

<b>Exhibit No.:</b>	
<b>Issue(s):</b>	Rate of Return (ROR)/ Capital Structure
<b>Witness/Type of Exhibit:</b>	Murray/Rebuttal
<b>Sponsoring Party:</b>	Public Counsel
<b>Case No.:</b>	ER-2022-0337

**REBUTTAL TESTIMONY**

**OF**

**DAVID MURRAY**

Submitted on Behalf of the Office of the Public Counsel

**UNION ELECTRIC COMPANY  
D/B/A AMEREN MISSOURI**

CASE NO. ER-2022-0337

February 15, 2023

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**UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI**

**FILE NO. ER-2022-0337**

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 is the purpose of your testimony?**

7 A. To respond to the direct testimony of Ameren Missouri's witnesses, Ann E. Bulkley and  
8 Darryl T. Sagel, as it relates to rate of return ("ROR") and capital structure. I will also  
9 respond to the direct testimony of Staff witness Seoung Joun Won, PhD.

10 **Q. How will you approach the presentation of your rebuttal testimony?**

11 A. I will address capital structure first. As it relates to capital structure, I will address Mr.  
12 Sagel and Dr. Won together since they recommend the same approach for purposes of  
13 setting Ameren Missouri's authorized ROR. I will then address Ms. Bulkley's and Dr.  
14 Won's recommended ROEs separately because they have different recommendations and  
15 approaches to how they arrive at their recommended ROEs.

16 **Q. Do you plan to address any issue other than capital structure and ROE as it relates  
17 to Ameren Missouri's requested revenue requirement?**

18 A. Yes. Although my testimony addressing capital structure is primarily focused on a fair and  
19 reasonable ratemaking capital structure for purposes of setting Ameren Missouri's ROR, I  
20 will also discuss the effect Ameren Corp's holding company's financial strategies have on  
21 standard ratemaking formulas, such as capitalizing financing costs associated with

1 construction work in progress (“CWIP”). Based on the logic and understanding that it is  
2 customary financing practice to use short-term debt to initially fund capital expenditures,  
3 Ameren Corp’s holding company financing strategies cause unreasonably high  
4 capitalization charges (i.e. increases to rate base) using the standard Federal Energy  
5 Regulatory Commission (“FERC”) allowance for funds used during construction  
6 (“AFUDC”) formula.

7 **CAPITAL STRUCTURE**

8 **Q. Whose direct testimony addressed the recommended ratemaking capital structure for**  
9 **determining Ameren Missouri’s revenue requirement in this case?**

10 A. Ameren Missouri witness Mr. Sagel, Staff witness Dr. Won, and myself.

11 **Q. Do you agree with Mr. Sagel’s and Dr. Won’s positions on capital structure in this**  
12 **case?**

13 A. No. Both Mr. Sagel and Dr. Won recommend the Commission determine Ameren  
14 Missouri’s authorized ROR for its electric utility using Ameren Missouri’s capital structure  
15 ratios. At this point, the only cause for the difference in Dr. Won’s and Mr. Sagel’s capital  
16 structure ratios is due to Dr. Won’s use of Ameren Missouri’s actual capital structure  
17 balances as of September 30, 2022, where Mr. Sagel recommends Ameren Missouri’s  
18 projected capital structure ratios as of December 31, 2022. Assuming Dr. Won and Mr.  
19 Sagel update Ameren Missouri’s capital structure balances for actual information through  
20 December 31, 2022, then their recommended capital structure ratios will likely be identical.

21 **Q. Are you confident Ameren Missouri will achieve its projected common equity of**  
22 **around 52% as of the December 31, 2022, true-up date in this case?**

23 A. Yes. As I identified in my direct testimony, Ameren Corp consistently manages Ameren  
24 Missouri’s capital flows to achieve a common equity ratio of approximately 52% for the  
25 anticipated end-of-period test year or updated/trued-up test year for any given rate case. It  
26 is not difficult for Ameren Corp to achieve this target for Ameren Missouri since Ameren

1 Corp manages Ameren Missouri's capital flows to achieve its targeted common equity ratio  
2 of approximately 52%. Ameren Corp has been able to consistently manage Ameren  
3 Missouri's capital structures for ratemaking to achieve an end-of-period ratemaking  
4 common equity ratio range of 51.75% to 52.30% for rate cases over the last ten years.

5 **Q. Does the Company contend that the Commission authorized Ameren Missouri's**  
6 **capital structure in Ameren Missouri's 2021 rate case, Case No. ER-2021-0240?**

7 A. Yes. Mr. Sagel testifies that although Ameren Missouri's capital structure was settled as  
8 part of the overall "black box" settlement of the revenue requirement in Case No. ER-2021-  
9 0240, the parties to the case agreed to use Ameren Missouri's actual capital structure at  
10 September 31, 2021 for purposes of accruals/capitalizations related to Plant-in-Service  
11 Accounting ("PISA"), the Renewable Energy Standard Rate Adjustment Mechanism  
12 ("RESRAM") and AFUDC. Mr. Sagel indicates that Ameren Missouri's capital structure  
13 contained 51.97% common equity at this date. In Mr. Sagel's opinion, because the  
14 Commission approved the settlement ("S&A") in the 2021 rate case, this also constitutes  
15 Commission authority of Ameren Missouri's capital structure.

16 **Q. Did the parties to that S&A in Ameren Missouri's last general electric rate case**  
17 **specify a ROR for purposes of PISA, RESRAM and AFUDC?**

18 A. Yes. The S&A specifies an after-tax ROR (referred to as a post-tax Weighted Average  
19 Cost of Capital in the S&A) of 6.76%.

