Exhibit No.:

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

REBUTTAL TESTIMONY

OF

DAVID MURRAY

Submitted on Behalf of the Office of the Public Counsel

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

CASE NOS. ER-2022-0129

*

Denotes Confidential Information that has been redacted.

July 13, 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)	Case No. ER-2022-0129
for Authority to Implement a General)	
Rate Increase for Electric Service)	

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 rebuttal testimony.
- 3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

David Murray

Utility Regulatory Manager

Ideus

Subscribed and sworn to me this 13^{th} day of July 2022.

MOTANY OF MISS

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

Tiffany Hildebran Notary Public

My Commission expires August 8, 2023.

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REBUTTAL TESTIMONY

OF

DAVID MURRAY

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

CASE 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.	Are you the same David Murray who previously filed Direct Testimony in this case?
5	A.	Yes.
6	Q.	What it the purpose of your testimony?
7	A.	To respond to the direct testimony of Evergy's witnesses, Ann E. Bulkley and Kirkland B.
8		Andrews, as it relates to rate of return ("ROR") and capital structure. I will also address
9		Staff witness Seoung Joun Won's, PhD, direct testimony.
LO	Q.	How will you approach the presentation of your rebuttal testimony?
l1	A.	I will address capital structure first. Mr. Andrews recommends a pro forma estimate of
12		Metro and MO West's capital structure as of the true-up period in this case, May 31, 2022.
L3		Dr. Won recommends a ratemaking capital structure consistent with the typical ratios
L4		targeted for Metro and MO West. I will then address Ms. Bulkley's and Dr. Won's return
L5		on equity ("ROE") recommendations.
L6	CAP	ITAL STRUCTURE
L7	Q.	Can you summarize the other parties' capital structure recommendations for Metro?
L8	A.	Yes. Mr. Andrews recommends a pro forma estimate of Metro's capital structure as of the
L9		true-up date, May 31, 2022, in this case. Mr. Andrews estimates Metro's capital structure
20		at May 31, 2022 will consist of 51.19% common equity and 48.81% long-term debt.

Dr. Won recommends that Metro's authorized ratemaking capital structure be consistent with its targeted capital structure of approximately 50% common equity and 50% long-term debt.¹

Q.

Considering the Company communicated to Staff that it targets a common equity ratio of 50% for Metro, why would the Company target a common equity ratio of 51.19% as of the true-up date, May 31, 2022?

A. I am not sure. However, this was consistent with Metro's common equity ratio of 50.91% as of the June 30, 2018 true-up date in its 2018 rate case, Case No. ER-2018-0145.² Therefore, it appears that Metro is continuing to target this capital structure for ratemaking purposes.

Q. Does Staff's approach of recommending a capital structure consistent with the company's communicated targets allow for the benefits of Missouri's reduced business risk profile to be shared with ratepayers?

A. More so than the Company's proposal. I agree with Staff's approach of simplifying the argument by focusing on targeted capital structure ratios rather than obscure and conflicting methods in which to calculate a ratemaking capital structure.

Q. Did the Kansas Corporation Commission ("KCC") deem it important to safeguard Kansas ratepayers by limiting Evergy's use of more leverage than its Kansas subsidiaries without triggering potential sharing of excess earnings?

A. Yes. The KCC recognized that Evergy could create a higher ROE for its shareholders by utilizing higher leverage at the holding company while charging ratepayers for a more equity-rich capital structure. Consequently, the KCC included a trigger in its Earnings Review and Sharing Plan ("ERSP") that required the Kansas subsidiaries equity ratios to be reduced proportionally if Evergy's consolidated common equity ratio was more than 2.5% lower than its Kansas' subsidiaries.

¹ Won Direct, p. 5, lns. 8-10.

² Case No. ER-2018-0145, Evergy Metro's True-up Workpapers.

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- Q. If the Commission sets Metro's ratemaking common equity ratio at 48%, can Evergy adjust Metro's capital structure to target 48% through affiliate capital transfers?
- A. Yes. As I have explained, due to Evergy issuing significant amounts of short-term debt at the holding company to both fund dividends to Evergy's shareholders and to make equity infusions into its subsidiaries, such as the \$200 million infusion into MO West to increase its common equity balance, it is rather easy for Evergy to achieve certain ratemaking targets.
- Q. How much short-term debt capacity does Evergy currently have and use?
- A. \$1.2 billion. Evergy issued a \$500 million Term Loan Credit Facility in February 2022, which is in addition to the \$700 million it has available under the Master Credit Facility.³
 - Q. Why is this relevant to Metro's and MO West's capital structure?
 - A. Because the use of holding company short-term borrowings allows for nimbleness in managing subsidiary capital structures to ratios desired for ratemaking. While the use of holding company liquidity may allow for certain economic efficiencies, doing so distorts the original intent of establishing a fair and reasonable rate of return based on market costs. When a subsidiary's financings are no longer managed independent of the rest of its affiliates, then certain ratemaking formulas/policies that anticipated such do not reflect the costs/values that would be determined absent this affiliation.
 - Q. Did Metro's and MO West's previous stand-alone holding company, Great Plains Energy ("GPE"), access significant amounts of holding company short-term debt?
- A. No. While GPE had access to \$200 million of short-term debt through its shared credit facility with Evergy Metro and Evergy MO West, it rarely and minimally accessed such.
 - Q. Did Metro and MO West consistently access commercial paper markets?
- 24 A. Yes.

 $^{^3}$ Evergy's SEC Form 10-Q, March 31, 2022, p. 36.

- Q. Did Metro and MO West consistently provide sufficient dividends to GPE to fund dividends to GPE's common and preferred shareholders?
 - A. Yes. Metro and MO West typically paid dividends to GPE that usually exceeded the amount of funds GPE needed to pay dividends to its common and preferred shareholders.
 - Q. Why is this an important consideration for purposes of evaluating fair and reasonable financing costs charged to Metro and MO West's ratepayers?
 - A. Because, as I explained in my direct testimony, instead of Metro and MO West funding a consistent dividend to support dividends to Evergy's shareholders, and issuing commercial paper to fund its own capital expenditure needs, Evergy is using short-term debt at the holding company to ensure dividends are fully funded.⁴ This distorts the original expectation for stand-alone electric utility companies to balance its capital allocation based on its own anticipated capital needs. As I will explain later, this funding strategy is unnecessarily inflating Metro's rate base. This is contrary to the customary financing practice of using short-term capital as a bridge to fund construction.
 - Q. Did Metro and MO West always pay sufficient dividends to GPE to fund dividends to owners of GPE's stock?
 - A. Yes. Please see Schedule DM-R-1 attached to my testimony. The dividends paid to GPE almost always exceeded 100% of the funds GPE distributed to external shareholders. Consequently, Metro and MO West issued commercial paper to fund liquidity needs, which resulted in ratepayers being charged a lower AFUDC rate, then if they had retained these earnings and GPE had issued short-term debt to fund dividends.

