

**Exhibit No.:** \_\_\_\_\_  
**Issue(s):** Rate of Return (ROR)/Capital Structure  
**Witness/Type of Exhibit:** Murray/Direct  
**Sponsoring Party:** Public Counsel  
**Case No.:** ER-2022-0129

**DIRECT TESTIMONY**

**OF**

**DAVID MURRAY**

Submitted on Behalf of the Office of the Public Counsel

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

CASE NOS. ER-2022-0129

\*\*

\*\*

Denotes Confidential Information that has been redacted.

June 8, 2022

**PUBLIC**

**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-2022-0129

**AFFIDAVIT OF DAVID MURRAY**

STATE OF MISSOURI    )  
  )    ss  
COUNTY OF COLE     )

David Murray, of lawful age and being first duly sworn, deposes and states:

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

  
\_\_\_\_\_  
David Murray  
Utility Regulatory Manager

Subscribed and sworn to me this 8<sup>th</sup> day of June 2022.



TIFFANY HILDEBRAND  
My Commission Expires  
August 8, 2023  
Cole County  
Commission #15637121

  
\_\_\_\_\_  
Tiffany Hildebrand  
Notary Public

My Commission expires August 8, 2023.

## TABLE OF CONTENTS

<b>Testimony</b>	<b>Page</b>
Fair Return on Common Equity	3
Cost of Equity Methods	18
Proxy Group Cost of Equity	23
Capital Structure	31
Summary and Conclusions	39

**DIRECT TESTIMONY**

**OF**

**DAVID MURRAY**

**EVERGY METRO**

**FILE NO. ER-2022-0129**

1 **Q. Please state your name and business address.**

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

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by the Missouri Office of the Public Counsel (“OPC”) as a Utility  
6 Regulatory Manager.

7 **Q. On whose behalf are you testifying?**

8 A. I am testifying on behalf of the OPC.

9 **Q. What is the purpose of your testimony?**

10 A. To recommend a fair and reasonable rate of return (“ROR”) for purposes of setting Evergy  
11 Metro’s (“Metro”) revenue requirement for its regulated electric utility operations.

12 **Q. What experience, knowledge and education qualify you to sponsor ROR testimony in  
13 this case?**

14 A. Please see the attached Schedule DM-D-1 for my qualifications as well as a summary of  
15 the cases in which I have sponsored testimony on ROR and other financial issues.

16 **Q. What aspects of ROR will you address?**

17 A. I will address a fair and reasonable allowed return on common equity (“ROE”) and a fair  
18 and reasonable capital structure.

1 **Q. What is your main conclusion after analyzing Metro’s specific financial situation as**  
2 **well as the current state of capital markets?**

3 A. Metro’s allowed ROE should be set at 9%, but at the very least no higher than The Empire  
4 District Electric Company’s (“Empire”) authorized ROE of 9.25% set in Case No. ER-  
5 2019-0374. Metro’s authorized common equity ratio should be more consistent with  
6 Evergy Inc.’s (“Evergy”) actual consolidated common equity ratios, which have ranged  
7 between approximately 47% to 49% during the test year and the update period, with an  
8 average of around 48% for the 12-month ended update period through December 31, 2021.

9 **Q. Before you discuss the details supporting your analysis, can you summarize the**  
10 **rationale for your conclusions?**

11 A. Yes. Although capital structure and the allowed ROE are interrelated as to the ultimate  
12 impact on Metro’s revenue requirement, I will first briefly explain my rationale for each  
13 component, separately.

14 I recommend that the Commission set Metro’s allowed ROE for its electric utility  
15 operations at 9% based on a range of 8.5% to 9.5%. Although recent increases in the cost  
16 of utility debt capital and volatility in broader capital markets would seem to suggest an  
17 increase to the utility industry’s cost of common equity (“COE”), utility stock valuation  
18 ratios indicate otherwise. This has caused utility stocks to once again trade at a premium  
19 relative to the S&P 500 (currently slightly above 1.1x), which had been the case prior to  
20 the Covid-19 pandemic. Based on my analysis, the COE for regulated electric utilities is  
21 currently in the range of 7% to 7.5%.

22 I recommend that the Commission set Metro’s authorized common equity ratio at 48%  
23 rather than the approximate 51% ratio Evergy targeted as of the test year and update period  
24 in this case. Metro’s business risk profile declined after it became eligible to elect an  
25 investor-friendly ratemaking mechanism referred to as plant in service accounting  
26 (“PISA”), which was enacted when Senate Bill (“SB”) 564 took effect on August 28,

1 2018.<sup>1</sup> Metro formally elected PISA on January 1, 2019. Metro’s reduced business risk  
2 profile allows for greater debt capacity. Moody’s and S&P acknowledge the reduced  
3 regulatory lag benefits afforded by the passage of SB 564 in rating agency reports  
4 published on Missouri’s electric utility companies.

5 **Q. Did you take any other matters into consideration when determining a fair and**  
6 **reasonable allowed ROE to apply to your recommended capital structure?**

7 A. Yes. I recognize that Metro has affiliates that compete with it for capital. In my opinion,  
8 Evergy should choose projects between its Missouri electric utility operations and Kansas  
9 electric utility operations based on economic efficiency rather than which jurisdiction  
10 awards the highest ROR. The allowed ROE for Evergy’s Kansas electric utility operations  
11 is 9.3%. Evergy’s Kansas earnings sharing mechanism with its Kansas ratepayers assumes  
12 its capital structure is supported by 50% common equity.<sup>2</sup>

### 13 **FAIR RETURN ON COMMON EQUITY**

14 **Q. How did you determine the approach you would take to estimate a fair and reasonable**  
15 **allowed ROE for purposes of this case?**

16 A. I reconciled the principles established in *Hope* and *Bluefield*<sup>3</sup> with modern financial models  
17 used to estimate the COE. While setting the allowed ROE based on the COE is at least  
18 theoretically sufficient to allow a company to attract capital in efficient markets, because  
19 average allowed ROEs have been set higher than the COE, this fact must be considered  
20 when determining a fair and reasonable allowed ROE. In fact, this Commission has set a  
21 “zone of reasonableness standard”<sup>4</sup> for purposes of setting an allowed ROE with the  
22 starting point for this zone of reasonableness being a recent industry average allowed ROE.  
23 Considering these principles, I first estimate Metro’s current COE, then compared my

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<sup>1</sup> SB 564 resulted in the creation/modification of several Sections of Chapter 393 with the primary new subsection being Section 393.1400, RSMo.

<sup>2</sup> Docket No. 18-KCPE-095-MER, Order Approving Merger, Attachment A, pgs. 18-19, May 24, 2018.

<sup>3</sup> *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1943); *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923).

<sup>4</sup> *State ex rel. Missouri Gas Energy v. Public Service Commission*, 186 S.W.3d 376, 383 (Mo App. W.D. 2005)

1 current COE estimates to those I estimated in recent rate cases to determine if there has  
2 been a fundamental change in the cost of capital. My analysis also includes consideration  
3 of other recently authorized ROEs with specific consideration given to Evergy's allowed  
4 ROE of 9.3% for its Kansas electric utility operations.

5 **Q. Based on your analysis, what is your estimate of Metro's COE?**

6 A. 7% to 7.5%.

7 **Q. Based on your analysis and awareness of capital market conditions, investor**  
8 **expectations and recent average allowed ROEs for electric utilities, what do you**  
9 **consider to be a fair and reasonable allowed ROE for Metro's electric utility**  
10 **operations?**

11 A. 8.5% to 9.5%. Based on recent average authorized ROEs of approximately 9.35%,<sup>5</sup> 8.35%  
12 is approximately the lowest ROE that the Commission would consider under its "zone of  
13 reasonableness" standard, while an awarded ROE below 9.5% would recognize the decline  
14 in the COE since the Commission first deemed a 9.5% ROE as fair and reasonable for MO  
15 West and Metro in 2015. After considering my COE estimates, the Commission's  
16 authorized ROE for Empire and the authorized ROE for Evergy's Kansas electric utility  
17 operations, I consider the mid-point of my range, 8.5% to 9.5%, to be fair and reasonable.

18 **Q. How did you inform yourself for purposes of determining the best methods and**  
19 **approaches to use to estimate Metro's COE?**

20 A. For purposes of this case, I reviewed Evergy's Board of Directors ("BOD") strategic  
21 financing and investment considerations since February 1, 2020, as well as equity  
22 investment research reports covering Evergy and the utility industry for a similar period.  
23 After performing this research, I estimated Metro's COE by performing a company-  
24 specific COE analysis on Evergy, as well as a COE analysis on a broad electric utility

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<sup>5</sup> RRA Major Rate Case Decisions Quarterly Updates, May 2, 2022.

1 industry proxy group, with emphasis on companies within this broad group that are more  
2 concentrated in regulated utility operations .

3 **Q. What specific COE models did you use?**

4 A. I used a multi-stage discounted cash flow (“DCF”) method, with specific emphasis on  
5 consensus analysts’ estimated dividends and the modeled growth of dividends. When the  
6 DCF method is applied to dividends as the proxy for cash flow, it is more specifically  
7 defined as the dividend discount model (“DDM”). I also applied the Capital Asset Pricing  
8 Model (“CAPM”) to both Evergy and the proxy groups. Finally, I performed simple and  
9 logical reasonableness checks to test the reasonableness of my COE estimates. These  
10 reasonableness checks recognize the basic characteristics of utility stocks, mainly being  
11 that they are perceived as yield/income investments by the investment community. One  
12 such reasonableness check is a straight-forward bond-yield-plus-risk-premium (“BYPRP”)  
13 method included in the Chartered Financial Analyst (“CFA”) Program curriculum.<sup>6</sup>

14 **Q. Can you describe current capital market conditions as it relates to the electric utility  
15 industry in general and Evergy specifically before you discuss the details of how you  
16 specifically estimated Metro’s COE?**

17 A. Yes. This information should help provide some context as to the current state of utility  
18 capital markets and what this implies about the trend in capital markets over approximately  
19 the last decade when long-term interest rates entered into a prolonged period of lower levels  
20 with a declining trend.

21 **Q. Did you sponsor ROR testimony in Metro’s 2018 rate case?**

22 A. No, but I supervised the Staff witness, Jeffrey Smith, who did.

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<sup>6</sup> 2021 CFA Program – Level II Refresher Reading, Equity Valuation, p. 35.



1 **Q. What about Metro rate cases prior to the 2018 rate case?**

2 A. I sponsored capital structure testimony in Metro's 2016 rate case. Staff hired Randall  
3 Woolridge, PhD, to sponsor ROE testimony in that case. In the 2014 rate case, I supervised  
4 the Staff witness, Zephania Marevangepo, who directly sponsored the ROR testimony.  
5 Prior to the 2014 rate cases, I directly sponsored ROR testimony in Metro's rate cases (see  
6 Schedule DM-D-1).