20 **Q. Does the S&A specify a ROE?**

21 A. No.

22 **Q. Can one imply a ROE if the capital structure, cost of debt, cost of preferred stock and**  
23 **overall ROR are known?**

24 A. Yes. With only one unknown variable, this is a simple matter of performing algebra. The  
25 ROE would have to be 9.39% to achieve an overall ROR of 6.76% based on Ameren

1 Missouri's September 30, 2021, capital structure of 51.97% common equity, 47.30% long-  
2 term debt and 0.73% of preferred stock.

3 **Q. From another perspective, what is the ROE if the ROR is 6.76% and the common**  
4 **equity ratio is 50%?**

5 A. 9.6%.

6 **Q. Do you agree with Mr. Sagel's characterization that the Commission "authorized" a**  
7 **capital structure of 51.97% common equity for Ameren Missouri in its last general**  
8 **electric rate case?**

9 A. No. These were not disputed issues before the Commission. In that case the Commission  
10 decided neither an authorized capital structure nor an authorized ROE for Ameren  
11 Missouri. The Company's suggestion the Commission did concerns me. As I will discuss  
12 when addressing Ms. Bulkley's ROE testimony, a "Commission authorization" should not  
13 be used liberally as it relates to settlement terms. I define the Commission's last authorized  
14 capital structure and ROE for Ameren Missouri as the Commission's explicit decision on  
15 this issue in Ameren Missouri's last fully litigated case, Case No. ER-2014-0258. A fair  
16 and reasonable capital structure for ratemaking was not a disputed issue in Ameren  
17 Missouri's 2014 rate case because Ameren Corp had not been issuing significant amounts  
18 of holding company debt at that time. This is no longer the case.

19 **Q. Fundamentally, why do you disagree with Dr. Won's and Mr. Sagel's proposed**  
20 **capital structure ratios for Ameren Missouri for purposes of determining Ameren**  
21 **Missouri's revenue requirement in this case?**

22 A. As I testified in direct and earlier in this testimony, Ameren Corp targets 52% common  
23 equity at Ameren Missouri, which, as the ultimate parent of Ameren Missouri, it can  
24 accurately achieve by managing the capital flows to and from Ameren Missouri.

1 **Q. Has Ameren Corp consistently targeted a 52% common equity ratio on a consolidated**  
2 **basis?**

3 A. No. As I explained in my direct testimony, Ameren Corp’s equity ratio has continued to  
4 diverge from Ameren Missouri’s targeted equity ratio. In fact, the delta between Ameren  
5 Missouri’s and Ameren Corp’s common equity ratio has been steadily increasing over the  
6 last several rate cases. In Ameren Missouri’s 2019 electric rate case, Case No. ER-2019-  
7 0335, the difference was 4% (52% vs. 48%). In Ameren Missouri’s 2021 rate case, Case  
8 No. ER-2021-00240, the difference increased to 7% (52% vs. 45%). In this case, the gap  
9 is now 9% (52% vs. 43%). The widening gap is due to the fact that Ameren Corp has  
10 continued to increase the amount and proportion of holding company debt as compared to  
11 total consolidated debt. On March 29, 2019, Moody’s lowered its Funds from Operations  
12 (“FFO”)/debt threshold to 17% from 19% which gave Ameren Corp the flexibility to incur  
13 more leverage at the holding company level without jeopardizing its credit rating. One of  
14 the primary reasons Moody’s cited for allowing less stringent financial metrics was the  
15 “improved regulatory construct in Missouri facilitating meaningful rate base growth and  
16 reducing regulatory lag [PISA].”<sup>1</sup>

17 **Q. What were Ameren Missouri’s authorized equity ratio and ROE before it was able to**  
18 **elect PISA accounting?**

19 A. 51.76% equity and a 9.53% ROE.<sup>2</sup>

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<sup>1</sup> “Updated to Credit Analysis,” Moody’s Investor Service, March 29, 2019, p. 2.

<sup>2</sup> Case No. ER-2014-0258, Report and Order, April 29, 2015, pgs. 61 and 68.

1 **Q. Has Ameren Corp adjusted its common equity ratios for its other subsidiaries,**  
2 **Ameren Illinois and ATXI, after the Commission changed Ameren Missouri's rates**  
3 **in its 2019 general electric rate case?**

4 A. Yes. It increased its common equity ratio for its subsidiary Ameren Illinois from 50% to  
5 approximately 54%.<sup>3</sup> It increased its common equity ratio for ATXI from 56% to  
6 approximately 60%.<sup>4</sup>

7 **Q. If Ameren Corp has increased the equity ratios of Ameren Illinois and ATXI and is**  
8 **still maintaining a 52% equity ratio at Ameren Missouri, why does Ameren Corp's**  
9 **consolidated capital structure have a lower equity ratio now than it did at the time of**  
10 **Ameren Missouri's 2019 rate case?**

11 A. Because it is issuing holding company debt to invest in the equity of its subsidiaries.  
12 Ameren Corp's only assets are its equity interests in its subsidiaries. Ameren Corp's debt  
13 capacity arises from its ownership of low-risk regulated utility assets. Ameren Corp's debt  
14 capacity increased after Ameren Missouri was able to elect PISA.

15 **Q. Is Ameren Missouri directly using the debt capacity enabled by PISA?**

16 A. No. Ameren Corp has not allowed it to because this would upset the ratemaking paradigm  
17 Ameren Corp believes it has established for its Ameren Missouri subsidiary. The  
18 Commission can correct this misappropriation of Ameren Missouri's debt capacity to  
19 Ameren Corp by authorizing a lower common equity ratio for Ameren Missouri for  
20 ratemaking purposes. I recommend the Commission authorize Ameren Missouri a 43%  
21 common equity ratio, which is consistent with the leverage Ameren Corp has deemed  
22 appropriate and optimal considering the low business risk of its regulated assets. If Ameren  
23 Corp wants the Commission to authorize Ameren Missouri a higher common equity ratio,  
24 it can simply reduce the amount of holding company debt it issues and maintain the current  
25 debt ratios at its subsidiaries.