 $^{^{4}}$ Murray Direct, p. 34, l. 13 – p. 37, l. 11.

RETURN ON COMMON EQUITY

ANN E. BULKLEY'S RECOMMENDED ROE

Q. What is Ms. Bulkley's recommended allowed ROE for Metro and MO West?

A. Ms. Bulkley recommends the Commission allow Metro and MO West an ROE anywhere in the range of 9.90% to 10.50%. Based on her range, she concludes that the each Company's request of a 10.00% allowed ROE is reasonable.⁵

Q. What is the premise underlying Ms. Bulkley's recommended allowed ROE?

A. Ms. Bulkley estimates the cost of equity ("COE") for Metro and MO West to be in the range of 9.90% to 10.50% based on her application of three primary COE methodologies: (1) the constant-growth discounted cash flow ("DCF") method, (2) the Capital Asset Pricing Model ("CAPM") – a standard CAPM and an empirical CAPM, and (3) a Bond Yield Plus Risk Premium analysis.

Q. What is your general reaction to Ms. Bulkley's testimony regarding estimating the utility industry's cost of common equity ("COE")?

A. First, I completely disagree with her that the utility industry's COE is in the high single-digit range, let alone in the low double digits. While estimating a COE for the utility industry this high may be convenient for attempting to sustain higher authorized ROEs, they are not consistent with the discount rates, i.e. the COE, that investors use for purposes of estimating the intrinsic value for Evergy's utility assets. The Commission need look no further than Evergy's own financial advisors', Morgan Stanley and Goldman Sachs, intrinsic value analysis to determine the unreasonableness of Ms. Bulkley's COE estimates.

Second, Ms. Bulkley's conjecture about potential changes to utility stock prices in future periods has been proven wrong in the five months since she filed her direct testimony. Ms. Bulkley claimed that because interest rates were expected to increase,⁶ this would cause

⁶ Bulkley Direct, p. 23, lns. 8-19.

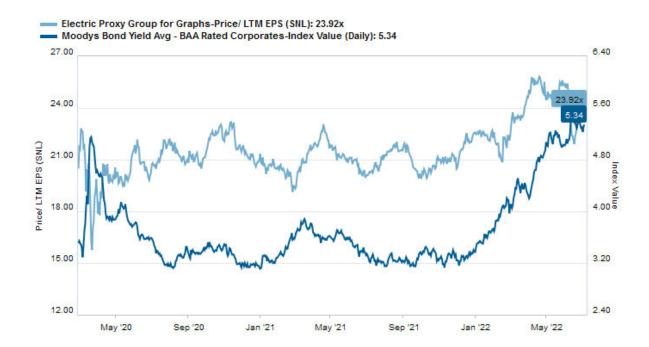
⁵ Bulkley Direct, p. 7, lns. 3-9.

utility stock prices to decline. She claimed that the realization of these market events would cause her constant-growth DCF results to understate utility companies' COE during future periods. As I will explain later in my testimony, while interest rates have increased in recent months, Ms. Bulkley's prediction that this would cause utility stock prices to decline was wrong. Therefore, if she follows her own logic, then she should give more weight to her constant-growth DCF results. Of course, predictions can always be updated until they come true. But this isn't the role of ROR witnesses. Our role is to estimate the current cost of capital, which already incorporates investors' expectations of future market conditions.

Finally, while she devotes almost thirty pages of testimony trying to convince the Commission that Metro and MO West are riskier than average utilities, she forgets that her proxy group contains companies that are exposed to competitive markets. Her opinions are also completely contradicted by Evergy's actual increased investment in its Missouri utilities. This increased capital spend is due directly to utility-friendly legislation passed in Missouri in recent years.

- Q. Do you and Ms. Bulkley agree that electric utility stocks have maintained high valuation levels over the last several years?
- A. Yes. We both agree that utility stocks have been trading at historically high valuation levels over the last several years, reaching all-time highs right before the onset of the Covid-19 pandemic. We also agree that at least until the Covid-19 pandemic, these high valuation levels had been primarily driven by low long-term interest rates.
- Q. Have utility valuation levels exhibited their typical negative correlation to long-term interest rates since Covid-19?
- A. No. As is evident from the below graph, electric utility industry valuation levels have not been negatively correlated with interest rates. As interest rates declined in 2020 and 2021, utility valuation levels declined initially, but then stabilized at levels somewhat consistent with the levels of interest rates prior to Covid-19. However, over the period from March 2020 through July 2022, utility P/E ratios have actually been positively correlated with

changes in interest rates. In fact, since the Fall of 2021, utility P/E ratios have exhibited an 80% *positive* correlation to interest rates, which is the exact opposite of the typical strong *negative* correlation during more typical capital market conditions.



Q. To what do you attribute this atypical utility stock behavior in relationship to changes in interest rates?

A. Considering the fact that utility stock P/E ratios did not increase when long-term rates decreased to all-time lows during 2020 to 2021, this appears to be due to two primary factors: (1) investors rotation to growth stocks because monetary and fiscal policy favored growth stocks that would benefit from an economic recovery, and (2) investors perceiving the monetary and fiscal policy support of corporate capital markets as being temporary, therefore expecting long-term rates to return to levels at least consistent with rates prior to Covid-19.

As it relates to utility stock P/E ratios increasing during the recent increase in interest rates, this appears to be due to a couple of primary factors: (1) investors rotation to defensive stocks because of the risk of a recession due to the Federal Reserve Board's ("Fed") attempt

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to control inflation, and (2) the fact that utility stock P/E ratios did not increase when interest rates decreased during 2020-2021 (investors looked through the extraordinary measures taken by the Fed and the Federal Government).

