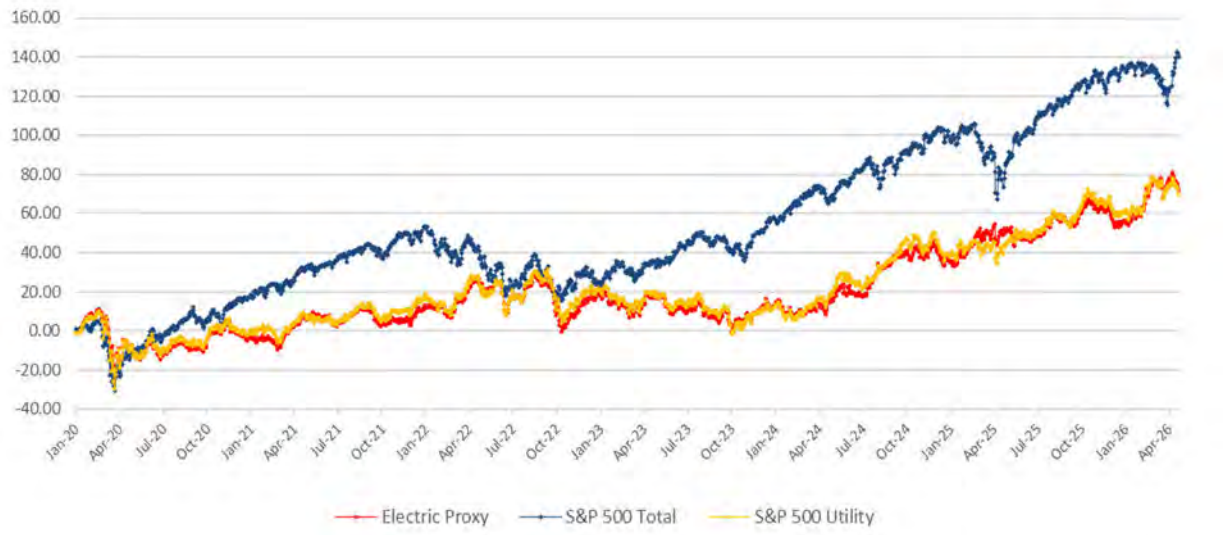
Q. Please explain the current utility equity market conditions.

A. After the 2020 stock market crash caused by the COVID-19 pandemic, the utilities sector underperformed the broader market. At the onset of the economic shutdown in March 2020, the index values of the Standard and Poor's ("S&P") 500 and the Dow Jones Industrial Average fell approximately 12.5% and 13.74%, respectively.[64] Since the beginning of the COVID-19 recovery, utilities, including electric utilities, have

[64] S&P Capital IQ Pro.

underperformed the market. This suggests that U.S. utility valuations remain relatively weak, even amid elevated inflation, rising interest rates, and global geopolitical uncertainty. Figure 3 shows the volatility experienced by the stock market since January 2020:

Figure 3. Comparison of Total Returns[65]



The total return of the electric service utility proxy group decreased from the point of reference on January 2, 2020, to an approximate loss of twenty-nine percent (-29%) by March 23, 2020. It then rebounded to a gain of approximately twenty-six percent (26%) by May 27, 2022, over the point of reference on January 2, 2020. A detailed analysis of the performance of the equity market since January 2020 reveals tremendous volatility. After January 2023, as shown in Figure 3, there is a clear trend indicating that the S&P 500 Utility Index and Staff's proxy group underperformed the S&P 500.

[65] S&P Capital IQ Pro., retrieved April 23, 2026.

As of March 31, 2026, the S&P 500, S&P 500 Utilities, and Staff's proxy group had total returns of 122.18%, 73.03%, and 75.35%, respectively, over the point of reference on January 2, 2020. S&P Global noted that after nearly two decades of stagnant electricity sales, where conservation efforts largely offset new customer growth, the electric utility service industry is now poised for a reversal, with data center demand expected to drive a 1% to 2% increase in sales in 2026.[66]

Q. Please explain how current utility equity market conditions affect the DCF COE estimation.

A. The utility sector's sustained growth throughout 2024–2025, following an anomalous decline in 2020 and a sluggish recovery period from 2021 to 2023, has resulted in a period of relative undervaluation since the COVID-19 recession. As illustrated in Figure 3, the average stock price for the electric utility proxy group has significantly underperformed relative to the S&P 500 Index. Under the DCF, a lower stock price, ceteris paribus, directly implies a higher COE estimate, as the dividend yield component increases.[67]

Before the COVID-19 pandemic, the index value of Staff's electric service utility proxy group (referred to as the 'electric service Index') reached 109.4 on February 18, 2020. However, due to the impact of COVID-19, the U.S. stock market experienced a significant downturn, causing the electric service Index to drop by 36% to 70.53 on March 23, 2020. After recovering from the COVID-19 shock, the electric service Index

[66] S&P Capital IQ Pro, Industry Credit Outlook 2026, North America Regulated Utilities, Published January 14, 2026.
[67] The relationship between stock price and DCF COE will be explained in the section of DCF.

experienced an upward trend, reaching 115.20 on September 12, 2022. Compared to the S&P 500 Index, which has enjoyed a continued bullish market, the electric service Index experienced a sluggish downturn, reaching 85.83 on October 2, 2024. However, on April 9, 2025, the electric service Index reached 142.78.[68]

As shown in Figure 4, the changes in dividend yield mirror the changes in the Index value due to their reciprocal relationship. Because of the relatively higher dividend yield of Staff's electric service utility proxy group, DCF COE estimates are currently elevated relative to the overall market COE.

Figure 4. Staff electric service Proxy Index Value and Dividend Yield[69]



[68] S&P Capital IQ Pro., retrieved April 23, 2026.
[69] Won's Direct Workpaper.

2.2 Utility Debt Market

Q. Please explain the current utility debt market conditions.

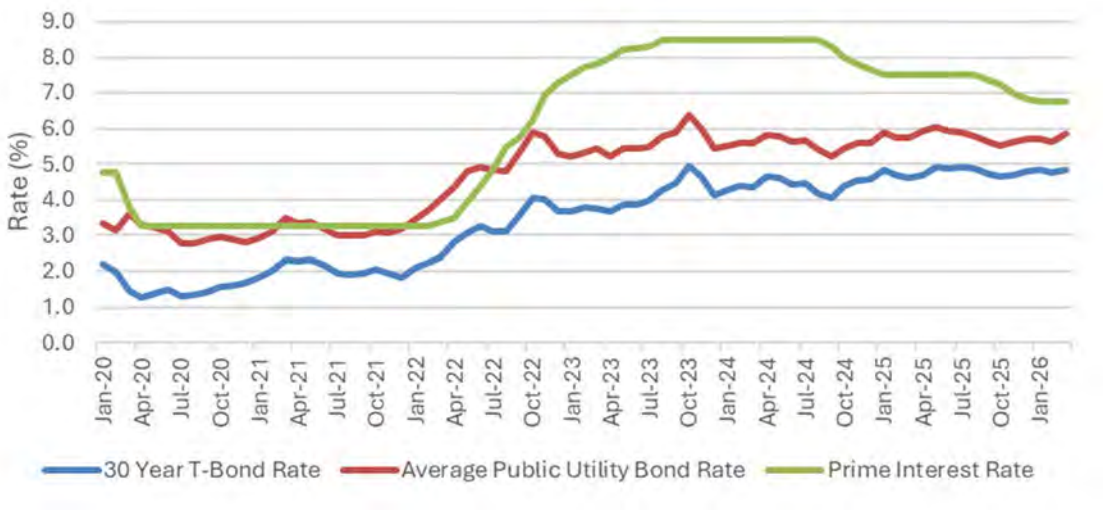
A. The utility debt market has experienced significant volatility in terms of bond yield changes. Average public utility bond yields decreased from 4.48% in January 2019 to 2.76% in August 2020.[70] However, this downward trend in public utility bond yields reversed after the Fed initiated its Treasury bond-buying activity.[71] Between March 2022 and July 2023, the Fed raised the target range for the federal funds rate by 525 basis points to a peak of 5.25%–5.50%, following a two-year period during which rates were maintained at the zero lower bound of 0.00%–0.25%.[72] Consequently, public utility bond yields increased by 362 basis points to 6.38% in October 2023 compared to the 2.76% yield in August 2020.[73] As of March 2026, public utility bond yields stood at 5.85%, reflecting the sustained elevated interest rate environment.[74]

As shown in Figure 5, the changes in public utility bond yields closely mirrored the fluctuations in 30-Year Treasury bond yields. Historically, with a few exceptions, 30-Year Treasury bond yields have exhibited a positive correlation with public utility bond yields. In the past two years, the primary driver of interest rates has been the concern over sustained higher inflation. The Fed has explicitly stated that the FOMC is strongly

[70] Schedule SJW-d4-1, Won's Direct Testimony.
[71] Brookings, The Hutchins Center Explains, https://www.brookings.edu/research/fed-response-to-covid19/.
[72] Forbes Advisor, Federal Funds Rate History 1990 to 2023, updated Jan 26, 2024, https://www.forbes.com/advisor/investing/fed-funds-rate-history/.
[73] Schedule SJW-d4-1, Won's Direct Testimony.
[74] Mergent Bond Record, April 2026.

committed to returning inflation to its 2.0% target. Consequently, it intends to maintain the current level of the federal funds rate until it achieves the desired inflation rate.[75]

Figure 5. 30-Year Treasury Bond, Public Utility Bond and Fed Fund[76]



Q. Is there a correlation between utility debt yields and stock prices?

A. Yes, there can be a correlation between utility debt yields and stock prices, although it is not always direct or consistent. Generally, when utility debt yields rise, it could indicate increased perceived risk or a higher cost of borrowing for the utility company. This could lead to a decrease in stock prices due to concerns about the company's financial health or profitability. Inversely, when utility debt yields fall, it may signal lower perceived risk or cheaper borrowing costs, which could lead to higher stock prices as investors become more optimistic about the company's prospects. Although utilities' COEs are not perfectly correlated to changes in utility debt yields, it is widely

[75] Federal Reserve issues Federal Open Market Committee (FOMC) Statement, published September 18, 2024, https://www.federalreserve.gov/monetarypolicy/files/monetary20240918a1.pdf.
[76] Won's Direct Workpaper.

recognized in the investment community that regulated utility stocks are a close alternative to bond investments because they tend to provide relatively stable cash flows and dividends.[77] In general, as interest rates increase, utility stock prices decrease, pushing COE estimates higher as investors substitute bonds for stocks in search of higher yields.[78]

Q. Please explain how the current utility debt market conditions affect COE estimation.

A. Current utility debt market conditions serve as a critical benchmark for COE estimation because they represent the "floor" for investor expectations; with public utility bond yields reaching 5.85% in March 2026, the risk-weighted return on equity must logically exceed this debt-cost threshold to remain competitive. Historically, elevated interest rates have functioned as a primary driver of upward pressure on the COE.

This trend is currently amplified by a notable decoupling between monetary policy and market yields; while the Fed has implemented 125 basis points of cumulative easing since September 2024, the 30-year Treasury yield has remained elevated, reaching 4.92% in April 2026. This persistent elevation, approximately 320 basis points above December 2021 levels, reflects a significant increase in the risk-free rate driven by expansionary fiscal policy and heightened long-term inflation uncertainty.

[77] Morningstar, Considering Bond Alternatives: Preferred Stocks and Utilities, published October 5, 2020, https://www.morningstar.com/columns/rekenthaler-report/considering-bond-alternatives-preferred-stocks-utilities.
[78] Forbes Advisor, How To Invest When Interest Rates Are Low, updated: Apr 15, 2022 and retrieved October 20, 2022, https://www.forbes.com/advisor/investing/low-interest-rates/#:~:text=While%20bond%20prices%20are%20directly%20affected%20by%20interest,mean%20companies%20may%20borrow%20less%20to%20fund%20growth.

Therefore, the direct application of DCF and CAPM models in this environment may result in overstated estimates if the unique risk-return profile of the utility bond market is not carefully reconciled. Because standard COE models may more heavily reflect current debt market conditions, a cautious approach is required when translating these theoretical estimates into a specific authorized ROE recommendation to ensure the final rate is both fair and sustainable.

continued on next page

IV. CORPORATE ANALYSIS

Q. Why is corporate analysis important for ROR analysis?

A. According to the regulatory principle of return consistent with returns on investments of comparable risk, the regulatory agency should ensure that the authorized ROE should provide investors with returns that align with those available from investments with similar levels of risk. Corporate analysis helps in identifying and evaluating various risks such as financial risk, operational risk, and business risk. By understanding these risks, the Commission can make an informed decision about determining a just and reasonable ROR for EMM, considering the commensurate risk of the electric service utility industry. Therefore, to recommend the proper rate-making capital structure and cost of capital in this proceeding, it is essential to understand the corporate structure, cost framework, financial quality, risk profile, and market performance of Evergy and EMM through corporate analysis.

Q. Why is corporate analysis necessary for both Evergy and EMM?

A. Understanding the relationship between the parent company and its subsidiaries is crucial for properly assessing the risks faced by the operating subsidiary. This includes considering the consolidated risk of the parent company and its other subsidiaries. By conducting corporate analysis, one can gain insights into the interconnectedness of various entities within the corporate structure and the potential impact of their actions on each other.

In the utility ratemaking process, if only the stand-alone risk of the operating subsidiary is considered, the determination of return may not accurately reflect the

actual risk faced by the utility. Since the financial and business risks of an operating subsidiary are not stand-alone in the real world, overlooking the broader corporate context could lead to the mispricing of risk and inadequate returns.

Major rating agencies consider the risks of the parent company and its other subsidiaries when determining the credit rating of a subsidiary.[79] Thus, to fully understand the risk profile and creditworthiness of Evergy and EMM, it is essential to analyze not only their individual financial and business profiles but also their positions within the broader corporate framework.

For instance, S&P lowered its issuer credit ratings one notch on Evergy and its subsidiaries, including Evergy Missouri West, Inc. on November 29, 2023, after the Kansas Corporation Commission ("KCC") adopted a settlement in the rate cases of Evergy Inc.'s Kansas subsidiaries, Evergy Kansas Central Inc. and Evergy Metro Inc., on November 21, 2023.[80] This serves as a compelling example of how a stand-alone approach can be naive and underscores the importance of considering the risks of the parent company and its other subsidiaries when assessing the risk of an operating subsidiary.

Q. Please provide the corporate profile of Evergy

A. The following answer is based on information from Evergy's 10-K and 10-Q filings with the SEC and the S&P Company Description. Evergy operates as a public utility holding company. Evergy primarily operates through several operating utility

[79] S&P RatingDirect, How We Rate Non-Financial Corporate Entities, published February 19, 2021.
[80] S&P Global Ratings, Evergy Inc. And Subsidiaries Downgraded By One Notch On Weakening Financials; Outlook Revised To Stable, published November 29, 2023.

subsidiaries, including EMM, Evergy Missouri West, Evergy Kansas Central, and Evergy Kansas South, as well as non-regulated subsidiaries such as Evergy Transmission Company, LLC, Evergy Ventures, Inc., and Evergy Services, Inc., and Special Purpose Subsidiaries such as Evergy Missouri West Storm Funding I, LLC.

Collectively, Evergy has approximately 15,800 megawatts ("MW") of owned generating capacity and renewable power purchase agreements. It is involved in the generation, transmission, distribution, and sale of electricity to approximately 1.7 million customers in Kansas and Missouri. Evergy serves approximately 1.5 million residential customers, 0.2 million commercial customers, and 7,400 industrial, municipal, and other electric utility customers.

Evergy Inc. was incorporated in 2017 as the strategic holding company designed to facilitate the "merger of equals" between Westar Energy, Inc. and Great Plains Energy Incorporated (the parent company of Kansas City Electric Power and Light Company ("KCP&L"), a transaction that officially closed in June 2018 to consolidate their utility operations across Kansas and Missouri.[81] Although Evergy operates the Wolf Creek Nuclear Generating Station, the facility is legally owned by the Wolf Creek Nuclear Operating Corporation, with ownership interests divided among Evergy Kansas Central, Evergy Metro, and the Kansas Electric Power Cooperative, Inc.[82]

Q. Please provide the corporate profile of EMM.

[81] SEC Form 8-K (filed July 10, 2017); SEC, EX-99.1, https://www.sec.gov/Archives/edgar/data/1711269/000119312519235960/d777364dex991.htm.
[82] Application, Case No. EO-2024-0056.

A. The following answer is based on information from EMM's 10-K and 10-Q filings with the SEC and the S&P Company Description. EMM is a subsidiary of Evergy. EMM operates as a vertically integrated, regulated electric utility engaged in the generation, transmission, distribution, and sale of electricity. It was formerly known as Kansas City Power & Light Company, was incorporated in 1922, and changed its name to Evergy Metro Inc. in 2017.

EMM serves approximately 571,500 customers in western Missouri and eastern Kansas. EMM's customers include approximately 505,000 residential customers, 64,600 commercial customers, and 1,900 industrial, municipal, and other electric utility customers. EMM's retail revenues averaged approximately 88% of total operating revenues over the last three years. Wholesale power, bulk power sales, and miscellaneous electric revenues accounted for the remainder EMM's revenues. EMM is not publicly traded and is totally owned by Evergy.

EMM maintains coal-purchase contracts with various suppliers in Wyoming's Powder River Basin, the nation's primary source of low-sulfur coal—as well as with local suppliers. To facilitate delivery, EMM holds transportation contracts with several railroads to move coal from the PRB and local sources to its generating units. Additionally, EMM owns a 47% interest in the Wolf Creek Generating Station, which procures uranium and manages its processing for use as reactor fuel. This fuel cycle involves the conversion of uranium concentrates to uranium hexafluoride, the enrichment of that hexafluoride, and the final fabrication of nuclear fuel assemblies. The owners of Wolf Creek have secured, either on hand or under contract, the uranium

enrichment and conversion services necessary to operate the facility through the first quarter of 2030, while fabrication services are under contract through the third quarter of 2045.

Q. What are the business and financial risk profiles of EMM and Evergy?

A. According to S&P, both EMM and Evergy maintain an "Excellent" business risk profile, the highest possible category in the agency's framework, while demonstrating a "Significant" financial risk profile near the benchmark midpoint, reflecting an aggressive growth strategy and its impact on the balance sheet.[83] These financial risk profiles are directly related to the fact that Evergy has introduced a massive $21.6 billion capital investment plan for 2026–2030, focused on grid modernization and meeting new demand from data centers.[84]

Due to the projected heavy capital investments, Evergy and EMM should manage the impact of higher interest rates on their financing costs, which partially offset gains from potentially increased retail sales. As of December 31, 2025, Evergy's debt-to-capital ratio of 56.06% is approximately 8% higher than EMM's ratio of 48.62%.[85] S&P typically expects a consolidated Funds From Operations (“FFO”) to Debt ratio in the 13% to 15% range for a “BBB+” issuer credit rating, leaving a “minimal financial cushion” above the

[83] S&P RatingDirect, Full Analysis, Evergy Metro Inc., published December 2, 2025, and Evergy Inc. published September 8, 2025.
[84] Evergy Inc. Fourth Quarter 2025 Earnings and Business Update Call, published February 19, 2026.
[85] Staff Data Request No. 0107.

13% downgrade threshold.[86] S&P expects Evergy's and EMM's FFO-to-debt ratios to be 13.0% to 14.0% and 20% to 21%, respectively, in 2026 and 2027.[87]

Q. What is the credit rating for Evergy and EMM?

A. Evergy and EMM are currently rated by Moody's and S&P with an investment grade. Moody's assigned "Baa2" to Evergy and "Baa1" to EMM for their most recent long-term issuer ratings, respectively.[88] Similarly, S&P assigned "BBB+" to Evergy and "A-" to EMM for their most recent long-term issuer ratings, respectively.[89]

One of the major reasons Evergy's credit rating is lower than EMM's is that Evergy carries the consolidated risk of all its subsidiaries, including Evergy Missouri West, which has faced greater financial pressure due to storm-related cost recoveries and higher capital needs. As noted above, on November 29, 2023, S&P lowered its issuer credit ratings by one notch on Evergy and its subsidiaries, including Evergy Missouri West, to "BBB+" from "A-." Evergy's consolidated financial measures have weakened over the past few years because of higher expenses, including interest and capital spending, and lower cost recovery.[90]

Q. What is the implication of credit ratings to Evergy and EMM for their estimated COE and authorized ROE?

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[86] S&P Global Ratings, Corporate Methodology, https://www.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/12913251.
[87] S&P RatingDirect, Full Analysis, Evergy Metro Inc., published December 2, 2025, and Evergy Inc. published September 8, 2025.
[88] According to S&P Capital IQ Pro, the most recent long-term issuer rating dates for Evergy and EMM are May 15, 2025, and January 14, 2025, respectively.
[89] According to S&P Capital IQ Pro, the most recent long-term issuer rating dates for Evergy and EMM are November 25, 2025.
[90] S&P Global Ratings, Evergy Inc. And Subsidiaries Downgraded By One Notch On Weakening Financials; Outlook Revised To Stable, published November 29, 2023.