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<sup>3</sup> Docket 22-0297, Illinois Commerce Commission, Ameren Illinois Company.

<sup>4</sup> Ameren Corporation SEC Form 10-K Filing, December 31, 2021, p. 8.



1 **Q. Why does Dr. Won recommend that the Commission use Ameren Missouri’s per**  
2 **books capital structure for determining the revenue requirement in this case?**

3 A. Dr. Won testifies that based on his review of Ameren Missouri’s financial relationship with  
4 Ameren Corp, and to be consistent with the Commission’s previous ratemaking decisions,  
5 he recommends the Commission set Ameren Missouri’s ROR “based on Ameren  
6 Missouri’s standalone capital structure.”<sup>5</sup>

7 **Q. Do you know to which previous Commission ratemaking decisions Dr. Won is**  
8 **referring?**

9 A. I am not sure. Dr. Won indicates he reviewed the Commission’s previous decisions in  
10 Spire Missouri rate cases, Case No. GR-2021-0108 and Case Nos. GR-2017-0215 and GR-  
11 2017-0216 (Case Nos. GR-2017-0215 and GR-2017-0216 were consolidated because  
12 while Spire Missouri East and Spire Missouri West are separate rate districts, they are not  
13 separate companies). Dr. Won also indicates he reviewed the Commission’s decision in  
14 The Empire District Electric Company’s (“Empire”) 2019 rate case, Case No. ER-2019-  
15 0374.

16 **Q. Of these Commission decisions which do you consider most applicable to Ameren**  
17 **Missouri’s relationship with its parent Ameren Corp?**

18 A. The Spire Missouri rate cases.

19 **Q. Dr. Won testifies that the Commission adopted Empire’s consolidated capital**  
20 **structure in Case No. ER-2019-0374. Is he correct?**

21 A. No. The Commission used Liberty Utilities Company’s (“LUCo”) adjusted consolidated  
22 capital structure for purposes of setting Empire’s ROR. After Algonquin Power & Utilities  
23 Corporation (“APUC”) acquired Empire, it consolidated all of the debt financing needs of  
24 its North American regulated utility subsidiaries at the LUCo level. Since this

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<sup>5</sup> Won Direct, p. 27, lines 8-11.

1 consolidation, Empire's capital needs have been funded through affiliate financing  
2 transactions.

3 **Q. In your opinion is Empire's financing relationship with LUCo a good comparable for**  
4 **Ameren Missouri's financing relationship with Ameren Corp?**

5 A. No.

6 **Q. Why not?**

7 A. Because Ameren Missouri issues its own long-term debt rather than relying on a financing  
8 affiliate to access long-term debt funds on its behalf.

9 **Q. In your opinion is Spire Missouri's financing relationship with Spire Inc. an**  
10 **appropriate comparable for Ameren Missouri's financing relationship with Ameren**  
11 **Corp?**

12 A. Yes.

13 **Q. Why?**

14 A. Because Spire Missouri issues its own long-term debt rather than relying on a financing  
15 affiliate to access long-term debt funds on its behalf.

16 **Q. What do you conclude about Ameren Missouri and Ameren Corp being comparable**  
17 **as to their financing relationships to Spire Missouri's financing relationships with**  
18 **Spire Inc. for purposes of the Commission using their per books capital structures for**  
19 **purposes of setting their authorized RORs?**

20 A. The Commission should not rely on their per books capital structures for that purpose.

21 **Q. Why not?**

22 A. Both Ameren Corp and Spire Inc. target capital structures for their utility subsidiaries in  
23 Missouri primarily for ratemaking, not to achieve a lower cost of capital for ratepayers. It  
24 is clear from Spire Inc.'s and Ameren Corp's more leveraged consolidated capital

1 structures that management recognizes that the low business-risk of its regulated utility  
2 subsidiaries allow for a much more optimal use of debt than reflected on each subsidiary's  
3 per books balance sheets.

4 **Q. Do the purposes for which Spire Inc. and Ameren Corp. issued holding company debt**  
5 **matter for purposes of the Commission deciding what capital structure to use for their**  
6 **subsidiaries it rate regulates?**

7 A. No. Spire Inc. issued most of its holding company debt in conjunction with its acquisitions  
8 of Spire Alabama Inc. and Spire EnergySouth Inc. Ameren Corp.'s holding company debt  
9 has largely been issued for purposes of financing investments into its existing subsidiaries.  
10 However, both Spire Inc.'s and Ameren Corp.'s capital structure policies at the holding  
11 company level indicate managements' views as to the amount of leverage its regulated  
12 utility assets can support. Ameren Missouri and Spire Missouri have shown through their  
13 actions that their targeted capital structures are driven by desired ratios for ratemaking  
14 rather than to target a reasonable cost of capital to charge ratepayers.

15 **Q. As it relates to Dr. Won's citation of circumstances he believes supports the use of**  
16 **Ameren Missouri's stand-alone capital structure, do you disagree with any of the**  
17 **circumstances Dr. Won present as statements of fact?**

18 A. Yes. I specifically disagree with the following statements related to Dr. Won's capital  
19 structure testimony on page 23, line 16 through page 27, line 18:

20 Ameren Missouri operates as an independent entity when considering  
21 Ameren Missouri's procurement of financing and the cost of that  
22 financing...[first statement]

23 ...Since January 2020, Ameren Missouri has not received long-term  
24 financing from Ameren Corp. or other Ameren Corp. subsidiaries...[second  
25 statement]

26 ...Ameren Missouri's stand-alone capital structure supports its own credit  
27 rating. The debt is rated by credit rating agencies based on the stand-alone  
28 credit quality of Ameren Missouri...[third statement]