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If you both agree that utility stock valuation levels are higher, implying a lower COE, why do you arrive at distinctly different conclusions about the implications such market conditions have on utilities' cost of capital?

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I accept that current market prices reflect investors' expectations of all factors, such as economic cycles, changes in interest rates, inflationary expectations, changes in industry factors, and changes in company-specific factors. While there may be consensus expectations as it relates to each of these factors, there is also risk as to whether the consensus expectations will be realized, which gives rise to the risk premium required by investors. Ms. Bulkley seems to believe that current market prices do not reflect investors' expectations and risks to these expectations. Therefore, she suggests the Commission should rely on projected market prices and interest rates for purposes of setting a fair and reasonable ROE in this case. While I admit that there is certainly controversy and subjectivity to measuring (ROR experts typically refer to this as estimating) the COE, there should not be controversy related to what is "known" as it relates to capital market conditions. Current market prices are "known," but future market prices are not. If future market prices were known, then all investing would be risk-less. If one had the fortunate ability to accurately predict future market prices, then this individual would not be commenting about markets, but investing in markets at a high rate of compensation.

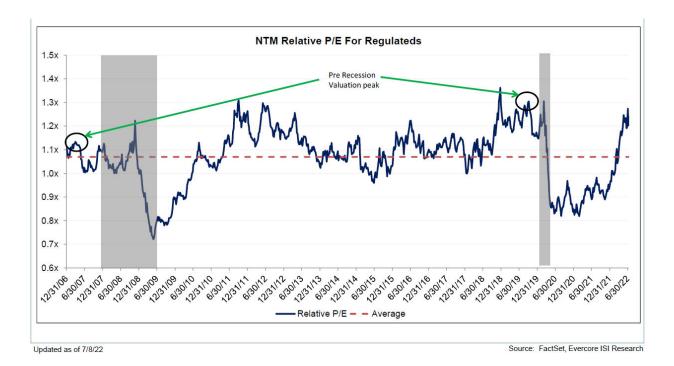
Q. What is the consequence of Ms. Bulkley's view that projected forward prices are more reliable for determining a fair and reasonable ROE based on her COE analysis?

Her views have been proven wrong by current "known" market conditions. Due to Ms. Bulkley filing direct testimony on January 7, 2022, much of her testimony on projected market conditions can be factually tested. For example, Ms. Bulkley contended that because interest rates were projected to increase (which they have, but due to inflation concerns, not economic recovery), that utility stock prices will decline, causing a higher COE. Therefore, she gave more weight to her mean high DCF COE estimates and her

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CAPM and Bond Yield Plus Risk Premium ("BYPRP") in determining her recommended ROE. However, because utility stock prices increased, rather than decreased, based on Ms. Bulkley's logic, she should now give more weight to her low DCF results based on current "known" market conditions.

- Q. What about Ms. Bulkley's other methods that specifically incorporate interest rates, such as her CAPM and Bond Yield Plus Risk Premium methods?
- A. As it relates to these methods, current bond market conditions do support the use of higher rates. However, these higher rates are not due to higher expected economic growth, but rather inflation concerns. All of these known factors can be analyzed and interpreted as to their impact on a utility company's cost of equity compared to that of broader markets. Because the S&P 500 has contracted significantly in recent months, while utility stocks have expanded, these facts support that while the broader market risk premium may have increased, the utility industry's has not. A strength of the DCF method is that it directly incorporates companies' stock prices in estimating the COE. Consequently, the DCF directly captures investors' required equity risk premiums over bond yields, because assuming rational and reliable inputs, the stock price will be valued according to investors' required returns.
- Q. Can you provide a graph showing the relative P/E ratios of the S&P 500 compared to electric utilities?
- A. Yes. The below graph was contained in a recent Evercore ISI equity research report discussing current market conditions:



As can be seen in the graph, electric utilities are currently trading at 1.2x to 1.3x premium to the S&P 500, which is indicative of investors' concerns about a recession and inflation outweighing the allure of investing in bonds as opposed to regulated utility stocks.

Q. Do you have concerns about Ms. Bulkley's chosen proxy group?

A. Yes, to the extent she doesn't recognize or discuss the fact that some of her companies have significant exposure to non-regulated operations. Cyclical industries, such as energy companies, with exposure to changes in commodity prices are impacted to a much greater extent by variations in economic/market conditions. This explains why companies in cyclical industries typically have stock betas closer to one, which indicates that the equity risk associated with these industries are higher than for regulated utilities. For example, the consumption of commodities, such as energy, are highly correlated with the expansion and contraction of the economy. This explains why utility companies with exposure to unregulated commodity prices typically have higher betas than pure-play regulated

⁷ Durgesh Chopra, et. al., "A Look at Q2 Weather Stats Ahead of Earnings," Evercore ISI, July 10, 2022, p. 8.

utilities. The following companies included in Ms. Bulkley's proxy group have significant (greater than 10%) non-regulated business exposure at least as recently as 2021: Entergy Corporation, MGE Energy Inc., NextEra Energy Inc., OGE Energy Corporation and Otter Tail Corporation. Unfortunately, Ms. Bulkley focuses on her perception that Missouri's regulatory ratemaking shortcomings as compared to her proxy group, cause Metro and MO West to have a higher cost of capital than the cost of capital of her proxy companies that have considerable non-regulated business risks.⁸

- Q. Ms. Bulkley indicates that the fact that Metro and MO West are owned by Evergy does not affect her analysis of Metro's and MO West's cost of capital. Was this prudent on her part?
- A. No. Metro and MO West are inextricably linked to their parent company, Evergy. Evergy's financial strategies, such as capital structure management, directly impact Metro and MO West.

Evergy's cost of equity is based on the collective business risks of its various subsidiaries, approximately 33% of which is related to its electric utility assets in Missouri, as well as the financial risk it incurs at the consolidated level. Because Evergy's business operations are predominately regulated electric utilities (vertically integrated in both Missouri and Kansas) its capital structure and cost of equity are appropriate proxies for estimating Metro's and MO West's cost of capital.

Therefore, because Ms. Bulkley did not consider Evergy in her assessment of Metro's and MO West's cost of capital, I consider her cost of capital analysis in her direct testimony to be incomplete.

⁸ Bulkley Direct, p. 70, lns. 1-15.