A. The electric utilities have average bond ratings of 'Baa1' and 'BBB+' provided by Moody's and S&P, respectively. [91] While EMM's credit rating is slightly superior, the overall agency ratings for both Evergy and EMM remain consistent with the average for U.S. electric utilities.[92] This means Evergy and EMM are perceived to have similar credit risks as the average electric utilities in the U.S. Considering the fundamental financial principle that similar risks demand similar returns, investors expect a similar COE for a company with a comparable credit rating. [93] This comparison of credit ratings suggests that EMM's authorized ROE should fall within a reasonable range compared to the average authorized ROE of electric service utility companies in the U.S.

For ratemaking capital structure, EMM has more debt capacity based on its financial risk profile, as reported by S&P and Moody's long-term debt credit ratings, because EMM currently shows higher credit quality than Evergy. Because capital structure is a primary driver of credit rating, Evergy must maintain a robust equity ratio to sustain its rating during a $21.6 billion capital spend cycle. However, Evergy's capital structure, which includes a 56.06% long-term debt ratio, reflects an excessively high debt-to-capital level for use in establishing the operating utility's ratemaking capital structure in this proceeding, because relying on it would artificially weaken EMM's perceived credit strength.

[91] S&P Capital IQ Pro.
[92] Schedule SJW-d8, Won's Direct Testimony.
[93] Arditti, F. D. (1967). Risk and the required return on equity. The Journal of Finance, 22(1), 19-36.

V. CAPITAL STRUCTURE

Q. Why is ratemaking capital structure important for this rate proceeding?

A. Because it directly impacts the determination of a fair and reasonable ROR that EMM can charge its ratepayers, the ratemaking capital structure is crucial for this rate proceeding. The reasons for its significance are outlined below.

First, the ratemaking capital structure is a key component in calculating EMM's overall cost of capital, which is the allowed ROR required by investors (both debt and equity holders) of EMM. This cost of capital is used in the rate-setting process to determine the allowed return on investment, which EMM needs to recover through tariff rates.

Second, the ratemaking capital structure should appropriately reflect EMM's actual financial risk by accounting for the proportion of debt and equity used to finance its operations. A structure that accurately represents this risk ensures that the rates set will appropriately cover EMM's cost of capital, aligning with the risk profile faced by EMM.

Third, a well-considered capital structure helps ensure that EMM remains financially stable. If the rates reflect the actual cost of capital, EMM will have sufficient revenue to meet its financial obligations, maintain its creditworthiness, and invest in necessary infrastructure and services.

To sum up, the ratemaking capital structure is a foundational element in this rate proceeding because it directly affects the financial health of EMM, the fairness of the rates charged to its customers, and the overall regulatory stability of the process.

A balanced capital structure ensures EMM can fund essential capital investments without overburdening ratepayers or compromising credit quality.

Q. What issues did Staff consider in determining its ratemaking capital structure for EMM?

A. EMM's ratemaking capital structure should be representative of its risk profile, considering its financing components such as common equity, preferred stock, long-term debt, and short-term debt. Staff considered three major issues in determining the capital structure for EMM.

First, which capital structure should be used for ratemaking in this proceeding: the parent company Evergy's consolidated capital structure or EMM's standalone capital structure? Second, which type of capital structure should be used for ratemaking in this proceeding: an actual, hypothetical, or projected capital structure? Third, what amount of short-term debt, if any, should be included in the ratemaking capital structure?

To provide a proper recommendation on these issues, Staff reviewed the financial relationship between Evergy and EMM, assessed which capital structure most appropriately reflects the cost of providing service under the new rates, and examined how EMM's short-term debt was utilized. For regulatory consistency, Staff also reviewed the Commission's previous decisions on these issues in EMM rate proceedings.

Q. Please explain the Commission's past decisions regarding capital structures used for the purpose of ratemaking.

A. Over the past six years, there have been three fully-litigated rate cases: The Empire District Electric Company ("Empire") rate proceeding, Case No.

ER-2019-0374 (the "2019 Empire Case"); the 2021 Spire Missouri Inc. ("Spire") rate proceeding, Case No. GR-2021-0108 (the "2021 Spire Case"); and the Confluence Rivers Utility Operating Company, Inc. ("Confluence Rivers") rate proceeding, Case No. WR-2023-0006 (the "2023 Confluence Case").

In the 2019 Empire Case, the Commission concluded that the adjusted actual capital structure (46% common equity and 54% long-term debt) of Empire's parent company, Liberty Utilities Co. ("LUCo"), was appropriate for setting rates in that case because it was more economical than Empire's, based on the finding that it was appropriate to utilize Empire's consolidated capital structure, including LUCo's off-balance sheet debt.[94]

In the 2021 Spire Case, the Commission ordered that EMM's standalone actual capital structure (49.86% common equity, 41.99% long-term debt and 8.15% short-term debt) be used for the purpose of ratemaking.[95] Regarding the issue of short-term debt in its capital structure, the Commission's decision in the 2021 Spire Case was that the average short-term debt in excess of short-term assets over the 13-month period, excluding both short-term assets and short-term debt related to Winter Storm Uri, should be included in the rate making capital structure.[96]

In the 2023 Confluence Case, the Commission found that a hypothetical capital structure of 50% equity and 50% debt was appropriate in that case, reasoning that ratepayers would benefit from having rates calculated with a 50% debt ratio, as debt is a

[94] Page 38-39, *Amended Report and Order* issued July 23, 2020, in Case No. ER-2019-0374.
[95] Accounting Schedule:12, *Staff Accounting Schedules*, December 13, 2021, in Case No. GR-2021-0108.
[96] Page 96, *Amended Report and Order* issued November 12, 2021, in Case No. GR-2021-0108.

cheaper cost than equity, while shareholders would benefit from rates calculated with a 50% equity ratio, as equity generates a greater return than debt, so a 50/50 capital structure in that case was expected to produce just and reasonable rates.[97]

Q. Do you think there are inconsistencies in the Commission's decisions on the capital structure issue?

A. No, I do not. The Commission's decision on the capital structure issue for each rate proceeding was based on principles established in the *Bluefield* and *Hope* decisions. In addition, for each rate proceeding, the Commission considered the unique characteristics of equity and debt financing of the associated company in relation to specific issues regarding ratemaking capital structure.

In the 2019 Empire Case, Condition 5 of the Merger Stipulation approved in File No. EM-2016-0213 required Empire to provide evidence in its rate cases as to why its per-book capital structure is the most economical for determining a fair and reasonable allowed ROR.[98] The Commission found that LUCo's adjusted capital structure was appropriate to use for setting rates in that case because it was more economical than Empire's.[99]

In the 2021 Spire Case, the Commission ordered that the ratemaking capital structure should be determined based on Spire's actual standalone capital structure of common equity and long-term debt as of May 31, 2021, and the average short-term debt

[97] Page 46, *Report and Order* issued October 25, 2023, in Case No. WR-2023-0006.
[98] Page 22, *Order Approving Stipulations and Agreements and Authorizing Merger Transaction*, issued September 7, 2016, EM-2016-0213.
[99] Page 39, *Amended Report and Order* issued July 23, 2020, Case No. ER-2019-0374.

in excess of short-term assets over the 13-month period ending May 31, 2021, excluding both short-term assets and short-term debt related to Winter Storm Uri during March, April, and May 2021.[100] In this decision, the Commission recognized that the Society of Utility and Regulatory Financial Analysts ("SURFA") lists four guidelines for determining when to use a parent company's capital structure in its guidebook, *Cost of Capital – A Practitioner's Guide*.[101]

SURFA notes that the utility's capital structure is generally more appropriate than the parent's when the utility obtains capital directly rather than solely through the parent, the parent does not guarantee the utility's securities, the utility's leverage is independent of the parent's leverage, and the parent's own capital structure does not distort the relationship between risk and leverage at the utility level.[102]

In the 2023 Confluence Case, both the actual operating standalone capital structure and the consolidated parent capital structure were inappropriate for ratemaking purposes. The Commission found that a hypothetical capital structure was appropriate for ratemaking due to Confluence Rivers' large negative retained earnings balance of approximately $9.5 million at year-end 2022 and its unique corporate structure, which relies directly on affiliates for external capital structure and Confluence Rivers' size.[103]

[100] Page 96, *Amended Report and Order* issued November 12, 2021, in Case No. GR-2021-0108.
[101] Paragraph 273, *Amended Report and Order* issued November 12, 2021, in Case No. GR-2021-0108.
[102] David Parcell (2020), The Cost of Capital – A Practitioner's Guide, 202 edition, Society of Utility and Regulatory Financial Analysts.
[103] Page 45-46, *Report and Order* issued October 25, 2023, in Case No. WR-2023-0006.

Q. What was Staff's recommended ratemaking capital structure for EMM in their most recent past rate case?

A. In EMM's most recent rate case, Case No. ER-2022-0129, Staff recommended EMM's targeted capital structure consisting of 50% long-term debt and 50% equity.[104]

Q. Have there been any significant changes in EMM's capital structure that should alter Staff's recommendation of using EMM's targeted stand-alone capital structure for the purpose of ratemaking?

A. Evergy has changed its target capital structure for each subsidiary utility to ** [redacted] ** since the last rate case, which has led Staff to consider revising its recommendation.[105]

Q. Please explain the financial relationship between Evergy and EMM regarding capital structure for the purpose of ratemaking in this proceeding.

A. EMM is a wholly owned operating regulatory utility subsidiary of Evergy. EMM and Evergy have separate credit ratings issued by Moody's and S&P.[106] Credit rating agencies have assigned EMM a stand-alone credit profile that is equal to or stronger than Evergy's consolidated credit rating.[107] ** [redacted] **.[108] Therefore, the cost of any debt that EMM incurs is primarily based on EMM's creditworthiness. The corporate credit ratings assigned by

[104] On page 7, lines 19-21, Won's True-Up Rebuttal Testimony, Case No. ER-2022-0129.
[105] Staff's Data Request No. 0112.
[106] Staff's Data Request No. 0117.
[107] S&P Global Rating, Evergy Metro Inc., published December 2, 2025.
[108] Staff's Data Request Nos. 0120 (5) and (6).

Moody's and S&P to EMM are 'Baa1' and 'A-', respectively, while those assigned to Evergy are 'Baa2' and 'BBB+'.[109]

While these facts show financial independence from the parent company, EMM has a close financial relationship with Evergy and its subsidiaries. For instance, ** [redacted] **.[110] ** [redacted] **.[111] ** [redacted] **.[112] However, these financial relationships could be considered normal within the regular relationship between a parent company and its subsidiary.

Evergy has raised significant equity capital in recent years to support higher capital expenditures, including any necessary equity contribution into the utility, but no proceeds from Evergy long-term debt issuances have been used to infuse equity into EMM.[113] Therefore, Staff does not find evidence that Evergy has used "double leverage" for investing in EMM.[114]

In addition, ** [redacted] **.[115] Hence, there are no significant concerns about the

[109] S&P Capital IQ Pro.
[110] Staff's Data Request Nos. 0120 (1) and (2) and 0121.
[111] Staff's Data Request Nos. 0110, 0111 and 0120 (7).
[112] Staff's Data Request No. 0120 (3).
[113] Staff's Data Request No. 0347.
[114] Double leverage occurs when a holding company conducts a debt offering to acquire a large equity stake in a subsidiary. Financial authorities have frequently raised concerns about the issue of double leverage because of this type of intra-firm financing.
[115] Staff's Data Request No. 0122.

financial relationship between EMM's regulated utility service and Evergy's non-regulated business.

Q. What are the components of capital structure commonly considered for the purpose of ratemaking in general rate proceedings?

A. In general, a ratemaking capital structure could be a mixture of debt and equity including some or all of the following components: common stock, preferred stock, long-term debt, and short-term debt. For short-term debt, the portion of short-term debt that supports long-term capital may be included in the capital structure. In other words, the amount of short-term debt exceeding the amount to support short-term assets and construction work in progress ("CWIP"), may be considered a capital structure component.

Q. What was the Commission's decision on short-term debt for the ratemaking capital structure in previous rate cases?

A. In prior Spire East and Spire West's rate cases, Case Nos. GR-2017-0215 and GR-2017-0216, the Commission determined that short-term debt should not be included in Spire's ratemaking capital structures when the average level of CWIP and other short-term assets exceeds the amount of short-term debt.[116] In the 2021 Spire Case, the Commission determined that an appropriate amount of short-term debt should be included in Spire's ratemaking capital structure because Spire was using some short-term debt to finance long-term assets.[117]

[116] Pages 44-45, *Amended Report and Order* issued March 7, 2018, in Case Nos. GR-2017-0215 and GR-2017-0216.
[117] Page 97, *Amended Report and Order* issued November 12, 2021, in Case No. GR-2021-0108.

Q. Should EMM's short-term debt be included in its ratemaking capital structure in this proceeding?

A. No. Based on an analysis of data for the 13-month period ending January 31, 2026, ** [redacted] **.[118]

Q. Has EMM or Evergy indicated to Staff that they would target specific capital structures in the future for EMM and Evergy?

A. As stated in its response to Staff's data request, EMM noted:

** [redacted] **[119]

Q. What is the actual capital structure of EMM and Evergy?

A. As of December 31, 2024, EMM's capital structure at the end of the update period consists of approximately 51.38% common equity and 48.62% long-term debt.[120] Table 2 below shows the average capital structures of Evergy and EMM for Q1 2025

[118] Staff's Data Request No. 0106.
[119] Staff's Data Request No. 0112.
[120] Schedule SJW-d6, Won's Direct Testimony.

through Q4 2025. As seen in Table 2, the average equity ratios for Q1 2025 through Q4 2025 were approximately 52.87% and 44.55% for EMM and Evergy, respectively:[121]

Table 2: Comparison Average Capital Structure Q1 2025 – Q4 2025

	Evergy	EMM
Common Equity	44.55%	52.87%
Long-Term Debt	55.45%	47.13%
	100.00%	100.00%

Q. What is Staff's recommended ratemaking capital structure in this proceeding?

A. Considering EMM's financial relationship with Evergy, and maintaining consistency with the Commission's previous ratemaking decisions, Staff recommends that the Commission set EMM's ROR based on its most recent actual standalone capital structure. The ratemaking capital structure Staff used for its analysis in this case is EMM's stand-alone capital structure composed of 51.38% common equity and 48.62% long-term debt, based on EMM's actual capital structure as of December 31, 2025.[122] Schedules SJW-d5-1 and SJW-d5-2 to this testimony, and incorporated by reference herein, presents Evergy and EMM's historical capital structures and the associated capital ratios. Staff will continue monitoring Evergy and EMM's updated capital structures through the end of the true-up period, through June 30, 2026, and will update its final recommendation to actual values at that time.

[121] Schedule SJW-d5-2, Won's Direct Testimony.
[122] Schedule SJW-d6 and SJW-d16, Won's Direct Testimony.

VI. RATE OF RETURN

Q. Please summarize the procedure that Staff used in its ROR analysis.

A. In order to arrive at Staff's recommended ROR, Staff calculated the weighted average cost of capital ("WACC") of EMM by investigating the cost of each capital component of its ratemaking capital structure.

Staff specifically examined: (1) the estimated COEs using DCF and CAPM for the selected electric distribution companies in the proxy group; (2) the authorized ROE estimated by the BY+RP method; (3) the recent national average authorized ROEs for electric utilities; (4) Staff's recommended ROE for the current EMM rate case; (5) the current embedded COD; and (6) the allowed ROR for the purpose of ratemaking in this proceeding.

Staff then applied the recommended capital structure and associated costs to calculate an overall ROR recommendation. For this procedure, Staff started with the selection of an electric proxy group.

1. Proxy Group

Q. How did you select the electric service proxy group for Staff's ROR analysis?

A. Staff used a proxy group consisting of U.S. utilities that the Edison Electric Institute classifies as Electric Utilities.[123] Staff screened forty-three (43) companies for the following criterions:

[123] EEI, 2024 Financial Review: Annual Report of the U.S. Investor-Owned Electric Utility Industry.

- stock publicly traded;
- at least 80% of assets from U.S. regulated operations;
- more than five years of financial data available;
- investment grade credit ratings from major U.S. credit rating agencies;
- positive long-term growth coverage from at least two analysts;
- no pending mergers or acquisitions;
- no dividend reductions since 2016;
- at least 60% of income from regulated utility operations; and
- at least 50% of assets in regulated electric utility operations.

Q. What is Staff's electric proxy group for its ROR analysis?

A. The fourteen (14) electric utilities that met these criteria are presented in Table 3 below:

Table 3: Electric Proxy Group

Electric Utility Companies	Ticker
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Avista Corporation	AVA
CMS Energy Corporation	CMS
DTE Energy Company	DTE
Duke Energy Corporation	DUK
Entergy Corporation	ETR
IDACORP, Inc.	IDA
OGE Energy Corp.	OGE
Pinnacle West Capital Corporation	PNW
Portland General Electric Company	POR
The Southern Company	SO
Xcel Energy Inc.	XEL

The detailed screening procedure and results, utilizing the above criteria, are presented in Schedules SJW-d8 and SJW-d9.

2. Cost of Common Equity

Q. Please explain how Staff conducted its COE estimation.

A. Staff conducted its COE estimation for EMM by examining the market data of the fourth quarter of 2025 ("Q4 2025") using the proxy group of electric distribution utility companies as shown in Table 3.[124] The analysis Staff used to estimate EMM's COE consisted of Staff's DCF COE and CAPM COE analyses. These two analyses are widely accepted in the financial industry as a means to determine a fair and reasonable ROR for regulated utility companies.[125] Staff agrees with the Federal Energy Regulatory Commission ("FERC") that conducting the COE analysis using DCF and CAPM is the most appropriate method for generating a composite zone of reasonableness to determine the recommended ROE to be presented to the Commission for EMM.[126] Staff used the result of the BY+RP method to recommend an authorized ROE comparable to the reasonable range of COEs for the proxy group, as determined through its DCF and CAPM analyses.

Q. Please explain the DCF model used for Staff's COE estimation.

A. The DCF model used for Staff's COE estimation is a widely used model by investors to evaluate stable-growth investment opportunities, such as regulated utility companies. The premise of the DCF model is that an investment in common stock is

[124] The test year for this case ends on June 30, 2025, with updates through December 31, 2025.
[125] *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.,* Opinion No. 569, 169 FERC ¶ 61,129 (2019).
[126] Ass'n of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569-A, 171 FERC ¶ 61,154 (2020) ("Opinion 569-A").

worth the present value of the infinite stream of dividends discounted at a market rate commensurate with the investment's risk. Using the following formula for the DCF model, investors determine a common stock price:

$$P = D/(k - g),$$

where P is the common stock price,
D is the current dividend,
k is investors' required return from the stock, and
g is the expected growth rate in dividends.

The common stock prices of Staff's proxy group in Q4 2025 are presented in Schedule SJW-d12. Staff uses an adjusted dividend yield $(1 + 0.5g)D$ to account for the fact that the dividends are paid on a quarterly basis.[127] For the growth rate, Staff used the average of analysts' projected earnings per share ("EPS"), dividends per share ("DPS"), and book value per share ("BVPS"), along with the projected nominal GDP growth rate.[128] The average projected growth rate in Q4 2025 for Staff's proxy group is 5.01%.[129] The average long-term sustainable growth rate for the DCF model is 4.04%,[130] compared to the projected longer-term nominal GDP growth rate of 3.80%.[131]

It is important that the growth rate used in Staff's constant-growth DCF model reflects the long-term investment horizon assumption implied in the constant-growth

[127] *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.,* Opinion No. 569, 169 FERC ¶ 61,129 (2019).
[128] *Entergy Arkansas, Inc.*, Opinion No. 575, 175 FERC ¶ 61,136 (2021).
[129] Schedule SJW-d10, Won's Direct Testimony.
[130] Schedule SJW-d12, Won's Direct Testimony.
[131] Table D-1 (p.155), Appendix D: CBO's Economic Projections for Each Year Through 2036, Congress Budget Office (CBO), Budget Economic Outlook:2026-2036, published February 2026.

DCF model. FERC also agreed with this principle when it ruled, in Opinion 569, that the exclusive use of analysts' short-term growth rates in the constant-growth DCF was inappropriate.[132] The detailed procedure for calculating the growth rate for Staff's DCF model is presented in Schedule SJW-d12. The formulation of the COE using the constant-growth DCF formula is:

$$k = (1 + 0.5g)D \,/\, P \; + \; g.$$

Q. What is the result of the COE estimation using the DCF model?

A. For the current rate case, Staff's DCF estimation of the COE for electric service utility companies in its proxy group ranges from 7.11% to 9.25%, with an average DCF COE estimate of 8.18%, based on the proxy group of electric service utility companies presented in Table 3.[133] The detailed calculation procedure of Staff's DCF analysis is presented in Schedule SJW-d12.