1 ...Ameren Corp has not raised debt in order to contribute equity to Ameren  
2 Missouri....Therefore, Staff does not find evidence that Ameren Corp. has  
3 used “double leverage” for investing in Ameren Missouri. [fourth  
4 statement]

5 **Q. Why do you disagree with Dr. Won’s first statement?**

6 A. While Ameren Missouri does issue its own long-term debt, I do not agree that Ameren  
7 Missouri operates as an independent entity as it relates to the procurement of financing.  
8 As I testified in direct, Ameren Services Company (“AMS”) provides financing and capital  
9 management services for Ameren Corp’s subsidiaries, including Ameren Missouri.  
10 Additionally, the fact that Ameren Missouri has been relying more heavily on long-term  
11 capital (i.e. retained earnings and long-term debt) rather than short-term debt to fund its  
12 liquidity needs illustrates Ameren Missouri is not being managed independent of Ameren  
13 Corp. Ameren Corp shares credit facilities with Ameren Missouri and Ameren Illinois.  
14 Under Ameren Corp’s shared credit facility with Ameren Missouri, it has the ability to  
15 directly borrow up to \$900 million of the shared \$1.2 billion credit facility or issue this  
16 amount in commercial paper.<sup>6</sup> Commercial paper is typically used to support immediate  
17 cash needs, such as for working capital, construction work in progress (“CWIP”), or paying  
18 expected dividends to third-party shareholders. The ability of Ameren Corp to issue this  
19 commercial paper is dependent on the low business-risk profile of its Ameren Missouri  
20 assets, which was enhanced by Ameren Missouri’s ability to elect PISA.

21 Ameren Corp uses its shared credit facilities with its regulated utility subsidiaries to  
22 facilitate its access to the commercial paper markets (i.e. short-term debt). Ameren Corp  
23 can then use commercial paper to fund dividend distributions to shareholders rather than  
24 rely on the operating cash flows from its subsidiaries. However, this strategy artificially  
25 drives up capital costs paid by Ameren Missouri’s ratepayers as it relates to capitalizing  
26 CWIP through the standard AFUDC formula. For example, because Ameren Missouri  
27 retained 100% of its \$535 million earnings for the last twelve months through September  
28 30, 2022, based on the standard AFUDC formula, Ameren Missouri ratepayers are charged  
29 a long-term capital financing rate for the excess \$310 million of retained earnings that

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<sup>6</sup> Ameren Corp SEC Form 10-K Filing, December 31, 2021, p. 115.

1 Ameren Missouri would normally distribute as dividends if it were a true stand-alone  
2 company.<sup>7</sup> While Ameren Corp's use of commercial paper at the holding company level  
3 to fund dividends is beneficial to Ameren Corp's financing efficiency, this affiliation  
4 inflates Ameren Missouri's rates through a higher capitalization rate (AFUDC) applied to  
5 CWIP.

6 **Q. Why do you disagree with Dr. Won's second statement?**

7 A. Ameren Corp has made \$698 million of common equity contributions to Ameren Missouri  
8 since January 1, 2020. Therefore, Ameren Corp has provided long-term financing to  
9 Ameren Missouri. If Dr. Won intended to state that Ameren Corp has not provided long-  
10 term *debt* financing to Ameren Missouri since January 1, 2020, then I agree.

11 **Q. Why do you disagree with Dr. Won's third statement?**

12 A. Because it is not true as it relates to S&P's ratings methodology. Moody's and S&P have  
13 differing approaches for assigning their credit ratings to Ameren Missouri. Moody's gives  
14 weight to Ameren Missouri's stand-alone capital structure for purposes of assigning its  
15 long-term issuer rating of 'Baa1'. However, S&P assigns Ameren Missouri a credit rating  
16 based on Ameren Corp's group credit profile. Dr. Won cites Ameren Missouri's response  
17 to Staff Data Request No. 0196 (*see* Schedule DM-R-1) and S&P Global Capital IQ Pro to  
18 support his position.<sup>8</sup> I am not surprised Ameren Missouri's response to Dr. Won's data  
19 request confirmed his statement because doing otherwise would not support Ameren  
20 Missouri's position in this case. However, because Dr. Won also cited S&P as support for  
21 his position, I wanted to ensure I was not misinterpreting S&P's ratings approach.  
22 Therefore, I requested Staff's source document for its position. As can be seen in the  
23 attached Schedule DM-R-2, Dr. Won referred me to documents included in the S&P folder  
24 with his workpapers. Dr. Won appears to have relied on S&P Global Ratings April 30,  
25 2021 report for his position (attached as Schedule DM-R-3). However, this report does not  
26 support Dr. Won's position. S&P specifically states the following on page 10 of this report:

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<sup>7</sup> Ameren Corp's recent dividend payout ratio of approximately 58% multiplied by \$535 million.

<sup>8</sup> Won Direct, p. 5, lines 7-8 and p. 24, lines 4-5.

1 Under our group rating methodology, we consider AM [Ameren Missouri] a core  
2 subsidiary of parent Ameren with a group credit profile of 'bbb+'. This core status  
3 reflects our view that AM is highly unlikely to be sold, integral to the group's  
4 overall strategy, possesses a strong long-term commitment from senior  
5 management, and closely linked to the parent's name and reputation. Given its core  
6 subsidiary status and Ameren's group credit profile of 'bbb+', the issuer credit rating  
7 on AM is 'BBB+'.<sup>9</sup>

8 Therefore, Dr. Won is incorrect when he testifies that S&P assigns Ameren Missouri a  
9 credit rating based on its own capital structure. S&P assigns a 'BBB+' rating to Ameren  
10 Missouri based on the fact that Ameren Corp's rating is 'BBB+'. It is a coincidence that  
11 Ameren Missouri's hypothetical stand-alone credit profile ("SACP") is the same as  
12 Ameren Corp's consolidated credit profile.

