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STATE OF MISSOURI

MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust its Revenues for Electric Service	)))	File No. ER-2024-0319

Surrebuttal Testimony
of
Tyler Comings

On Behalf of
Sierra Club

February 14, 2025

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I. Introduction and Qualifications

Q **Please state your name, business address, and position.**

A My name is Tyler Comings. I am a Principal Economist at Applied Economics Clinic. The business address is 6 Liberty Sq., PMB 98162, Boston, Massachusetts, 02109.

Q **Are you the same Tyler Comings that filed direct testimony in this case?**

A Yes.

Q **What is the purpose of your surrebuttal testimony?**

A My surrebuttal testimony responds to Ameren's rebuttal testimony from Witness Ann Bulkley. I address Ms. Bulkley's criticisms of my cost of equity estimates and present updates of my estimates. My ultimate recommendation for the allowed return on equity ("ROE"), however, has not changed from my direct testimony.

II. Responses to Company Witness Bulkley

Q **Please summarize your responses to Ms. Bulkley's rebuttal.**

A In this section, I address the criticisms of my cost of equity analysis from Company Witness Ann Bulkley. Regarding my Discounted Cash Flow ("DCF") cost of equity estimates, I address the following:

- **Ms. Bulkley claims that a sustainable growth rate should not be used because it assumes a "positive relationship between future earnings and the retention ratio."**[1] My sustainable growth analysis contradicts this claim because earnings and retention can have a negative relationship.

[1] Rebuttal Testimony of Ann E. Bulkley at p.110:19-111:2 (hereinafter "Bulkley Rebuttal").

- **Ms. Bulkley claims that historical growth data should not be used.**[2] This runs counter to how investors and investment services operate, whereby historical information is provided to assist in decision-making.
- **Ms. Bulkley claims that only short-term earnings forecasts should be used for the DCF growth rate term ("g").**[3] I include these forecasts in my DCF, but I also include dividend and book value growth because the model is capturing long-term growth or growth in perpetuity; therefore, 3-to-5-year earnings forecasts alone are not sufficient.
- **Ms. Bulkley criticizes the inclusion of Ameren as a member of the proxy group (where the beta coefficient is also used in the Capital Asset Pricing Model ("CAPM")).**[4] But the proxy group is attempting to capture the risk of the target company—in this case, Ameren Missouri. It is unreasonable to posit that a potential investor in Ameren would not look at Ameren's past and projected performance. Moreover, I also calculate the cost of equity using Ms. Bulkley's proxy group and it results in a lower cost of equity than using my proxy group.
- **Ms. Bulkley claims that older stock prices are somehow just as valid as up-to-date stock prices.**[5] However, by definition, current stock prices incorporate more information than earlier stock prices. Notably, Ms. Bulkley's DCF results are lower when she uses a more up-to-date stock price.

Regarding my CAPM and Empirical CAPM ("ECAPM") cost of equity estimates, I address the following:

- **Ms. Bulkley claims that only a 30-year bond should be used as the risk-free rate in the CAPM.**[6] As I discuss, a 30-year bond is fine to use but other

[2] *Id.* at p. 111:22-112:2.
[3] *Id.* at p. 112:3-16.
[4] *Id.* at p. 109:3-11.
[5] *Id.* at p. 113:1-13.
[6] *Id.* at p. 115:7-10.

often-cited sources of the CAPM use a 10-year or 20-year bond as the risk-free rate.

- **Ms. Bulkley claims that only arithmetic averages—not geometric averages—should be used to estimate the CAPM equity risk premium.**[7] I use both average methods. The geometric average (also compound annual growth rate ("CAGR")) is the best representation for long-term growth because it factors in compounding investment over time, while the arithmetic average does not. However, I also use the arithmetic average because I acknowledge that investors may look at both values.
- **Ms. Bulkley claims that historical returns should not be used to estimate the equity risk premium.**[8] I would agree if I were only using historical returns, but I take an average of historical and projected returns in my CAPM analysis. As I state regarding the DCF, historical data is fully known and considered by investors alongside future projections, which are likely to be wrong.
- **Ms. Bulkley claims that my CAPM is understated because I use total returns—rather than income only.**[9] As an exercise, I calculated the CAPM using the income-only method and that estimate was slightly lower than what I present in my testimony; therefore, my original method is not understated.
- **Ms. Bulkley defends the ECAPM model.**[10] This model upwardly adjusts the CAPM for utilities; but that upward adjustment is likely unnecessary as evidenced by Ms. Bulkley's own CAPM results, some of which result in a cost of equity over 12 percent. While I also use the ECAPM in this case, I consider it an extreme value that is not on equal footing with the DCF and CAPM.

[7] *Id.* at p. 55:12-57:2; p. 117:15-118:3.
[8] *Id.* at p. 113:14-114:12.
[9] *Id.* at p. 117:15-118:3; n.154.
[10] *Id.* at p. 116-117.