Q. Please explain the CAPM used for Staff's COE estimation.

A. The CAPM used for Staff's COE estimation is another widely used financial model that describes the relationship between risk and expected return. According to CAPM, the expected return on an investment is determined by the risk-free ROR (typically the yield on government bonds) and a risk premium that reflects the riskiness of the investment compared to the overall market. The CAPM is built on the premise that the variance in returns over time is the appropriate measure of risk, but only the

[132] *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (2019).
[133] Table 3 and Schedule SJW-d12, Won's Direct Testimony.

non-diversifiable variance (systematic risk) is rewarded. Systematic risks, also called market risks, are unanticipated events that affect almost all assets to some degree because the effects are economy wide. Systematic risk in an asset, relative to the average, is measured by the beta of that asset.[134] Unsystematic risks, also called asset-specific risks, are unanticipated events that affect single assets or small groups of assets. Because unsystematic risks can be substantially reduced through diversification, the appropriate reward for bearing risk depends on the level of systematic risk.

The CAPM shows that the expected return for a particular asset depends on the pure time value of money (measured by the risk-free rate), the amount of the reward for bearing systematic risk (measured by the market risk premium ("MRP")), and the amount of systematic risk incurred by the asset (measured by beta). Specifically, the CAPM methodology estimates the COE by taking the risk-free rate and adding the MRP multiplied by beta.[135] The MRP is calculated by subtracting the risk-free rate from the expected market return. The general formula of the CAPM is as follows:

$$k = R_f + \beta(R_m - R_f)$$

where, k is the expected return on equity for a security,
R_f is the risk-free rate,
R_m is the expected market return,
β is beta, and
$R_m - R_f$ is the MRP.

[134] Beta is a measure of the volatility—or systematic risk—of a security or portfolio compared to the market as a whole. (Investopedia, retrieved October 13, 2022).
[135] Roger A. Morin, New Regulatory Finance (Public Utilities Reports, Inc. 2006).

For the risk-free rate of each time period, Staff used the average yield on 30-Year U.S. Treasury bonds which was 4.71% for Q4 2025.[136] For Staff's CAPM estimation, it relied on betas provided by Value Line.[137] For the MRP estimate, Staff relied on four well respected recommended MRPs.

The first MRP is Kroll's recommended 5.0% equity risk premium ("ERP"),[138] based on its year-end 2025 and March 2026 updates, which serves as a benchmark incorporating the impact of the Middle East conflict on global cost of capital assumptions.[139] Kroll (formerly Duff & Phelps) is widely recognized as a global leader in valuation advisory, with its Cost of Capital Navigator serving as a primary industry benchmark for transparent, data-driven risk premiums and discount rate inputs.[140]

The other three MRPs are the implied ERP, and the historical geometric and arithmetic mean MRPs produced by Dr. Aswath Damodaran. Dr. Damodaran is the Kerschner Family Chair at the Stern School of Business at New York University.[141] The implied ERP is the forward-looking excess return investors require over the risk-free rate, inferred by solving a valuation model that assumes the present value of expected market cash flows equals current market prices.[142] Dr. Damodaran reported

[136] Schedule SJW-d13, Won's Direct Testimony.
[137] Value Line, https://valueline.com/?msclkid=4ed36370d16911eca58154b129389016.
[138] ERP can refer to any equity excess return over the risk-free rate, so it may represent any risk premium for the market as a whole, an individual firm, or other equity investments. In contrast, MRP is the equity premium of the market portfolio used directly in the CAPM. In other words, the market-wide ERP is used as the MRP when referring to the aggregate market.
[139] Kroll, Kroll Cost of Capital Inputs at Year-End 2025, published January 30. 2026, and Impact of the Middle East Conflict on Cost of Capital Assumptions – March 2026 Update, published March 24, 2026.
[140] Kroll, https://www.kroll.com/en/about-us'.
[141] New York University, https://pages.stern.nyu.edu/~adamodar/New_Home_Page/home.htm.
[142] Damodaran, A. (2026). Equity Risk Premiums (ERP): Determinants, Estimates and Implications-The 2026 Edition. https://papers.ssrn.com/sol3/Data_Integrity_Notice.cfm?abid=6361419.

the US implied ERP at 5.03% as of April 1, 2026.[143] The third data set is the long-term geometric mean of historical return differences between the S&P 500 and long-term government bonds from 1928 through 2025, resulting in MRP estimates of 5.48%.[144] The fourth data set is the long-term arithmetic mean of historical return differences between the S&P 500 and long-term government bonds from 1928-2025, resulting in MRP estimates of 7.03%.[145]

Q. What is the result of Staff's CAPM COE estimation?

A. For the current rate case, Staff's CAPM estimation of the COE for electric service utility companies in its proxy group ranges from 7.97% to 10.34%, with an average CAPM COE estimate of 9.16%, based on the proxy group of electric service utility companies presented in Table 3.[146] The detailed calculation procedure of Staff's CAPM analysis and its summary results are presented in Schedule SJW-d13.

3. Bond Yield Plus Risk Premium

Q. Please explain the BY+RP model used to recommend ROE.

A. The BY+RP model is widely accepted in academia and regulatory proceedings to estimate ROE.[147] The BY+RP model is built on the premise that investors demand a greater return in exchange for taking on higher levels of risk; for instance, a company's common stock equity is riskier than its corporate bonds because equity

[143] Damodaran On Line, The Stern Business School, New York University, ,https://pages.stern.nyu.edu/~adamodar/New_Home_Page/home.htm.
[144] Risk Premium, Damodaran Online, Stern School of Business, NYU.
[145] Ibid.
[146] Schedule SJW-d13, Won's Direct Testimony.
[147] Paragraph 146, Opinion No. 531, 147 FERC ¶ 61,234.

holders have residual claims on a company's assets and earnings, which means they are not guaranteed fixed returns and may face greater volatility in their investment.[148] According to the Chartered Financial Analyst ("CFA") study guide, BY+RP estimates the ROE of a company by adding its equity risk premium to the yield-to-maturity ("YTM") of the subject company's long-term debt.[149]

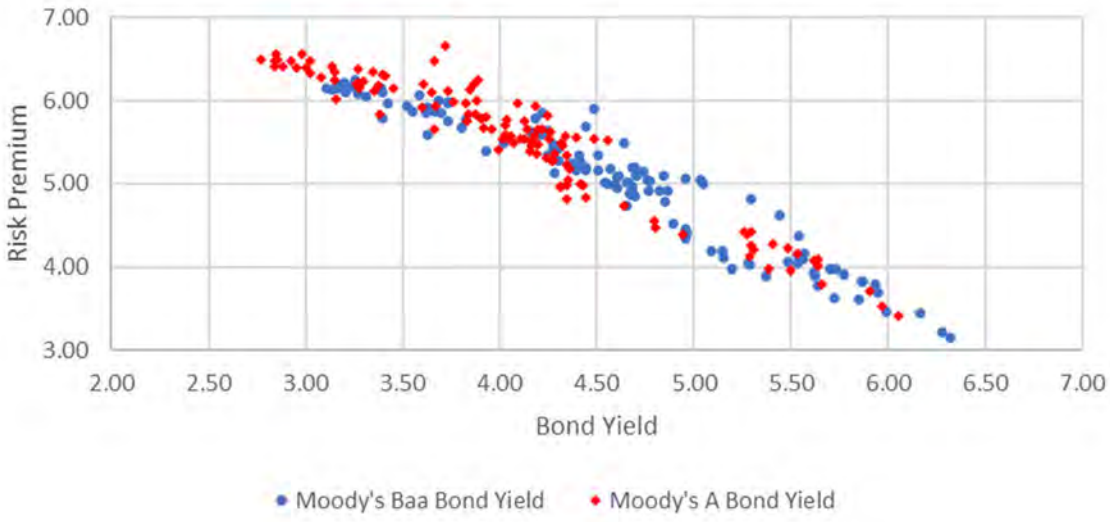
In contrast to DCF and CAPM estimates of the COE for recommending an authorized ROE, Staff's BY+RP method is designed to directly estimate an authorized ROE. Staff's BY+RP method involves estimating an authorized ROE by adding an associated risk premium to the utility bond yields. The relationship between ROE and Risk Premium can be expressed as follows:

ROE = Bond Yield + Risk Premium.

As of March 31, 2026, Moody's maintains a Baa1 senior unsecured rating for EMM and a Baa2 issuer rating for its parent company, Evergy, both with a stable outlook.[150] Staff utilized Moody's A-rated and Baa-rated public utility bond yields and defined the difference between the authorized ROE and the utility bond yield as the Risk Premium. Staff's BY+RP analysis considered authorized ROEs of electric utilities over a period from 2014 to 2025.[151] To determine a risk premium for a given bond yield, Staff relied on the negative relationship between risk premiums and bond yields, as shown in Figure 6.

[148] Brigham, E. F., Houston, J. F., & Clark, D. A. (2004). Fundamentals of financial management. (P.339)
[149] Stowe, J. D., Robinson, T. R., Pinto, J. E., & McLeavey, D. W. (2002) Analysis of Equity Investment: Valuation. Association for Investment Management and Research.
[150] S&P RatingDirect.
[151] S&P Capital IQ Pro, Rate Case History (Past Rate Cases).

Figure 6. Bond Yield and Risk Premium (2014-2025)



Staff determined Risk Premiums for each of those months by subtracting the 3-month moving average yield of A-rated and Baa-rated public utility bonds from the 3-month moving average authorized ROE for electric utilities in each month. To account for the inverse relationship between bond yields and risk premiums, Staff performed a regression analysis between the utility bond yields and monthly risk premiums during the 2014-2025 study period. Using regression analyses for A-rated and Baa-rated public utility bonds, Staff obtained the following equations:[152]

Risk Premium (%) = 9.3342% – 0.9300 Bond Yield [A] (%),

and

Risk Premium (%) = 9.2304% – 0.9146 Bond Yield [Baa] (%)

Staff's regression model yielded robust results, with R-squared values exceeding 0.94 and coefficient *p*-values below 0.00001. This indicates that approximately 95% of

[152] Schedule SJW-d14-2, Won's Direct Testimony.

the variability in the Risk Premium can be explained by the Bond Yield and suggests that the Bond Yield has a significant effect on the Risk Premium. In the fourth quarter of 2025 and the first quarter of 2026, the average yields of A and Baa-rated utility bonds were 5.65% and 5.84%, respectively.[153] Using these yields and the equations derived from the regression analysis described above, Staff's BY+RP analysis indicates that the electric service utility's estimated ROE is 9.73% as illustrated in Staff's Schedule SJW-d14-1.

4. Authorized Return on Equity

Q. What is Staff's recommendation of authorized ROE in this proceeding based on the results of COE and ROE estimation analyses?

A. Staff conducted two COE estimation analyses using DCF and CAPM. In addition, Staff directly estimated an authorized ROE using the BY+RP method. Based on Staff's estimation analyses described above, Staff estimates EMM's current market COE to be in the range of 7.11% to 10.34%, as summarized in Table 4. Staff recommends that the Commission grant EMM an authorized ROE of 9.73% within a reasonable range of 9.48% to 9.98%.[154]

continued on next page

[153] Schedule SJW-d14-1, Won's Direct Testimony.
[154] Schedule SJW-d16, Won's Direct Testimony.

Table 4: Summary Result of COE and ROE Estimation[155]

		COE Analysis		
		Lower	Mean	Upper
COE Estimation	DCF	7.11%	8.18%	9.25%
	CAPM	7.97%	9.16%	10.34%
		7.11%	8.67%	10.34%

		ROE Analysis		
		Lower	Estimate	Upper
ROE Estimation	BYPRP	9.72%	9.73%	9.74%
ROE Recommandation			9.73%	

Q. Does Staff have any supporting evidence for the Commission to consider regarding the reasonableness of Staff's ROE recommendation?

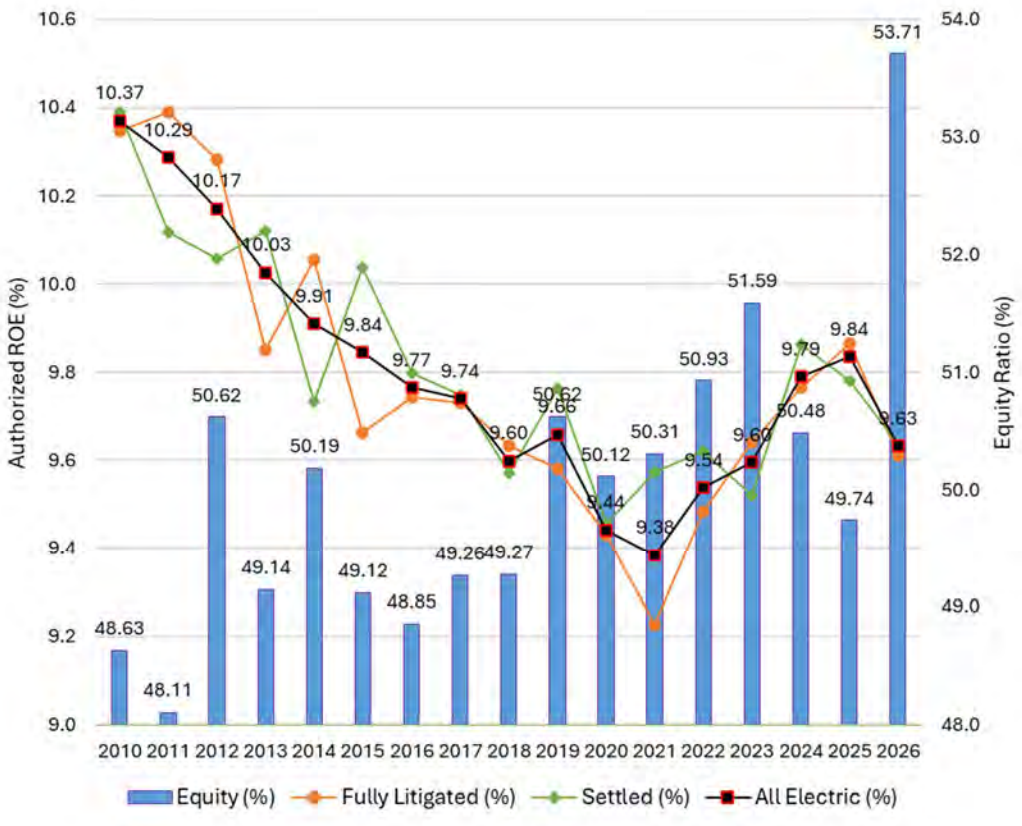
A. Yes. Staff recognizes that the Commission may be interested in recent authorized ROEs for other electric service utility companies in the U.S. as a test of the reasonableness of Staff's recommendation of authorized ROE. Comparing Staff's recommended ROE to those of similar electric utilities provides a benchmark for assessing whether the recommendation falls within a reasonable range. In addition, analyzing recent authorized ROEs for other electric utilities helps to gauge what is considered reasonable within the industry at a given time.

Table 5 presents information compiled and published by Regulatory Research Associates ("RRA") which details the average fully litigated and other authorized ROEs from Commissions around the U.S. from 2010 through Q1 2026 along with the number of cases considered:

[155] Schedule SJW-d15, Won's Direct Testimony.

Table 5: Authorized ROE and Equity Ratio in the U.S.[156]

	Fully Litigated			Settled			Total		
Year	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)
2010	10.35	47.68	27	10.39	49.49	34	10.37	48.63	61
2011	10.39	48.17	26	10.12	48.01	16	10.29	48.11	42
2012	10.28	49.98	29	10.06	51.40	29	10.17	50.62	58
2013	9.85	48.25	17	10.12	49.70	32	10.03	49.14	49
2014	10.05	50.14	21	9.73	50.26	17	9.91	50.19	38
2015	9.66	48.98	16	10.04	49.28	15	9.84	49.12	31
2016	9.74	49.75	25	9.80	47.51	17	9.77	48.85	42
2017	9.73	49.23	24	9.75	49.30	29	9.74	49.26	53
2018	9.63	48.70	22	9.57	49.76	26	9.60	49.27	48
2019	9.58	51.07	27	9.76	49.66	20	9.66	50.62	47
2020	9.43	49.87	32	9.46	50.45	23	9.44	50.12	55
2021	9.23	50.71	30	9.57	49.79	25	9.38	50.31	55
2022	9.48	51.25	32	9.62	50.32	21	9.54	50.93	53
2023	9.64	52.10	39	9.52	50.57	24	9.60	51.59	63
2024	9.77	50.64	68	9.86	50.18	22	9.79	50.48	90
2025	9.86	49.39	56	9.78	50.09	30	9.84	49.74	86
2026Q1	9.61	55.55	1	9.64	53.34	6	9.63	53.71	7



[156] S&P Capital IQ Pro: Regulatory Research Association, retrieved April 17, 2025.

In 2025, the average authorized ROE of electric utilities for fully litigated and settled cases was 9.86% and 9.78%, respectively, for an overall average of 9.84% over a total of 86 cases. In the first quarter of 2026, the average authorized ROE of electric utilities for fully litigated and settled cases was 9.61% and 9.64%, respectively, for an overall average of 9.63% over a total of 7 cases.

Given the current uncertain international and domestic political and economic conditions, Staff's recommended authorized ROE of 9.73% is generally consistent with ROEs recently authorized for other electric utilities across the country. It is Staff's position that in order for EMM to be competitive in the capital market, it needs to have the opportunity to earn an ROE that is reasonably consistent with ROEs awarded to other electric utilities around the country.

Q. What is the most recent authorized ROE determined by this Commission for an electric and natural gas service utility?

A. The Commission's most recent, fully-litigated electric service rate case is Empire District Electric's rate case, Case No. ER-2019-0374, ("2020 Empire rate case").[157] In the 2020 Empire rate case, the Commission ordered an authorized ROE of 9.25%. The Commission's most recent, fully-litigated natural gas service rate case is 2021 Spire Case.[158] In the 2021 Spire Case, the Commission ordered an authorized ROE of 9.37%.

[157] *Amended Report and Order* issued July 1, 2020, in Case No. ER-2019-0374.
[158] *Amended Report and Order* issued November 12, 2021, in Case No. GR-2021-0108.

5. Cost of Debt

Q. What is the cost of COD for the purpose of ratemaking?

A. To recommend an allowed ROR, the cost of COD is an essential component in calculating the cost of capital.[159] Unlike common stock dividends, COD refers to the expenses a utility incurs from borrowing money through bonds, loans, or other debt instruments. These costs typically include interest payments and any associated fees. Estimating COD involves using embedded COD methodologies, such as calculating the weighted average COD, analyzing interest rates on existing debt instruments, evaluating credit ratings, and comparing borrowing costs to industry benchmarks.

Q. What COD should the Commission authorize for EMM in this proceeding?

A. At this time, Staff recommends that the Commission authorize the ratemaking COD in this proceeding to be EMM's embedded COD as of December 31, 2025, which is 4.58%, rather than Evergy's embedded COD as of December 31, 2025, which is 5.11%.[160] Staff will update its embedded COD throughout this proceeding, through the true-up period, as additional information becomes available.

continued on next page

[159] The cost of preferred stock is another essential component in calculating the cost of capital when preferred stock is present, as it represents the return a company must provide to its preferred shareholders, essentially the dividend yield on preferred shares. As of December 31, 2025, EMM reported no preferred stock in response to Staff's Data Request No. 0108.
[160] Staff's Data Request No. 0055 and Schedules SJW-d7-1, Won's Direct Testimony.

VII. CONCLUSION

Q. What is Staff's conclusion?

A. Considering the current financial and economic markets, particularly the recent changes in inflation and interest rates, as well as EMM's risk profile, Staff's COE and ROE analysis supports a just and reasonable recommended ROE of 9.73% for EMM, which is the midpoint of a range from 9.48% to 9.98%. Because of the rapidly changing economic outlook, Staff will update its recommended ROE if there are significant changes in the economic outlook that necessitate such an update.

Staff's recommended ROE of 9.73% for EMM and COD of 4.58% applied to a capital structure of 51.38% common equity and 48.62% long-term debt, result in an allowed ROR of 7.23%. Staff will continue to monitor Evergy's and EMM's capital structure and COD through the true-up period, which ends on June 30, 2026, and will make its final recommendation at that time.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

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

AFFIDAVIT OF SEOUNG JOUN WON, PhD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

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

Further the Affiant sayeth not.

SEOUNG JOUN WON, PhD

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 24th day of June 2026.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

Notary Public

Credentials and Background of
Seoung Joun Won, PhD

I am currently employed as a Regulatory Compliance Manager in the Financial Analysis Department of the Financial and Business Analysis Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission since May 2010.

I received my Bachelor of Arts, Master of Arts, and Doctor of Philosophy in Mathematics from Yonsei University and my Bachelor of Business Administration in Financial Accounting from Seoul Digital University in Seoul, South Korea, and earned my Doctor of Philosophy in Economics from the University of Missouri - Columbia. Also, I passed several certificate examinations for Finance Specialist in South Korea such as Accounting Management, Financial Risk Manager, Enterprise Resource Planning Accounting Consultant, Derivatives Investment Advisor, Securities Investment Advisor, and Financial Planner.

Prior to joining the Commission, I taught both undergraduate and graduate level mathematics at the Korean Air Force Academy and Yonsei University for 13 years. I served as the director of the Education and Technology Research Center in NeoEdu for 5 years. Before starting my current position at the Missouri Public Service Commission, I had served as a regulatory economist in Tariff/Rate Design Department.