7 **Q. What ROE have you recently recommended the Commission authorize for its large**  
8 **electric utilities?**

9 A. I had consistently recommended the Commission reduce its electric utility authorized ROE  
10 from around 9.5% to 9.25%. The Commission's last authorized ROE for Metro was 9.5%  
11 in the 2016 rate case, Case No. ER-2016-0285, which was consistent with the  
12 Commission's authorized ROE for Metro in its 2014 rate case, Case No. ER-2014-0370.  
13 In the most recent Empire and Ameren Missouri electric rate cases, I recommended the  
14 Commission further reduce authorized ROEs to 9.0%. Although the COE has varied over  
15 much of the period since the Commission last determined Metro's authorized ROEs, with  
16 a generally overall declining trend until recently, I had consistently urged the Commission  
17 to lower the authorized ROE for its electric utilities by at least 25 basis points to recognize  
18 the decline in the costs of capital.

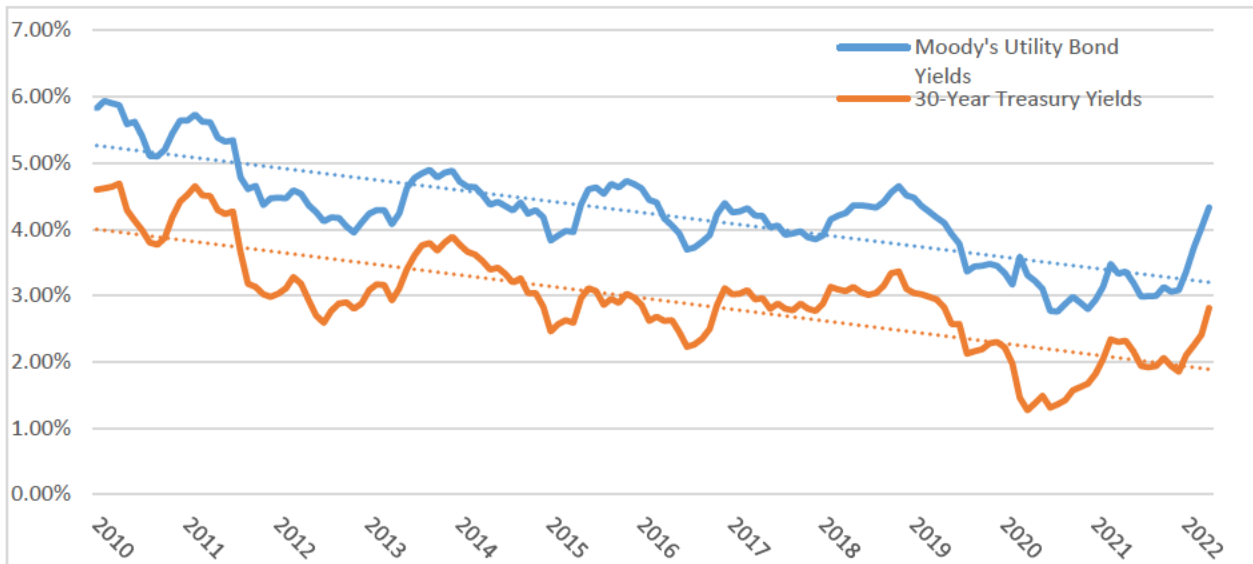
19 **Q. How do current investment grade utility bond yields compare to investment grade**  
20 **utility bond yields over the past decade?**

21 A. They are higher than yields over the last three years, similar to yields since around 2015,  
22 and generally lower than yields prior to 2015.<sup>7</sup> The below graph shows long-term bond  
23 yields since January 1, 2010, which captures the prolonged period of lower long-term  
24 interest rates post the recession/financial crisis of 2008/2009. While the early stages of  
25 lower long-term interest rates in the first half of this decade were considered by some as  
26 potentially anomalous because of the Federal Reserve Bank's ("Fed") quantitative easing

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<sup>7</sup> S&P rates MO West and Metro at A-; Moody's rates MO West and Metro at Baa2 and Baa1, respectively.

1 (“QE”) programs<sup>8</sup> through the end of 2013, since that time, long-term interest rates  
2 continued a declining trend through 2021. Although long-term rates have increased  
3 significantly in recent months, they are still low based on historical standards over the last  
4 40+ years.



5  
6 Average utility long-term bond yields dropped to modern all-time lows in the latter half of  
7 2020 - levels not experienced since the late 1940s and early 1950s (I am not aware of a  
8 publication at the time, such as Regulatory Research Associates, that would provide  
9 information on allowed returns to provide guidance for current decisions). However, due  
10 to inflationary concerns, the Fed's communicated path of moderating to potential  
11 tightening of monetary policy, and recession fears, long-term bond yields have increased  
12 in recent months.

13 **Q. Why is it important to evaluate trends in long-term interest rates when evaluating the**  
14 **utility industry's COE?**

15 **A.** Investors typically view utility stocks as a close alternative to bond investments. In fact,  
16 the investment community estimates fair prices of utility stocks based on regressions to

<sup>8</sup> QE involved three rounds of the Fed's direct intervention in bond markets beyond just lowering the Fed Funds rate. The Fed's QE programs had the express intent of reducing long-term interest rates.

1 bond yields.<sup>9</sup> Utility stocks are often referred to as bond-substitutes or pseudo bonds.  
2 Therefore, changes in utility stock valuation levels typically have a strong inverse  
3 correlation to changes in bond yields, i.e. as bond yields decline, utility stock prices  
4 increase.

5 **Q. Since April 2020, have utility stock valuations and bond yields provided traditional**  
6 **and consistent signals about utilities' cost of capital?**

7 A. No. Utility and corporate bond yields have declined significantly since even before the  
8 pandemic, which were already trading at yields-to-maturity ("YTM") that were at 60-year  
9 lows. During most of the post-pandemic months in 2020, utility and corporate bonds were  
10 trading at YTM that were at 70-to-80 year lows. However, electric utility stocks' valuation  
11 levels (as measured by P/E ratios) declined on both an absolute and relative basis (as  
12 compared to the S&P 500) through most of 2021. However, during recent months, in  
13 which long-term yields have been increasing, electric utility stock valuation levels have  
14 also been increasing. The impact of Covid-19 on economic conditions, fiscal policy and  
15 monetary policy has caused unique capital market conditions over the last two years.

16 During the all-time low bond yield environment, the utility industry was able to take  
17 advantage of these extremely low debt capital costs. For example, Metro was able to issue  
18 10-year bonds on May 18, 2020, at a coupon of 2.25%. However, during this period, utility  
19 equity valuation levels had not increased in conjunction with the decline in bond yields,  
20 which certainly implied investors did not expect extremely low interest rates to be  
21 sustainable. Between this factor and investors' concerns about a potential recession, this  
22 at least partially explains why utility stock valuation levels have not only been sustained in  
23 recent periods, but once again trade at a premium to the S&P 500.

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<sup>9</sup> Julien Dumoulin-Smith, et. al, "Utilities Macro: Closing The Valuation Gap At Last, But Can It Go Further?," January 25, 2022, Bank of America Merrill Lynch. Jeremy Tonet, CFA, et. al., "Thoughts Into 4Q Earnings: Under Pressure From Weather, But Utes Won't Back Down," February 1, 2022, JP Morgan.

1 **Q. Can you provide a graphic illustration of the electric utility industry’s price-to-next-**  
2 **twelve-months-earnings (P/E) ratios since January 1, 2012?**

3 A. Yes. First, I should note that P/E ratios are often used to evaluate the relative cost to the  
4 investor to buy a share of earnings and the potential growth of those earnings. Also, for  
5 context regarding the favorableness of utility P/E ratios over the past several years, utility  
6 P/E ratios averaged 14.4x since 1995.<sup>10</sup> A graph of the P/E ratios for electric utility industry  
7 follows:



8  
9 As can be seen in the above graph, the electric utility industry briefly achieved a P/E ratio  
10 of around 22.5x at April 8, 2022. Electric utility P/E ratios had not been at this level since  
11 they hit all-time highs in February 2020. At that time I had recommended the Commission  
12 authorize Empire an ROE of 9.25% based on low implied COE estimates. The  
13 Commission subsequently authorized Empire an ROE of 9.25% based on Staff’s and

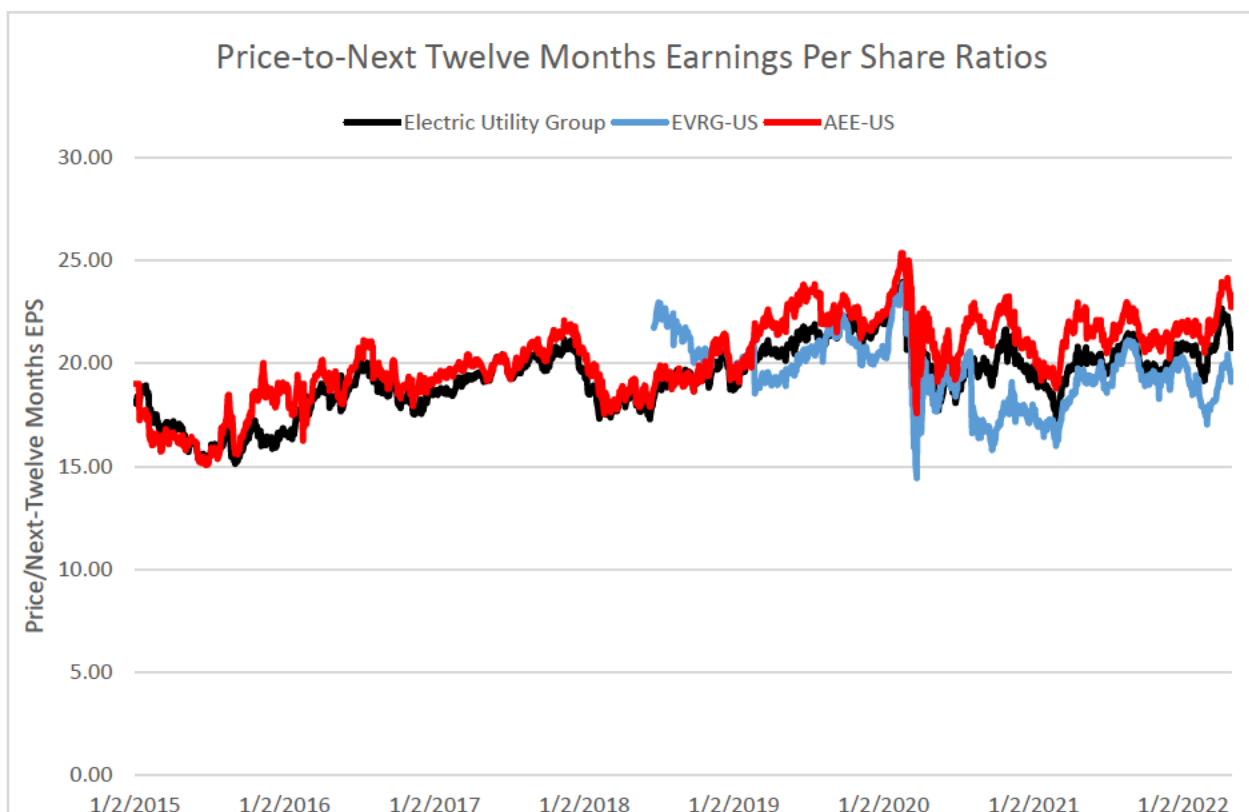
<sup>10</sup> Durgesh Chopra, et. al., “Up & Up – Strong First Quarter Electric Demand,” Evercore ISI, April 10, 2022, p. 8.