13 **Q. How do you know this is a coincidence?**

14 A. Because, despite the fact that S&P assigns Ameren Illinois a hypothetical SACP of 'A-', it  
15 ultimately assigns Ameren Illinois a credit rating of 'BBB+' based on Ameren Corp.'s  
16 group credit profile.<sup>10</sup>

17 **Q. Why do you disagree with Dr. Won's fourth statement?**

18 A. The existence of double leverage is not limited to a direct reconciliation of the use of  
19 holding company debt to purchase equity in any specific subsidiary. In fact, Ameren Corp  
20 does not deny the fact that it issues debt at the holding company to purchase equity in its  
21 other subsidiaries. To claim that this proves that Ameren Corp does not employ double  
22 leverage is too narrow of an interpretation and does not consider the fact that Ameren Corp  
23 balances its consolidated capital structure based on the business risk of all of its  
24 subsidiaries, including Ameren Missouri. In fact, contrary to Dr. Won's view that because  
25 Ameren Corp only has a small percentage of non-regulated utilities, Ameren Missouri's  
26 capital structure is appropriate, it is the fact that Ameren Corp is predominately a pure-play

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<sup>9</sup> William Hernandez, et. al., Union Electric Co. d/b/a Ameren Missouri, S&P Global Ratings – RatingsDirect, April 30, 2021, pgs. 10-11.

<sup>10</sup> Ameren Illinois Company, S&P Global Ratings – RatingsDirect, April 28, 2022.

1 regulated utility that allows Ameren Corp the ability issue significant amounts of holding  
2 company debt in addition to its subsidiary debt (*i.e.* double leverage).

3 **Q. Does Ameren Missouri need support from Ameren Corp to issue stand-alone debt?**

4 A. No. In fact, Ameren Missouri could have its own stand-alone credit facility without sharing  
5 it with Ameren Corp, but this would not be beneficial to Ameren Corp as it relates to its  
6 access to commercial paper to fund other investments.

7 **Q. Has Ameren Corp disaggregated shared credit facilities in the past when an entity  
8 was causing a strain on Ameren Corp's credit quality?**

9 A. Yes. Ameren Corp did so in 2010 when it was attempting to limit the impact Ameren  
10 Corp's non-regulated subsidiary, Ameren Energy Generating Company had on its credit  
11 quality.<sup>11</sup> Ameren Corp also did so in 2006 when it no longer allowed Ameren Illinois  
12 (then operating as five different companies: Central Illinois Public Service Company,  
13 CILCORP Inc., Central Illinois Light Company, Illinois Power Company and Ameren  
14 Energy Resources Generating Company) access to the shared credit facility Ameren Corp  
15 had with Ameren Missouri and Ameren Energy Generating Company.<sup>12</sup>

16 **Q. Does Ameren Corp currently provide current financial support for non-regulated  
17 subsidiaries?**

18 A. Not that I am aware. The financial obligations Ameren Corp is required to fund is its  
19 holding company debt.

20 **Q. What capital structure has Ameren Corp managed to take advantage of the lower  
21 business-risk associated with its regulated utility subsidiaries?**

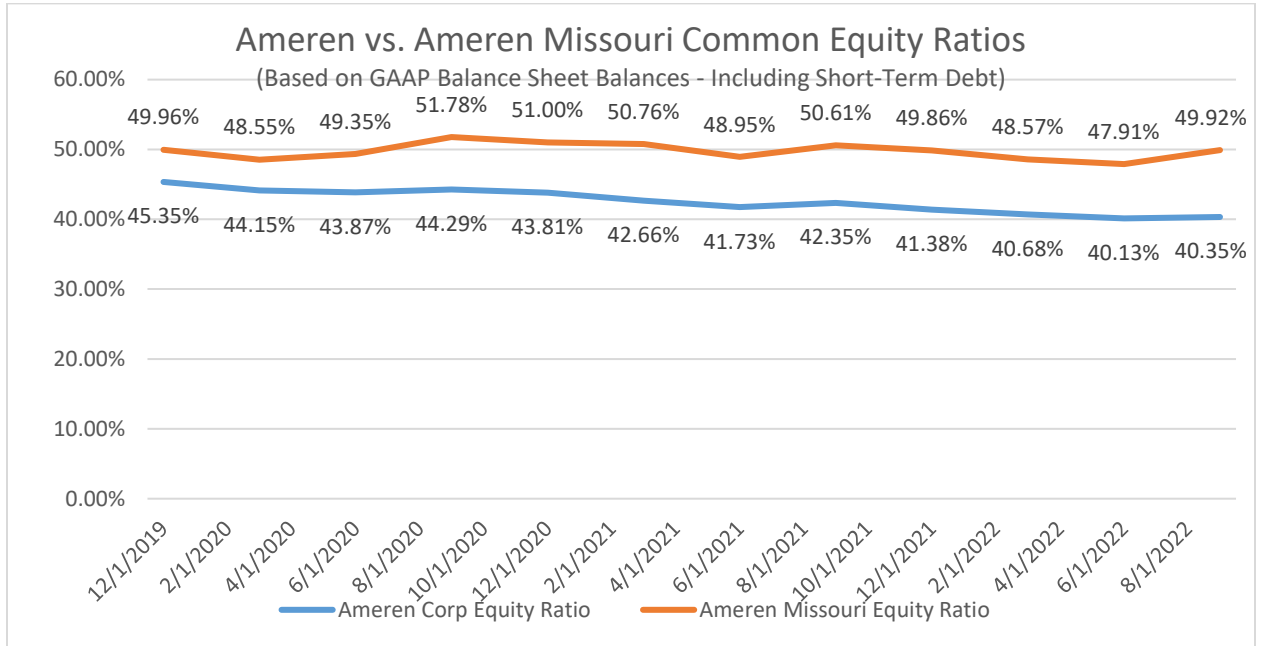
22 A. It has dynamically managed its capital structure as detailed in in Schedule DM-R-4 and  
23 summarized in the below graph. I created this graph by using data from Ameren Corp's  
24 and Ameren Missouri's balance sheets filed with the Securities and Exchange Commission

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<sup>11</sup> Ameren Corp 2010 SEC 10-K Filing, pgs. 114-118.