My current duties at the Commission include financial analysis of rate of return and cost of equity, valuation analysis on merger and acquisition, due diligence review and supporting economic and statistical analysis.

List of Previous Testimony Filed
Seoung Joun Won, PhD

Case Number	Company	Issue
GA-2026-0282	Spire Missouri, Inc., d/b/a Spire	Financial Capability
EA-2025-0299	Empire District Electric Company, d/b/a Liberty	Financial Capability
GO-2026-0122	Spire Missouri, Inc., d/b/a Spire	Financial Capability
GA-2026-0121	Spire Missouri, Inc., d/b/a Spire	Financial Capability
EA-2026-0018	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2025-0239	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EF-2026-0106	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
EA-2025-0238	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2025-0222	Ameren Transmission Company of Illinois	Financial Capability
WA-2025-0298	Missouri-American Water Company	Financial Capability
EA-2025-0087	Ameren Transmission Company of Illinois	Financial Capability
EA-2025-0075	Evergy Metro Inc., d/b/a Evergy Missouri Metro; Evergy Missouri West, Inc., d/b/a Evergy Missouri West	Financial Capability
GR-2025-0107	Spire Missouri, Inc., d/b/a Spire	Rate of Return, Capital Structure
EA-2024-0292	Evergy Missouri West, Inc., d/b/a Evergy Missouri West	Financial Capability

Case Number	Company	Issue
EA-2025-0028	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GA-2025-0181	Spire Missouri, Inc., d/b/a Spire	Financial Capability
GR-2024-0369	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
EA-2024-0302	Ameren Transmission Company of Illinois	Financial Capability
ER-2024-0319	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
GA-2024-0361	Spire Missouri, Inc., d/b/a Spire	Financial Capability
WM-2025-0017	Missouri-American Water Company	Merger and Acquisition
EA-2024-0237	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GF-2025-0053	Spire Missouri, Inc., d/b/a Spire	Financing Authority
EF-2025-0047	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
ER-2024-0212	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
WF-2024-0353	Missouri-American Water Company	Financing Authority
WA-2024-0325	Missouri-American Water Company	Financial Capability
ER-2024-0189	Evergy Missouri West, Inc., d/b/a Evergy Missouri West	Rate of Return, Capital Structure
GA-2024-0257	Spire Missouri, Inc., d/b/a Spire	Financial Capability

Case Number	Company	Issue
EO-2023-0448	Union Electric Co., d/b/a Ameren Missouri	Nuclear Decommissioning
GA-2024-0243	Spire Missouri, Inc., d/b/a Spire	Financial Capability
EA-2024-0147	Ameren Transmission Company of Illinois	Financial Capability
EA-2023-0131	Empire District Electric Company, d/b/a Liberty	Financial Capability
EF-2024-0192	Evergy Metro, Inc., d/b/a Evergy Missouri Metro	Financing Authority
WF-2024-0135	Liberty Utilities (Missouri Water) LLC, d/b/a Liberty	Financing Authority
EF-2024-0099	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
GA-2024-0100	Spire Missouri, Inc., d/b/a Spire	Financial Capability
EA-2023-0286	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GA-2023-0441	Spire Missouri, Inc., d/b/a Spire	Financial Capability
EF-2023-0425	Evergy Metro Inc., d/b/a Evergy Missouri Metro	Financing Authority
SA-2023-0435	Missouri-American Water Company	Financial Capability
WA-2023-0434	Missouri-American Water Company	Financial Capability
GA-2023-0389	Spire Missouri, Inc., d/b/a Spire	Financial Capability
GA-2023-0374	Spire Missouri, Inc., d/b/a Spire	Financial Capability

Case Number	Company	Issue
GF-2023-0280	Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty	Financing Authority
WA-2023-0345	Missouri-American Water Company	Financial Capability
EA-2023-0226	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2023-0017	Grain Belt Express LLC	Financial Capability
GA-2023-0038	Spire Missouri, Inc., d/b/a Spire	Financial Capability
EF-2022-0151	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
EA-2022-0328	Evergy Missouri West, Inc., d/b/a Evergy Missouri West	Financial Capability
ER-2022-0337	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
EA-2022-0245	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2022-0244	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2022-0234	NextEra Energy Transmission Southwest, LLC	Financial Capability
GR-2022-0179	Spire Missouri, Inc., d/b/a Spire	Rate of Return, Capital Structure
GF-2022- 0169	Spire Missouri, Inc.	Financing Authority
EF-2022-0164	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
WF-2022-0161	Missouri-American Water Company	Financing Authority
ER-2022-0130	Evergy Missouri West, Inc., d/b/a Evergy Missouri West	Rate of Return, Capital Structure

Case Number	Company	Issue
ER-2022-0129	Evergy Metro Inc., d/b/a Evergy Missouri Metro	Rate of Return, Capital Structure
EF-2022- 0103	Evergy Missouri West, Inc.	Financing Authority
WF-2022-0066	Missouri American Water Company	Financing Authority
WF-2021-0427	Raytown Water Company	Financing Authority
GR-2021-0320	Empire District Gas Company	Rate of Return, Capital Structure
ER-2021-0312	Empire District Electric Company	Rate of Return, Capital Structure
GR-2021-0241	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
ER-2021-0240	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
GR-2021-0108	Spire Missouri, Inc.	Rate of Return, Capital Structure
EA-2021-0087	Ameren Transmission Company of Illinois	Financial Capability
EA-2020-0371	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
SR-2020-0345	Missouri American Water Company	Rate of Return, Capital Structure
WR-2020-0344	Missouri American Water Company	Rate of Return, Capital Structure
EF-2020-0301	Evergy Missouri Metro	Financing Authority
WR-2020-0264	Raytown Water Company	Rate of Return, Capital Structure
WR-2020-0053	Confluence Rivers Utility Operating Company, Inc.	Rate of Return, Capital Structure

Case Number	Company	Issue
HM-2020-0039	Veolia Energy Kansas City, Inc. AIP Project Franklin Bidco	Merger and Acquisition
EO-2019-0133	KCP&L Greater Missouri Operations Company, Evergy Metro	Business Process Efficiency
EO-2019-0132	Kansas City Power & Light Company, Evergy Metro	Business Process Efficiency
GR-2019-0077	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
GO-2019-0059	Spire West, Spire Missouri, Inc.	Weather Variables
GO-2019-0058	Spire East., Spire Missouri, Inc.	Weather Variables
ER-2018-0146	KCP&L Greater Missouri Operations Co.	Weather & Normalization, Net System Input
ER-2018-0145	Kansas City Power & Light Co.	Weather & Normalization, Net System Input
GR-2018-0013	Liberty Utilities (Midstates Natural Gas) Corp.	Weather Variables
GR-2017-0216	Missouri Gas Energy (Laclede), Spire Missouri, Inc.	Weather Variables
GR-2017-0215	Laclede Gas Co., Spire Missouri, Inc.	Weather Variables
ER-2016-0285	Kansas City Power & Light Co.	Weather & Normalization, Net System Input
ER-2016-0179	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
ER-2016-0156	KCP&L Greater Missouri Operations Co.	Weather & Normalization, Net System Input
ER-2016-0023	Empire District Electric Company	Weather & Normalization, Net System Input

Case Number	Company	Issue
ER-2014-0370	Kansas City Power & Light Co	Weather & Normalization, Net System Input
ER-2014-0351	Empire District Electric Company	Weather & Normalization, Net System Input
ER-2014-0258	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
EC-2014-0223	Noranda Aluminum, Inc., et al, Complaint v. Union Electric Co., d/b/a Ameren Missouri	Weather Variables
GR-2014-0152	Liberty Utilities (Midstates Natural Gas) Corp.	Weather Variables
GR-2014-0086	Summit Natural Gas of Missouri, Inc.	Weather Variables
HR-2014-0066	Veolia Energy Kansas City, Inc.	Weather Variables, Revenue
GR-2013-0171	Laclede Gas Co.	Weather Variables
ER-2012-0345	Empire District Electric Company	Weather Variables, Revenue
ER-2012-0175	KCP&L Greater Missouri Operations Co.	Weather Variables
ER-2012-0174	Kansas City Power & Light Co.	Weather Variables
ER-2012-0166	Union Electric Co., d/b/a Ameren Missouri	Weather Variables, Revenue
HR-2011-0241	Veolia Energy Kansas City, Inc.	Weather Variables
ER-2011-0028	Union Electric Co., d/b/a Ameren Missouri	Weather Variables, Revenue
ER-2011-0004	Empire District Electric Company	Weather Variables, Revenue
GR-2010-0363	Union Electric Co., d/b/a Ameren Missouri	Weather Variables
ER-2010-0356	KCP&L Greater Missouri Operations Co.	Weather Variables
ER-2010-0355	Kansas City Power & Light Co.	Weather Variables, Revenue

Work Related Publication

Won, Seoung Joun, X. Henry Wang, and Henry E. Warren. "Climate normals and weather normalization for utility regulation." *Energy Economics* (2016).

DIRECT TESTIMONY

FOR

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

CASE NO. ER-2026-0143

APPENDIX 2

SCHEDULES

BY

Seoung Joun Won, PhD

Financial Analysis

MISSOURI PUBLIC SERVICE COMMISSION

June 30, 2026

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

List of Schedules

Schedule	Description of Schedule
1	List of Schedules
2-1	Federal Reserve Discount Rate and Federal Reserve Funds Rate Changes
2-2	Graph of Federal Reserve Discount Rates and Federal Funds Rates Changes
3-1	Rate of Inflation
3-2	Graph of Rate of Inflation
4-1	Average Yields on Moody's Public Utility Bonds
4-2	Average Yields on Thirty-Year U.S. Treasury Bonds
4-3	Graph of Average Yields on Mergent's Public Utility Bonds and Thirty-Year U.S. Treasury Bonds
4-4	Graph of Monthly Spreads Between Yields on Moody's Public Utility Bonds and 30-Year U.S. Treasury Bonds
4-5	Graph of Average Yields on A and BBB rated Utility Bonds
5-1	Historical Consolidated Capital Structures (Dollar)
5-2	Historical Consolidated Capital Structures (Percentage)
6	Capital Structure
7-1	Cost of Long-Term Debt
7-2	Cost of Preferred Stock
8	Criteria for Selecting Comparable Utility Companies
9	Proxy Group List
10	Historical and Projected Growth Rates
11	Average High / Low Stock Price
12	DCF Model Analysis of COE Estimates
13	CAPM Analysis of COE Estimates
14-1	BYPRP Analysis of ROE Estimates
14-2	Regression Analysis for Risk Premium
15	Return on Equity
16	Rate of Return
17	Authorized Return on Equity

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Federal Reserve Discount Rate and Federal Reserve Funds Rate

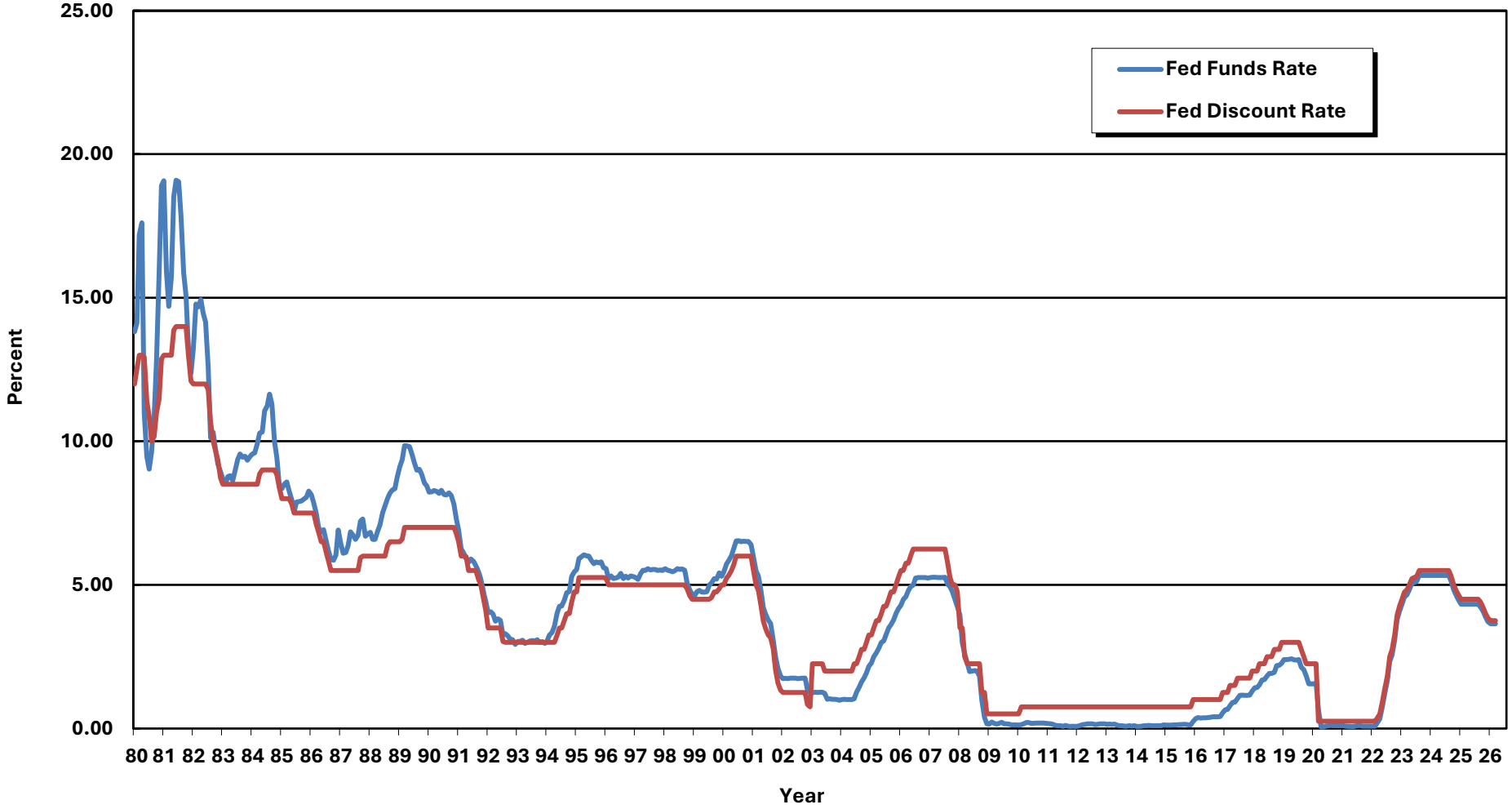
Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate
Jan 2001	5.52	5.50	Jan 2006	5.50	4.50	Jan 2011	0.75	0.13
Feb	5.00	5.50	Feb	5.50	4.50	Feb	0.75	0.13
Mar	4.81	5.00	Mar	5.75	4.75	Mar	0.75	0.13
Apr	4.28	4.50	Apr	5.75	4.75	Apr	0.75	0.13
May	3.73	4.00	May	6.00	5.00	May	0.75	0.13
Jun	3.47	3.75	June	6.25	5.25	Jun	0.75	0.13
Jul	3.25	3.75	July	6.25	5.25	Jul	0.75	0.13
Aug	3.16	3.50	Aug	6.25	5.25	Aug	0.75	0.13
Sep	2.77	3.00	Sep	6.25	5.25	Sep	0.75	0.13
Oct	2.02	2.50	Oct	6.25	5.25	Oct	0.75	0.13
Nov	1.58	2.00	Nov	6.25	5.25	Nov	0.75	0.13
Dec	1.33	1.75	Dec	6.25	5.25	Dec	0.75	0.13
Jan 2002	1.25	1.75	Jan 2007	6.25	5.25	Jan 2012	0.75	0.13
Feb	1.25	1.75	Feb	6.25	5.25	Feb	0.75	0.13
Mar	1.25	1.75	Mar	6.25	5.25	Mar	0.75	0.13
Apr	1.25	1.75	Apr	6.25	5.25	Apr	0.75	0.13
May	1.25	1.75	May	6.25	5.25	May	0.75	0.13
Jun	1.25	1.75	Jun	6.25	5.25	Jun	0.75	0.13
Jul	1.25	1.75	Jul	6.25	5.25	Jul	0.75	0.13
Aug	1.25	1.75	Aug	5.75	5.25	Aug	0.75	0.13
Sep	1.25	1.75	Sep	5.25	4.75	Sep	0.75	0.13
Oct	1.25	1.75	Oct	5.00	4.75	Oct	0.75	0.13
Nov	0.83	1.25	Nov	5.00	4.50	Nov	0.75	0.13
Dec	0.75	1.25	Dec	4.75	4.25	Dec	0.75	0.13
Jan 2003	2.25	1.25	Jan 2008	3.50	3.50	Jan 2013	0.75	0.13
Feb	2.25	1.25	Feb	3.50	3.00	Feb	0.75	0.13
Mar	2.25	1.25	Mar	2.50	2.25	Mar	0.75	0.13
Apr	2.25	1.25	Apr	2.25	2.25	Apr	0.75	0.13
May	2.25	1.25	May	2.25	2.00	May	0.75	0.13
Jun	2.00	1.25	Jun	2.25	2.00	Jun	0.75	0.13
Jul	2.00	1.00	Jul	2.25	2.00	Jul	0.75	0.13
Aug	2.00	1.00	Aug	2.25	2.00	Aug	0.75	0.13
Sep	2.00	1.00	Sep	2.25	2.00	Sept	0.75	0.13
Oct	2.00	1.00	Oct	1.25	1.25	Oct	0.75	0.13
Nov	2.00	1.00	Nov	1.25	1.25	Nov	0.75	0.13
Dec	2.00	1.00	Dec	0.50	0.13	Dec	0.75	0.13
Jan 2004	2.00	1.00	Jan 2009	0.50	0.13	Jan 2014	0.75	0.13
Feb	2.00	1.00	Feb	0.50	0.13	Feb	0.75	0.13
Mar	2.00	1.00	Mar	0.50	0.13	Mar	0.75	0.13
Apr	2.00	1.00	Apr	0.50	0.13	Apr	0.75	0.13
May	2.00	1.00	May	0.50	0.13	May	0.75	0.13
Jun	2.25	1.00	Jun	0.50	0.13	Jun	0.75	0.13
Jul	2.25	1.25	Jul	0.50	0.13	Jul	0.75	0.13
Aug	2.50	1.50	Aug	0.50	0.13	Aug	0.75	0.13
Sep	2.75	1.50	Sep	0.50	0.13	Sep	0.75	0.13
Oct	2.75	1.75	Oct	0.50	0.13	Oct	0.75	0.13
Nov	3.00	2.00	Nov	0.50	0.13	Nov	0.75	0.13
Dec	3.25	2.25	Dec	0.50	0.13	Dec	0.75	0.13
Jan 2005	3.25	2.25	Jan 2010	0.50	0.13	Jan 2015	0.75	0.13
Feb	3.50	2.50	Feb	0.75	0.13	Feb	0.75	0.13
Mar	3.75	2.50	Mar	0.75	0.13	Mar	0.75	0.13
Apr	3.75	2.75	April	0.75	0.13	Apr	0.75	0.13
May	4.00	3.00	May	0.75	0.13	May	0.75	0.13
Jun	4.25	3.00	Jun	0.75	0.13	Jun	0.75	0.13
Jul	4.25	3.25	Jul	0.75	0.13	Jul	0.75	0.13
Aug	4.50	3.50	Aug	0.75	0.13	Aug	0.75	0.13
Sep	4.75	3.75	Sep	0.75	0.13	Sep	0.75	0.13
Oct	4.75	3.75	Oct	0.75	0.13	Oct	0.75	0.13
Nov	5.00	4.00	Nov	0.75	0.13	Nov	0.75	0.13
Dec	5.25	4.25	Dec	0.75	0.13	Dec	1.00	0.38