1 OPC's recommendations. Over the last couple of years, the electric utility industry P/E  
2 ratios have oscillated around 20x, which is a much higher average valuation level than in  
3 2015 when the Commission first determined that a 9.5% allowed ROE was fair and  
4 reasonable for Metro. Consequently, in my opinion, despite the recent increase in interest  
5 rates, investors are continuing to place a premium on utility stocks. This evidence supports  
6 awarding Metro an ROE below the 9.5% deemed fair and reasonable several years ago.

7 **Q. Can you compare the electric utility industry's P/E ratios to Eversource and Ameren since**  
8 **2015, when the Commission first deemed a 9.5% ROE fair and reasonable for these**  
9 **companies?**

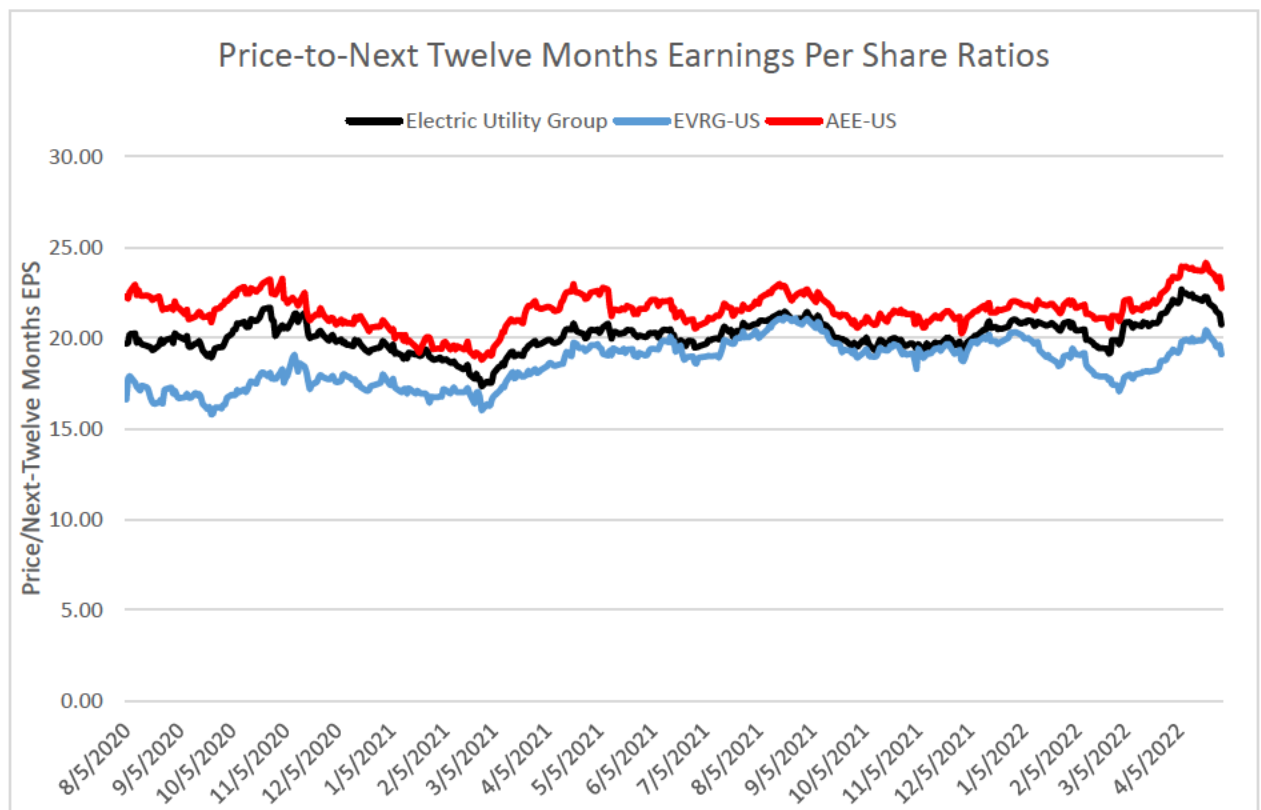
10 **A.** Yes for Ameren and the electric utility industry. However, market data for Eversource is only  
11 available since June 4, 2018, which is when it was formed through the merger of Great  
12 Plains Energy and Westar Inc. The chart follows:

13



14

1 As is evident from above, since the beginning of 2019, Ameren has typically traded at a  
2 premium to the electric utility industry, whereas Evergy started trading at a premium when  
3 it was first formed, but then traded at a discount for much of 2019. When Elliott  
4 Management (“Elliott”) issued a January 21, 2020 public letter to Evergy’s BOD, Evergy’s  
5 P/E ratio traded in line with the rest of the electric utility industry. On August 5, 2020,  
6 when Evergy announced it would pursue a stand-alone strategy through its Sustainability  
7 Transformation Plan (“STP”), its P/E ratio immediately declined by approximately 3x  
8 (from around 20x to 17x). However, for most of 2021, Evergy’s discount to the electric  
9 utility industry and Ameren has narrowed. The below chart compares Evergy’s P/E ratio  
10 to the industry and Ameren since August 5, 2020:



12  
13 Although Evergy’s P/E ratio had been trading consistent with the industry for most of 2021,  
14 at the beginning of 2022 it began to trade at a consistent discount to the industry. This  
15 implies that Evergy’s cost of capital may be slightly higher than the industry average and/or  
16 there is less confidence in Evergy’s ability to grow its earnings and dividends consistent

1 with industry averages. Investors have been quite confident in Ameren’s expected earnings  
2 and dividend growth. In fact, Ameren is considered by many investors as a “premium”  
3 utility, which is assigned to a few select utilities such as Excel Inc., WEC Energy Group,  
4 Alliant Energy, and CMS Energy. Evergy is striving to join this “premium” group.

5 Q. \*\* \_\_\_\_\_  
6 \_\_\_\_\_  
7 \_\_\_\_\_

8 A. \_\_\_\_\_  
9 \_\_\_\_\_  
10 \_\_\_\_\_  
11 \_\_\_\_\_

12 \_\_\_\_\_ \*\* Under the STP, Evergy increased its capital expenditure budget by \$1.4  
13 billion through 2024. Of this \$1.4 billion incremental increase over the original \$7.5 billion  
14 plan, \$438 million is planned for Missouri jurisdictional investment, \$612 million for  
15 FERC jurisdictional investment, and \$303 million for Kansas jurisdictional investment. Of  
16 the \$3.3 billion total targeted for Missouri, \$2.9 billion is eligible for the plant in service  
17 accounting (“PISA”) mechanism.<sup>11</sup> These investments contribute to Evergy’s increased  
18 projected 5-year compound annual growth rate (“CAGR”) in EPS to 6-8% from 5-7%  
19 previously.<sup>12</sup> \*\* \_\_\_\_\_  
20 \_\_\_\_\_  
21 \_\_\_\_\_ \*\*

22 Q. **Can you provide some recent market commentary that supports your analysis and**  
23 **commentary related to utility stock valuation levels, despite increasing long-term**  
24 **interest rates?**

25 A. Yes. On May 5, 2022, the Wall Street Journal (“WSJ”) provided the following comments  
26 about recent trading patterns in dividend paying stocks, which includes utilities:

<sup>11</sup> Sustainability Transformation Plan, August 5, 2020, p. 8.  
<sup>12</sup> *Id.*, p. 11.

1 Investors seeking shelter from volatility are turning to a part of the markets that  
2 had largely been overlooked last year: dividend-paying stocks.

3  
4 Shares of companies paying big dividends to investors have trounced practically  
5 everything else this year...

6  
7 What's unusual about this year's rally in dividend-paying stocks is that it is the  
8 opposite of what market convention says happens when interest rates rise.  
9 Usually, investors say, dividend-paying stocks do poorly in a rising-rate  
10 environment because rates typically go up when the economy is growing. In  
11 boom times, investors tend to forgo the steady cash payments of bondlike stocks  
12 in favor of companies that have the potential to deliver bigger profits later.

13  
14 This time, a different dynamic is at play. Interest rates have risen swiftly, not  
15 because investors are betting on an economic surge but because accelerating  
16 inflation is forcing the Federal Reserve to act quickly to rein in price pressures.  
17 Some investors worry the Fed's increases could cause a recession.

18  
19 That has drawn investors into shares of big dividend payers, which promise to  
20 deliver a steady stream of cash in the near term.

21  
22 A bonus? Many dividend payers are in industries like utilities,  
23 telecommunications and consumer staples, which consumers tend to rely on year  
24 round, regardless of the economic environment.

25  
26 That has made them especially attractive to investors who are worried the Fed  
27 won't be able to combat inflation without significantly raising unemployment.<sup>13</sup>

28 Between the spring of 2000 (the onset of the Covid-19 pandemic) until the end of 2021 and  
29 early 2022, utilities had been trading at a discount relative to the S&P 500, as compared to  
30 the premium they traded to the S&P 500 for most of the past decade prior to the Covid-19  
31 pandemic. In response to the Covid-19 pandemic, the United States' Federal Reserve Bank  
32 (i.e. monetary policy) and the United States' government (i.e. fiscal policy) initiated  
33 aggressive policies to counteract economic and market concerns that may be caused by  
34 Covid-19 and the measures instituted to mitigate its spread. The rapid increase in S&P 500  
35 valuation ratios relative to the utility industry's valuation ratios suggested that the  
36 aggressive monetary and fiscal policy increased investors' optimism and risk appetite.  
37 However, this quickly changed as a result of inflationary concerns, which caused the Fed

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<sup>13</sup> Akane Otani, "Investors Find Safety in Overlooked Stocks That Pay Dividends," Wall Street Journal, May 6, 2022, pages B1 and B11.



1 to communicate its intent to transition to tighter monetary policy, and even potential  
2 restrictive conditions, in order to gain control of inflationary pressures caused by consumer  
3 demand.

4 **Q. Can you provide commentary that specifically addresses the utility industry?**

5 A. Yes. A WSJ article published on May 16, 2022, provided further insight on the current  
6 state of utility capital markets as they related to past absolute performance and relative  
7 performance to the S&P 500:

8 Rising interest rates and inflation are typically a circuit breaker for richly valued  
9 utility stocks, but these are unusual times.

10  
11 The sector is the second-best performing one in the U.S. behind energy year to  
12 date, trouncing the S& P 500 by 15 percentage points through Friday. That leaves  
13 utility stocks trading at almost 20 times forward 12-month earnings on average—  
14 close to a high and nearly a fifth richer than the S& P 500. The last time utilities  
15 fetched such a premium was during the market panic in March 2020. The staid  
16 sector typically traded at a slight discount to the broader index over the past  
17 decade...