<sup>12</sup> Ameren Corp 2006 SEC 10-K Filing, pgs. 124-128.

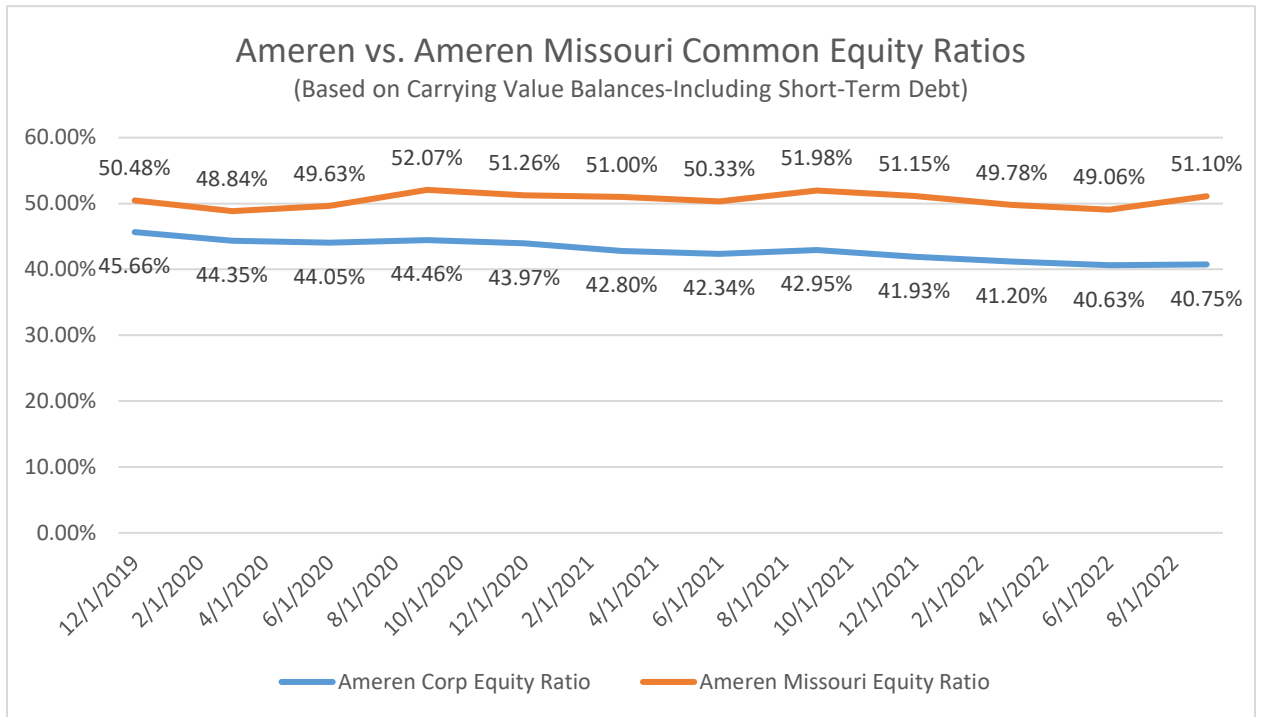
1 (“SEC”). Ameren Corp’s consolidated common equity ratio has been declining whereas  
2 Ameren Missouri’s has remained generally constant.



3  
4 Recognizing that for ratemaking purposes capital balances may be adjusted to reflect the  
5 carrying values or net proceeds received for various capital issuances, I also show Ameren  
6 Corp’s and Ameren Missouri’s common equity ratios using these balances in the below  
7 chart:



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As demonstrated in the above charts, Ameren Corp’s common equity ratio has dropped by 500 basis points (*i.e.* 5%) over the last three years, while Ameren Missouri’s has hovered right around 50%. While Ameren Missouri’s common equity ratio dropped at June 30, 2022, because Ameren Corp targets a 52% common equity ratio for Ameren Missouri for ratemaking purposes, and the ordered true-up period in this case is December 31, 2022, Ameren Corp is repositioning Ameren Missouri’s capital structure to meet its 52% target for ratemaking.

10

**Q. What allowed Ameren Missouri’s common equity ratio to increase significantly between June 30, 2022 and September 30, 2022?**

11

12

A. Ameren Missouri did not pay a dividend to Ameren Corp, despite the fact that it generated \$398 million of earnings during the third quarter of 2022. Because Ameren Corp can fund dividend obligations to its shareholders from parent company financing, Ameren Corp can forego dividends from Ameren Missouri. These strategies do not support the argument that Ameren Missouri’s capital structure is managed independent of Ameren Corp’s capital structure.

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17

1 **Q. Would you summarize your disagreement with Dr. Won regarding the information**  
2 **he cites to support the use of Ameren Missouri's stand-alone capital structure for**  
3 **ratemaking in this case?**

4 A. Yes. Dr. Won is incorrect in stating that Ameren Missouri's capital structure supports its  
5 own credit rating and that its debt is rated based on its own stand-alone credit profile. While  
6 I agree that Moody's gives consideration to Ameren Missouri's capital structure, and  
7 consequently its financial risk, when assessing Ameren Missouri's financial risk profile,  
8 S&P clearly states that it assigns Ameren Missouri a credit rating based on Ameren Corp's  
9 group credit profile. There is no reason Ameren Missouri's capital structure should be less  
10 levered than Ameren Corp's capital structure. Instead of passing the benefit of lower  
11 capital costs through to Ameren Missouri ratepayers who provide the certainty of recovery  
12 of costs associated with PISA investments, Ameren Corp is attempting to retain the  
13 financial benefit of lower capital costs for its shareholders. The Commission can correct  
14 the misappropriation of Ameren Missouri's debt capacity to Ameren Corp by authoring a  
15 lower common equity ratio for ratemaking.