⁹ Bulkley Direct, p. 11, lns. 4-10.

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- Q. Ms. Bulkley maintains that it is important to authorize Metro and MO West a ROR based on an ROE and capital structure that will allow it to attract capital on a standalone basis and within the Evergy system. Did Ms. Bulkley compare her recommended ROR for Metro and MO West to Evergy's other systems?
 - A. If she did, she did not provide such analysis in her direct testimony.
 - Q. Based on the factual circumstances associated with Evergy's family of companies, is it reasonable and appropriate to use information related to Evergy's cost of capital (both debt and equity) in determining a fair and reasonable allowed ROR for Metro and MO West?
- 10 A. Yes. Therefore, this includes estimating Evergy's cost of equity and analyzing the interrelationship of its capital structure management.

INTERPRETATION OF MARKET CONDITIONS

- Q. What is Ms. Bulkley's solution for her view that utility stocks have been trading at levels above historical averages and may not be sustainable?¹¹
- A. Her solution is to give less weight to DCF methods, which directly incorporate utility stock prices, and give more weight to her methods that rely on market risk premium estimates, such as the CAPM.¹²
- Q. If utility stock prices currently trade at higher P/E ratios, what does this imply about utility investors' required returns and therefore, the utility industry's cost of equity?
- A. It is lower.

¹¹ *Id.*, p. 22, l. 4 – p. 22, l. 6.

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¹² *Id.*, p. 23, ll. 7-19 and p. 38, lns. 1-9.

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On pages 11 through 23 of her direct testimony, Ms. Bulkley provides her view on how the Commission should consider the impact of market conditions when setting Metro's and MO West's allowed ROR. What is your reaction to her testimony?

First, as I indicated earlier, I disagree that current market prices do not reflect forward expectations, which causes her to suggest that the Commission should more or less dismiss current valuations of utility stocks. Second, because we now have the benefit of market experience since January 2022 (Ms. Bulkley filed her direct testimony when the Metro and MO West applied for the rate increase), we have the ability to analyze whether utility stocks traded as Ms. Bulkley suggested they would if interest rates increased. They have not. While Ms. Bulkley provided several examples of market commentary that projected that the utility industry would underperform the broader markets (the S&P 500) and other sectors, the opposite has occurred. This fact demonstrates the fallacy of supplanting one's own view from that already incorporated in current security prices (this explains the theory of market efficiency, which forms the basis for passive investing). Estimating the current COE is already subjective and a matter of much debate, so why throw in another unknown (projected future market conditions), which if we really knew, we wouldn't be sponsoring ROR testimony.

Ms. Bulkley's suggestions to use projected market data violates a fundamental tenet of the efficient market hypothesis, which dictates that security prices reflect all known information at the time, whether that information is certain or not, such as changes in earnings, dividends, interest rates, economic growth, etc. Ms. Bulkley goes as far as to suggest that investors have mispriced utility stocks to the point that she believes they may deflate causing dividend yields to increase.

Ms. Bulkley and I analyzed the same capital market information and arrived at starkly different conclusions. I embrace the capital market information that the utility industry's cost of capital had been declining steadily for the past several years. While recent inflationary concerns have certainly increased utility companies' cost of debt, utility stock prices, and therefore their dividend yields, do not support Ms. Bulkley's or Staff's position that utility companies' current COE supports a higher authorized ROE. Utility stock prices

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have been at odds with their typical relationship to interest rates since Covid-19 and the corresponding fiscal and monetary policy initiatives. Interest rates declined precipitously during 2020-2021, but utility stock prices did not increase. I recognized this in my testimonies at the time. Consequently, current utility equity capital market conditions do not support increases to authorized ROEs for Missouri's electric utilities. While I recommend the Commission authorize MO West and Metro a 9% ROE, it certainly should not be set any higher than Empire's recent authorized ROE of 9.25%, which is also consistent with the 9.3% authorized for Evergy's Kansas subsidiaries.

- Q. If Ms. Bulkley were correct that utility stocks are overvalued and will decline, is she correct in her conclusion that a properly applied constant-growth DCF analysis results in an underestimated cost of equity?
- A. No.
- 13 Q. Would it actually cause an overestimation of the cost of equity in a properly applied constant-growth DCF analysis?
 - A. Yes. Ms. Bulkley claims that utility stocks are currently overvalued and do not reflect expected capital market conditions. If Ms. Bulkley is correct, then investors buying utility stocks are factoring in a contraction in P/E ratios. Ms. Bulkley's constant-growth DCF does not consider this expected contraction.
 - Q. Is there a means by which to adjust the constant-growth DCF method to account for Ms. Bulkley's anticipated changes to utilities' P/E ratios?
 - A. Yes. The constant-growth model can be extended to include expected changes in the P/E ratio. This version of the constant-growth DCF is referred to as the "Grinold- Kroner" model.¹³ It is expressed algebraically as:

¹³ 2010 CFA® Program Curriculum, Level III, Volume 3, p. 35.

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$$k = D_1/P_0 + g + \Delta PE$$

Where:

k =the cost of equity;

 D_1 = the expected next 12 months dividend;

 P_0 = the current price of the stock;

g = the dividend growth rate; and

 $\triangle PE$ = the per period change in the P/E multiple

- Q. If Ms. Bulkley had used this derivative of the constant-growth DCF method to estimate the cost of common equity, how would this impact her cost of equity estimates?
- They would be lower. 11 A.
- Q. If investors did expect a return to historical average P/E ratios, wouldn't this already 12 13 be factored into the price they are willing to pay for the stock today?
 - A. The Grinold-Kroner extension of predicting changes in market P/E ratios are primarily used by active portfolio managers who are trying to achieve alpha (excess return over expected market returns). The objective of utility rate of return witnesses, including Ms. Bulkley and me, should be to provide insight on current market required returns, which is an underlying assumption for cost of capital models, including the CAPM.