Finally, I respond to Ms. Bulkley's defense of the bond risk premium model—which I have previously criticized and continue not to use because of its many flaws. The model is invalid because it assumes that previously allowed ROEs are a fair proxy for the cost of equity; and because the regression does not address that ROEs have decreased over time, regardless of interest rates.

Later in my testimony, I describe changes in the economic outlook since my direct testimony was filed, and present updated cost of equity estimates using my DCF and CAPM models.

A. DCF

Q **Do you agree with Ms. Bulkley's argument that your DCF results are too low?**

A No. Ms. Bulkley's comparison here is misguided. She claims that my DCF results are too low because she compares them to existing allowed ROEs for vertically-integrated utilities. But this comparison presupposes that allowed ROEs are already accurately reflecting the *current* cost of equity. There are several reasons why this logic does not hold. First, there is regulatory lag because allowed ROEs can be set many months after cost of equity analysis is performed. Second, ROEs have been decreasing for decades, which shows that there has been a slow, downward adjustment to these values. Third, the market-to-book value of many utilities remains substantially greater than one: indeed, the ratio for Ameren is above two. The ROE is calculated based on the book value, not market value. That means that an equity investor would only pay substantially more than the book value if that investor expected higher returns than what it *would have been willing to accept*. For all these reasons, the allowed ROE is not a reliable as a direct comparison to the current cost of equity.

Q **What is the most controversial component of the DCF model among analysts?**

A Typically, the most controversial component is how to estimate the growth rate or "g" term, which represents long-term growth, because the model assumes that the current price is based on the discounted growth of future dividends, in perpetuity. In my DCF estimates, in order to estimate a long-term growth rate, I use two methods: 1) a sustainable growth rate (based on historical and projected retained earnings), and 2) using the average of historical and projected growth rates of dividends, book value, and earnings.

Q **Do you agree with Ms. Bulkley's rejection of the sustainable growth rate?**

A No. Ms. Bulkley rejected the usage of this growth rate in my "DCF 1" model because of her claim that the method assumes that "there is a positive relationship between future earnings and the retention ratio."[11] It is unclear how this conclusion was reached, however. The "internal growth" term is equal to the average of the historical and projected *retention rate* "b" times the average of the historical and projected *return on equity* "r". I do not only rely on a single year's data as I recognize the retention rate and earnings can fluctuate. (My DCF 1 also incorporates "external growth" through the expected increase shares being sold.) The internal growth term could be stable if either: the actual ROE and retention rate stayed the same; or the ROE increased while the retention rate decreased; or the ROE decreased while the retention rate increased. This indicates the potential for a *negative* relationship between retention rate and ROE—which contradicts Ms. Bulkley's claim that the model assumes a positive relationship. Therefore, her rejection of the sustainable growth rate should be ignored.

[11] *Id.* at p. 110:19-111:2.

Q **Do you agree with Ms. Bulkley that historical growth rates should be ignored?**

A No. Ms. Bulkley claims that historical growth rates provide "no meaningful incremental information" and therefore should be ignored.[12] One question to keep in mind when conducting a cost of equity analysis is: *what data would a potential equity investor review?* The cost of equity in part seeks to capture an investor's expectations, but also at what rate of return they would be willing to invest. It is difficult to fathom that a potential investor in a company would not analyze the past performance of that company and likewise for companies of similar risk. I agree that forecasts are useful, and I incorporate them in my analysis because investors have access to this information as well. But, as I stated in my direct testimony, forecasts are almost always incorrect. Investors know that forecasts are bound to be incorrect, and that historical data is fact; it therefore strains credulity that investors would only apply weight to the former and zero weight to the latter.

Q **Do you agree with Ms. Bulkley that only earnings forecasts should be used?**

A No. Ms. Bulkley disagrees with me using book value and dividend growth in my DCF analysis, arguing that only earnings projections should be used.[13] To clarify: I do include earnings projections in my DCF 2 model; but I also include dividend and book value projections in addition to historical data for all three metrics. The "g" term of the DCF is meant to capture long-term growth and forecasts of earnings only go three to five years into the future—in addition to being fallible and uncertain, as I discussed above. Therefore, short-term earnings forecasts alone are not sufficient to estimate *long-term* growth.

[12] *Id.* at p. 111:22-112:2.
[13] *Id.* at p. 112:3-16.

Q **Do you agree with Ms. Bulkley that Ameren should be excluded from the proxy group?**

A No. Ms. Bulkley claims that I should not have included Ameren in the proxy group that I use for my DCF and for the CAPM because "Ameren would be being used to determine its own subsidiary's ROE."[14] I disagree that the data available for the Ameren parent company should be ignored. First, equity investments for Ameren Missouri will come from shares purchased at the parent company level. Second, potential equity investors would undoubtedly look at the performance of the parent company. The idea that a potential investor would simply ignore publicly available data on the very company it is considering is difficult to believe. Third, the proxy group is meant to approximate the operations and risks of the target company—in this case Ameren. Why exclude the company that is undeniably the most like the target of the proxy group itself?