16 While there are differing degrees of merit in deciding when to consider the holding  
17 company's consolidated capital structure compared to a subsidiary's capital structure, the  
18 overarching consideration that should be given the most weight is whether the use of  
19 leverage is consistent with a company's business risk. As I discussed in my direct  
20 testimony, Ameren Corp and Moody's recognized the lower business risk afforded the  
21 Ameren group by the ability of Ameren Missouri to elect PISA in 2018. This was cited as  
22 a primary reason to allow Ameren Corp to carry more leverage. Unfortunately, it appears  
23 the Commission is the only entity that has the authority and potential willingness to ensure  
24 Ameren Missouri's ratepayers receive fair consideration for the lower business risk profile  
25 their rate payments support.

1 **RETURN ON COMMON EQUITY**

2 *ANN E. BULKLEY'S RECOMMENDED ROE*

3 **Q. What is Ms. Bulkley's recommended allowed ROE for Ameren Missouri's electric**  
4 **utility?**

5 A. Ms. Bulkley recommends the Commission allow Ameren Missouri a ROE anywhere in the  
6 range of 9.90% to 11.25% for its electric utility operations. Based on her range, she  
7 concludes that the Company's request of a 10.20% allowed ROE is reasonable.<sup>13</sup>

8 **Q. What premise underlies Ms. Bulkley's recommended allowed ROE?**

9 A. Ms. Bulkley estimates the cost of equity ("COE") for Ameren Missouri's electric utility  
10 operations to be in the range of 9.90% to 11.25% based on her application of a three  
11 primary COE methodologies: (1) the constant-growth discounted cash flow ("DCF")  
12 method, (2) the Capital Asset Pricing Model ("CAPM") – a standard CAPM and an  
13 empirical CAPM, and (3) a Bond Yield Plus Risk Premium analysis.

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

16 A. First, I completely disagree with her that the utility industry's COE is in the high single-  
17 digit range, let alone in the low double digits. While estimating a COE for the utility  
18 industry this high may be convenient for attempting to sustain higher authorized ROEs,  
19 they are not consistent with the discount rates, *i.e.* the COE, that investors use for purposes  
20 of estimating the intrinsic value of electric utility's share prices.<sup>14</sup>

21 Second, Ms. Bulkley's conjecture about potential changes to utility stock prices in future  
22 periods should be dismissed. Ms. Bulkley claims that because interest rates have increased  
23 and are expected to increase further, this causes her constant-growth DCF results to

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<sup>13</sup> Bulkley Direct, p. 8, lns. 1-12.

<sup>14</sup> Murray Direct, p. 27, lns. 18-19.

1       understate utility companies' COE during future periods.<sup>15</sup> She also testified that market  
2       conditions at the time she filed her testimony in August 2022 were likely to cause utility  
3       industry equity returns to underperform the broader market.<sup>16</sup> As I will explain later in my  
4       testimony, while interest rates have increased in recent months, Ms. Bulkley's predictions  
5       that utility stocks will underperform, causing their COE to increase, were wrong.

6       Finally, while she devotes almost thirty pages of testimony trying to convince the  
7       Commission that Ameren Missouri is riskier than average utilities, she forgets that her  
8       proxy group contains companies that are exposed to competitive markets. Her opinions  
9       are also completely contradicted by Ameren Corp's significant increased investment in  
10      Ameren Missouri. This increased capital spend is due directly to utility-friendly legislation  
11      passed in Missouri in recent years.

12   **Q.     Do you and Ms. Bulkley agree on some fundamental issues in this case?**

13   A.     Yes. We both agree that long-term interest rates started to increase during 2022, and based  
14      on the historical negative correlations utility valuation levels typically had with long-term  
15      interest rates, this typically would cause utility stock prices to decline. We also agree that  
16      should this happen, this intuitively implies that utility companies' COE increases.

17   **Q.     Where do you and Ms. Bulkley disagree on your interpretation of market conditions  
18      and how they should be considered in assessing a fair and reasonable authorized ROE  
19      for purposes of this case?**

20   A.     Ms. Bulkley relies heavily on market prognostications rather than analyzing and  
21      interpreting current market conditions. In my couple of decades of performing cost-of-  
22      capital analysis, I am not aware of anyone consistently providing accurate and reliable  
23      market predictions. Based on Ms. Bulkley's testimonies since at least 2020, she has been  
24      predicting a decline in utility valuation levels. She initially reasoned that this would occur  
25      because low long-term interest rates were not sustainable. Now, despite the fact that long-  
26      term interest rates did increase in 2022, utility valuation levels did not plummet as Ms.

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<sup>15</sup> *Id.*, p. 16, lns. 3-13.

<sup>16</sup> *Id.* p. 26, line 8 – p. 30, line 20

1 Bulkley predicted. This has been perplexing to some, but not necessarily to those that have  
2 studied the history of other periods similar to the current period.