18  
19 ...Still, the sector's rally is something of an anomaly given the macroeconomic  
20 environment. Utility stocks tend not to take well to rising interest rates for two  
21 reasons: First, utilities have large debt burdens, with those in the S& P 500 on  
22 average carrying net debt that is more than five times earnings before interest,  
23 taxes, depreciation and amortization, according to S& P Global Market  
24 Intelligence. Second, they are a bond substitute. When interest rates rise, utilities'  
25 dividend yields start looking less attractive compared with Treasurys. At one  
26 point during the early-2020 recession, the dividend yield on utility stocks was  
27 nearly 4 percentage points higher than the yield on 10-year Treasury notes. That  
28 edge is now 0.17 percentage point.

29  
30 In addition, high inflation tends to be bad news for utilities. When inflation starts  
31 pushing up overall costs for households, it becomes harder to persuade utility  
32 regulators to grant higher rates. Regulators are typically either appointed by  
33 governors or elected, so they aren't immune to the sentiments now prompting  
34 politicians to blame companies—ranging from oil producers to supermarket  
35 chains— for causing consumer pain...

36  
37 ...With investors seemingly finding new worries around every corner lately, the  
38 forces holding the rest of the market back can make utilities look like a hidden

1                   jewel one moment and a lump of expensive coal in the next. In a softening stock  
2                   market, these power lines are starting to look stretched.<sup>14</sup>

3                   Although the COE has increased for the broader markets, because utility stocks P/E  
4                   ratios are close to their all-time high levels shortly before the pandemic, this information  
5                   supports my position that the absolute level of the utility industry’s COE has not changed  
6                   much relative to bond yields, meaning utility equity risk premiums over current higher  
7                   bond yields are lower than they were when bond yields were lower. My multi-stage  
8                   DCF analysis corroborates this view. Because a DCF analysis directly incorporates  
9                   utility stock prices, it is generally the most reliable method to determine company-  
10                  specific or industry-specific risk premiums (assuming reasonable growth rate  
11                  assumptions).

12 **Q. What are utility equity investors’ reactions to the rising rate environment?**

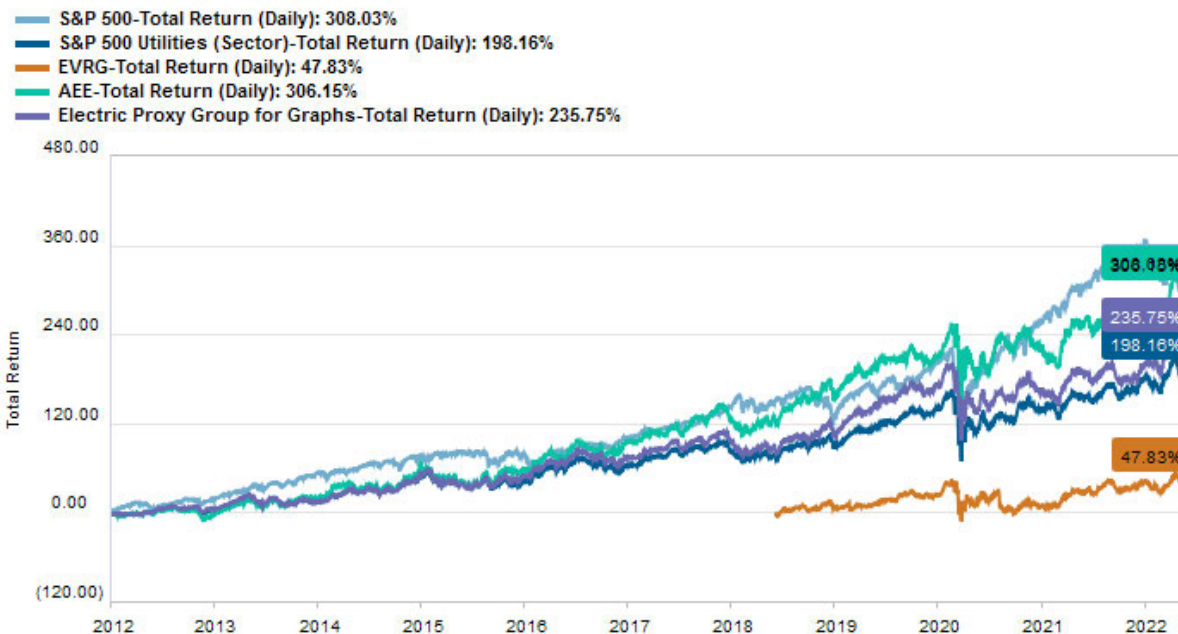
13 A. Based solely on interpreting/evaluating utility stock price changes, they consider the safety  
14 of the non-elasticity in demand and the ability of utilities to increase rates because of  
15 inflation’s impact on their cost of service to currently be more attractive than the  
16 opportunity cost of higher yields offered on bonds. However, as I mentioned earlier, utility  
17 equity analysts consistently compare the valuation levels of utility stocks to corporate bond  
18 yields to determine if they consider them underpriced, fairly priced or overpriced. Until  
19 recently, most utility equity analysts had projected that low interest rates justified at least  
20 a gradual reduction of authorized ROEs. However, if the recent increases in long-term  
21 rates are sustained, then many Wall Street stock analysts expect that regulators may at least  
22 hold the line on awarded ROEs.

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<sup>14</sup> Jinjoo Lee, “Utility Stocks Keep Their Spark – Sector isn’t cheapest place to park money, but there are few alternatives,” Wall Street Journal, May 16, 2022, p. B11.

1 **Q. Can you provide information on how Evergy's shareholder returns have compared**  
2 **to its peers, Ameren and the S&P 500?**

3 A. Yes. See the below chart for a graphic illustration of Evergy's total return as compared to  
4 an electric utility proxy group, EEI's Broad Electric Utility Proxy Group, Ameren, and the  
5 S&P 500.

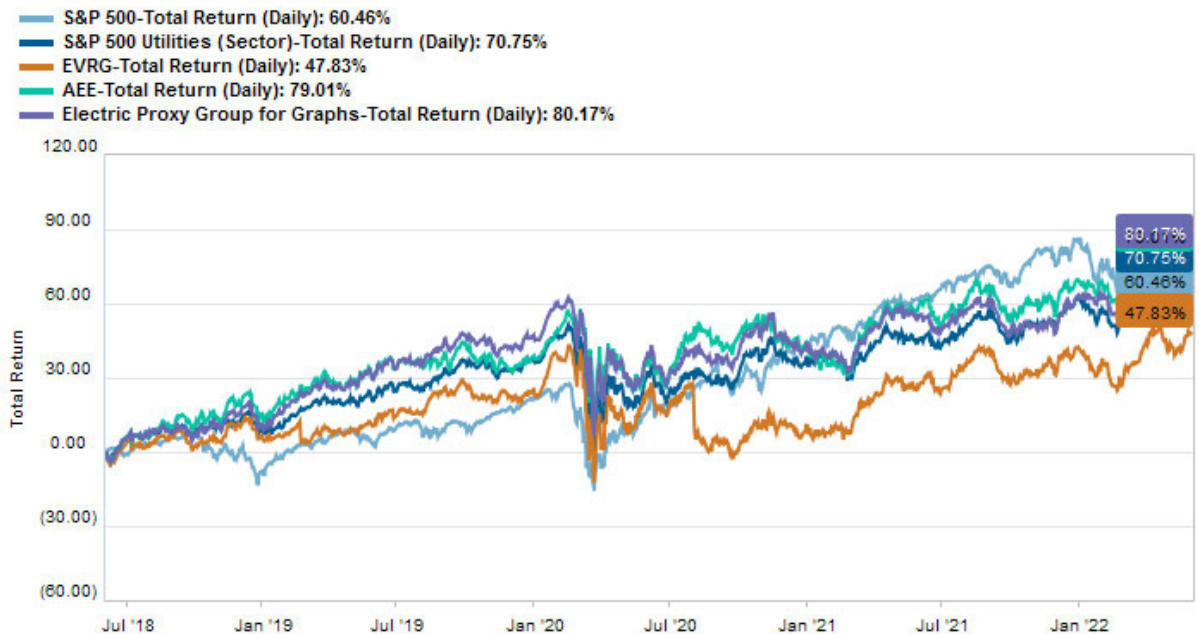


7 Although I included Evergy in the above graph, its performance is not comparable in the  
8 above chart due to the fact that its stock didn't start trading until June 2018. The key  
9 takeaways from the above chart is the fact that until the pandemic, the electric utility  
10 industry achieved total returns similar to the S&P 500 despite the fact that they are not  
11 expected to achieved capital gains similar to growth stocks. This is largely due to the  
12 sustained long-term decline in interest rates over this period, which also caused higher  
13 capital gains for bond investments. Being that bond coupons are typically fixed, this  
14 clearly demonstrated that yield investments achieved capital gains mainly due to a decline  
15 in long-term yields. However, post the pandemic, and more importantly post the response  
16 of the Federal Reserve and the U.S. Congress to support the economy during the pandemic,  
17 aggressive stimulus measures caused the S&P 500 to significantly outperform the electric

1 utility industry. This is largely attributed to the Fed providing a tremendous amount of  
2 capital market support, which caused real bond yields to be negative during much of this  
3 period. This had the impact of reducing the discount rates (i.e. COE) for the broader  
4 markets, which made potential future profits worth more in present value terms. However,  
5 since inflation has become a major concern of the Fed, it is now planning a fairly aggressive  
6 path to transition to at least neutral monetary policy, if not tightening, which may cause a  
7 recession. This explains why utility stocks have performed much better than the S&P 500  
8 since the beginning of 2022.

9 The total returns shown in the chart above convert into the following compound annual  
10 returns for Ameren Corp, Electric Proxy Group, S&P Utilities, and the S&P 500,  
11 respectively: 11.17%, 8.25%, 6.29%, and 10.49%.

12 The following chart compares Evergy to Ameren and the other groups/indices since  
13 Evergy's stock began trading:



16 As can be seen, Evergy's returns have underperformed Ameren, the electric industry, and  
17 the S&P 500. Evergy's compound annual total return has been 9.04% for approximately

1 the past four years, where the annual total returns for Ameren, the electric utility industry,  
2 the S&P Utilities and the S&P 500 have been, 15.88%, 15.70%, 13.54% and 11.18%,  
3 respectively. Evergy's underperformance can be largely explained by the uncertainty of  
4 Evergy's situation for much of 2020 (evaluation of standalone strategy versus merger) and  
5 investors evaluating whether new management and BOD changes will be able to execute  
6 the current STP.

7 **Q. What are recent implied yields on Metro's and MO West's long-term debt?**

8 A. Unfortunately, MO West's long-term debt is privately placed so there is no implied yield  
9 information on its debt. However, Metro's long-term debt is registered with the SEC and  
10 trades over-the-counter. Therefore, pricing information is available on its debt. Recent  
11 information on Metro's debt indicates that its long-term debt is yielding approximately  
12 4.65%, which is a much higher cost than it has consistently experience over the past several  
13 years (absent the short-term spike in yields at the onset of the Covid-19 pandemic).