Federal Reserve Discount Rate and Federal Reserve Funds Rate

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate
Jan 2016	1.00	0.38	Jan 2021	0.25	0.09			
Feb	1.00	0.38	Feb	0.25	0.08			
Mar	1.00	0.38	Mar	0.25	0.07			
Apr	1.00	0.38	Apr	0.25	0.07			
May	1.00	0.38	May	0.25	0.06			
Jun	1.00	0.38	Jun	0.25	0.08			
Jul	1.00	0.39	Jul	0.25	0.10			
Aug	1.00	0.40	Aug	0.25	0.09			
Sep	1.00	0.40	Sep	0.25	0.08			
Oct	1.00	0.40	Oct	0.25	0.08			
Nov	1.00	0.41	Nov	0.25	0.08			
Dec	1.25	0.54	Dec	0.25	0.08			
Jan 2017	1.25	0.65	Jan 2022	0.25	0.08			
Feb	1.25	0.66	Feb	0.25	0.08			
Mar	1.50	0.79	Mar	0.25	0.20			
Apr	1.50	0.90	Apr	0.25	0.33			
May	1.50	0.91	May	0.25	0.77			
Jun	1.75	1.04	Jun	0.25	1.21			
July	1.75	1.15	Jul	0.25	1.68			
Aug	1.75	1.16	Aug	0.25	2.33			
Sep	1.75	1.15	Sep	0.25	2.56			
Oct	1.75	1.15	Oct	0.25	3.08			
Nov	1.75	1.16	Nov	0.25	3.78			
Dec	2.00	1.30	Dec	0.25	4.10			
Jan 2018	2.00	1.41	Jan 2023	0.25	4.33			
Feb	2.00	1.42	Feb	0.25	4.57			
Mar	2.25	1.51	Mar	0.25	4.65			
Apr	2.25	1.69	Apr	0.25	4.83			
May	2.25	1.70	May	0.25	5.06			
Jun	2.50	1.82	Jun	0.25	5.08			
Jul	2.50	1.91	Jul	0.25	5.12			
Aug	2.50	1.91	Aug	0.25	5.33			
Sep	2.75	1.95	Sep	0.25	5.33			
Oct	2.75	2.19	Oct	0.25	5.33			
Nov	2.75	2.20	Nov	0.25	5.33			
Dec	3.00	2.27	Dec	0.25	5.33			
Jan 2019	3.00	2.40	Jan 2024	5.50	5.33			
Feb	3.00	2.40	Feb	5.50	5.33			
Mar	3.00	2.41	Mar	5.50	5.33			
Apr	3.00	2.42	Apr	5.50	5.33			
May	3.00	2.39	May	5.50	5.33			
Jun	3.00	2.38	Jun	5.50	5.33			
Jul	3.00	2.40	Jul	5.50	5.33			
Aug	2.75	2.13	Aug	5.50	5.33			
Sept	2.50	2.04	Sep	5.31	5.13			
Oct	2.25	1.83	Oct	5.00	4.83			
Nov	2.25	1.55	Nov	4.81	4.64			
Dec	2.25	1.55	Dec	4.65	4.48			
Jan 2020	2.25	1.55	Jan 2025	4.50	4.33			
Feb	2.25	1.58	Feb	4.50	4.33			
Mar	0.25	0.65	Mar	4.50	4.33			
Apr	0.25	0.05	Apr	4.50	4.33			
May	0.25	0.05	May	4.50	4.33			
Jun	0.25	0.08	Jun	4.50	4.33			
Jul	0.25	0.09	Jul	4.50	4.33			
Aug	0.25	0.10	Aug	4.50	4.33			
Sep	0.25	0.09	Sep	4.40	4.22			
Oct	0.25	0.09	Oct	4.23	4.09			
Nov	0.25	0.09	Nov	4.00	3.88			
Dec	0.25	0.09	Dec	3.84	3.72			

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Federal Reserve Discount Rates and Federal Funds Rates
1980 - 2025



SCHEDULE SJW-d2-2

Evergy Metro, Inc., Evergy Missouri Metro
Case No. ER-2026-0143

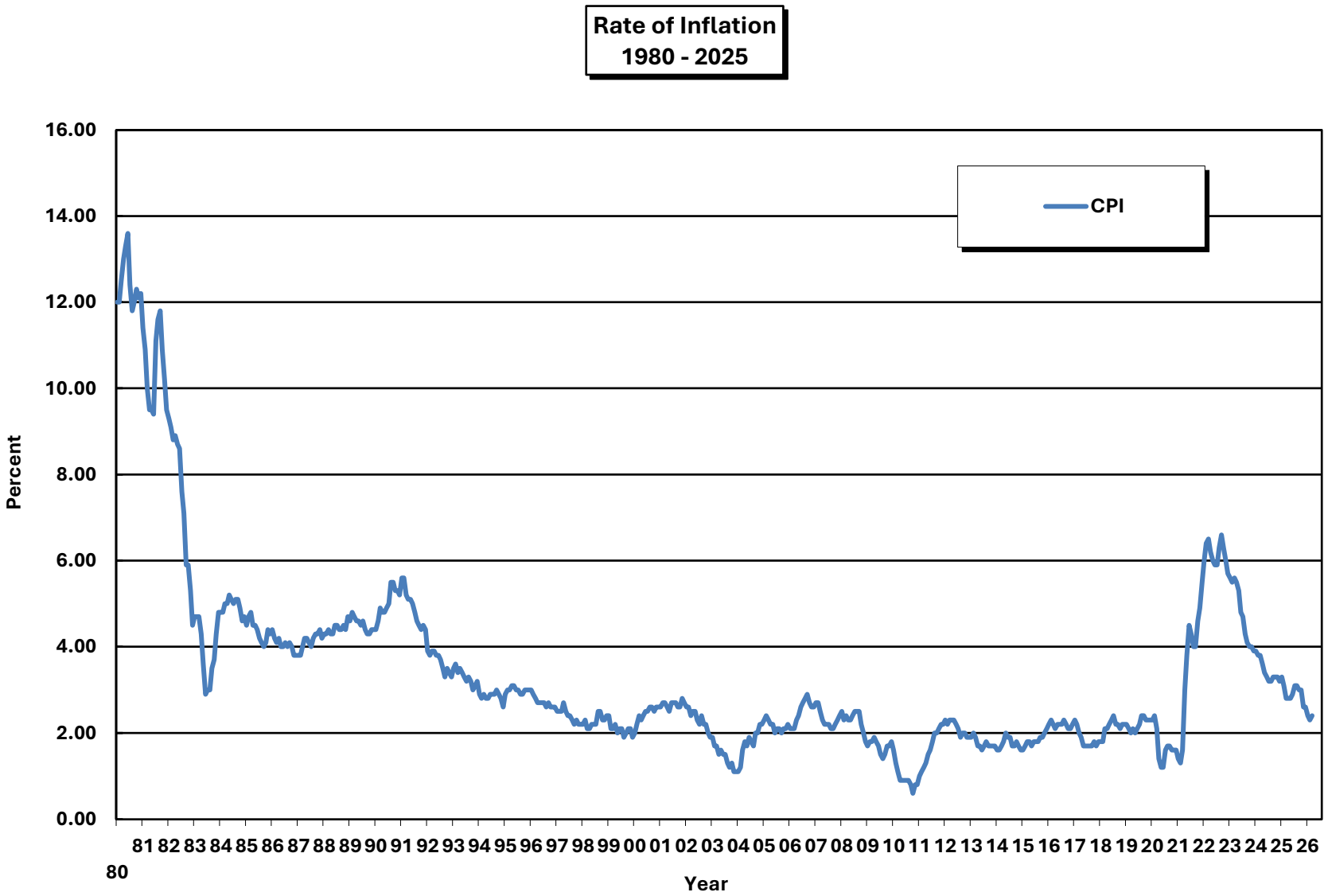
Rate of Inflation

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	12.00	Jan 1987	3.80	Jan 1994	2.90	Jan 2001	2.60	Jan 2008	2.50	Jan 2015	1.60	Jan 2022	6.00
Feb	12.00	Feb	3.80	Feb	2.80	Feb	2.70	Feb	2.30	Feb	1.70	Feb	6.40
Mar	12.50	Mar	4.00	Mar	2.90	Mar	2.70	Mar	2.40	Mar	1.80	Mar	6.50
Apr	13.00	Apr	4.20	Apr	2.80	Apr	2.60	Apr	2.30	Apr	1.80	Apr	6.20
May	13.30	May	4.20	May	2.80	May	2.50	May	2.30	May	1.70	May	6.00
Jun	13.60	Jun	4.10	Jun	2.90	Jun	2.70	Jun	2.40	Jun	1.80	Jun	5.90
Jul	12.40	Jul	4.00	Jul	2.90	Jul	2.70	Jul	2.50	Jul	1.80	Jul	5.90
Aug	11.80	Aug	4.20	Aug	2.90	Aug	2.70	Aug	2.50	Aug	1.80	Aug	6.30
Sep	12.00	Sep	4.30	Sep	3.00	Sep	2.60	Sep	2.50	Sep	1.90	Sep	6.60
Oct	12.30	Oct	4.30	Oct	2.90	Oct	2.60	Oct	2.20	Oct	1.90	Oct	6.30
Nov	12.10	Nov	4.40	Nov	2.80	Nov	2.80	Nov	2.00	Nov	2.00	Nov	6.00
Dec	12.20	Dec	4.20	Dec	2.60	Dec	2.70	Dec	1.80	Dec	2.10	Dec	5.70
Jan 1981	11.40	Jan 1988	4.30	Jan 1995	2.90	Jan 2002	2.60	Jan 2009	1.70	Jan 2016	2.20	Jan 2023	5.60
Feb	10.90	Feb	4.30	Feb	3.00	Feb	2.60	Feb	1.80	Feb	2.30	Feb	5.50
Mar	10.00	Mar	4.40	Mar	3.00	Mar	2.40	Mar	1.80	Mar	2.20	Mar	5.60
Apr	9.50	Apr	4.30	Apr	3.10	Apr	2.50	Apr	1.90	Apr	2.10	Apr	5.50
May	9.50	May	4.30	May	3.10	May	2.50	May	1.80	May	2.20	May	5.30
Jun	9.40	Jun	4.50	Jun	3.00	Jun	2.30	Jun	1.70	Jun	2.20	Jun	4.80
Jul	11.10	Jul	4.50	Jul	3.00	Jul	2.20	Jul	1.50	Jul	2.20	Jul	4.70
Aug	11.60	Aug	4.40	Aug	2.90	Aug	2.40	Aug	1.40	Aug	2.30	Aug	4.30
Sep	11.80	Sep	4.40	Sep	2.90	Sep	2.20	Sep	1.50	Sep	2.20	Sep	4.10
Oct	10.90	Oct	4.50	Oct	3.00	Oct	2.20	Oct	1.70	Oct	2.10	Oct	4.00
Nov	10.20	Nov	4.40	Nov	3.00	Nov	2.00	Nov	1.70	Nov	2.10	Nov	4.00
Dec	9.50	Dec	4.70	Dec	3.00	Dec	1.90	Dec	1.80	Dec	2.20	Dec	3.90
Jan 1982	9.30	Jan 1989	4.60	Jan 1996	3.00	Jan 2003	1.90	Jan 2010	1.60	Jan 2017	2.30	Jan 2024	3.90
Feb	9.10	Feb	4.80	Feb	2.90	Feb	1.70	Feb	1.30	Feb	2.20	Feb	3.80
Mar	8.80	Mar	4.70	Mar	2.80	Mar	1.70	Mar	1.10	Mar	2.00	Mar	3.80
Apr	8.90	Apr	4.60	Apr	2.70	Apr	1.50	April	0.90	Apr	1.90	Apr	3.60
May	8.70	May	4.60	May	2.70	May	1.60	May	0.90	May	1.70	May	3.40
Jun	8.60	Jun	4.50	Jun	2.70	Jun	1.50	Jun	0.90	Jun	1.70	Jun	3.30
Jul	7.60	Jul	4.60	Jul	2.70	Jul	1.50	Jul	0.90	July	1.70	Jul	3.20
Aug	7.10	Aug	4.40	Aug	2.60	Aug	1.30	Aug	0.90	Aug	1.70	Aug	3.20
Sep	5.90	Sep	4.30	Sep	2.70	Sep	1.20	Sep	0.80	Sep	1.70	Sep	3.30
Oct	5.90	Oct	4.30	Oct	2.60	Oct	1.30	Oct	0.60	Oct	1.80	Oct	3.30
Nov	5.30	Nov	4.40	Nov	2.60	Nov	1.10	Nov	0.80	Nov	1.70	Nov	3.30
Dec	4.50	Dec	4.40	Dec	2.60	Dec	1.10	Dec	0.80	Dec	1.80	Dec	3.20
Jan 1983	4.70	Jan 1990	4.40	Jan 1997	2.50	Jan 2004	1.10	Jan 2011	1.00	Jan 2018	1.80	Jan 2025	3.30
Feb	4.70	Feb	4.60	Feb	2.50	Feb	1.20	Feb	1.10	Feb	1.80	Feb	3.10
Mar	4.70	Mar	4.90	Mar	2.50	Mar	1.60	Mar	1.20	Mar	2.10	Mar	2.80
Apr	4.30	Apr	4.80	Apr	2.70	Apr	1.80	Apr	1.30	Apr	2.10	Apr	2.80
May	3.60	May	4.80	May	2.50	May	1.70	May	1.50	May	2.20	May	2.80
Jun	2.90	Jun	4.90	Jun	2.40	Jun	1.90	Jun	1.60	Jun	2.30	Jun	2.90
Jul	3.00	Jul	5.00	Jul	2.40	Jul	1.80	Jul	1.80	Jul	2.40	Jul	3.10
Aug	3.00	Aug	5.50	Aug	2.30	Aug	1.70	Aug	2.00	Aug	2.20	Aug	3.10
Sep	3.50	Sep	5.50	Sep	2.20	Sep	2.00	Sep	2.00	Sep	2.20	Sep	3.00
Oct	3.70	Oct	5.30	Oct	2.30	Oct	2.00	Oct	2.10	Oct	2.10	Oct	NA
Nov	4.30	Nov	5.30	Nov	2.20	Nov	2.20	Nov	2.20	Nov	2.20	Nov	2.60
Dec	4.80	Dec	5.20	Dec	2.20	Dec	2.20	Dec	2.20	Dec	2.20	Dec	2.60
Jan 1984	4.80	Jan 1991	5.60	Jan 1998	2.20	Jan 2005	2.30	Jan 2012	2.30	Jan 2019	2.20		
Feb	4.80	Feb	5.60	Feb	2.30	Feb	2.40	Feb	2.20	Feb	2.10		
Mar	5.00	Mar	5.20	Mar	2.10	Mar	2.30	Mar	2.30	Mar	2.00		
Apr	5.00	Apr	5.10	Apr	2.10	Apr	2.20	Apr	2.30	Apr	2.10		
May	5.20	May	5.10	May	2.20	May	2.20	May	2.30	May	2.00		
Jun	5.10	Jun	5.00	Jun	2.20	Jun	2.00	Jun	2.20	Jun	2.10		
Jul	5.00	Jul	4.80	Jul	2.20	Jul	2.10	Jul	2.10	Jul	2.20		
Aug	5.10	Aug	4.60	Aug	2.50	Aug	2.10	Aug	1.90	Aug	2.40		
Sep	5.10	Sep	4.50	Sep	2.50	Sep	2.00	Sep	2.00	Sept	2.40		
Oct	4.90	Oct	4.40	Oct	2.30	Oct	2.10	Oct	2.00	Oct	2.30		
Nov	4.60	Nov	4.50	Nov	2.30	Nov	2.10	Nov	1.90	Nov	2.30		
Dec	4.70	Dec	4.40	Dec	2.40	Dec	2.20	Dec	1.90	Dec	2.30		
Jan 1985	4.50	Jan 1992	3.90	Jan 1999	2.40	Jan 2006	2.10	Jan 2013	1.90	Jan 2020	2.30		
Feb	4.70	Feb	3.80	Feb	2.10	Feb	2.10	Feb	2.00	Feb	2.40		
Mar	4.80	Mar	3.90	Mar	2.10	Mar	2.10	Mar	1.90	Mar	2.10		
Apr	4.50	Apr	3.90	Apr	2.20	Apr	2.30	Apr	1.70	Apr	1.40		
May	4.50	May	3.80	May	2.00	May	2.40	May	1.70	May	1.20		
Jun	4.40	Jun	3.80	Jun	2.10	June	2.60	Jun	1.60	Jun	1.20		
Jul	4.20	Jul	3.70	Jul	2.10	July	2.70	Jul	1.70	Jul	1.60		
Aug	4.10	Aug	3.50	Aug	1.90	Aug	2.80	Aug	1.80	Aug	1.70		
Sep	4.00	Sep	3.30	Sep	2.00	Sep	2.90	Sept	1.70	Sep	1.70		
Oct	4.10	Oct	3.50	Oct	2.10	Oct	2.70	Oct	1.70	Oct	1.60		
Nov	4.40	Nov	3.40	Nov	2.10	Nov	2.60	Nov	1.70	Nov	1.60		
Dec	4.30	Dec	3.30	Dec	1.90	Dec	2.60	Dec	1.70	Dec	1.60		
Jan 1986	4.40	Jan 1993	3.50	Jan 2000	2.00	Jan 2007	2.70	Jan 2014	1.60	Jan 2021	1.40		
Feb	4.20	Feb	3.60	Feb	2.20	Feb	2.70	Feb	1.60	Feb	1.30		
Mar	4.10	Mar	3.40	Mar	2.40	Mar	2.50	Mar	1.70	Mar	1.60		
Apr	4.20	Apr	3.50	Apr	2.30	Apr	2.30	Apr	1.80	Apr	3.00		
May	4.00	May	3.40	May	2.40	May	2.20	May	2.00	May	3.80		
Jun	4.00	Jun	3.30	Jun	2.50	Jun	2.20	Jun	1.90	Jun	4.50		
Jul	4.10	Jul	3.20	Jul	2.50	Jul	2.20	Jul	1.90	Jul	4.30		
Aug	4.00	Aug	3.30	Aug	2.60	Aug	2.10	Aug	1.70	Aug	4.00		
Sep	4.10	Sep	3.20	Sep	2.60	Sep	2.10	Sep	1.70	Sep	4.00		
Oct	4.00	Oct	3.00	Oct	2.50	Oct	2.20	Oct	1.80	Oct	4.60		
Nov	3.80	Nov	3.10	Nov	2.60	Nov	2.30	Nov	1.70	Nov	4.90		
Dec	3.80	Dec	3.20	Dec	2.60	Dec	2.40	Dec	1.60	Dec	5.50		

Source: U.S. Dept. of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers less food and energy,
Change for 12-Month Period, Bureau of Labor Statistics,
https://www.bls.gov/cpi/data.htm

SCHEDULE SJW-d3-1

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143



SCHEDULE SJW-d3-2

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Average Yields on Moody's Public Utility Bonds