TAX CUT AND JOBS ACT

- Q. Do you think the Commission needs to consider the Tax Cut and Jobs Act ("TCJA") of 2017 when determining a reasonable ratemaking capital structure to set Metro's and MO West' authorized ROR?
- No. Regulators and utility companies have already addressed issues related to the TCJA. A. Besides, subsequent to the passage of the TCJA, Evergy had been on a path of increasing the amount of leverage in its consolidated capital structure by issuing holding company debt to buy back stock. Evergy's strategy of using debt to buy back stock allowed Evergy to increase its earnings per share ("EPS") on the fewer shares remaining. This strategy directly contradicts Ms. Bulkley's suggestion that the Commission should authorize a

higher common equity ratio to support Metro's and MO West's credit quality. Authorizing a higher common equity ratio simply supports the potential that Evergy may try to use more debt at the holding company to improve the EPS growth to its shareholders. It is not fair for ratepayers to be charged for a more equity-rich capital structure that Evergy itself considers less cost efficient.

DISCOUNTED CASH FLOW ASSUMPTIONS

- Q. Although Ms. Bulkley urges caution regarding her lower DCF COE estimates for purposes of informing her recommended ROE, do you agree with the assumptions Ms. Bulkley used in her DCF analysis?
- A. No. Ms. Bulkley argues that her constant-growth DCF results under-estimate the electric utility industry's COE because she doesn't believe current higher stock prices are sustainable. As I indicated previously, this is incorrect. However, even without an adjustment for changes in P/E ratios, her DCF analysis overestimates the COE. Ms. Bulkley's DCF analysis assumes her proxy groups' DPS can grow in perpetuity at the same rate as equity analysts' projected 5-year CAGR in EPS. This is not how equity analysts determine fair prices to pay for utility stocks.

CAPM ASSUMPTIONS

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

A. Because she uses irrational expected market returns. Ms. Bulkley estimates a total compound annual market return for the S&P 500 of 12.94% for the foreseeable future (perpetually based on her use of a constant-growth DCF to estimate S&P 500 returns). 14 Subtracting long-term risk-free rates from Ms. Bulkley's estimated market return results in her market risk premium estimates of 9.44% to 11.01%. 15 Ms. Bulkley's expected market risk premiums are ** _____ ** higher than the market risk premiums used by Evergy's

¹⁴ Bulkley Direct, p. 41, lns. 16-18.

¹⁵ Id., Schedule AEB-4.

own financial advisors when determining the best strategic decision to create shareholder value for its shareholders by moving forward as a stand-alone company.

- Q. How is Ms. Bulkley able to achieve such high market risk premium estimates?
- A. Because she assumes that the S&P 500 can grow its earnings at a compound annual rate of 11.29% in perpetuity. 16
 - Q. Are you aware of any authoritative sources, academic or practical, that use Ms. Bulkley's approach for estimating market returns?
 - A. No. I know of no authoritative source that suggests this is a rational or reasonable approach for purposes of estimating market returns. In fact, I know of several authoritative sources that recommend against using a growth rate higher than GDP for purposes of determining the long-term expected return for a broad index, such as the S&P 500.
 - Q. What academic support are you aware of?

A. The 2010 curriculum for Level III of the Chartered Financial Analyst ("CFA") Program discusses how analysts often use the Gordon growth model (synonymous with the constant growth DCF model used in utility ratemaking) to formulate the long-term expected return for the broader equity markets. In the case of a broad-based equity index, such as the S&P 500, it is reasonable to estimate the long-term potential capital gains for the index by using estimated nominal GDP over a long-term period. The curriculum specifically provides the following formula for estimating the constant growth rate with an explanation that follows:

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

where the term *excess corporate growth* may be positive or negative depending on whether the sectoral composition of the index companies is viewed as higher or lower growth than that of the overall economy. If the analyst has chosen a broad-based equity index, the excess corporate growth adjustment, if any, should be small.¹⁷

¹⁷ 2010 CFA® Program Curriculum, Level III, Volume 3, p. 34.

¹⁶ *Id.*, p. 41, lns. 16-18.

Considering that the S&P 500's current dividend yield is approximately 1.75% and projected long-term growth in U.S. nominal GDP is around 4.0%, it seems that investment professionals' forecasts of long-term returns for the S&P 500 of around 4.1% to 6.73% are consistent with the above-prescribed formula.

Q. Are you aware of any common valuation metrics that dispute Ms. Bulkley's market growth rate expectations?

- A. Yes. A comparison of a broad equity market capitalization amount to that of the total size of the U.S. economy. This valuation metric provides a sanity check on potential growth for capital markets. Warren Buffett made it popular when he provided insight on how high the market, as measured by the Wilshire 5000, became valued as compared to U.S. GDP at the time of the "dot com" bubble around March 2000. At that time, the Wilshire 5000 was around 1.4x that of GDP. As of March 31, 2022, it was around 1.7x.
- Q. What would this ratio be in 50 years if the market grew at the 11.29% compound annual growth rate Ms. Bulkley suggests is appropriate?
- A. The Wilshire 5000 index would be approximately 50x times the GDP level. Based on the market capitalization of the Wilshire 5000 of approximately \$40.97 trillion as of March 31, 2022, the Wilshire 5000 would have a market capitalization of \$8.61 quadrillion in 50 years. U.S. GDP was \$24.39 trillion as of the same date. Based on a 4.0% long-term growth rate for the U.S. economy, GDP would be approximately \$173.31 trillion in 50 years. It is not rational to assume corporate wealth will become much larger than the economy in which it operates, let alone 50x the size of the economy. This explains why the CFA Program advises not using a perpetual growth rate much, if any, higher than the GDP growth rate of the economy(ies) in which a company operates.

¹⁸ Murray Direct, p. 27, lns. 1-2.

- Q. Why are Ms. Bulkley's Empirical CAPM ("ECAPM") results higher than her standard CAPM results?
 - A. The results are higher because Ms. Bulkley's ECAPM gives 25% weight to the unadjusted market risk premium and 75% weight to the utility beta adjusted market risk premium. Being that Ms. Bulkley's utility betas at least reduce her high equity risk premium estimates by 10% to 30%, because her ECAPM allows for a 25% weighting to an unadjusted risk premium, this amplifies the bias inherent in Mr. Bulkley's high risk premiums.
 - Q. Does this mean that the larger the market risk premium estimate, the more widely divergent the ECAPM results will be compared to the standard CAPM?
- 10 A. Yes.

- Q. Can you explain?
- A. Yes. Ms. Bulkley assumes a market risk premium of approximately 9.44% to 11.01% compared to more rational estimates of around 5.5% to 6%. If Ms. Bulkley had used a more reasonable market risk premium of 6%, her ECAPM adjustment would have been 10 to 40 basis points lower as compared to her standard CAPM.