14 **COST OF EQUITY METHODS**

15 **Q. Now that you have provided some context on changes in utility capital market**  
16 **conditions generally and Evergy specifically, can you discuss how you decided to**  
17 **approach your COE estimate for MO West and Metro in this case?**

18 A. Yes. I performed a company-specific COE analysis on Evergy as well as a proxy group  
19 COE analysis. I used a multi-stage DCF approach and a CAPM. I then tested the  
20 reasonableness of my estimates by using simple, straightforward sanity checks, such as the  
21 straight-forward bond-yield-plus-risk-premium ("BYPRP") method discussed in the CFA  
22 curriculum.

23 **Q. How have you informed yourself as to reasonable and rational inputs for your COE**  
24 **approaches?**

25 A. Being that the objective of a ROR witness is to emulate investors' approaches to analyzing  
26 and making investment recommendations as it relates to investing in utility stocks, I have

1 made it a priority to review and analyze how equity research analysts determine a utility  
2 stock price estimate in practice. This has allowed me to test the theory of cost of capital  
3 estimation in utility ROR testimony as it compares to how utility stocks are actually valued.  
4 I have discovered investment analysts do use multi-stage DCF approaches to estimate  
5 fundamental values of utility stocks, and/or they use relative valuation techniques that  
6 compare a company's P/E ratios to averages for the industry and/or potentially a more  
7 tailored subset of peer companies. In my experience, professional equity ("Wall Street")  
8 analysts project long-term CAGR in EPS to determine whether a company's P/E ratio  
9 deserves a premium or a discount to its peers. Wall Street analysts DO NOT use these  
10 estimated long-term CAGRs in EPS for purposes of projecting a perpetual dividend growth  
11 rate, as some ROR witnesses suggest. When performing an absolute valuation analysis,  
12 such as a DCF/DDM, Wall Street analysts assume rational perpetual growth rates in the  
13 2.5% to 3.3% range for electric utility companies. Finally, and most relevant to the task at  
14 hand, they estimate utilities' COE to be in the 5-6% range.<sup>15</sup>

15 **Q. What equity research firms cover Evergy's stock?**

16 A. According to Evergy's website, the following firms cover its stock: Argus Research  
17 Corporation, Bank of American Merrill Lynch ("BAML"), Evercore ISI, Goldman Sachs,  
18 Guggenheim Securities, Morningstar, UBS Equities, Value Line, Wells Fargo Securities,  
19 and Wolfe Research ("Wolfe").<sup>16</sup>

20 **Q. Why is it important to analyze this information to determine a fair and reasonable**  
21 **allowed ROE for Evergy?**

22 A. Analyzing this information is important because these Wall Street analysts are the very  
23 individuals that underlie various consensus estimates widely considered by investors. ROR

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<sup>15</sup> Durgesh Chopra, et. al, "Top Ten Touches – Q1 2022 Investor Activity," May 30, 2022, Evercore ISI. Neil Kalton, Sarah Akers, and Jonathan Reeder, "DDM Analysis Supports Sector Valuation & Quality/Growth Trade," August 19, 2019, Wells Fargo.

<sup>16</sup> [Analyst Coverage | Evergy, Inc.](#)

1 witnesses recognize the influence Wall Street analysts have on utility stock prices by the  
2 very fact that they use consensus EPS forecasts for purposes of estimating the COE.

3 **Q. Did you review any of these firms' research for purposes of performing your cost of**  
4 **equity analysis and preparing your testimony?**

5 A. Yes. I mainly relied on reports Evergy provided in response to Staff Data Request No.  
6 0129. However, over my career I have established relationships with some firms/analysts  
7 who have distributed this material to me directly through their email distribution lists.  
8 These relationships were borne from my role as a regulator in which many of these analysts  
9 seek information related to Missouri's general and specific regulatory issues. I have also  
10 interacted with these analysts through my participation in organizations, such as the Society  
11 of Utility and Regulatory Analysts ("SURFA").

12 **Q. How did you approach the multi-stage DCF/DDM analysis you performed on**  
13 **Evergy?**

14 A. Schedule DM-D-2 attached to my testimony illustrates the primary logic and assumptions  
15 I used in my multi-stage approach. For the first stage, I used consensus analysts' estimates  
16 for dividend per share ("DPS") through 2026. Evergy's consensus dividend payout ratio  
17 is projected to be 67.51% in 2026. Evergy's targets a dividend payout ratio in the range of  
18 60% to 70%.<sup>17</sup> I assume Evergy's payout ratio will continue at 67.51% for a 10-year  
19 transitionary stage (2026 through 2036). Consequently, both Evergy's DPS and EPS  
20 annual growth rates gradually decline to my assumed perpetual sustainable growth rate in  
21 the range of 2.5% to 3.5%. Based on a terminal expected ROE of 9.25%, this results in  
22 terminal dividend payout ratios in the range of 62.16% (3.5% perpetual growth rate) to  
23 72.97% (2.5% perpetual growth rate). My range of assumed perpetual growth rates range  
24 are consistent with the assumed rates used by Evercore ISI<sup>18</sup> and \*\* \_\_\_\_\_  
25 \_\_\_\_\_

<sup>17</sup> Sustainability Transformation Plan, August 5, 2020, p. 11.

<sup>18</sup> *Id.*

<sup>19</sup> Evergy's response to Staff Data Request No. 127.

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**Q. Can you provide some additional explanation as to the rationale underlying your assumed growth rates for Evergy?**

A. Yes. Through recent investment communications and actions, Evergy has signaled that it plans to increase its dividend in line with its long-term CAGR in EPS guidance of 6% to 8%.<sup>20</sup> Evergy has also communicated to investors that it plans to increase rate base at a CAGR of approximately 5% to 7% through 2024 by investing \$8.9 billion.<sup>21</sup> Although Evergy has communicated it will likely have additional investment opportunities beyond 2024 due to the transition to renewable generation, these ramped up investment programs are finite and will eventually return to a maintenance level of capital investment, similar to investment before the STP initiative and PISA authority. Once the Company achieves this steady state, then it should gravitate toward a dividend payout ratio that ensures it will have sufficient internal equity capital to fund its investments (i.e. a sustainable growth rate). Assuming a 3% perpetual growth rate and a 9.25% perpetual ROE, Evergy would need to target a dividend payout ratio of 67.57% to retain sufficient capital to avoid issuing new common equity (i.e. sustainable growth).

**Q. What does industry data suggest is a sustainable growth rate for a predominately regulated electric utility company, such as Metro and MO West?**

A. I reviewed past actual historical industry growth rate data from the Moody’s electric utility index,<sup>22</sup> a sample group of electric utility companies in which data was available from Value Line,<sup>23</sup> and commentary/analysis available from institutional investors/analysts.<sup>24</sup> This information supports a perpetual growth rate in the range of 2.5% to 3.5%. A perpetual growth rate within this range is also consistent with the “sustainable growth model,” which estimates EPS growth by multiplying an average long-term industry

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<sup>20</sup> Sustainability Transformation Plan, August 5, 2020, p. 11.  
<sup>21</sup> *Id.*  
<sup>22</sup> Staff Cost of Service Report, Case No. ER-2011-0028, p. 18.  
<sup>23</sup> *Id.*  
<sup>24</sup> Discussed throughout this testimony.



1 retention rate by an expected book ROE. Assuming the utility industry reverts to its long-  
2 term earnings retention rate of approximately 30% and allowed ROEs are eventually  
3 lowered to compress the spread between the COE and the allowed ROE, this supports a  
4 2.8% perpetual growth rate if investment opportunities are available (9.25% allowed ROE  
5 multiplied by 30%).

6 **Q.** \*\* \_\_\_\_\_  
7 \_\_\_\_\_  
8 \_\_\_\_\_

9 **A.** \_\_\_\_\_  
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11 \_\_\_\_\_  
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14 \_\_\_\_\_

15 \_\_\_\_\_ \*\*25

16 **Q. How does this compare to perpetual growth rates used by equity analysts to estimate**  
17 **fair prices for utility stocks?**

18 **A.** This is fairly consistent with the perpetual growth rates used for purposes of estimating  
19 utility stock prices. For example, Evercore ISI uses a perpetual growth rate of 2.5% in its  
20 3-stage DDM analyses of electric utility stocks.<sup>26</sup> Wells Fargo uses an average perpetual  
21 growth rate of around 3%.<sup>27</sup>

22 **Q. How do these growth rates compare to how Metro’s and MO West’s rate base growth**  
23 **since 2010?**

24 **A.** Based on Metro’s and MO West’s estimated rate bases through the true-up period in this  
25 case, the CAGR in their rate bases were 4.06% and 3.19%, respectively. For comparison,

<sup>25</sup> Evergy’s Strategic Review Operating Committee Materials, p. 17/181 (Confidential Schedule DM-D-3).  
<sup>26</sup> *Id.*  
<sup>27</sup> *Id.*

1 through the true-up period in Metro's and MO Wests' 2018 rate case, June 30, 2018, the  
2 CAGR in their rate bases were 3.45% and 1.09%, respectively.

3 **Q. What cost of equity did you estimate for Evergy using the multi-stage approach?**

4 A. Using Evergy's stock prices since January 1, 2022, and discounting prospective dividends  
5 by reasonable growth rates in the intermediate future as well as perpetually, the implied  
6 COE for Evergy is approximately 7.45% to 7.75% (see Schedule DM-D-2). Given that  
7 this COE estimate assumes Evergy can achieve CAGR in EPS of 5.34% for approximately  
8 the next 10 years, I consider this COE estimate to be higher than likely. Additionally, as I  
9 explained earlier in my testimony, Evergy has been in a state of strategic transition, which  
10 has caused some noise in its stock price. I do not consider this noise to be due to business  
11 risks associated with Evergy's regulatory environments. Therefore, this COE estimate will  
12 be the basis for the upper end of my estimated COE range.

13 **PROXY GROUP COST OF EQUITY**

14 **Q. Should you compare your estimate of Evergy's company-specific COE to the COE of**  
15 **a proxy group of other regulated electric utilities?**

16 A. Yes. Investors frequently evaluate the attractiveness of a utility company's share price by  
17 comparing it to the average of a peer proxy group, whether it's based on a broader utility  
18 index or a custom proxy group.

19 **Q. How did you approach selecting a custom proxy group for purposes of comparing**  
20 **Evergy's COE versus its peers?**

21 A. I decided to analyze a broad proxy group of utilities classified as "regulated" and "mostly  
22 regulated" utilities by the Edison Electric Institute ("EEI").<sup>28</sup> Although I estimated a COE  
23 based on this broad electric proxy group, I also reviewed the companies EEI classifies as  
24 "regulated," but even these companies may have non-regulated operations that contribute  
25 to volatility to earnings and/or cash flows. Therefore, I reviewed the various business

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<sup>28</sup> EEI classifies companies as "Regulated" if at least 80% of their assets are dedicated to regulated utility operations.