Q **Do you agree with Ms. Bulkley's defense of using longer periods of average stock prices?**

A No. Ms. Bulkley estimates a DCF with 30-day, 90-day, and 180-day average stock prices and treats them all equally. As I pointed out in my direct testimony, this introduces an inconsistency because she is using the latest market data (at the time of her analysis)—such as earnings forecasts, future dividend payments, etc.—but applying these to outdated 90- and 180-day stock prices. In her rebuttal, she claims that there is no basis to support that the more recent stock prices are the "best information available."[15] But the stock price today is by definition the most up-to-date price that incorporates all information that is

[14] *Id.* at p. 109:3-11.
[15] *Id.* at p. 113:1-13.

known today. The 30-day price that both Ms. Bulkley and I use—though I use it exclusively—is a reasonable measure because it is recent and smooths out daily market fluctuations. Notably, as with her direct testimony, Ms. Bulkley's rebuttal DCF results with the 30-day stock price were the lowest of her results; moreover, her DCF's consistently increased with the extension of the historical stock price period.[16]

Q **Have you changed your DCF methodology due to Ms. Bulkley's rebuttal?**

A No. Below, I present updated DCF estimates using more recent data, but the methodology has not changed.

B. CAPM

Q **Do you agree with Ms. Bulkley that only a 30-year Treasury Bond should be used when calculating the risk premium?**

A No. Ms. Bulkley claims that only a 30-year bond should be used given that "utility investments are long-lived assets."[17] I do not dispute that a 30-year bond could be used. But commonly cited measures of the equity risk premium use either 10- or 20-year bonds in their calculation. The most important aspect when calculating the CAPM is that the term of the current bond yield matches the bond term used in calculating the equity risk premium ("ERP"). New York University ("NYU") Professor Damodoran—who is often cited and provides substantial market data that is publicly available—uses a 10-year Treasury bond when calculating the ERP.[18] Therefore, when I use his historical ERP, I apply it to a 10-year Treasury bond yield otherwise I would be introducing an inconsistency. Notably, I

[16] *Id.* at p. 10.
[17] *Id.* at p. 115:7-8.
[18] *See* NYU Stern School of Business, "Historical Returns on Stocks, Bonds, and Bills: 1928-2024," *available at:* https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html.

also take the historical ERP calculation from the longest period of data available: from 1928 through 2024.

Kroll (formerly Duff and Phelps) is another common source of ERP that recommends a forward-looking value along with a risk-free rate based on a 20-year Treasury Bond. Kroll recommends that if applying its ERP to also use a 20-year rate (and the time of their recommendation) unless the current yield (or "spot rate") is higher.[19] In the CAPM estimate that used the Kroll ERP, I took the higher current yield on the 20-year Treasury and applied Kroll's recommended ERP.

Ms. Bulkley's criticism that I am using too short of a time frame is curious because her CAPM analysis relies on 5-year earnings forecasts to calculate her ERP—which she uses as the only measure of "long-term growth" for the equity market.

Q **Did you agree with Ms. Bulkley's criticism of the geometric average?**

A No. Ms. Bulkley dismisses both Dr. Won's and my usage of the geometric average in the ERP.[20] This measure is also known as the compound annual growth rate, or CAGR, because it captures the effect of cumulative returns on an asset or portfolio over time. The arithmetic average is simply the average annual return. I use both average methods in my CAPM, even though I favor the geometric average as a more accurate value for a long-term investment. I understand that this issue is not settled and there are citations that would favor one way or the other. Ms. Bulkley provides citations in favor of the arithmetic

[19] *See* Carla Nunes, James P. Harrington, Anas Aboulamer, Roger J. Grabowski, "Kroll Recommended U.S. Equity Risk Premium and Corresponding Risk-Free Rates to be Used in Computing Cost of Capital: January 2008 – Present," Kroll (Feb. 3, 2025), *available at:* https://www.kroll.com/en/insights/publications/cost-of-capital/recommended-us-equity-risk-premium-and-corresponding-risk-free-rates.