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	12.12	Jan 1987	8.77	Jan 1994	7.31	Jan 2001	7.76	Jan 2008	6.08	Jan 2015	3.83	Jan 2022	3.46
Feb	13.48	Feb	8.81	Feb	7.44	Feb	7.69	Feb	6.28	Feb	3.91	Feb	3.73
Mar	14.33	Mar	8.75	Mar	7.83	Mar	7.59	Mar	6.29	Mar	3.97	Mar	4.02
Apr	13.50	Apr	9.30	Apr	8.20	Apr	7.81	Apr	6.36	Apr	3.96	Apr	4.34
May	12.17	May	9.82	May	8.32	May	7.88	May	6.38	May	4.38	May	4.79
Jun	11.87	Jun	9.87	Jun	8.31	Jun	7.75	Jun	6.50	Jun	4.60	Jun	4.91
Jul	12.12	Jul	10.01	Jul	8.47	Jul	7.71	Jul	6.50	Jul	4.63	Jul	4.84
Aug	12.82	Aug	10.33	Aug	8.41	Aug	7.57	Aug	6.48	Aug	4.54	Aug	4.80
Sep	13.29	Sep	11.00	Sep	8.65	Sep	7.73	Sep	6.59	Sep	4.68	Sep	5.33
Oct	13.53	Oct	11.32	Oct	8.88	Oct	7.64	Oct	7.70	Oct	4.63	Oct	5.91
Nov	14.07	Nov	10.82	Nov	9.00	Nov	7.61	Nov	7.80	Nov	4.73	Nov	5.78
Dec	14.48	Dec	10.99	Dec	8.79	Dec	7.86	Dec	6.87	Dec	4.69	Dec	5.30
Jan 1981	14.22	Jan 1988	10.75	Jan 1995	8.77	Jan 2002	7.69	Jan 2009	6.77	Jan 2016	4.62	Jan 2023	5.23
Feb	14.84	Feb	10.11	Feb	8.56	Feb	7.62	Feb	6.72	Feb	4.44	Feb	5.32
Mar	14.86	Mar	10.11	Mar	8.41	Mar	7.83	Mar	6.85	Mar	4.40	Mar	5.44
Apr	15.32	Apr	10.53	Apr	8.30	Apr	7.74	Apr	6.90	Apr	4.16	Apr	5.20
May	15.84	May	10.75	May	7.93	May	7.76	May	6.83	May	4.06	May	5.44
Jun	15.27	Jun	10.71	Jun	7.62	Jun	7.67	Jun	6.54	Jun	3.93	Jun	5.46
Jul	15.87	Jul	10.96	Jul	7.73	Jul	7.54	Jul	6.15	Jul	3.70	Jul	5.48
Aug	16.33	Aug	11.09	Aug	7.86	Aug	7.34	Aug	5.80	Aug	3.73	Aug	5.77
Sep	16.89	Sep	10.56	Sep	7.62	Sep	7.23	Sep	5.60	Sep	3.80	Sep	5.91
Oct	16.76	Oct	9.92	Oct	7.46	Oct	7.43	Oct	5.64	Oct	3.90	Oct	6.38
Nov	15.50	Nov	9.89	Nov	7.40	Nov	7.31	Nov	5.71	Nov	4.21	Nov	5.99
Dec	15.77	Dec	10.02	Dec	7.21	Dec	7.20	Dec	5.86	Dec	4.39	Dec	5.46
Jan 1982	16.73	Jan 1989	10.02	Jan 1996	7.20	Jan 2003	7.13	Jan 2010	5.83	Jan 2017	4.24	Jan 2024	5.51
Feb	16.72	Feb	10.02	Feb	7.37	Feb	6.92	Feb	5.94	Feb	4.25	Feb	5.59
Mar	16.07	Mar	10.16	Mar	7.72	Mar	6.80	Mar	5.90	Mar	4.30	Mar	5.59
Apr	15.82	Apr	10.14	Apr	7.88	Apr	6.68	April	5.87	Apr	4.19	Apr	5.83
May	15.60	May	9.92	May	7.99	May	6.35	May	5.59	May	4.19	May	5.78
Jun	16.18	Jun	9.49	Jun	8.07	Jun	6.21	Jun	5.62	Jun	4.01	Jun	5.65
Jul	16.04	Jul	9.34	Jul	8.02	Jul	6.54	Jul	5.41	July	4.06	Jul	5.68
Aug	15.22	Aug	9.37	Aug	7.84	Aug	6.78	Aug	5.10	Aug	3.92	Aug	5.42
Sep	14.56	Sep	9.43	Sep	8.01	Sep	6.58	Sep	5.10	Sep	3.93	Sep	5.23
Oct	13.88	Oct	9.37	Oct	7.76	Oct	6.50	Oct	5.20	Oct	3.97	Oct	5.44
Nov	13.58	Nov	9.33	Nov	7.48	Nov	6.44	Nov	5.45	Nov	3.88	Nov	5.58
Dec	13.55	Dec	9.31	Dec	7.58	Dec	6.35	Dec	5.64	Dec	3.85	Dec	5.60
Jan 1983	13.46	Jan 1990	9.44	Jan 1997	7.79	Jan 2004	6.23	Jan 2011	5.64	Jan 2018	3.91	Jan 2025	5.89
Feb	13.60	Feb	9.66	Feb	7.68	Feb	6.17	Feb	5.73	Feb	4.15	Feb	5.74
Mar	13.28	Mar	9.75	Mar	7.92	Mar	6.01	Mar	5.62	Mar	4.21	Mar	5.75
Apr	13.03	Apr	9.87	Apr	8.08	Apr	6.38	Apr	5.62	Apr	4.24	Apr	5.93
May	13.00	May	9.89	May	7.94	May	6.68	May	5.38	May	4.36	May	6.06
Jun	13.17	Jun	9.69	Jun	7.77	Jun	6.53	Jun	5.32	Jun	4.37	Jun	5.95
Jul	13.28	Jul	9.66	Jul	7.52	Jul	6.34	Jul	5.34	Jul	4.35	Jul	5.90
Aug	13.50	Aug	9.84	Aug	7.57	Aug	6.18	Aug	4.78	Aug	4.33	Aug	5.79
Sep	13.35	Sep	10.01	Sep	7.50	Sep	6.01	Sep	4.61	Sep	4.41	Sep	5.63
Oct	13.19	Oct	9.94	Oct	7.37	Oct	5.95	Oct	4.66	Oct	4.56	Oct	5.53
Nov	13.33	Nov	9.76	Nov	7.24	Nov	5.97	Nov	4.37	Nov	4.65	Nov	5.65
Dec	13.48	Dec	9.57	Dec	7.16	Dec	5.93	Dec	4.47	Dec	4.51	Dec	5.71
Jan 1984	13.40	Jan 1991	9.56	Jan 1998	7.03	Jan 2005	5.80	Jan 2012	4.48	Jan 2019	4.48		
Feb	13.50	Feb	9.31	Feb	7.09	Feb	5.64	Feb	4.47	Feb	4.35		
Mar	14.03	Mar	9.39	Mar	7.13	Mar	5.86	Mar	4.59	Mar	4.26		
Apr	14.30	Apr	9.30	Apr	7.12	Apr	5.72	Apr	4.54	Apr	4.18		
May	14.95	May	9.29	May	7.11	May	5.60	May	4.36	May	4.10		
Jun	15.16	Jun	9.44	Jun	6.99	Jun	5.39	Jun	4.26	Jun	3.93		
Jul	14.92	Jul	9.40	Jul	6.99	Jul	5.50	Jul	4.12	Jul	3.79		
Aug	14.29	Aug	9.16	Aug	6.96	Aug	5.51	Aug	4.18	Aug	3.36		
Sep	14.04	Sep	9.03	Sep	6.88	Sep	5.54	Sep	4.17	Sept	3.44		
Oct	13.68	Oct	8.99	Oct	6.88	Oct	5.79	Oct	4.04	Oct	3.45		
Nov	13.15	Nov	8.93	Nov	6.96	Nov	5.88	Nov	3.95	Nov	3.48		
Dec	12.96	Dec	8.76	Dec	6.84	Dec	5.83	Dec	4.10	Dec	3.45		
Jan 1985	12.88	Jan 1992	8.67	Jan 1999	6.87	Jan 2006	5.77	Jan 2013	4.24	Jan 2020	3.34		
Feb	13.00	Feb	8.77	Feb	7.00	Feb	5.83	Feb	4.29	Feb	3.16		
Mar	13.66	Mar	8.84	Mar	7.18	Mar	5.98	Mar	4.29	Mar	3.59		
Apr	13.42	Apr	8.79	Apr	7.16	Apr	6.28	Apr	4.08	Apr	3.31		
May	12.89	May	8.72	May	7.42	May	6.39	May	4.24	May	3.22		
Jun	11.91	Jun	8.64	Jun	7.70	June	6.39	Jun	4.63	Jun	3.10		
Jul	11.88	Jul	8.46	Jul	7.66	July	6.37	Jul	4.78	Jul	2.77		
Aug	11.93	Aug	8.34	Aug	7.86	Aug	6.20	Aug	4.85	Aug	2.76		
Sep	11.95	Sep	8.32	Sep	7.87	Sep	6.03	Sept	4.90	Sep	2.88		
Oct	11.84	Oct	8.44	Oct	8.02	Oct	6.01	Oct	4.78	Oct	2.98		
Nov	11.33	Nov	8.53	Nov	7.86	Nov	5.82	Nov	4.86	Nov	2.89		
Dec	10.82	Dec	8.36	Dec	8.04	Dec	5.83	Dec	4.88	Dec	2.80		
Jan 1986	10.66	Jan 1993	8.23	Jan 2000	8.22	Jan 2007	5.96	Jan 2014	4.72	Jan 2021	2.94		
Feb	10.16	Feb	8.00	Feb	8.10	Feb	5.91	Feb	4.64	Feb	3.13		
Mar	9.33	Mar	7.85	Mar	8.14	Mar	5.87	Mar	4.64	Mar	3.48		
Apr	9.02	Apr	7.76	Apr	8.14	Apr	6.01	Apr	4.52	Apr	3.33		
May	9.52	May	7.78	May	8.56	May	6.03	May	4.37	May	3.36		
Jun	9.51	Jun	7.68	Jun	8.22	Jun	6.34	Jun	4.42	Jun	3.19		
Jul	9.19	Jul	7.53	Jul	8.17	Jul	6.28	Jul	4.35	Jul	2.99		
Aug	9.15	Aug	7.21	Aug	8.06	Aug	6.28	Aug	4.28	Aug	2.99		
Sep	9.42	Sep	7.01	Sep	8.15	Sep	6.24	Sep	4.40	Sep	3.00		
Oct	9.39	Oct	6.99	Oct	8.08	Oct	6.17	Oct	4.24	Oct	3.13		
Nov	9.15	Nov	7.30	Nov	8.03	Nov	6.04	Nov	4.29	Nov	3.06		
Dec	8.96	Dec	7.33	Dec	7.79	Dec	6.23	Dec	4.18	Dec	3.17		

Source:
https://fred.stlouisfed.org/series/DBAA

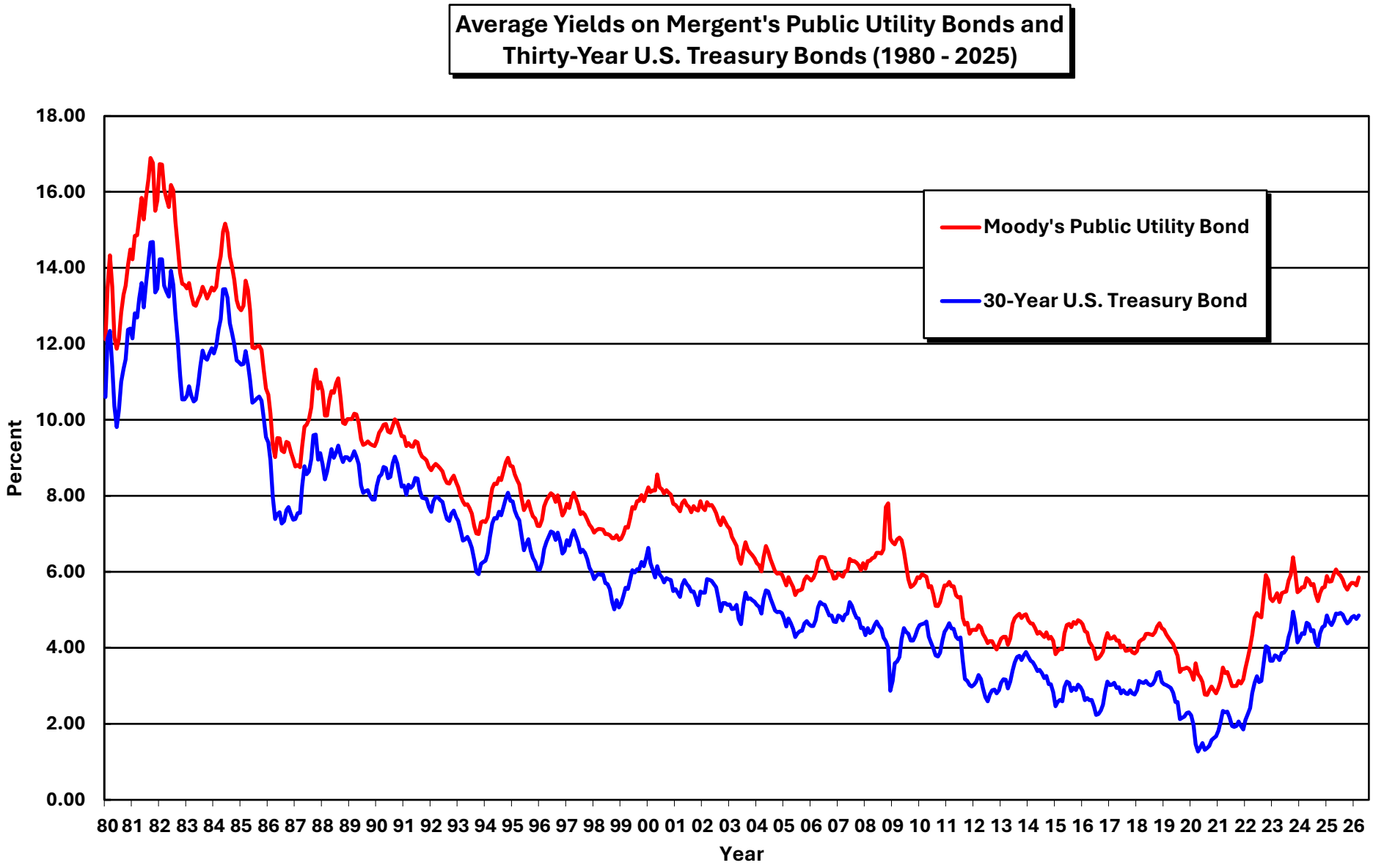
Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Average Yields on Thirty-Year U.S. Treasury Bonds

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	10.60	Jan 1987	7.39	Jan 1994	6.29	Jan 2001	5.54	Jan 2008	4.33	Jan 2015	2.46	Jan 2022	2.10
Feb	12.13	Feb	7.54	Feb	6.49	Feb	5.45	Feb	4.52	Feb	2.57	Feb	2.25
Mar	12.34	Mar	7.55	Mar	6.91	Mar	5.34	Mar	4.39	Mar	2.63	Mar	2.41
Apr	11.40	Apr	8.25	Apr	7.27	Apr	5.65	Apr	4.44	Apr	2.59	Apr	2.81
May	10.36	May	8.78	May	7.41	May	5.78	May	4.60	May	2.96	May	3.07
Jun	9.81	Jun	8.57	Jun	7.40	Jun	5.67	Jun	4.69	Jun	3.11	Jun	3.25
Jul	10.24	Jul	8.64	Jul	7.58	Jul	5.61	Jul	4.57	Jul	3.07	Jul	3.10
Aug	11.00	Aug	8.97	Aug	7.49	Aug	5.48	Aug	4.50	Aug	2.86	Aug	3.13
Sep	11.34	Sep	9.59	Sep	7.71	Sep	5.48	Sep	4.27	Sep	2.95	Sep	3.56
Oct	11.59	Oct	9.61	Oct	7.94	Oct	5.32	Oct	4.17	Oct	2.89	Oct	4.04
Nov	12.37	Nov	8.95	Nov	8.08	Nov	5.12	Nov	4.00	Nov	3.03	Nov	4.00
Dec	12.40	Dec	9.12	Dec	7.87	Dec	5.48	Dec	2.87	Dec	2.97	Dec	3.66
Jan 1981	12.14	Jan 1988	8.83	Jan 1995	7.85	Jan 2002	5.45	Jan 2009	3.13	Jan 2016	2.86	Jan 2023	3.66
Feb	12.80	Feb	8.43	Feb	7.61	Feb	5.45	Feb	3.59	Feb	2.62	Feb	3.80
Mar	12.69	Mar	8.63	Mar	7.45	Mar	5.81	Mar	3.64	Mar	2.68	Mar	3.77
Apr	13.20	Apr	8.95	Apr	7.36	Apr	5.79	Apr	3.76	Apr	2.62	Apr	3.68
May	13.60	May	9.23	May	6.95	May	5.76	May	4.23	May	2.63	May	3.86
Jun	12.96	Jun	9.00	Jun	6.57	Jun	5.68	Jun	4.52	Jun	2.45	Jun	3.87
Jul	13.59	Jul	9.14	Jul	6.72	Jul	5.59	Jul	4.41	Jul	2.23	Jul	3.96
Aug	14.17	Aug	9.32	Aug	6.86	Aug	5.28	Aug	4.37	Aug	2.26	Aug	4.28
Sep	14.67	Sep	9.06	Sep	6.55	Sep	4.96	Sep	4.19	Sep	2.35	Sep	4.47
Oct	14.68	Oct	8.89	Oct	6.37	Oct	5.18	Oct	4.19	Oct	2.50	Oct	4.95
Nov	13.35	Nov	9.02	Nov	6.26	Nov	5.18	Nov	4.31	Nov	2.86	Nov	4.66
Dec	13.45	Dec	9.01	Dec	6.06	Dec	5.13	Dec	4.49	Dec	3.11	Dec	4.14
Jan 1982	14.22	Jan 1989	8.93	Jan 1996	6.05	Jan 2003	5.14	Jan 2010	4.60	Jan 2017	3.02	Jan 2024	4.26
Feb	14.22	Feb	9.01	Feb	6.24	Feb	5.02	Feb	4.62	Feb	3.03	Feb	4.38
Mar	13.53	Mar	9.17	Mar	6.60	Mar	5.03	Mar	4.64	Mar	3.08	Mar	4.36
Apr	13.37	Apr	9.03	Apr	6.79	Apr	5.13	April	4.69	Apr	2.94	Apr	4.66
May	13.24	May	8.83	May	6.93	May	4.76	May	4.29	May	2.96	May	4.62
Jun	13.92	Jun	8.27	Jun	7.06	Jun	4.62	Jun	4.13	Jun	2.80	Jun	4.44
Jul	13.55	Jul	8.08	Jul	7.03	Jul	5.13	Jul	3.99	July	2.88	Jul	4.46
Aug	12.77	Aug	8.12	Aug	6.84	Aug	5.45	Aug	3.80	Aug	2.80	Aug	4.15
Sep	12.07	Sep	8.15	Sep	7.03	Sep	5.28	Sep	3.77	Sep	2.78	Sep	4.04
Oct	11.17	Oct	8.00	Oct	6.81	Oct	5.30	Oct	3.87	Oct	2.88	Oct	4.38
Nov	10.54	Nov	7.90	Nov	6.48	Nov	5.25	Nov	4.19	Nov	2.80	Nov	4.54
Dec	10.54	Dec	7.90	Dec	6.55	Dec	5.21	Dec	4.42	Dec	2.77	Dec	4.58
Jan 1983	10.63	Jan 1990	8.26	Jan 1997	6.83	Jan 2004	5.13	Jan 2011	4.52	Jan 2018	2.88	Jan 2025	4.85
Feb	10.88	Feb	8.50	Feb	6.69	Feb	5.08	Feb	4.65	Feb	3.13	Feb	4.68
Mar	10.63	Mar	8.56	Mar	6.93	Mar	4.90	Mar	4.51	Mar	3.09	Mar	4.60
Apr	10.48	Apr	8.76	Apr	7.09	Apr	5.28	Apr	4.50	Apr	3.07	Apr	4.71
May	10.53	May	8.73	May	6.94	May	5.51	May	4.29	May	3.13	May	4.90
Jun	10.93	Jun	8.46	Jun	6.77	Jun	5.48	Jun	4.23	Jun	3.05	Jun	4.89
Jul	11.40	Jul	8.50	Jul	6.51	Jul	5.31	Jul	4.27	Jul	3.01	Jul	4.92
Aug	11.82	Aug	8.86	Aug	6.58	Aug	5.15	Aug	3.65	Aug	3.04	Aug	4.87
Sep	11.63	Sep	9.03	Sep	6.50	Sep	4.98	Sep	3.18	Sep	3.15	Sep	4.74
Oct	11.58	Oct	8.86	Oct	6.33	Oct	4.94	Oct	3.13	Oct	3.34	Oct	4.64
Nov	11.75	Nov	8.54	Nov	6.11	Nov	4.95	Nov	3.02	Nov	3.36	Nov	4.70
Dec	11.88	Dec	8.24	Dec	5.99	Dec	4.91	Dec	2.98	Dec	3.10	Dec	4.80
Jan 1984	11.75	Jan 1991	8.27	Jan 1998	5.81	Jan 2005	4.77	Jan 2012	3.03	Jan 2019	3.04		
Feb	11.95	Feb	8.03	Feb	5.89	Feb	4.56	Feb	3.11	Feb	3.02		
Mar	12.38	Mar	8.29	Mar	5.95	Mar	4.77	Mar	3.28	Mar	2.98		
Apr	12.65	Apr	8.21	Apr	5.92	Apr	4.65	Apr	3.18	Apr	2.94		
May	13.43	May	8.27	May	5.93	May	4.49	May	2.93	May	2.82		
Jun	13.44	Jun	8.47	Jun	5.70	Jun	4.28	Jun	2.70	Jun	2.57		
Jul	13.21	Jul	8.45	Jul	5.68	Jul	4.38	Jul	2.59	Jul	2.57		
Aug	12.54	Aug	8.14	Aug	5.54	Aug	4.44	Aug	2.77	Aug	2.12		
Sep	12.29	Sep	7.95	Sep	5.20	Sep	4.45	Sep	2.88	Sept	2.16		
Oct	11.98	Oct	7.93	Oct	5.01	Oct	4.64	Oct	2.90	Oct	2.19		
Nov	11.56	Nov	7.92	Nov	5.25	Nov	4.70	Nov	2.80	Nov	2.28		
Dec	11.52	Dec	7.70	Dec	5.06	Dec	4.62	Dec	2.88	Dec	2.30		
Jan 1985	11.45	Jan 1992	7.58	Jan 1999	5.16	Jan 2006	4.57	Jan 2013	3.08	Jan 2020	2.22		
Feb	11.47	Feb	7.85	Feb	5.37	Feb	4.57	Feb	3.17	Feb	1.97		
Mar	11.81	Mar	7.97	Mar	5.58	Mar	4.73	Mar	3.16	Mar	1.46		
Apr	11.47	Apr	7.96	Apr	5.55	Apr	5.06	Apr	2.93	Apr	1.27		
May	11.05	May	7.89	May	5.81	May	5.20	May	3.11	May	1.38		
Jun	10.45	Jun	7.84	Jun	6.04	June	5.15	Jun	3.40	Jun	1.49		
Jul	10.50	Jul	7.60	Jul	5.98	July	5.13	Jul	3.61	Jul	1.31		
Aug	10.56	Aug	7.39	Aug	6.07	Aug	5.00	Aug	3.76	Aug	1.36		
Sep	10.61	Sep 1992	7.34	Sep	6.07	Sep	4.85	Sept	3.79	Sep	1.42		
Oct	10.50	Oct	7.53	Oct	6.26	Oct	4.85	Oct	3.68	Oct	1.57		
Nov	10.06	Nov	7.61	Nov	6.15	Nov	4.69	Nov	3.80	Nov	1.62		
Dec	9.54	Dec	7.44	Dec	6.35	Dec	4.68	Dec	3.89	Dec	1.67		
Jan 1986	9.40	Jan 1993	7.34	Jan 2000	6.63	Jan 2007	4.85	Jan 2014	3.77	Jan 2021	1.82		
Feb	8.93	Feb	7.09	Feb	6.23	Feb	4.82	Feb	3.66	Feb	2.04		
Mar	7.96	Mar	6.82	Mar	6.05	Mar	4.72	Mar	3.62	Mar	2.34		
Apr	7.39	Apr	6.85	Apr	5.85	Apr	4.87	Apr	3.52	Apr	2.30		
May	7.52	May	6.92	May	6.15	May	4.90	May	3.39	May	2.32		
Jun	7.57	Jun	6.81	Jun	5.93	Jun	5.20	Jun	3.42	Jun	2.16		
Jul	7.27	Jul	6.63	Jul	5.85	Jul	5.11	Jul	3.33	Jul	1.94		
Aug	7.33	Aug	6.32	Aug	5.72	Aug	4.93	Aug	3.20	Aug	1.92		
Sep	7.62	Sep	6.00	Sep	5.83	Sep	4.79	Sep	3.26	Sep	1.94		
Oct	7.70	Oct	5.94	Oct	5.80	Oct	4.77	Oct	3.04	Oct	2.06		
Nov	7.52	Nov	6.21	Nov	5.78	Nov	4.52	Nov	3.04	Nov	1.94		
Dec	7.37	Dec	6.25	Dec	5.49	Dec	4.53	Dec	2.83	Dec	1.85		