1 segments of each of these companies to determine which generally have less than 10% of  
2 their operations exposed to competitive and international markets, which was 19  
3 companies. I also analyzed a subset of the EEI companies I have consistently followed in  
4 electric rate cases since 2012 (I use this group for the charts included in my testimony).

5 **Q. Did you perform a multi-stage DCF analyses on these companies?**

6 A. Yes. I applied the same principles as I did when applying the multi-stage DCF to Evergy.  
7 For the first stage (May 31, 2022 through June 30, 2026) I used Wall Street analysts'  
8 consensus DPS estimates to the extent they were available. For the second stage (June 30,  
9 2026 through June 30, 2036), I allowed for a gradual decline from Wall Street analysts'  
10 projected 5-year CAGR in EPS to a sustainable perpetual growth rate of 3% starting in  
11 June 30, 2036. In order to estimate investors' anticipated annual DPS over the second  
12 stage, I determined consensus analysts' estimated dividend payout ratios as of 2026. I then  
13 allowed the dividend payout ratios to gradually converge to a sustainable payout ratio of  
14 67.57% starting in 2036. This payout ratio is consistent with the constant/sustainable-  
15 growth DCF theory that requires DPS, EPS and book value per share ("BVPS") to grow in  
16 perpetuity at the same rate. This payout ratio is consistent with the proportion of earnings  
17 utility companies should retain to sustain a 3% growth rate at a 9.25% book ROE.

18 My industry COE estimate based on application of the multi-stage DCF to the proxy group  
19 indicates a COE in the range of around 7% to 7.25% (see Schedule DM-D-4, p. 1).

20 **Q. How does this COE estimate compare to your electric utility industry COE estimates**  
21 **before the recent increase in interest rates?**

22 A. It is quite similar. As I explained in my testimonies in the recent Ameren Missouri and  
23 Empire electric rate cases, utility stock prices did not exhibit the typical negative  
24 correlation with the decline in interest rates during the Fed's easing of monetary policy in  
25 response to the Covid-19 pandemic. This continues to be the case as the Fed has started to  
26 transition to a potential tightening of monetary policy in response to inflationary pressures.  
27 While the utility industry's debt costs have fluctuated along with the changes in broader  
28 debt costs, the COE seems to have held fairly steady during these fluctuations.

1 **Q. If you had performed your multi-stage similar to how you did so when with Staff,**  
2 **what COE would you have estimated?**

3 A. My estimate would have generally been below 7% (see Schedule DM-D-5). The higher  
4 COE estimate using my current approach is mainly due to the fact that adjusting the  
5 dividend payout ratio for a sustainable stage recognizes that dividends will increase faster  
6 than EPS during the transition period. However, in order to ensure that DPS, EPS and  
7 BVPS grow in equilibrium in the terminal stage, my current method is consistent with the  
8 assumptions of the constant-growth DCF and therefore should be used. Regardless,  
9 because it is clear that the COE is much lower than allowed ROEs, I don't consider it  
10 critical to narrow down the COE to a precise estimate. In my opinion, the fact that a  
11 reasonable and logical COE estimate for the electric utility industry is much lower than  
12 average awarded ROEs illustrates the reasonableness of my recommended authorized ROE  
13 of 9.00%.

14 **Q. Are there any other models that investors typically use to estimate the utility**  
15 **industries' COE?**

16 A. Yes. In my experience, many Wall Street analysts use the CAPM to determine a discount  
17 rate, i.e. the COE, to apply to expected cash flows to the equity investor. The CAPM shows  
18 the potential impact of changes in interest rates on the cost of capital. Although COE  
19 estimates can be manipulated with the CAPM by using unreasonable market risk premium  
20 estimates, fortunately there are a variety of authoritative sources that provide equity risk  
21 premium estimates that can form the basis for a consensus view on reasonable risk  
22 premium based on current capital market conditions. In fact, Evergy's own financial  
23 advisors provided market risk premium estimates for purposes of evaluating whether to  
24 pursue a stand-alone plan or a strategic acquisition. Considering the significance of this  
25 decision on shareholder value, the financial advisors' estimates should be considered  
26 extremely reliable because of the consequential nature of this significant strategic decision.

1 **Q. What is the underlying theory that supports the use of the CAPM to estimate the cost**  
2 **of equity for utilities?**

3 A. The CAPM is based on capital market theory in which it is recognized that although the  
4 total risk of a company and/or industry consists of market (“systematic”) risk and  
5 asset/business-specific (“unsystematic”) risk, investors are only compensated for  
6 systematic risk because holding a diversified portfolio allows the investor to avoid  
7 unsystematic risk. Systematic risks are unanticipated events in the economy, such as  
8 economic growth, changes in interest rates, demographic changes, etc., that affect almost  
9 all assets to some degree. The required risk premium for incurring the market risk as it  
10 relates to the investment/portfolio is determined by adjusting the market risk premium by  
11 the beta of the stock or portfolio. The adjusted risk premium is then added to a risk-free  
12 rate to determine the cost of equity. The CAPM is typically expressed in equation form as  
13 follows:

$$K_e = R_f + \beta (RP_m)$$

14 Where:  $K_e$  = the cost of equity for a security;  
15  $R_f$  = the risk-free rate;  
16  $\beta$  = beta; and  
17  $RP_m$  = equity risk premium.  
18  
19

20 For purposes of my CAPM analysis, I relied on Duff & Phelps (D&P) recommended equity  
21 risk premium of 5.5% provided as of December 8, 2020<sup>29</sup> and a range of realized historical  
22 equity risk premiums of 4.92% (geometric historical mean for 1926 through 2021) to  
23 6.36% (arithmetic historical annual mean for the period 1926 through 2021) derived from  
24 data provided by Ibbotson Associates’ Stocks, Bonds, Bills and Inflation database.  
25 Although each of these equity risk premium estimates use various methods and risk-free  
26 rates to arrive at their final estimates, I do not consider any estimate outside these to be  
27 consistent with the investment community’s “consensus.” One of the primary drivers of  
28 using a higher market risk premium versus a lower market risk premium is due to whether  
29 this market risk premium is applied to a normalized risk-free rate or a current risk-free rate

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<sup>29</sup> <https://www.duffandphelps.com/insights/publications/cost-of-capital/duff-and-phelps-recommended-us-equity-risk-premium-decreased-december-2020>

1 (higher market risk premiums applied to lower current low risk-free rates). Long-term  
2 expected nominal market returns for the S&P 500 are as low as 4.1% to 6.73%.<sup>30</sup>  
3 Therefore, market risk premiums in the 5.5% to 6.0% range may actually be excessive for  
4 purposes of a CAPM analysis.

5 **Q. What does the beta represent in a CAPM analysis?**

6 A. Beta is statistically defined as the covariance of the returns on an asset (in this case an  
7 individual stock or group of stocks) with the return on the S&P 500 divided by the variance  
8 of the returns on the S&P 500. This statistical measure is intended to provide investors  
9 with insight regarding expected volatility of a security (or portfolio of securities) as it  
10 relates to market volatility. A beta of less than one implies less expected volatility than the  
11 market with the trade-off of a lower expected return than the market. The reverse is  
12 expected for a beta greater than one.

13 **Q. Did utility stock betas increase subsequent to the market disruptions at the onset of**  
14 **the Covid-19 pandemic?**

15 A. Yes. At the time I drafted testimony for the Empire and Ameren Missouri 2019 rate cases,  
16 electric utility 5-year stock betas had declined to quite low levels of around 0.55. At the  
17 time I sponsored testimony for the Empire and Ameren Missouri 2021 utility rate cases,  
18 electric utility 5-year stock betas had increased to around 0.80. Electric utility 5-year stock  
19 betas are currently approximately 0.80 for the broad EEI proxy group and around 0.75 for  
20 more pure-play regulated electric utilities. Specifically, Evergy and Ameren currently have  
21 a current long-term beta of approximately 0.75. Because Evergy has only been trading  
22 publicly since it was formed in the Westar and Great Plains Energy merger in 2018, its  
23 long-term beta captures only four years of data, as compared to five years for the other  
24 companies.

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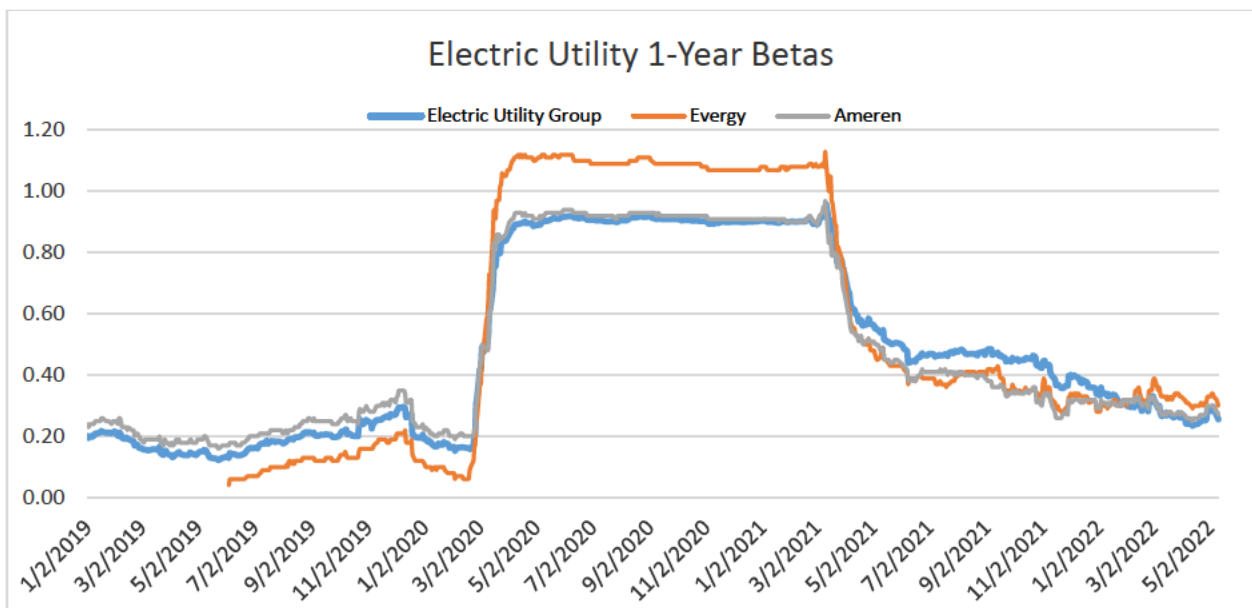
<sup>30</sup> First Quarter 2022 Survey of Professional Forecasters, Philadelphia Federal Reserve Board (Feb. 11, 2022), [First Quarter 2022 Survey of Professional Forecasters \(philadelphiafed.org\)](https://www.philadelphiafed.org/publications/survey-of-professional-forecasters) and John Bilton et al., *Executive Summary: 2022 Long-Term Capital Market Assumptions*, J.P.Morgan (Nov. 8, 2021), [2022 Long-Term Capital Market Assumptions Executive Summary \(jpmorgan.com\)](https://www.jpmorgan.com/markets/assumptions).