BOND YIELD PLUS RISK PREMIUM ANALYSIS

- Q. What are your thoughts on Ms. Bulkley's Bond-Yield-Plus Risk Premium ("BYPRP") analysis?
 - A. Ms. Bulkley's BYPRP is a regression analysis of allowed ROEs to interest rates. Ms. Bulkley concludes from her regression analysis that because allowed ROEs haven't declined as much as interest rates, an adjustment needs to be made to recognize that regulators have been hesitant to reduce allowed ROEs as much as lower interest rates would suggest. This approach does not allow sufficient compression of allowed ROEs versus the utility industry's COE. It only serves to maintain the current wide spread between the utility industry's COE and allowed ROE.

<u>CONSIDERATION FOR SPECIFIC BUSINESS AND REGULATORY RISK</u>

- Q. Ms. Bulkley devotes approximately 30 pages of direct testimony to justify her view that Evergy's 100% pure-play regulated vertically integrated electric utilities in Missouri cause its cost of equity to be higher than her proxy group. Does any of Ms. Bulkley's testimony recognize that her proxy group has companies with significant non-regulated business-risk exposure?
- A. No. As I indicated when discussing Ms. Bulkley's proxy group, she includes the following five companies that have significant non-regulated business exposure: Entergy Corporation, MGE Energy Inc., NextEra Energy Inc., OGE Energy Corporation and Otter Tail Corporation. Of these five companies, Entergy, OGE and Otter Tail, have or have had significant exposure to the commodity markets through their non-regulated business segments. While utility companies rely on commodities (i.e. natural gas, coal, nuclear fuel, renewable power projects, etc.), they are not exposed to gains and losses from changes in prices of commodities. This is not true for the companies that are involved in midstream operations related to natural gas (OGE and MGE Energy) or other wholesale energy trading operations (Entergy) and renewable power development (Nextera Energy). Otter Tail actually has exposure to manufacturing and plastics businesses.

While I admit there are very few pure-play regulated utilities, let alone pure-play vertically-integrated electric utilities, to develop a larger proxy group, it is important to recognize that many of the proxy companies used to estimate the COE for a regulated electric utility do have this exposure. To only focus on the selected proxy companies' regulated operations, and perceived risks related to their regulatory ratemaking constructs, to attempt to justify an authorized ROE above the proxy group, should be duly noted as to the weight given to this comparative analysis.

¹⁹ Bulkley Direct, pgs. 48-74.

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- Q. What is your response to Ms. Bulkley's discussion related to her views on MO West and Metro's specific business and regulatory risks?
- Ms. Bulkley essentially maintains that because MO West and Metro will be investing more A. in their systems over the next few years, customers should have to pay a higher ROR because of higher risk. As I discussed and has been recognized by investors, a key aspect of Elliott Management's initiative to cause Evergy to change its strategy was to take full advantage of plant-in-service accounting ("PISA") allowed in Missouri and potential legislative changes that would allow securitization in Missouri and Kansas. The scale of investment Evergy plans to make in its Missouri electric utility systems will create a tremendous amount of value for Evergy's shareholders. As the scale of investment increases, the higher the allowed ROR over the cost of capital, the higher the net present value created for shareholders. Under this scenario, management is incentivized to pursue all projects it believes will be allowed in rate base because the mere process of investment causes an increase to shareholder wealth above the minimum required return. However, this excess shareholder wealth is derived at the expense of ratepayers. This is the economic rationale for attempting to set utility companies' ROR as close to the cost of capital as possible, because otherwise the scales are tilted in favor of inefficient investing for the sake of building shareholder value.
- Q. Ms. Bulkley also claims that the elevated capital expenditures will cause pressure on Metro's and MO West's credit ratings. She also states that PISA does not reduce their cost of capital.²⁰ Does this make sense in light of the investment community's, specifically Elliott Management, initiative to cause Evergy to cease buying back stock by issuing holding company debt and instead, invest in its utilities?
- A. No. A primary factor related to Evergy's pursuit of the Sustainability Transformation Plan is the additional value Evergy can create for its shareholders by pursuing increased rate base growth in each of its jurisdictions, but specifically Missouri because of the incentives related to recent utility supportive legislative measures.

 $^{^{20}}$ Bulkley Direct, p. 50, lns. 1-3 and p. 52, ln. 7 – p. 23, ln. 54, ln. 11.

- Q. Does Ms. Bulkley attempt to minimize the favorability of PISA to MO West and Metro in other ways?
 - A. Yes. She indicates that because the companies may only be eligible for PISA through 2023 (unless the Commission approves and extension through 2028) and because PISA limits MO West's and Metro's compound annual growth rate ("CAGR") to no more than 3% based on 2017 levels, this exposes MO West and Metro to additional risk than if these limitations weren't in place.
 - Q. Has the PISA law been recently amended to lengthen the period in which Missouri utility companies can elect PISA without having to petition the Commission to do so?
 - A. Yes. Missouri recently passed Senate Bill 745, which contains provisions related to Missouri electric utility companies' ability to use PISA. The amended PISA law now allows Missouri electric utility companies to extend PISA through December 31, 2028, without being required to petition the Commission to do so. If Missouri utility companies desire to continue to utilize PISA after December 31, 2028, this is now the date for which they are required to have Commission authority to do so.
 - Q. Have any other provisions changed in the PISA law?
 - A. Yes. Only the companies' base rates are subject to a CAGR rate cap under the amended law. Prior to this amendment, and an issue currently experienced by MO West, if rates increased by more than 3% due to higher fuel and purchased power costs, then a company had to defer such costs that would cause rates to exceed the 3% cap.
 - Q. Does the amended PISA law include language acknowledging potential ratemaking consideration (through the allowed return) for business risk changes due to the ability to elect PISA?
 - A. Yes. SB 764 specifically states the following:

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

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addition to any other changes in business risk experienced by the corporation.

Q. How do you recommend the Commission explicitly consider MO West's and Metro's reduced business risk related to their ability to elect PISA?