[20] Bulkley Rebuttal at p. 55:12-57:2; p. 117:15-118:3.

average. Professor Damodoran argues in favor of the geometric average for a long-term analysis:

> As we move to longer time horizons, and as returns become more serially correlated (and empirical evidence suggests that they are), it is far better to use the geometric risk premium. In particular, when we use the risk premium to estimate the cost of equity to discount a cash flow in ten years, the single period in the CAPM is really ten years, and the appropriate returns are defined in geometric terms. In summary, the arithmetic mean is more appropriate to use if you are using the Treasury bill rate as your riskfree rate, have a short time horizon and want to estimate expected returns over that horizon. The geometric mean is more appropriate if you are using the Treasury bond rate as your riskfree rate, have a long time horizon and want to estimate the expected return over that long time horizon.[21]

I use Professor Damodoran's calculations of historical ERP where he calculates in both arithmetic and geometric terms. Again, I prefer the latter, but I acknowledge that some investors prefer the arithmetic average, which is why I incorporate both methods. Using both types of averages leads to a higher CAPM than using only the geometric average.

Q **Do you agree with Ms. Bulkley's argument that historical returns should not be used as one way to measure the equity risk premium?**

A No. Similarly to the issue of average methods, there is disagreement on the issue of whether to use a historical ERP or a forward-looking ERP:[22] I use both methods. If I were only using the historical data, then I would agree that it was inappropriate because it would ignore the fact that investors look at forward-looking data, and I would simply be assuming that history repeats itself. But I cannot ignore that investors also look at historical returns

[21] *See* NYU Stern School of Business, "Discussion Issues and Derivations," *available at:* https://pages.stern.nyu.edu/~adamodar/New_Home_Page/AppldCF/derivn/ch4deriv.html.
[22] Bulkley Rebuttal at p. 113:14-114:12.

when making decisions today. Large investment managers, such as Vanguard, provide data on historical returns for their mutual funds for customers to consider when making an investment.[23] As I discuss later, the usage of only projected data would lead to a lower CAPM—so again by using both methods my CAPM is skewing higher or more favorable to the Company.

Q **Is Ms. Bulkley correct that using total returns on bonds—rather than income-only[24]—makes your CAPM understated?**

A No. The usage of either total returns (factoring in income from yields and price changes) or income-only returns in my ERP would actually increase my CAPM. I calculated both the historical arithmetic averages of the income-only returns and they were both slightly higher than the total returns that I use. The arithmetic average was 4.79 percent with total returns and 4.77 percent with income-only returns. The geometric average was 4.50 percent with total returns and 4.74 percent with income-only returns. Because the historical ERP is the equity market return minus the bond return, higher bond returns decrease the ERP. Thus, my CAPM is not understated, and I find that the usage of either total or income-only return makes little difference. Indeed, when I used the income-only values, my CAPM estimate decreased by 0.05 percent.

Q **Please respond to Ms. Bulkley's claim that you mischaracterized her testimony.**

A Ms. Bulkley asserts that I mischaracterize her testimony on the relationship of her CAPM and ECAPM results and the Company's requested ROE.[25] First, on the CAPM alone: I had

[23] *See* Vanguard, "Vanguard mutual funds & ETFs," *available at:* https://investor.vanguard.com/investment-products/list/all?managementstyle=index&assetclass=equity.
[24] Bulkley Rebuttal at p. 117:15-118:3; n.154.
[25] *Id.* at p.116-117.

stated that her CAPM was high because it produced a value higher than what she was *recommending*, i.e., the Company's 10.20 percent. She argues that she does not *recommend* a specific value but rather a range. However, her testimony is the only evidence supporting the Company's requested allowable ROE of 10.20 percent. Whether she is supporting the Company's ROE versus recommending that ROE is a distinction without a difference. Despite this evidence that the CAPM was higher than the ROE request (in some cases much higher), the bottom line is: 1) Ms. Bulkley's testimony is supporting the Company's requested ROE; and 2) her CAPM results are undoubtedly higher than that amount. In her rebuttal testimony, where she updates the CAPM values—while they have decreased since her direct testimony—all nine CAPM estimates are higher than the 10.20 percent ROE requested by the Company.

The ECAPM upwardly adjusts the CAPM when the beta is less than 1. Ms. Bulkley argues that the ECAPM is a corrective for the fact that the CAPM "understate[s] the costs of equity for companies with beta coefficients less than 1, such as regulated utilities."[26] In my direct testimony, I argued that the ECAPM was not necessary and inflated an already high CAPM. To wit: in Ms. Bulkley's direct testimony, several of her CAPM estimates are above 12 percent, and the ECAPM adjustment increased those even higher.[27] The range of her ECAPM results in her direct testimony were between 11.07 percent and 12.17 percent—or roughly one to two percentage points above the Company's proposed 10.20 percent allowable ROE. Yet, Ms. Bulkley claims that I had "no evidence" for the claim

[26] Direct Testimony of Ann E. Bulkley at p. 44:7-9 (hereinafter "Bulkley Direct").
[27] *Id.* at p. 45, Figure 10.

that the CAPM was "already high" and disagrees with my dismissal of the ECAPM as an upward adjustment to a high CAPM result.[28]

Q **Have you changed your CAPM and ECAPM methodology due to Ms. Bulkley's rebuttal?**

A No. Later, I present updated CAPM and ECAPM estimates using more recent data, but the methodology has not changed.