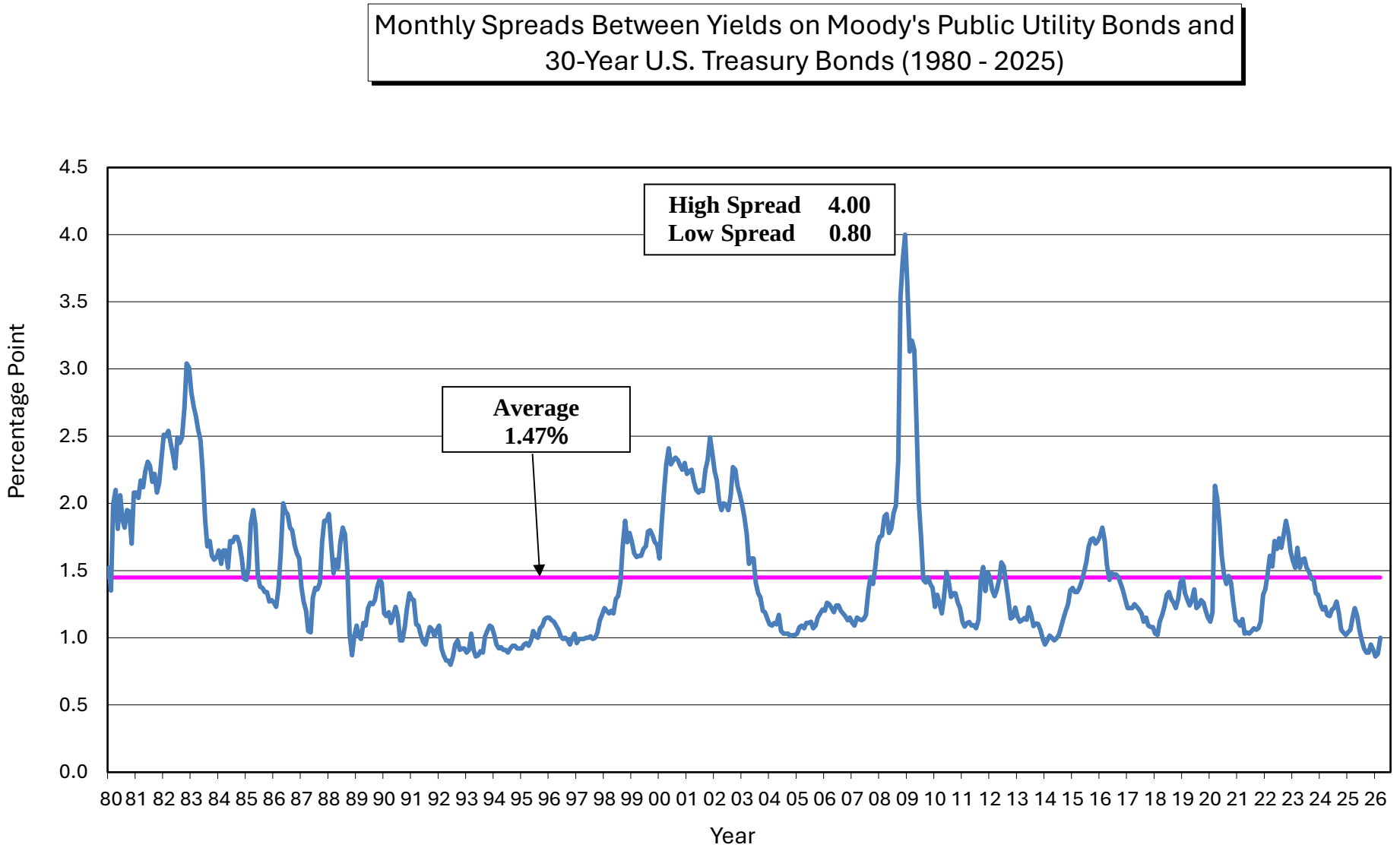
Sources:
http://research.stlouisfed.org/fred2/data/GS30.txt

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143



SCHEDULE SJW-d4-3

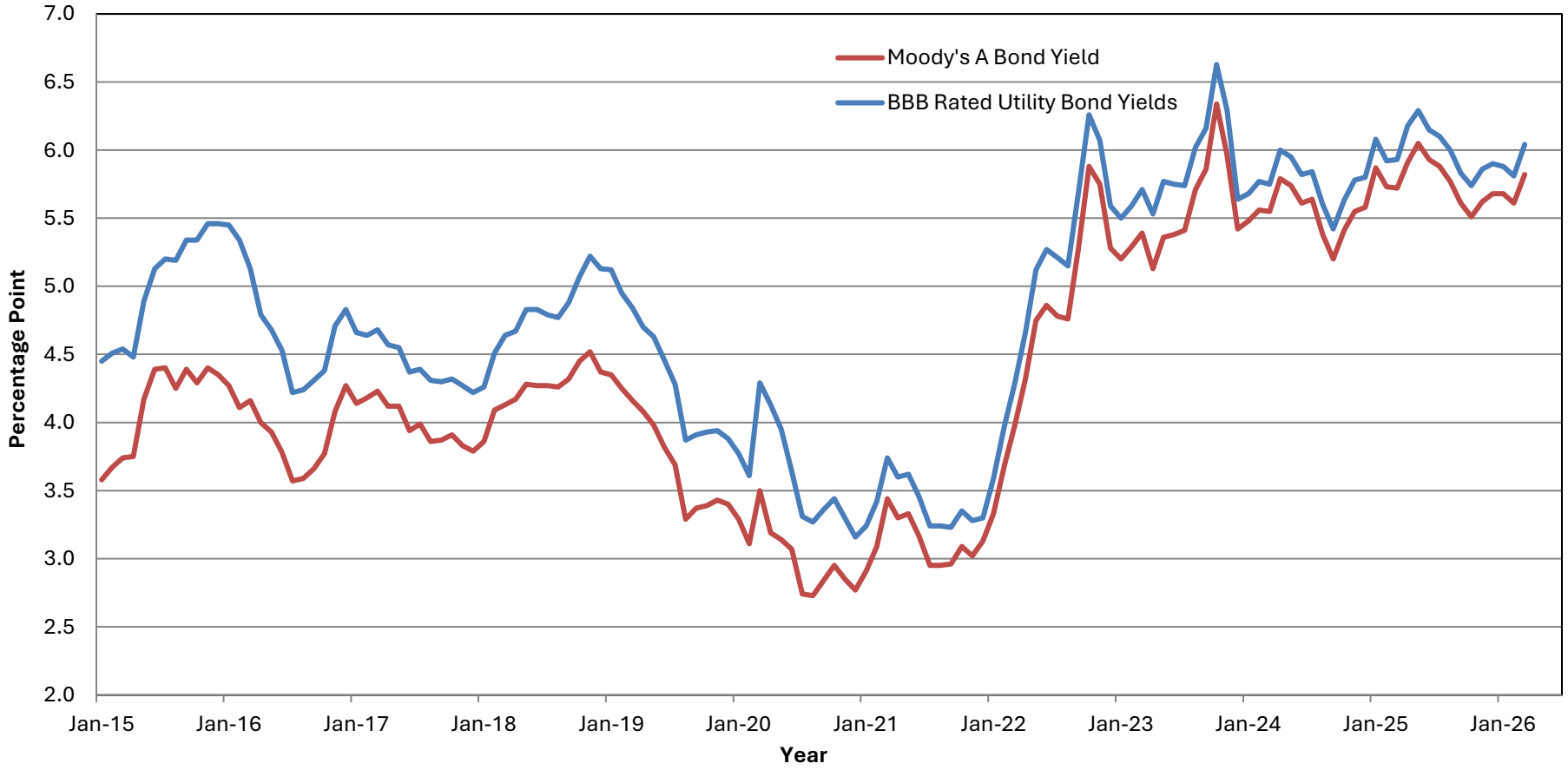
Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143



SCHEDULE SJW-d4-4

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Average Yields on A and BBB rated Utility Bonds (2015- 2025)



SCHEDULE SJW-d4-5

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Historical Consolidated Capital Structures for
Evergy, Inc.
(Dollars in Millions)

Capital Components	December 31, 2020	December 31, 2021	December 31, 2022	December 31, 2023
Common Equity	$8,739.0	$9,241.7	$9,483.7	$9,663.1
Preferred Stock	$0.0	$0.0	$0.0	$0.0
Long-Term Debt	$9,251.8	$9,297.9	$9,905.7	$11,053.3
Total Capitalization	$17,990.8	$18,539.6	$19,389.4	$20,716.4

Capital Components	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024
Common Equity	$9,639.2	$9,703.5	$100,250.8	$9,955.0
Preferred Stock	$0.0	$0.0	$0.0	$0.0
Long-Term Debt	$11,658.4	$11,954.6	$11,571.1	$11,809.2
Total Capitalization	$21,297.6	$21,658.1	$111,821.9	$21,764.2

Capital Components	March 31, 2025	June 30, 2025	September 30, 2025	December 31, 2025
Common Equity	$9,930.6	$9,958.9	$10,289.0	$10,221.3
Preferred Stock	$0.0	$0.0	$0.0	$0.0
Long-Term Debt	$12,405.5	$12,405.5	$12,446.3	$13,039.2
Total Capitalization	$22,336.0	$22,364.3	$22,735.3	$23,260.4

Historical Consolidated Capital Structures for
Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro
(Dollars in Millions)

Capital Components	December 31, 2020	December 31, 2021	December 31, 2022	December 31, 2023
Common Equity	$2,758.9	$3,022.5	$3,186.3	$3,193.0
Preferred Stock	$0.0	$0.0	$0.0	$0.0
Long-Term Debt	$2,949.4	$2,949.4	$2,547.1	$2,924.4
Total Capitalization	$5,708.3	$5,971.9	$5,733.4	$6,117.4

Capital Components	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024
Common Equity	$3,225.7	$3,300.3	$3,408.5	$3,376.4
Preferred Stock	$0.0	$0.0	$0.0	$0.0
Long-Term Debt	$3,217.6	$3,222.5	$2,872.8	$2,873.4
Total Capitalization	$6,443.4	$6,522.7	$6,281.4	$6,249.8

Capital Components	March 31, 2025	June 30, 2025	September 30, 2025	December 31, 2025
Common Equity	$3,363.2	$3,396.9	$3,548.6	$3,456.6
Preferred Stock	$0.0	$0.0	$0.0	$0.0
Long-Term Debt	$2,874.0	$2,874.6	$3,271.2	$3,271.4
Total Capitalization	$6,237.2	$6,271.6	$6,819.8	$6,728.0

Sources:

Form 10-Q, 10-K.

Staff Data Request No. 0107.

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Historical Consolidated Capital Structures for Evergy, Inc.

(Dollars in Millions)

Capital Components	December 31, 2020	December 31, 2021	December 31, 2022	December 31, 2023
Common Equity	48.57%	49.85%	48.91%	46.64%
Preferred Stock	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	51.43%	50.15%	51.09%	53.36%
Total Capitalization	100.00%	100.00%	100.00%	100.00%

Capital Components	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024
Common Equity	45.26%	44.80%	89.65%	45.74%
Preferred Stock	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	54.74%	55.20%	10.35%	54.26%
Total Capitalization	100.00%	100.00%	100.00%	100.00%

Capital Components	March 31, 2025	June 30, 2025	September 30, 2025	December 31, 2025
Common Equity	44.46%	44.53%	45.26%	43.94%
Preferred Stock	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	55.54%	55.47%	54.74%	56.06%
Total Capitalization	100.00%	100.00%	100.00%	100.00%

Historical Consolidated Capital Structures for Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro

(Dollars in Millions)

Capital Components	December 31, 2020	December 31, 2021	December 31, 2022	December 31, 2023
Common Equity	48.33%	50.61%	55.57%	52.20%
Preferred Stock	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	51.67%	49.39%	44.43%	47.80%
Total Capitalization	100.00%	100.00%	100.00%	100.00%

Capital Components	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024
Common Equity	50.06%	50.60%	54.26%	54.02%
Preferred Stock	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	49.94%	49.40%	45.74%	45.98%
Total Capitalization	100.00%	100.00%	100.00%	100.00%

Capital Components	March 31, 2025	June 30, 2025	September 30, 2025	December 31, 2025
Common Equity	53.92%	54.16%	52.03%	51.38%
Preferred Stock	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	46.08%	45.84%	47.97%	48.62%
Total Capitalization	100.00%	100.00%	100.00%	100.00%

Sources:

Form 10-Q, 10-K.

Staff Data Request No. 0107.

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Capital Structure as of December 31, 2025
Evergy, Inc.
(Dollars in Millions)

Capital Component	Amount	Percentage of Capital
Common Stock Equity	$10,221	43.94%
Preferred Stock	$0	0.00%
Long-Term Debt	$13,039	56.06%
Total Capitalization	**$23,260**	**100.00%**

Capital Structure as of December 31, 2025
Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro
(Dollars in Millions)

Capital Component	Amount	Percentage of Capital
Common Stock Equity	$3,457	51.38%
Preferred Stock	$0	0.00%
Long-Term Debt	$3,271	48.62%
Total Capitalization	**$6,728**	**100.00%**

Sources:

Form 10-Q, 10-K.

Staff Data Request No. 0107.

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Cost of Long-Term Debt as of December 31, 2025

Evergy, Inc.
(In millions)

Total Annual Cost:	$671.2
Total Carrying Value:	$13,136.3
Embedded Cost = Total Annual Cost/Total Carrying Value	5.109%

Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro
(In millions)

Total Annual Cost:	$151.2
Total Carrying Value:	$3,299.4
Embedded Cost = Total Annual Cost/Total Carrying Value	4.582%

Note:

Source:
Staff Data Requests No. 0108

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Cost of Preferred Stock as of September 30, 2024

Evergy, Inc.
(In millions)

Total Annual Cost:	N/A
Total Carrying Value:	N/A
Embedded Cost = Total Annual Cost/Total Carrying Value	N/A

Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro
(In millions)

Total Annual Cost:	N/A
Total Carrying Value:	N/A
Embedded Cost = Total Annual Cost/Total Carrying Value	N/A

Note:

Source:
Staff Data Requests No. 0108.

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

PROXY GROUP SCREENING DATA AND RESULTS

		Edison Electric Institute (EEI) U.S. Investor-Owned Electric Utilities	Ticker	[1] Stock Publicly Traded?	[2] Information Provided by Value Line	[3] Information Provided by WSJ	[4] 5-Year Financial Data Available	[5] 80% of Assets U.S. Regulated?	[6] At Least Investment Grade Credit Rating? (S&P)	[7] At Least Investment Grade Credit Rating? (Moody's)	[8] Long-Term Growth Rates From at Least 2 Sources?	[9] Positive Dividend Growth Rate Since 2020?	[10] At Least 60% of Regulated Income from Electric Utility Operations?	[11] At least 50% of Plant from Electric Utility?	[12] Positive Projected Growth Rates?	[13] No Recent or Pending Merger or Acquisitions ?	Comparable Company Met All Criteria?
1		ALLETE, Inc.		No													No
2	1	**Alliant Energy Corporation**	**LNT**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa2)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	2	**Ameren Corporation**	**AEE**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa1)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	3	**American Electric Power Company, Inc.**	**AEP**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa2)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
5	4	**Avista Corporation**	**AVA**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB)**	**Yes (Baa2)**	**Yes**	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
6		Berkshire Hathaway Energy		No													No
7		Black Hills Corporation	BKH	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	Yes	No	No			No
8		CenterPoint Energy, Inc.	CNP	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	No					No
9		Cleco Corporation		No													No
10	5	**CMS Energy Corporation**	**CMS**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (BBB+)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
11		Consolidated Edison, Inc.	ED	Yes	Yes	Yes	Yes	Yes	Yes (A-)	Yes (Baa1)	Yes	Yes	Yes	No			No
12		Dominion Resources, Inc.	D	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	No					No
13		DPL Inc.		No													No
14	6	**DTE Energy Company**	**DTE**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa2)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
15	7	**Duke Energy Corporation**	**DUK**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa2)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16		Edison International	EIX	Yes	Yes	Yes	Yes	Yes	Yes (BBB-)	Yes (Baa2)	Yes	Yes	Yes	No			No
17	8	**Entergy Corporation**	**ETR**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa2)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
18		Evergy Inc.	EVRG	Yes	Yes	Yes	No	Yes	Yes (BBB+)	Yes (Baa2)							No
19		Eversource Energy	ES	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	Yes	Yes	Yes	Yes	No	No
20		Exelon Corporation	EXC	Yes	Yes	Yes	Yes	Yes	Yes (A-)	Yes (Baa2)	Yes	No					No
21		FirstEnergy Corp.	FE	Yes	Yes	Yes	No	Yes	Yes (BBB+)	Yes (Baa3)							No
22		Hawaiian Electric Industries, Inc.	HE	Yes	Yes	Yes	Yes	Yes	No (B+)	No (Ba3)							No
23	9	**IDACORP, Inc.**	**IDA**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB)**	**Yes (Baa2)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
24		IPALCO Enterprise Inc.		No													No
25		MDU Resources Group, Inc.	MDU	Yes	Yes	Yes	Yes	Yes	Yes (BBB)	Yes (Baa2)	Yes	Yes	No	No			No
26		MGE Energy, Inc.	MGEE	Yes	Yes	Yes	Yes	Yes	N/A	N/A							No
27		NextEra Energy, Inc.	NEE	Yes	Yes	Yes	Yes	No									No
28		NiSource Inc.	NI	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	Yes	No	No			No
29		Northwestern Corporation	NWE	Yes	Yes	Yes	Yes	Yes	Yes (BBB)	Yes (Baa2)	Yes	Yes	Yes	Yes	Yes	No	No
30	10	**OGE Energy Corp.**	**OGE**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa1)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
31		Otter Tail Corporation	OTTR	Yes	Yes	Yes	Yes	No	Yes (BBB)	Yes (Baa2)	Yes	Yes	No				No
32		PG&E Corporation	PCG	Yes	Yes	Yes	Yes	Yes	No (BB)	No (Ba3)							No
33	11	**Pinnacle West Capital Corporation**	**PNW**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa2)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
34	12	**Portland General Electric Company**	**POR**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (A3)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
35		PPL Corporation	PPL	Yes	Yes	Yes	Yes	Yes	Yes (A-)	Yes (Baa1)	Yes	No					No
36		Public Service Enterprise Group Incorporated	PEG	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	Yes	No				No
37		Puget Energy, Inc.		No													No
38		Sempra Energy	SRE	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	Yes	No				No
39	13	**The Southern Company**	**SO**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (A-)**	**Yes (Baa1)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
40		TXNM Energy Inc.	TXNM	Yes	Yes	Yes	Yes	Yes	Yes (BBB)	Yes (Baa3)	Yes	Yes	Yes	Yes	Yes	No	No
41		Unitil Corporation	UTL	Yes	Yes	Yes	Yes	Yes	Yes (BBB+)	Yes (Baa2)	Yes	Yes	No				No
42		WEC Energy Group, Inc.	WEC	Yes	Yes	Yes	Yes	Yes	Yes (A-)	Yes (Baa1)	Yes	Yes	No				No
43	14	**Xcel Energy Inc.**	**XEL**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes (BBB+)**	**Yes (Baa1)**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Note:

[1] Source: Edison Electric Institute, https://www.eei.org/issues-and-policy/finance-and-tax#financialreview.
[2] Source: Value Line, https://valueline.com/.
[3] Source: Wall Street Journal, Market Data, https://www.wsj.com/market-data?msockid=0f356b4670d06c833ece78c071bf6dd9.
[4] Source: Value Line, https://valueline.com/.
[5] Source: Edison Electric Institute, https://www.eei.org/issues-and-policy/finance-and-tax#financialreview.
[6] Source: S&P Capital IQ Pro.
[7] Source: S&P Capital IQ Pro.
[8] Source: Value Line Investment Survey, Yahoo! Finance, and Zacks.
[9] Source: Value Line Investment Survey, Yahoo! Finance, and Zacks.
[10] Source: SEC Form 10-K Filings.
[11] Source: SEC Form 10-K Filings.
[12] Source: Value Line, https://valueline.com/.
[13] Source: S&P Capital IQ Pro.