By authorizing a more leveraged ratemaking capital structure. Prior to the passage and A. election of PISA, MO West and Metro requested similar common equity ratios in their 2018 rate cases. This is illogical considering the fact that reduced business risk increases a company's debt capacity, while allowing it to maintain the same credit rating. While Evergy has not transferred as much leverage to its holding company as Ameren subsequent to the passage of PISA, it is clear that Evergy is increasing the amount of liquidity (i.e. short-term debt) it issues at the holding company. While my recommended common equity ratio of 48% does not specifically consider Evergy's use of short-term debt (my capital structure recommendation considers Evergy's higher consolidated leverage due to its \$1.6 billion of holding company long-term debt), it at least considers some additional leverage that Evergy considers cost efficient based on its current business risk profile. Given that many Evergy investors have considered Missouri's regulatory environment to be more shareholder-friendly than Kansas' regulatory environment, Evergy's Missouri ratepayers should be compensated for this reduced business risk by paying a ROR consistent with the ability to be capitalized with more debt.

STAFF'S RECOMMENDED ROE:

Q. How does Dr. Won approach his recommended allowed ROE in this case?

A. Dr. Won uses the Commission's authorized ROE of 9.25% for The Empire District Electric Company in its 2019 electric rate case as his starting point for determining whether he believes capital market conditions justify authorizing MO West and Metro a different ROE.²¹ Dr. Won relies primarily on implied DCF COE estimates from the period of Empire's 2019 rate case (fourth quarter of 2019) to implied DCF COE estimates now (first quarter of 2022) in order to conclude that the COE has increased by 37 basis points since

²¹ Won Direct, p. 3, lns. 12-16.

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the Commission made its decision in the 2019 rate case.²² Dr. Won used his quantification

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of a 37 basis point increase to support his recommendation to the Commission to award Metro and MO West a 9.62% ROE. Dr. Won considers an authorized ROE of +/- 25 basis points around this point estimate to be considered reasonable (9.37% to 9.87%).

Q. Do you agree that it is appropriate to consider the Commission's 9.25% allowed ROE in the recent Empire rate case for determining a fair and reasonable ROE for Metro and MO West?

A. Yes.

Q. Do you agree that capital market conditions justify an allowed ROE of up to 9.87%?

No. Considering the Commission authorized Metro a 9.5% ROE in its 2014 rate case and 2016 rate case, Case Nos. ER-2014-0370 and ER-2016-0285, respectively, it is not logical to consider an ROE any higher than this level. Utility P/E ratios have been consistently higher in recent years as compared to the middle of the past decade. Additionally, despite Ms. Bulkley's attempt to characterize Missouri's legislative and regulatory environment as riskier than other electric utility companies, it is indisputable that Metro's and MO West's business risk profile has declined over this period due to each company's election of PISA (which became legally available on August 28, 2018 after the passing of SB 564) and the ability to securitize energy transition and qualified extraordinary costs pursuant to the recently passed securitization law. Otherwise, Evergy would not have decided to add \$438 million in incremental capital expenditures to its Missouri assets in conjunction with its announcement to pursue the Sustainability Transformation Plan ("STP").23 As it relates to the Commission's assessment of Metro's and MO West's business risk, it simply needs to observe Evergy's higher proportional capital allocation to Missouri as opposed to Kansas, rather than be influenced by subjective assessments by ROR witnesses.

²² Id., Schedule SJW-d15.

²³ Sustainability Transformation Plan, August 5, 2020, p. 8.

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- Q. Did Staff estimate that the COE had declined precipitously between the time it filed its direct testimony in the Ameren Missouri 2014 rate case, Case No. ER-2014-0258 and its direct testimony in Metro's 2014 rate case, Case No. ER-2014-0370?
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- A. Yes. Staff filed its direct testimony in the Ameren Missouri 2014 rate case on December 5, 2014 and on April 3, 2015 for the Metro rate case. Although Staff estimated that the increases in utility stock prices between these two cases demonstrated that the COE had declined by another 40 to 50 basis points (in addition to the 25 to 75 basis points Staff had estimated the COE had declined since 2012), Staff decided that due to the fact that the utility stock rally occurred within only three to four months of Staff's analysis for the Ameren Missouri rate case, this short-term movement may not be sustained. Therefore, Staff recommended the same range of authorized ROEs for Evergy Metro as it did for Ameren Missouri, which was in the range of 9% to 9.5%.
- Q. Can you provide a graphical illustration that shows the sudden increase in utility valuation ratios between the filing of direct testimony in those two cases?
- A. Yes. I will show the P/E ratios over this period for the electric proxy group I displayed in charts in my direct testimony as well as P/E ratios for Staff's electric utility proxy group. The graph below shows the P/E ratios since January 1, 2014:



As is evident from the chart, the valuation ratios of Staff's and OPC's proxy groups over the period since 2014 are almost identical. Therefore, the proxy group is not the source of differences in views between OPC and Staff on a fair and reasonable authorized ROE. Staff's and OPC's differences lie mainly in the periods compared. I focus on longer-term trends in utility capital markets (since the Commission first deemed a 9.5% ROE as fair and reasonable for Evergy Metro and Ameren Missouri), whereas Staff focuses on the shorter-term trend, (since the Commission deemed a 9.25% ROE as fair and reasonable for Empire).

Staff's COE estimates for the Ameren Missouri 2014 rate case were based on capital market data during the Fall of 2014. P/E ratios during this period were in the 16x to 17x range. However, in early 2015, utility P/E ratios increased to the 18x to 19x range, which was above recent valuation ratios. As can be seen, P/E ratios contracted shortly thereafter. However, since the middle of 2017, P/E ratios for the electric utility industry seem to have hit a support level of around 20x, with an all-time high right before Covid-19. The fact

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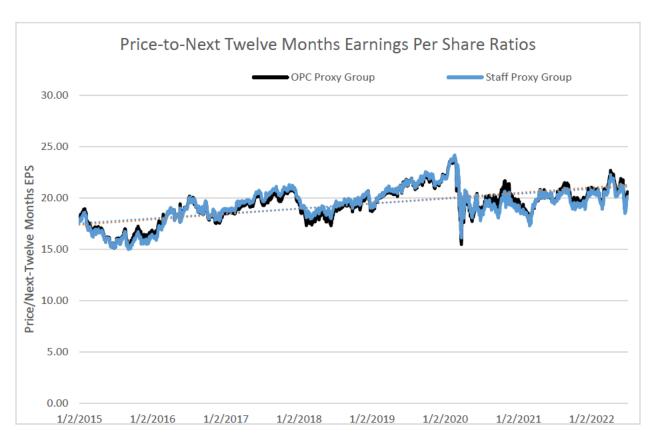
that electric utility P/E ratios have consistently been around 20x for approximately the last 5 years provides substantial support for not increasing authorized ROEs from recent levels in the low 9% range.