C. Defense of the Bond Risk Premium does not hold water

Q **Do you agree with Ms. Bulkley's defense of the usage of authorized ROEs in the bond risk premium analysis?**

A No. I had argued that this model was deeply flawed, and Ms. Bulkley attempts to defend its usage in her rebuttal. Ms. Bulkley argues with the premise that ROEs have been upwardly biased and are likely above the cost of equity. The ROE is calculated based on book value, not market value. As she points out, others have argued that the fact that the market value of utilities typically outweighs the book value indicates that the allowed ROE exceeds the cost of equity.[29] She argues that there are "several reasons" why this would be the case but does not offer any other reasons. Indeed, as I have discussed, in my proxy group of utilities the market values are currently around *double* their book value. I recognize that stock prices are at the parent company level, but my proxy group of utilities were chosen in part due to a high portion of their revenue coming from regulated operations. Thus, the willingness of equity investors to pay a substantial premium for

[28] Bulkley Rebuttal at p. 116-117.
[29] *Id.* at p. 119:1-14.

equity in these companies is indicative of the ROE being higher than investors would have accepted.

Q **Please address the usage of historical data in the bond risk premium analysis.**

A Ms. Bulkley argues with my claim that this analysis relies solely on historical data.[30] Her argument here rests on the fact that she eventually applies *current and projected* bond yields; but the fact remains that her bond risk premium term itself is solely based on historical data. Thus, I will clarify and state instead that the analysis *overly* relies on historical data. Her defense of the bond risk premium analysis is still curious given her rejection of the usage of historical data in my DCF and CAPM.

Q **Have actual ROEs been decreasing over time?**

A Yes. In addition to the flaws of using historical, allowable ROEs themselves (as addressed above), another major problem with the model is that there is a long-term trend of ROEs decreasing over time. The regression specified by Ms. Bulkley does not account for this effect because time is not a variable in the regression. She argues that the R^2 of 0.83—which means 83 percent of the variation in risk premium can be explained by interest rates—is indicative of high predictive power. This model produces a ROE estimate of between 10.41 percent and 10.62 percent, including bond yields of between 4.30 percent and 4.66 percent.[31] However, when looking at instances in the past where interest rates were historically in that range, it is apparent that the risk premium (as defined by ROE minus bond yield in this model) has been mostly decreasing, as shown below in Table 1.

[30] *Id.* at p. 119:15-19.
[31] Bulkley Direct, Schedule AEB-D2, Attachment 7; *see also* Bulkley Direct at p. 40:19-41:3.

Table 1: Bond Risk Premiums under Select Interest Rates[32]

Quarter	Average Authorized Electric ROE (1)	U.S. Govt. 30-year Treasury (2)	Bond Risk Premium = (1) minus (2)
2003.2	11.16%	4.60%	6.56%
2005.2	10.13%	4.47%	5.65%
2005.3	10.85%	4.42%	6.42%
2005.4	10.59%	4.65%	5.94%
2006.1	10.38%	4.63%	5.75%
2007.4	10.43%	4.61%	5.81%
2008.1	10.15%	4.41%	5.74%
2008.2	10.54%	4.57%	5.96%
2008.3	10.38%	4.45%	5.93%
2009.3	10.41%	4.32%	6.09%
2009.4	10.54%	4.34%	6.20%
2010.1	10.45%	4.62%	5.82%
2010.2	10.08%	4.37%	5.71%
2011.1	9.96%	4.56%	5.40%
2011.2	10.12%	4.34%	5.78%
2023.4	9.68%	4.58%	5.09%
2024.1	9.66%	4.32%	5.34%
2024.2	9.78%	4.64%	5.15%