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

PROXY GROUP LIST

	Electric Utility Companies	Ticker
1	Alliant Energy Corporation	LNT
2	Ameren Corporation	AEE
3	American Electric Power Company, Inc.	AEP
4	Avista Corporation	AVA
5	CMS Energy Corporation	CMS
6	DTE Energy Company	DTE
7	Duke Energy Corporation	DUK
8	Entergy Corporation	ETR
9	IDACORP, Inc.	IDA
10	OGE Energy Corp.	OGE
11	Pinnacle West Capital Corporation	PNW
12	Portland General Electric Company	POR
13	The Southern Company	SO
14	Xcel Energy Inc.	XEL

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Growth Rate Estimates
Earning per Share (EPS), Based on Dividend per Share (DPS) and Book Value per Share
for the Comparable Electric Utility Companies

			[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
	2025 Q4		Past 10-Years			Past 5-Year			Projected			Average			Projective	GDP
	Natural Gas Utility Companies	Ticker	EPS	DPS	BVPS	EPS	DPS	BVPS	EPS	DPS	BVPS	EPS	DPS	BVPS	Growth	Growth
1	Alliant Energy Corporation	LNT	5.50%	6.50%	6.00%	4.50%	6.00%	6.00%	6.00%	6.00%	4.00%	5.33%	6.17%	5.33%	5.33%	3.80%
2	Ameren Corporation	AEE	4.00%	3.50%	2.00%	8.00%	5.00%	5.50%	6.50%	6.50%	6.50%	6.17%	5.00%	4.67%	6.50%	3.80%
3	American Electric Power Company, Inc.	AEP	5.00%	5.00%	3.50%	4.00%	5.00%	3.50%	6.50%	5.50%	6.00%	5.17%	5.17%	4.33%	6.00%	3.80%
4	Avista Corporation	AVA	3.00%	4.00%	3.50%	-1.00%	4.00%	3.00%	6.50%	4.00%	2.00%	2.83%	4.00%	2.83%	4.17%	3.80%
5	CMS Energy Corporation	CMS	6.50%	6.50%	7.00%	6.00%	6.50%	8.50%	8.50%	7.50%	4.50%	7.00%	6.83%	6.67%	6.83%	3.80%
6	DTE Energy Company	DTE	4.00%	5.50%	3.00%	2.50%	5.50%	1.50%	4.50%	3.00%	1.00%	3.67%	4.67%	1.83%	2.83%	3.80%
7	Duke Energy Corporation	DUK	3.50%	2.50%	0.50%	3.00%	2.00%	0.50%	6.00%	4.00%	3.50%	4.17%	2.83%	1.50%	4.50%	3.80%
8	Entergy Corporation	ETR	2.50%	2.50%	2.00%	4.00%	4.00%	7.00%	3.00%	5.50%	4.50%	3.17%	4.00%	4.50%	4.33%	3.80%
9	IDACORP, Inc.	IDA	4.00%	7.50%	4.50%	3.50%	6.00%	4.50%	6.00%	4.50%	4.00%	4.50%	6.00%	4.33%	4.83%	3.80%
10	OGE Energy Corp.	OGE	3.00%	7.50%	4.00%	4.50%	6.50%	1.50%	6.50%	3.00%	5.50%	4.67%	5.67%	3.67%	5.00%	3.80%
11	Pinnacle West Capital Corporation	PNW	2.50%	4.00%	4.00%	N/A	4.00%	3.50%	5.00%	1.50%	4.00%	3.75%	3.17%	3.83%	3.50%	3.80%
12	Portland General Electric Company	POR	3.50%	5.50%	3.50%	3.00%	5.50%	3.00%	6.50%	5.50%	4.50%	4.33%	5.50%	3.67%	5.50%	3.80%
13	The Southern Company	SO	3.00%	3.50%	3.00%	3.00%	3.50%	2.50%	6.50%	3.50%	3.50%	4.17%	3.50%	3.00%	4.50%	3.80%
14	Xcel Energy Inc.	XEL	5.50%	6.50%	5.50%	6.00%	6.50%	6.00%	7.00%	6.50%	5.50%	6.17%	6.50%	5.67%	6.33%	3.80%
	Average		3.96%	5.04%	3.71%	3.92%	5.00%	4.04%	6.07%	4.75%	4.21%	4.65%	4.93%	3.99%	5.01%	3.80%

Note:

[1] Source: The Value Line Investment Survey
[2] Source: The Value Line Investment Survey
[3] Source: The Value Line Investment Survey
[4] Source: The Value Line Investment Survey
[5] Source: The Value Line Investment Survey
[6] Source: The Value Line Investment Survey
[7] Source: The Value Line Investment Survey
[8] Source: The Value Line Investment Survey
[9] Source: The Value Line Investment Survey
[10] =([1]+[4]+[7])/3
[11] =([2]+[5]+[8])/3
[12] =([3]+[6]+[9])/3
[13] =([7]+[8]+[9])/3
[14] Source: Congress Budget Office (CBO), Budget Economic Outlook
[15] = (4 x [13] + [14]) / 5

SCHEDULE SJW-d10

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Average High / Low Stock Price
for the Comparable Electric Utility Companies

			[1]	[2]	[3]	[4]	[5]	[6]	[7]
	2025 Q4		October 2024		Nobember 2024		December 2024		(10/01/25 - 12/31/25)
	Company Name	Ticker	Max High Stock Price	Min Low Stock Price	Max High Stock Price	Min Low Stock Price	Max High Stock Price	Min Low Stock Price	Average High/Low Stock Price
1	Alliant Energy Corporation	LNT	68.42	67.51	68.12	67.23	65.98	65.19	67.08
2	Ameren Corporation	AEE	104.92	103.53	104.87	103.33	100.37	99.01	102.67
3	American Electric Power Company, Ir	AEP	118.10	116.19	122.52	120.75	116.98	115.42	118.33
4	Avista Corporation	AVA	38.25	37.70	41.02	40.43	39.10	38.48	39.16
5	CMS Energy Corporation	CMS	74.46	73.27	74.27	73.27	71.21	70.26	72.79
6	DTE Energy Company	DTE	142.09	140.12	137.47	135.64	131.06	129.31	135.95
7	Duke Energy Corporation	DUK	127.01	125.22	124.21	122.50	117.81	116.30	122.18
8	Entergy Corporation	ETR	97.03	95.09	96.54	94.91	93.82	92.42	94.97
9	IDACORP, Inc.	IDA	135.59	133.35	129.85	127.79	127.94	126.00	130.09
10	OGE Energy Corp.	OGE	46.34	45.65	44.95	44.24	43.58	43.01	44.63
11	Pinnacle West Capital Corporation	PNW	92.12	90.76	89.61	88.32	88.70	87.64	89.52
12	Portland General Electric Company	POR	44.84	44.20	49.50	48.61	48.79	48.10	47.34
13	The Southern Company	SO	97.05	95.65	91.43	90.14	87.32	86.04	91.27
14	Xcel Energy Inc.	XEL	81.59	80.14	81.33	80.06	76.03	74.82	78.99

Note:

[1] Source: Wall Street Journal, https://www.wsj.com/market-data

[2] Source: Wall Street Journal, https://www.wsj.com/market-data

[3] Source: Wall Street Journal, https://www.wsj.com/market-data

[4] Source: Wall Street Journal, https://www.wsj.com/market-data

[5] Source: Wall Street Journal, https://www.wsj.com/market-data

[6] Source: Wall Street Journal, https://www.wsj.com/market-data

[7] = ([1]+[2]+[3]+[4]+[5]+[6]) / 6

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Discounted Cash Flow (DCF) Costs of Common Equity (COE) Estimates
Based on Dividend per Share, Earning per Share, Stock Price, and Growth Rate
for the Comparable Electric Utility Companies

	2025 Q4 DCF COE estimate		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	Electric Utility Companies	Ticker	2025 Dividend per Share	Stock Price	Dividend Yield	Expected Dividend Yield	Projected Growth	Projected GDP Growth	Sustainable Growth Rate	COE
1	Alliant Energy Corporation	LNT	2.04	67.08	3.04%	3.12%	5.33%	3.80%	5.03%	8.14%
2	Ameren Corporation	AEE	2.85	102.67	2.78%	2.86%	6.50%	3.80%	5.96%	8.82%
3	American Electric Power Company, Inc	AEP	3.80	118.33	3.21%	3.30%	6.00%	3.80%	5.56%	8.86%
4	Avista Corporation	AVA	1.96	39.16	5.00%	5.11%	4.17%	3.80%	4.09%	9.20%
5	CMS Energy Corporation	CMS	2.17	72.79	2.98%	3.07%	6.83%	3.80%	6.23%	9.30%
6	DTE Energy Company	DTE	4.41	135.95	3.24%	3.29%	2.83%	3.80%	3.03%	6.32%
7	Duke Energy Corporation	DUK	4.30	122.18	3.52%	3.60%	4.50%	3.80%	4.36%	7.96%
8	Entergy Corporation	ETR	2.44	94.97	2.57%	2.62%	4.33%	3.80%	4.23%	6.85%
9	IDACORP, Inc.	IDA	3.48	130.09	2.68%	2.74%	4.83%	3.80%	4.63%	7.36%
10	OGE Energy Corp.	OGE	1.71	44.63	3.83%	3.92%	5.00%	3.80%	4.76%	8.68%
11	Pinnacle West Capital Corporation	PNW	3.61	89.52	4.03%	4.10%	3.50%	3.80%	3.56%	7.66%
12	Portland General Electric Company	POR	2.08	47.34	4.39%	4.51%	5.50%	3.80%	5.16%	9.67%
13	The Southern Company	SO	3.04	91.27	3.33%	3.40%	4.50%	3.80%	4.36%	7.76%
14	Xcel Energy Inc.	XEL	2.28	78.99	2.89%	2.97%	6.33%	3.80%	5.83%	8.80%
	Average		2.87	88.21	3.39%	3.47%	5.01%	3.80%	4.77%	8.24%
									DCF Lower Bound	7.11%
									DCF Upper Bound	9.25%
									DCF COE	8.18%

Note:

[1] Source: The Value Line Investment Survey: Ratings & Reports.

[2] Source: The Wall Street Journal; Monthly Average.

[3] = [1] / [2]

[4] = [3] x (1 + .5 x [7])

[5] Source: [12] of Growth Rate SJW-11

[6] Source: Congress Budget Office (CBO), Budget Economic Outlook

[7] = (4 x [5] + [6]) / 5

[8] = [4] + [7]

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Capital Asset Pricing Model (CAPM) Costs of Common Equity (COE) Estimates
Based on Historical Return Differences Between Common Stocks and Long-Term U.S. Treasuries
for the Comparable Electric Utility Companies

	2025 Q4 CAPM Estimate		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
					Market Risk Premium				CAPM Cost of Common Equity			
					Kroll, LLC	NYU Stern	Damodaran Historical		Kroll, LLC	NYU Stern	Damodaran Historical	
	Electric Utility Companies	Ticker	Risk-Free Rate	Beta	Duff & Phelps Recommended	Adjusted Implied ERP	Geometric Mean MRP	Arithmetic Mean MRP	Recommended	Adjusted Implied ERP	Geometric Mean MRP	Arithmetic Mean MRP
1	Alliant Energy Corporation	LNT	4.71%	0.80	5.00%	5.03%	5.48%	7.03%	8.71%	8.74%	9.10%	10.34%
2	Ameren Corporation	AEE	4.71%	0.80	5.00%	5.03%	5.48%	7.03%	8.71%	8.74%	9.10%	10.34%
3	American Electric Power Company, Inc	AEP	4.71%	0.70	5.00%	5.03%	5.48%	7.03%	8.21%	8.23%	8.55%	9.64%
4	Avista Corporation	AVA	4.71%	0.70	5.00%	5.03%	5.48%	7.03%	8.21%	8.23%	8.55%	9.64%
5	CMS Energy Corporation	CMS	4.71%	0.70	5.00%	5.03%	5.48%	7.03%	8.21%	8.23%	8.55%	9.64%
6	DTE Energy Company	DTE	4.71%	0.80	5.00%	5.03%	5.48%	7.03%	8.71%	8.74%	9.10%	10.34%
7	Duke Energy Corporation	DUK	4.71%	0.65	5.00%	5.03%	5.48%	7.03%	7.96%	7.98%	8.28%	9.28%
8	Entergy Corporation	ETR	4.71%	0.75	5.00%	5.03%	5.48%	7.03%	8.46%	8.49%	8.83%	9.99%
9	IDACORP, Inc.	IDA	4.71%	0.70	5.00%	5.03%	5.48%	7.03%	8.21%	8.23%	8.55%	9.64%
10	OGE Energy Corp.	OGE	4.71%	0.85	5.00%	5.03%	5.48%	7.03%	8.96%	8.99%	9.37%	10.69%
11	Pinnacle West Capital Corporation	PNW	4.71%	0.75	5.00%	5.03%	5.48%	7.03%	8.46%	8.49%	8.83%	9.99%
12	Portland General Electric Company	POR	4.71%	0.75	5.00%	5.03%	5.48%	7.03%	8.46%	8.49%	8.83%	9.99%
13	The Southern Company	SO	4.71%	0.65	5.00%	5.03%	5.48%	7.03%	7.96%	7.98%	8.28%	9.28%
14	Xcel Energy Inc.	XEL	4.71%	0.70	5.00%	5.03%	5.48%	7.03%	8.21%	8.23%	8.55%	9.64%
	Average		4.71%	0.74	5.00%	5.03%	5.48%	7.03%	8.39%	8.41%	8.75%	9.89%
										CAPM Lower Bound		7.97%
										CAPM Upper Bound		10.34%
										CAPM COE		9.16%

Note:

[1] Source: 3-Month Average of 30-Year Treasury Bond

[2] Source: Value Line, Investment Survey.

[3] Source: Kroll, LLC, Kroll Cost of Capital Inputs at Year-End 2025.

[4] Source: Implied Equity Risk Premiums, Damodaran Online, Stern School of Business, NYU.

[5] Source: Risk Premium, Damodaran Online, Stern School of Business, NYU.

[6] Source: Risk Premium, Damodaran Online, Stern School of Business, NYU.

[7] = [1] + [2] x [3]

[8] = [1] + [2] x [4]

[9] = [1] + [2] x [5]

[10] = [1] + [2] x [16]

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Bond Yield Plus Risk Premium (BYPRP) Return on Equity (ROE) Estimates
Risk Premium Calculated by Authorized ROE and Utility Bond Yields

	[1]	[2]	[3]	[4]	[5]	[6]
	Bond Yield (%)		Risk Premium (%)		Estimated ROE (%)	
Month-Year	A	Baa	A	Baa	A	Baa
Oct-25	5.51	5.71	4.21	4.01	9.72	9.72
Nov-25	5.62	5.83	4.11	3.90	9.73	9.73
Dec-25	5.68	5.88	4.05	3.85	9.73	9.73
Jan-26	5.68	5.86	4.05	3.87	9.73	9.73
Feb-26	5.61	5.78	4.12	3.94	9.73	9.72
Mar-26	5.82	5.99	3.92	3.75	9.74	9.74

BYPRP Lower Bound	9.72
BYPRP Upper Bound	9.74
BYPRP ROE	9.73

Notes:

[1] Mergent Bond Record, Moody's Utility Bonds Yields

[2] Mergent Bond Record, Moody's Utility Bonds Yields

[3] = 9.33 - 0.9299 x [1]

[4] = 9.23 - 0.9145 x [2]

[5] = [1] + [3]

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Risk Premium Estimation Using Regression Analysis
Plus Risk Premium (BYPRP) Return on Equity (ROE) Estimates
Risk Premium as Difference Between Authorized ROE and Utility Bond Yield

SUMMARY OUTPUT (Baa)

Regression Statistics	
Multiple R	0.9699
R Square	0.9406
Adjusted R Square	0.9402
Standard Error	0.2109
Observations	144

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	100.0785	100.0785	2249.1999	0.0000
Residual	142	6.3183	0.0445		
Total	143	106.3968			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	9.2304	0.0938	98.4201	0.0000	9.0450	9.4158	9.0450	9.4158
X Variable 1	-0.9146	0.0193	-47.4257	0.0000	-0.9527	-0.8765	-0.9527	-0.8765

SUMMARY OUTPUT (A)

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

RETURN ON EQUITY

		COE Analysis			
		Lower	Mean	Upper	
COE Estimation	DCF	7.11%	8.18%	9.25%	A
	CAPM	7.97%	9.16%	10.34%	B
		7.11%	8.67%	10.34%	C

		ROE Analysis			
		Lower	Estimate	Upper	
ROE Estimation	BYPRP	9.72%	9.73%	9.74%	D
ROE Recommandation			9.73%		

Note:

A Schedule SJW-d12

B Schedule SJW-d13

C = ([A] + [B]) / 2

D Schedule SJW-d14-1

SCHEDULE SJW-d15

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

RATE OF RETURN

Capital Component	Percentage of Capital [1]	Embedded Cost	Allowed Rate of Return Common Equity Return of: Lower **9.48%**	ROE [4] **9.73%**	Upper **9.98%**
Common Stock Equity	51.38%	-	4.87%	5.00%	5.13%
Preferred Stock	0.00%	N/A [2]	0.00%	0.00%	0.00%
Long-Term Debt	48.62%	4.58% [3]	2.23%	2.23%	2.23%
Total	**100.0%**		**7.10%**	**7.23%**	**7.36%**

Note:

[1] Schedule SJW-d6
[2] Schedule SJW-d7-2
[3] Schedule SJW-d7-1
[4] Schedule SJW-d15

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2026-0143

Authorized ROE and Equity Ratio of the U.S Utility by Sector
2010-2025

	Electric								
	Fully Litigated			Settled			Natural Gas Total		
Year	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)
2010	10.35	47.68	27	10.39	49.49	34	10.37	48.63	61
2011	10.39	48.17	26	10.12	48.01	16	10.29	48.11	42
2012	10.28	49.98	29	10.06	51.40	29	10.17	50.62	58
2013	9.85	48.25	17	10.12	49.70	32	10.03	49.14	49
2014	10.05	50.14	21	9.73	50.26	17	9.91	50.19	38
2015	9.66	48.98	16	10.04	49.28	15	9.84	49.12	31
2016	9.74	49.75	25	9.80	47.51	17	9.77	48.85	42
2017	9.73	49.23	24	9.75	49.30	29	9.74	49.26	53
2018	9.63	48.70	22	9.57	49.76	26	9.60	49.27	48
2019	9.58	51.07	27	9.76	49.66	20	9.66	50.62	47
2020	9.43	49.87	32	9.46	50.45	23	9.44	50.12	55
2021	9.23	50.71	30	9.57	49.79	25	9.38	50.31	55
2022	9.48	51.25	32	9.62	50.32	21	9.54	50.93	53
2023	9.64	52.10	39	9.52	50.57	24	9.60	51.59	63
2024	9.77	50.64	68	9.86	50.18	22	9.79	50.48	90
2025	9.86	49.39	56	9.78	50.09	30	9.84	49.74	86
2026Q1	9.61	55.55	1	9.64	53.34	6	9.63	53.71	7

	Vertically Integrated Electric								
	Fully Litigated			Settled			Natural Gas Total		
Year	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)	ROE (%)	Equity (%)	Case (No.)
2010	10.32	47.37	16	10.49	49.63	25	10.42	48.65	41
2011	10.46	48.51	17	10.14	48.47	11	10.33	48.50	28
2012	10.10	49.69	16	10.10	52.34	23	10.10	51.09	39
2013	9.91	46.46	9	9.96	50.90	22	9.95	49.42	31
2014	10.03	51.39	9	9.86	51.03	10	9.94	51.24	19
2015	9.74	49.03	13	9.78	52.00	4	9.75	49.59	17
2016	9.62	49.47	9	9.88	47.21	11	9.77	48.28	20
2017	9.69	47.89	8	9.85	49.06	20	9.80	48.68	28
2018	9.62	46.44	9	9.72	48.76	14	9.68	47.89	23
2019	9.74	50.83	10	9.74	47.65	15	9.74	49.10	25
2020	9.52	48.71	15	9.57	49.78	12	9.55	49.25	27
2021	9.24	49.03	8	9.67	48.87	17	9.53	48.93	25
2022	9.82	50.85	12	9.68	48.76	13	9.75	49.80	25
2023	9.96	52.93	19	9.61	49.72	17	9.80	51.52	36
2024	9.84	49.71	17	9.91	47.57	18	9.88	48.57	35
2025	9.83	47.05	14	9.89	51.74	19	9.87	49.84	33

Note:

Source: S&P Global Market Intelligence, Retrieved in January 2, 2025

SCHEDULE SJW-d17