1 **Q. What was the primary cause of the increase in utility stock betas?**

2 A. The spike in utility stock betas occurred when the market plummeted at the onset of the  
3 pandemic in March 2020. It is quite common for all securities, both higher-risk and lower-  
4 risk securities, to move in tandem during significant market corrections. Because betas  
5 measure the relative volatility of a company or a portfolio as it relates to the market, if all  
6 securities rapidly decline at the same time, this causes all betas to converge toward one.  
7 For example, the semiconductor equipment industry typically have betas that significantly  
8 exceeds one. However, when all securities declined at the start of the pandemic, the  
9 semiconductor equipment industry's betas decreased towards one. After the stock market  
10 data associated with the synchronized decline of equity markets during March and April of  
11 2020 began to drop off of 1-year beta calculations, the semiconductor equipment industry's  
12 betas started to increase back to their normal higher levels.

13 **Q. How much have electric utility one-year raw betas changed over the last couple of**  
14 **years due to the market contraction at the onset of the pandemic?**

15 A. As can be seen in the following chart, electric utility raw betas were in the 0.2 to 0.25 range  
16 before they increased to approximately 0.9 and have recently returned to around 0.25.



17

1 **Q. How do you interpret the one-year raw beta data shown in the chart?**

2 A. Evergy's stock price during 2020 was volatile due to speculation regarding a potential  
3 strategic transaction with another utility company. On August 5, 2020, Evergy announced  
4 that it was pursuing a standalone plan rather than a strategic transaction. This caused a  
5 sudden decline in Evergy's stock price by approximately \$10 during a couple of trading  
6 days. Based on Evergy's stock price of around \$65 at the time, this was about a 15%  
7 decline. Therefore, this speculation caused Evergy's beta to skew higher during much of  
8 2020. Evergy's 1-year betas starting after August 2021 are more consistent with the  
9 electric utility industry and Ameren. Therefore, recent betas do not imply Evergy's risk  
10 level is much different than that of the industry.

11 **Q. Based on your CAPM analysis, what is the estimated COE for Evergy and the proxy  
12 groups?**

13 A. My CAPM COE analysis indicates that Evergy and the electric utility industry currently  
14 have a COE of around 7.5%. (see Schedules DM-D-6).

15 **Q. What inputs did Evergy's financial advisors use to determine an estimate of Evergy's  
16 share value if it pursued the STP?**

17 A. \*\* \_\_\_\_\_  
18 \_\_\_\_\_  
19 \_\_\_\_\_  
20 \_\_\_\_\_  
21 \_\_\_\_\_ \*\*

22 **Q. Are there any other reasonableness tests to show your COE estimates are rational  
23 and logical?**

24 A. Yes. First, as I indicated earlier in my testimony, a simple rule of thumb the Chartered  
25 Financial Analyst ("CFA") suggests in its curriculum to estimate the COE is to add 3% to  
26 4% risk premium to a company's bond yield to provide a fairly simple, but objective cost  
27 of equity. Being that the investment community views utility stocks as bond



1 surrogates/substitutes, it is logical and reasonable to not add a risk premium any higher  
2 than 3% to the bond. Simply adding a 3% risk premium to recent YTM's of around 4.6%  
3 on Evergy Metro's long-term bonds implies a COE of approximately 7.6%.

4 Second, one just needs to think about the basic characteristics of utility stocks, which is  
5 that investors typically view them as yield investments. An analysis performed by Alliance  
6 Bernstein (an equity research firm) showed that between 1974 to 2010, approximately 68%  
7 of returns from utility stocks were from the income received through dividends, with the  
8 remaining from capital gains.<sup>31</sup> However, with some electric utility companies targeting  
9 lower dividend payout ratios, at least in the near-term, in order to fund higher capital  
10 expenditure programs related to grid modernization and renewable generation projects, it  
11 is reasonable to expect a larger share of returns may be in the form of capital gains. But a  
12 fundamental change in the basic characteristics of electric utility stocks is highly unlikely.  
13 Even if assuming electric utility stocks generated 50% of returns from capital gains over  
14 the long-term, this translates into only a 6.4% required return based on the current average  
15 electric utility dividend yield of approximately 3.2%. If Evergy investors were able to  
16 achieve 50% of their total return from capital gains over the long-term, this implies a total  
17 return of approximately 7% based on its current dividend yield of approximately 3.5%.

18 **Q. Based on your analysis and understanding of Evergy's COE, the electric utility**  
19 **industry's COE, investor expectations on allowed ROEs, average electric utility**  
20 **authorized ROEs and Evergy's authorized returns for its Kansas electric utility**  
21 **operations, what would be a fair and reasonable allowed ROE range in this case?**

22 **A.** 8.5% to 9.5% would be justified with 9% being reasonable for MO West and Metro to  
23 attract capital.

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<sup>31</sup> Hugh Wynne, Francois D. Broquin, and Saurabh Singh, "U.S. Utilities: Our Dividend Growth Model Identified Utilities Poised to Pay More," May 20, 2011, Bernstein Research.

1 **Q. Considering your estimate Metro’s COE in the range of 7% to 7.5%, why do you**  
2 **consider a 9% authorized ROE reasonable?**

3 A. While it certainly may be a worthwhile debate to quantify the amount of “premium,” if  
4 any, over the COE that is fair and reasonable to allow a utility, the Commission has  
5 repeatedly indicated it needs to consider average authorized ROEs in setting a fair and  
6 reasonable ROE for its Missouri utilities. As it relates to this instant case, I believe the fact  
7 that the cost of capital has generally been declining since the Commission last awarded  
8 Metro a 9.5% ROE supports a reduction. This is also supported by lower average  
9 authorized ROEs awarded to other companies.

10 **CAPITAL STRUCTURE**

11 **Q. Will you briefly explain capital structure?**

12 A. Capital structure represents how a company’s assets are financed. The typical capital  
13 structure consist of common equity, long-term debt, and short-term debt. Although short-  
14 term debt is a typical component of a utility company’s capital structure, if it is fully  
15 supporting construction work in progress (“CWIP”), then it typically is excluded from the  
16 rate making capital structure and reflected in the allowance for funds used during  
17 construction (“AFUDC”) rate.

18 **Q. What capital structure do you recommend for purposes of setting Metro’s rate of**  
19 **return (ROR)?**

20 A. I recommend a capital structure that consists of approximately 48% common equity and  
21 52% long-term debt. My capital structure recommendation is based on my analysis of  
22 Evergy’s and Metro’s quarterly capital structures from the beginning of the original test  
23 year (July 1, 2020) through the end of the update period (December 31, 2021). My  
24 recommended capital structure ratios consider the interdependency of Evergy and its  
25 subsidiaries’ capital flows.

1 **Q. What is the basis for this capital structure recommendation?**

2 A. My recommended capital structure for Metro is consistent with Evergy's and Metro's  
3 average consolidated capital structures for the test year and the updated test year in this  
4 case. With the inclusion of short-term debt, Evergy has typically had an equity ratio of  
5 approximately 45% and Evergy Metro's common equity ratio has been in the 47% to 48%  
6 range. If short-term debt were excluded, each capital structure has had a common equity  
7 ratio of approximately 48%.

8 **Q. Excluding short-term debt, Metro's capital structure as of the end of the update**  
9 **period, December 31, 2021, indicates Metro has a common equity ratio of 50.27%.**  
10 **How does this common equity ratio compare to Evergy's consolidated common equity**  
11 **ratio as of the same date?**

12 A. It is higher. Evergy's common equity ratio was 48.49% as of December 31, 2021.

13 **Q. Is it important to evaluate each company's capital structures over time rather than**  
14 **an isolated date?**

15 A. Yes. Because rates are in effect over multiple years, the mix of capital in the authorized  
16 capital structure should be consistent with the usual mix of capital targeted over time.  
17 Setting the authorized capital structure with the typical ratios maintained over time more  
18 closely matches the authorized return to the typical ratio targeted.

19 **Q. Should Metro's authorized common equity ratio consider Evergy's recent actual and**  
20 **targeted common equity ratios?**

21 A. Yes.

1 **Q. Did the Kansas Corporation Commission (“KCC”) implement safeguards regarding**  
2 **potential discrepancies in capital structures when it approved the merger of Great**  
3 **Plains Energy and Westar?**

4 A. Yes. A condition of the KCC’s approval of the merger was to institute an Earnings Review  
5 and Sharing Plan (“ERSP”). The KCC understood that the newly formed entity, Evergy,  
6 could attempt to accrue additional earnings for its shareholders by using more leverage at  
7 the holding company level as compared to its subsidiaries. Consequently, if Evergy’s  
8 consolidated common equity declined below 47.5%, then each Kansas subsidiary’s  
9 common equity ratio would be reduced by a proportional amount for purposes of  
10 determining potential bill credits to customers for the ERSP.<sup>32</sup>

11 **Q. What common equity ratios did the KCC specify for Evergy’s subsidiaries for**  
12 **purposes of the ERSP?**

13 A. 51% in 2019, 50.5% in 2020 and 50% in 2021 through 2022.

14 **Q. What common equity ratios has Evergy had recently?**

15 A. Evergy’s common equity ratios have been in the range of 47% to 48%.

16 **Q. What does this imply about a reasonable common equity ratio for Metro?**

17 A. Based on the agreement approved at the KCC, the spread between Metro’s common equity  
18 ratio and Evergy’s common equity ratio should not be greater than 2.5%. Therefore, at a  
19 minimum, Metro’s authorized common equity ratio should not be any higher than 50%.

20 **Q. What common equity ratio does Evergy generally target for its long-term capital**  
21 **components (common equity and long-term debt)?**

22 A. Around 50% common equity and 50% long-term debt.

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<sup>32</sup> Docket No. 18-KCPE-095-MER, Order Approving Merger, Attachment A, May 24, 2018, pgs. 18-22.

1 **Q. What common equity ratio did Metro recommend in its 2018 rate case?**

2 A. Approximately 49%.<sup>33</sup>

3 **Q. What was Metro's embedded cost of debt at December 31, 2021?**

4 A. 3.9236%.

5 **Q. Did you accept the Company's calculations to determine the embedded cost of debt?**

6 A. Yes. The Company determined the embedded cost of debt using a weighted-average yield-  
7 to-maturity, which is a reasonable approach to determining the cost of debt.

8 **Q. How does Metro's cost of debt compare to Evergy's consolidated cost of debt?**

9 A. According to the Company's response to OPC Data Request No. 3025, Evergy's  
10 consolidated cost of debt is 3.9%. The consolidated cost is likely lower due to Evergy's  
11 lower-cost of standalone holding company debt, which had a weighted-average cost of  
12 3.2836% on December 31, 2021.