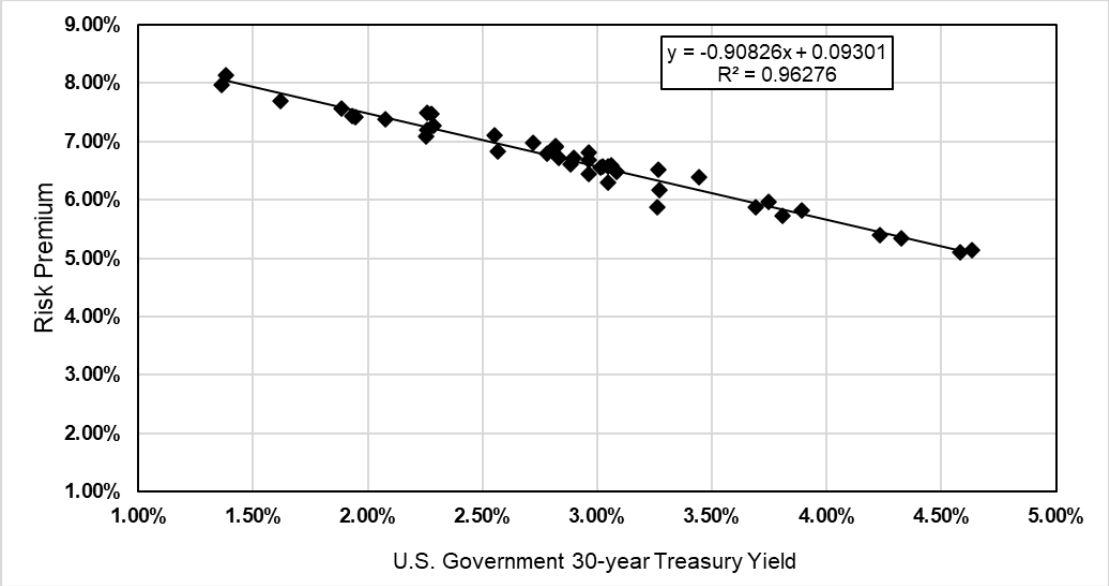
Ms. Bulkley's regression predicts a risk premium of 5.96 percent to 6.11 percent for similar interest rates; but the bond risk premium (at these interest rates) has not been that high since 2009.

In an illustrative exercise, I altered Ms. Bulkley's regression to only use data from the past 10 years. This exercise shows how much the variable of time itself is important. When only looking at data going back to 2014, the regression of risk premium on interest rates produces an R^2 of 0.96—thus, the power of predicting the relationship is better with a more limited timeframe. This illustrative example predicts a risk premium of between 5.07 percent and 5.40 percent, and associated ROE of 9.70 percent to 9.73 percent.[33]

[32] Bulkley Direct, Schedule AEB-D2, Attachment 7 at p. 3.

[33] I also ran this exercise with Ms. Bulkley's updated rebuttal data and generated almost the same result—a range of 9.69 percent to 9.71 percent, with an R-square of 97 percent.

Figure 1: Illustrative Example of Bond Risk Premium Using Only the Past Ten Years[34]



Merely focusing on more recent data decreases the original result by roughly 0.7 and 0.9 percent. Moreover, these results are also more in line with recent risk premia (shown above in Table 1). Again, I caution here that "risk premia" in this analysis is defined as based on the interest rates and the actual ROEs award, the latter which are an already upwardly biased proxy for the cost of equity. Because of that issue, and the other flaws with this model, neither my illustrative example nor Ms. Bulkley's bond risk premium calculation should be used to set the allowable ROE.

III. Updated Cost of Equity Estimates

Q **What is your recommendation for the allowed ROE in this case?**

A My recommendation continues to be an allowed ROE of between 9.25 and 9.5 percent. This is a conservative (i.e. favorable to the Company) recommendation based on the

[34] *Id.* I followed Ms. Bulkley's regression steps and reproduced the corresponding figure from her direct testimony but only using the data from 2014 through 2024.

multiple models provided in my direct testimony, which resulted in an average cost of equity of 9.06 percent (a range of 8.35 percent to 9.55 percent). Company Witness Bulkley argues that my recommendation was too low for several reasons, which I addressed above. In this surrebuttal, I have updated the data used in my DCF, CAPM and ECAPM to generate newer estimates; these updated results average to 9.30 percent (a range of 8.38 percent to 10.06 percent), which falls on the low end of my recommended range. The highest result (10.06 percent) is from the ECAPM model, which I continue to argue is overstated and should not be viewed on the same footing as the DCF and CAPM results.

Q **Has the U.S. economic outlook changed throughout this case?**

A Yes, more so since the Company's direct filing in June 2024 than it has since my direct filing in November 2024. In my direct testimony, I discussed how Witness Bulkley's June 2024 view that high inflation rates were likely to persist and that the Federal Reserve ("Fed") was not likely to cut interest rates in the rest of 2024 proved to be incorrect.[35] Between June 2024 and my direct filing, the Fed actually cut interest rates twice in both September and November of 2024 as inflation was coming down. Since my direct filling, the Fed cut interest rates yet again with the current target range now set at 4.25 to 4.50 percent. As of its last meeting on January 29, 2025, the Fed decided to hold interest rates steady as a wait-and-see approach, noting that the labor market was "solid" and inflation remained "somewhat elevated," but that the "risks to achieving its employment and

[35] Bulkley Direct at p. 17:8-9.