4 5 Q. Would the trend line in P/E ratios for electric utility companies be as steep if you started with data beginning on January 1, 2015?

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A. No. But it will still show an inclining P/E ratio trend. See as follows:

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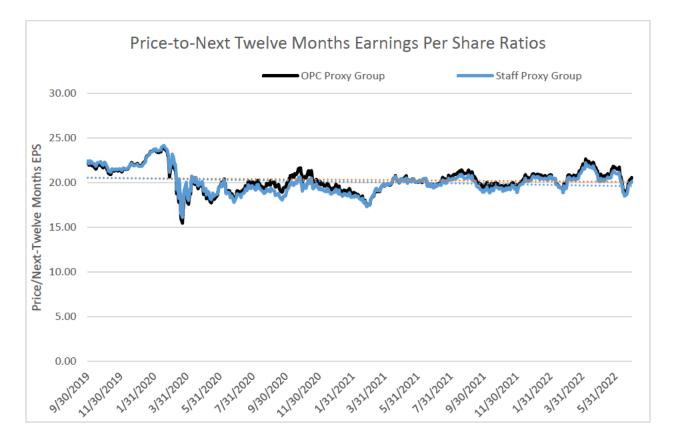
Q. Can you provide the trend for electric utility P/E ratios for the period analyzed by Staff?

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A. Yes. Staff analyzed the period from the fourth quarter of 2019 through information through the first quarter 2022. The below shows the trend in electric utility P/E ratios for this period:



As is evident from the above, electric utility P/E ratios have decreased slightly since the end of 2019. However, during the period of the fourth quarter of 2019 to early 2020 (right before the onset of the Covid-19 pandemic), electric utility P/E ratios had reached all-time highs. While I emphasized these all-time high P/E ratios and corresponding extremely low implied COE estimates in my testimony in the Ameren Missouri and Empire 2019 rate cases, Case Nos. ER-2019-0335 and ER-2019-0374, respectively, I did not recommend a steep reduction to either companies' authorized ROE. I recommended the ROEs be set at 9.25% so ratepayers can share in at least some of the cost of capital savings the companies realized when accessing capital markets. In my opinion, the sustained electric utility industry's P/E ratios of around 20x at the very least supports maintaining Missouri's electric utility companies' authorized ROEs at no higher than 9.25%. However, in my opinion the sustained low COE environment, coupled with lower regulatory risk in Missouri, justifies an ROE of 9.0%.

OTHER RELATED COST OF CAPITAL ISSUES

ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION

- Q. Does Evergy's management of liquidity at the holding company disrupt the determination of a fair and reasonable Allowance for Funds Used During Construction ("AFUDC") rate for its subsidiaries?
- A. Yes. This has particularly been an issue for Metro. Despite having CWIP balances of \$300 to \$500 million since June 2020, because Metro is retaining its earnings rather than supporting the dividend paid to Evergy's shareholders, it has only had a miniscule percentage of short-term debt (usually less than 2% of CWIP) contributing to its AFUDC capitalization rate. This inflates Metro's rate base. Based on Metro's monthly CWIP balances for the period July 1, 2020 through March 1, 2022, I estimated that Metro's accrued capitalization for financing charges related to CWIP was \$44.585 million. During most of these months, Metro's AFUDC rate was in excess of 6%. If Metro's AFUDC rate had been determined based on a cost of commercial paper consistent with Metro's commercial paper rating, the accrued capitalization for financing over this period would have been approximately \$1.6 million.
- Q. What is your recommendation to resolve the unfair use of long-term capital costs to capitalize CWIP?
- A. Reduce Metro's rate base by \$43 million and order Metro and MO West to use a short-term debt rate to capitalize all CWIP, rather than follow the FERC AFUDC formula.

SUMMARY AND CONCLUSIONS

- Q. Can you summarize your main conclusions related to your rebuttal testimony in this case?
- A. Yes. The Companies recommend the Commission set Metro's and MO West's authorized ROR based on figures it uses from each company's balance sheets. While Metro's balance sheet has not been through as many derivatives as MO West's, both companies' capital

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structures are managed to target a common equity ratio desired for ratemaking. Evergy's increased use of short-term debt at the holding company level makes the strategy of achieving a certain desired ratemaking capital structure at an anticipated snapshot date, such as the true-up date, a much easier goal to accomplish. Therefore, the Commission need not focus on picking which of three sets of balance sheets to use for MO West and potential further adjustments to make to these balance sheets, but rather evaluate whether the current requested ratemaking capital structures are consistent with Evergy's Missouri utilities reduced business risk. As compared to past ratemaking capital structures, they are Staff accepted Evergy's claim that it considers a capital structure containing approximately 50% equity and 50% long-term debt as appropriate for its subsidiaries. While this is a step in the right direction, I recommend the Commission go further and look to the company ultimately responsible to shareholders and held accountable through all third-party investors, Evergy. Therefore, I recommend the Commission determine Metro and MO West's authorized ROR using a capital structure consisting of 48% common equity and 52% long-term debt. However, with the caveat that if MO West is allowed to charge carrying costs in its securitization case based on its composite cost of capital, shortterm debt should be included in its ratemaking capital structure.

Additionally, it simply makes no sense to authorize an ROE at a level consistent with that which the Commission determined reasonable seven years ago when interest rates were higher and utility stock valuation levels were lower. Ms. Bulkley's recommended ROE does not recognize this decline and in fact, dismisses current low cost of capital conditions as being unsustainable. Staff views the current cost of capital for utility companies as being higher than when the Commission decided a 9.25% ROE for Empire was appropriate. However, Staff's assessment does not consider the longer-term trend since the Commission deemed 9.5% ROEs as being reasonable starting in 2015. Interest rates are lower and utility stock valuation levels are higher than they were seven years ago. The longer-term trend continues to support lower authorized returns.

Q. Does this conclude your testimony?

A. Yes.