13 **Q. Is there other supporting evidence for considering Evergy's capital structure for  
14 purposes of setting Metro's authorized capital structure?**

15 A. Yes. Evergy paid its shareholders \$497.3 million in dividends in 2021. However, Evergy  
16 MO West did not pay any dividends to Evergy in 2021 and Evergy Metro only paid \$50  
17 million in dividends. Kansas Central paid Evergy \$240 million in dividends. Therefore,  
18 Evergy had to issue short-term debt to fund \$207.3 million in dividends to shareholders.  
19 Evergy is able to access commercial paper because of its ownership of regulated utility  
20 subsidiaries. If Evergy did not have a holding company commercial paper program, then  
21 the regulated utility subsidiaries would be required to provide a consistent dividend to the  
22 parent company, which would require the subsidiaries to issue commercial paper for its  
23 liquidity needs rather than retaining more expensive equity. While this situation may be

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<sup>33</sup> Metro True-up Workpapers "KCPL-MO Cost of Capital 6-30-2018"

1 efficient for the holding company, it comes at an expense to ratepayers through higher  
2 accruals in AFUDC and carrying costs for other assets.

3 **Q. What do you consider the best approach to mitigate the consequences of Metro's**  
4 **capital flows being impacted by Evergy's capital allocation decisions?**

5 A. Take guidance from Evergy's targeted and actual consolidated capitalization ratios to  
6 assure Metro's capital structure is based on the most cost efficient use of leverage (i.e.  
7 debt). While I understand the Commission has shown a preference for using a subsidiary  
8 capital structure if that subsidiary issues all of its own debt (or in the case of Spire Missouri,  
9 at least all of its long-term debt, but not short-term debt), due to the numerous affiliate  
10 capital transfers that occur (money pool transactions) and Evergy's issuance of significant  
11 amounts of holding company commercial paper, it is quite difficult to have confidence that  
12 the utility subsidiaries' capital structures are a consequence of managing to the lowest  
13 reasonable cost for the subsidiary.

14 **Q. Do you have an example of commentary that supports your view that Evergy manages**  
15 **its subsidiary capital structures to those authorized by the Commission?**

16 A. Yes. Moody's stated the following about MO West's capital structure in an April 29, 2021  
17 Credit Opinion:

18 The company plans to fund these capital expenditures with a balance of  
19 internally generated cash flow, incremental debt and money pool  
20 borrowings, **adjusting dividends as needed to maintain the utility's**  
21 **regulatory allowed capital structure.**<sup>34</sup> (emphasis added)

22 **Q. Is it prudent for a utility subsidiary's capital structure to remain constant over time?**

23 A. No. Changes in capital market conditions and business risk should consistently and  
24 constantly be evaluated to determine the most cost efficient balance of capital and timing  
25 for capital issuances. Evergy's BOD and Finance Committee are primarily focused on

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<sup>34</sup> Hamilton, Nana, "Evergy Missouri West, Inc. – Update to Credit Analysis," Moody's Investor Services, April 29, 2021.

1 managing Evergy's consolidated capital structure for cost efficiency and earning accretion  
2 to attempt to maximize shareholder value.

3 **Q. Can you provide examples from Evergy's Finance Committee discussions?**

4 A. Yes. At Evergy's November 1, 2021 Finance Committee meeting, the Committee  
5 discussed that its \*\* \_\_\_\_\_  
6 \_\_\_\_\_  
7 \_\_\_\_\_

8 \_\_\_\_\_  
9 \_\_\_\_\_

10 \_\_\_\_\_

11 \_\_\_\_\_  
12 \_\_\_\_\_ 35 \*\*

13 **Q. Has Evergy used significantly more leverage at the holding company to take**  
14 **advantage of the lower business risk associated with its Missouri subsidiaries elections**  
15 **of PISA on January 1, 2019?**

16 A. No. Unlike Ameren, Evergy has maintained some parity between its consolidated capital  
17 structure and that of its Missouri subsidiaries. As I testified in Ameren Missouri's recent  
18 rate cases, Ameren has increased the amount of holding company debt it issues without a  
19 proportionate increase in the debt utilized at its Ameren Missouri subsidiary. The KCC  
20 appropriately imposed a condition on Evergy to minimize the potential of this occurring.

21 **Q. Did Evergy plan to issue more holding company debt after it was formed in order to**  
22 **boost Evergy's shareholders EPS?**

23 A. Yes. It had planned to buyback approximately three million shares of common equity. The  
24 Company planned to issue holding company debt to partially fund this buyback.

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<sup>35</sup> Evergy Finance Committee Meeting, November 1, 2021, p. 27.

1 **Q. How much debt did it issue before the share buyback program was halted?**

2 A. \$1.6 billion.

3 **Q. How does affiliate financing issues impact other areas of ratemaking of Evergy's**  
4 **Missouri utility subsidiaries?**

5 A. Because Metro has only paid \$170 million in dividends (\$120 million in 2020 and \$50  
6 million in 2021) to Evergy of its \$611 million in earnings in the last two years - a payout  
7 ratio of only 28%, Metro has issued almost no commercial paper (i.e. short-term debt) since  
8 the first half of 2020, when Metro paid \$80 million of dividends. Consequently, Evergy's  
9 management of Metro's capital flows has caused Metro's AFUDC rate to be much higher  
10 than it otherwise would be if it were a standalone company targeting a typical utility  
11 dividend payout ratio of around 65%.

12 **Q. What corroborating information supports your position that Evergy's Missouri**  
13 **subsidiaries' business risks are lower due to its ability to recover a return on and of**  
14 **investments between rate cases through PISA?**

15 A. First, the very fact that as part of its STP initiative, Evergy increased its allocated capital  
16 to Missouri by over \$400 million through 2024 demonstrates the attractiveness of investing  
17 in Missouri due to PISA. According to Elliott, the allocation of capital to investment in  
18 Missouri would create more shareholder value than Evergy's share buyback program.<sup>36</sup>  
19 Of course, to the extent the Commission awards a ROR that is significantly higher than  
20 Evergy's cost of capital, this initiative will create even more shareholder value.  
21 Consequently, I recommend the Commission at the very least not set Metro and MO West's  
22 authorized ROEs any higher than KS current awarded ROE of 9.3%.

23 Second, both Moody's and S&P have consistently cited the PISA ratemaking mechanism  
24 as a credit positive factor as it relates to Evergy's Missouri utility companies, Ameren  
25 Missouri and Empire. In fact, Moody's lowered Ameren Corp's Funds from Operations

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<sup>36</sup> Elliott's January 21, 2020 letter to Evergy's Board of Directors.



1 (“FFO”)/debt<sup>37</sup> threshold to 17% from 19%, which means that Ameren Corp can incur  
2 more leverage as it compares to cash flow and still maintain its current credit rating of Baa1  
3 (functional equivalent of S&P’s BBB+). One of the primary reasons Moody’s cited for  
4 allowing Ameren Corp to have a lower FFO/debt threshold (i.e. use of more leverage) was  
5 “improved regulatory construct in Missouri facilitating meaningful rate base growth and  
6 reducing regulatory lag [PISA].”<sup>38</sup> While I am not aware of S&P or Moody’s making any  
7 specific adjustments to Metro or MO West’s credit metric benchmarks, this certainly  
8 supports authorizing a lower common equity ratio than Metro and MO West were targeting  
9 in 2018, before the law allowing PISA was passed. Considering the anticipated sizeable  
10 increase in Metro’s and MO West’s rate base over the next several years, it is just and  
11 reasonable to set the authorized capital structure with a ratio of debt similar to that which  
12 Evergy targets at the consolidated level. Recognizing this lower business risk by including  
13 a higher debt ratio in the capital structure ensures Evergy’s Missouri ratepayers receive  
14 credit for Evergy’s reduced risk profile afforded by the legislative opportunity to receive a  
15 return on and of plant placed in service between rate cases.

16 **Q. Why do you consider Evergy’s long-term equity ratio to be the most appropriate for**  
17 **setting Metro’s allowed ROR?**

18 **A** Evergy allocates capital around its companies to target and achieve ratemaking common  
19 equity ratios. The most objective and practical measure of the capital structure that  
20 captures the debt capacity of Evergy’s regulated utility assets, is that of the Evergy on a  
21 consolidated basis. Consequently, this is why I am recommending Metro’s be set no  
22 higher than Evergy’s, which is currently approximately 48%, net of short-term debt.

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<sup>37</sup> FFO/Debt (as generally referenced by most evaluating credit worthiness) is the credit metric that receives the most weight by both Standard & Poor’s (S&P) and Moody’s. This metric provides insight as to how much sustainable cash flow the operations generate as it relates to the amount of fixed obligations, which includes traditional debt, but also other obligations such as capital leases. The higher the ratio, the less financial risk implied by the ratio. Moody’s more specifically defines FFO/debt as “Cash flow from Operations – Pre Working Capital to Debt”. However, I will generally refer to each as FFO/debt.

<sup>38</sup> “Update to Credit Analysis,” Moody’s Investor Service, March 29, 2019, p. 2.

1 **Q. How can the Commission determine an equitable, market-tested and objective capital**  
2 **structure that more closely captures the amount of debt capacity that is consistent**  
3 **with Metro’s business risks?**

4 A. The Commission can more closely capture debt capacity consistent with Metro’s business  
5 risks by using Evergy’s consolidated capital structure as a proxy. While this capital  
6 structure includes capital that is used for investment in all of Evergy’s subsidiaries, this  
7 should not be the focus for determining the proper balance of capital as it relates to each of  
8 Evergy’s subsidiaries. Evergy’s strategic financing decisions primarily concentrate on the  
9 amount of leverage Evergy can carry on a consolidated basis. This capital structure most  
10 accurately reflects the debt capacity afforded by Evergy’s regulated utility subsidiaries.

## 11 **SUMMARY AND CONCLUSIONS**

12 **Q. Can you summarize your main conclusions and views as it relates to an authorized**  
13 **ROR in this case?**

14 A. Metro’s ratepayers deserve consideration for the fact that they are now charged for plant  
15 placed in service in between general rate cases. In competitive markets, if a company is  
16 able to reduce its business risk and have more assurance of achieving its expected returns,  
17 its debt capacity increases. However, Metro’s targeted common equity ratio has not  
18 changed since before it was able to elect PISA. Consideration for such lower business risk  
19 can be achieved by reducing the awarded ROE and/or reducing the authorized common  
20 equity ratio. Sustained higher valuation levels of utility stocks (systematic factors) support  
21 lowering Metro’s awarded ROE. Metro’s lower business risk due to PISA support a higher  
22 amount of leverage in its authorized capital structure. This is most objectively determined  
23 by looking to the amount of leverage used by Evergy. In fact, if Evergy’s balance sheet  
24 were recorded based on the original book value of its utility assets (before the recording of  
25 goodwill), its common equity ratio would be closer to approximately 40%. This illustrates  
26 the reasonableness of my recommended 48% common equity ratio. A 9% ROE applied to  
27 this 48% common equity ratio is fair and reasonable in the current market environment.

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

2 A. Yes.