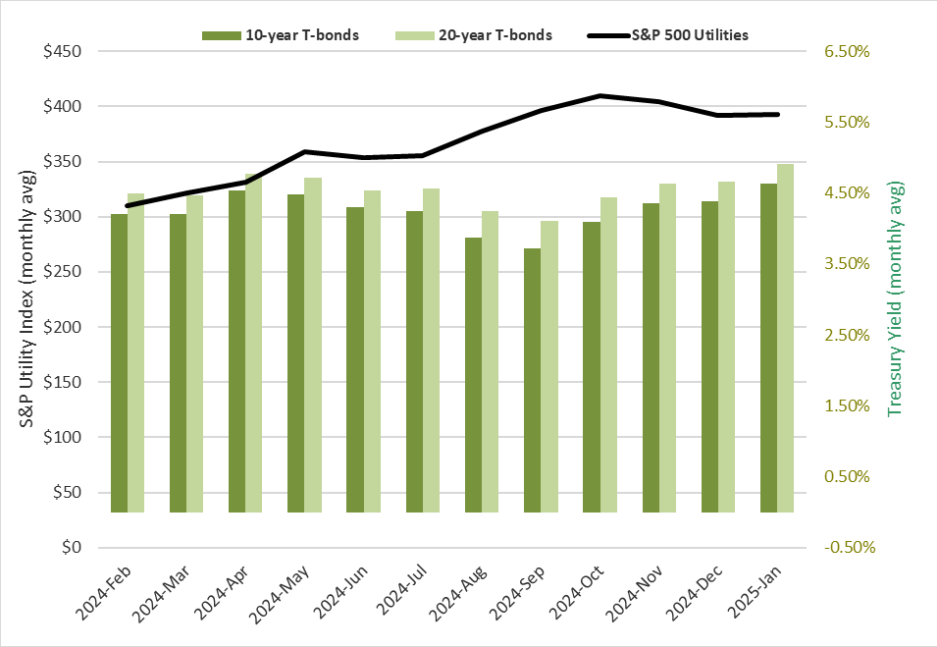
inflation goals are roughly in balance."[36] Thus, there is slightly more caution in recent months from the Fed. But the CME Group's *Fed Watch* tool—which estimates the probability of future Fed funds rates—predicts one more rate cut in 2025, with a Fed target of 4.00 to 4.25 percent seen as most likely by the end of 2025.[37] Long-term interest rates have mostly increased since November, although they have more recently decreased since mid-January of 2025.

Q **Have the stock prices of utilities suffered as long-term interest rates increased?**

A No. Shares of equity in utilities (including Ameren) are in high demand, leading to higher stock prices, which indicate a lower cost of equity. Ms. Bulkley testified in June 2024 that "utility share prices will continue to underperform" because of "elevated" interest rates being "inversely related" to utility stocks.[38] But this did not happen. In recent months, utility stocks (including Ameren's) have increased substantially and remained high even as long-term interest rates increased. Figure 2 shows the monthly average S&P utility index from the past 12 months along with yields on 10- and 20-year Treasury bonds. While Treasury yields have increased by roughly 10 percent, the S&P utility index price has increased by 27 percent.

[36] *See* Federal Reserve, "Federal Reserve issues FOMC statement," (Jan. 29. 2025), *available at:* https://www.federalreserve.gov/newsevents/pressreleases/monetary20250129a.htm.
[37] *See* CME Group, *FedWatch* Tool, *available at:* https://www.cmegroup.com/markets/interest-rates/cme-fedwatch-tool.html (reviewed on Feb. 13, 2025).
[38] Bulkley Direct at p. 9:6-8.

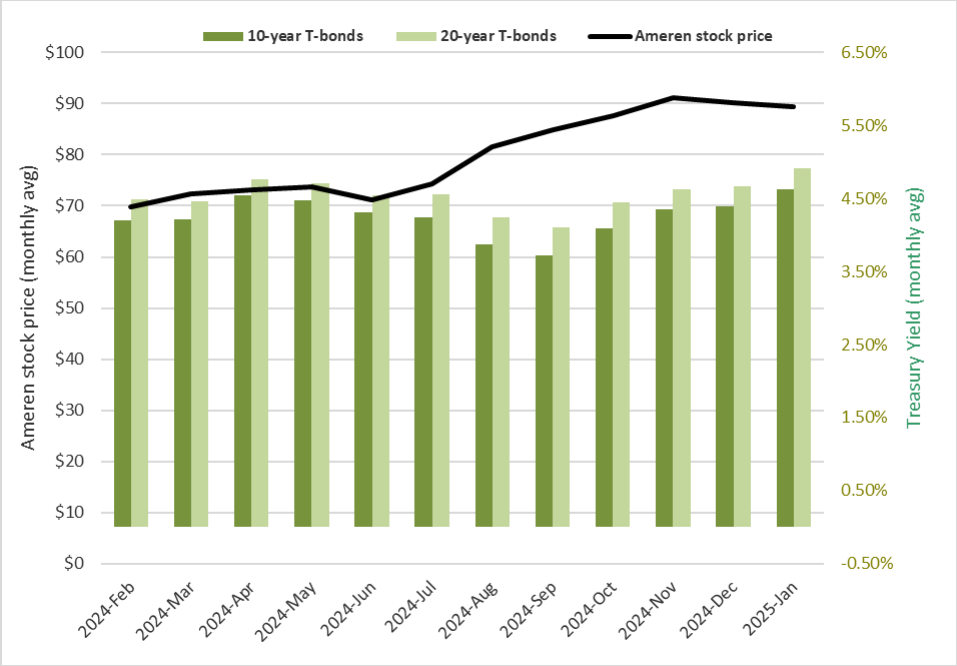
Figure 2: Utility Stocks and Long-Term Interest Rates (monthly average)[39]



The movement in Ameren stock has been similar to that of the industry at-large—as shown in Figure 2. During the same period, the price of Ameren stock price has increased by 28 percent while Treasury yields increased by 9 to 10 percent.

[39] S&P Global, S&P Utility Index, *available at:* https://www.spglobal.com/spdji/en/indices/equity/sp-500-utilities-sector/#overview; Treasury Bond yields, FRED data, *available at:* https://fred.stlouisfed.org/.

Figure 3: Ameren Stock and Long-Term Interest Rates (monthly average)[40]



The theory of the "inverse" relationship in interest rates and utility stock prices has not held in practice since September 2024 as interest rates were mostly increasing and, simultaneously, utility stock prices were increasing or staying flat. This is an indication that there are other factors causing upward pressure on the stock price (e.g., projected electricity demand) that outweigh the downward pressure of the interest rate increases. Regardless of the theory, it is undeniable that the market values of the utility industry, and specifically the Ameren Corporation, have increased substantially in the past year. Ms. Bulkley had previously testified that "underperformance" of utility stocks would indicate a higher cost of equity,[41] but the converse is also true that overperformance indicates a lower cost of equity.

[40] Yahoo Finance, AEE stock price, *available at:* https://finance.yahoo.com/quote/AEE/history/; Treasury Bond yields, FRED data, *available at:* https://fred.stlouisfed.org/.
[41] Bulkley Direct at p. 23:19-24:1.

Q **Did you update your cost of equity analysis to reflect updated data?**

A Yes. I have updated my cost of equity estimates to reflect more up-to-date information, including recent stock prices, interest rates, market returns, and forecasts (among others). I made one change to my proxy group by removing Edison International ("EIX") because its stock has plummeted with the recent wildfires in southern California—making it a clear anomaly among the group of utilities in terms of risk. I also was unable to use Yahoo Finance earnings forecasts as they are no longer publicly available.[42] However, I continue to use Zack's and Value Line earnings forecasts.

Q **Please summarize your updated DCF and CAPM estimates.**

A My cost of equity results range between 8.4 and 10.1 percent, as shown below. As I stated in my direct testimony, I do not see the ECAPM as on equal footing with the other results but as an extreme value. The average of all four results is 9.30 percent—which is closer to the low end of my recommended range. Since my direct testimony, my DCF estimates have barely changed and CAPM and ECAPM have increased slightly—mainly due to higher long-term interest rates. As with my direct testimony, I also tested results using Ameren's proxy group and using my group but only projected data (i.e. no historical data): these resulted in average cost of equity of 9.25 percent and 9.20 percent, respectively.

[42] I attempted to purchase the data from Yahoo Finance through its paywall, but it was not functioning.

Table 2: Comings Cost of Equity Estimates

DCF 1	8.4%
DCF 2	8.8%
CAPM	10.0%
ECAPM	10.1%
Average	9.30%

Q **What do you recommend for the allowable ROE?**

A Based on my review of the Company's analysis, its rebuttal, and my own cost of equity estimates, I continue to recommend a ROE between 9.25 and 9.5 percent.

Q **Does this conclude your testimony?**

A Yes.

BEFORE THE MISSOURI

PUBLIC SERVICE COMMISSION

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust its Revenues for Electric Service	)))	File No. ER-2024-0319

AFFIDAVIT

Pursuant to Missouri Public Service Commission requirements I, Tyler Comings, hereby state:

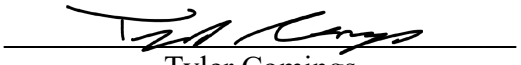
1. My name is Tyler Comings and I am a Principal Economist at Applied Economics Clinic. My business address is 6 Liberty Sq., PBM 98162, Boston, Massachusetts 02109.

2. Attached hereto and made part hereof for all purposes is my Surrebuttal Testimony on behalf of Sierra Club, including an exhibit, which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that based upon my personal knowledge, the facts stated in the Surrebuttal Testimony are true. In addition, my judgement is based on my professional experience, and the opinions and conclusions stated in the testimony are true, valid, and accurate.

Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.

Date: February 13, 2025



Tyler Comings