3 **Q. Ms. Bulkley testifies that the financial environment is substantially different than**  
4 **when the “Commission set the Company’s current authorized ROE.” Does she**  
5 **identify when the Commission set Ameren Missouri’s current authorized ROE?**

6 A. No.

7 **Q. When did the Commission last “set” Ameren Missouri’s authorized ROE?**

8 A. In 2015 in Case No. ER-2014-0258.

9 **Q. Do you agree with Ms. Bulkley that current financial and capital market conditions**  
10 **are substantially different than in 2015?**

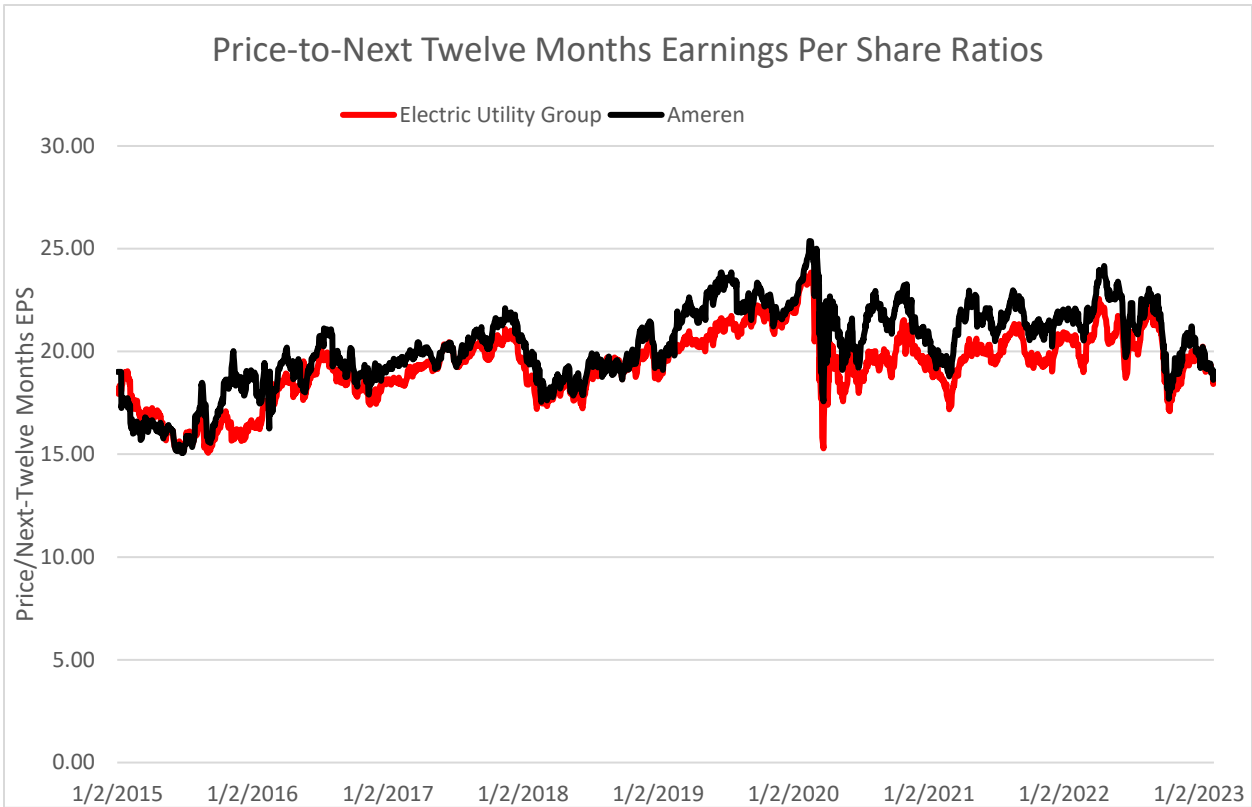
11 A. Only as it relates to current inflationary conditions. However, as it relates to valuations  
12 assigned to electric utility stocks, and more specifically Ameren Corp’s stock, current  
13 capital market conditions are more favorable for issuing common equity (i.e. lower cost of  
14 equity).

15 **Q. Did you compare current capital market conditions to 2015 capital market conditions,**  
16 **as it relates to the electric utility industry in general and Ameren Corp in specific in**  
17 **your direct testimony?**

18 A. Yes. Therefore, I will not repeat my analysis in my rebuttal testimony.

19 **Q. Have electric utility capital market conditions changed significantly since you filed**  
20 **your direct testimony?**

21 A. No. See the below chart for Ameren Corp’s and the electric utility industry’s updated  
22 valuation information related to equity securities:



1  
2 In my direct testimony, I had indicated I may lower my recommended authorized ROE  
3 from 9.25% to 9.00% if Ameren Corp's and the electric utility industry's valuation levels  
4 at the end of 2022 were sustained through 2023. However, because valuation levels have  
5 slightly declined in early 2023, I reaffirm my 9.25% recommended ROE as being fair and  
6 reasonable based on current market conditions.

7 **Q. Does the resiliency of Ameren Corp and the electric utility industry's equity valuation**  
8 **levels mean Ameren Missouri's cost of debt capital has not been impacted by**  
9 **inflationary conditions?**

10 **A.** No. Ameren Missouri issued a 30-year first mortgage bond on March 21, 2022, at a coupon  
11 rate of 3.9%. This compares to the coupon rate of 2.625% Ameren Missouri paid on a 30-  
12 year first mortgage bond issued on October 1, 2020.

1 **Q. Despite significant declines in Ameren Missouri’s cost of debt issuances during 2020**  
2 **and 2021, did you recommend a significant reduction to Ameren Missouri’s ROE in**  
3 **its last general electric rate case (2021)?**

4 A. No. As I detailed in my testimony in the 2021 rate case, Ameren Corp’s stock valuation,  
5 as well as the electric utility industry’s stock valuation levels did not increase consistent  
6 with utility’s traditional inverse correlation within interest rates. Recognizing such, I  
7 recommended a 9% ROE, despite extremely low implied COE estimates (in the 5% range)  
8 derived by applying standard risk premiums to low debt yields.

9 **Q. Ms. Bulkley testifies that the Commission is “establishing the Company’s cost of**  
10 **equity” in this proceeding.<sup>17</sup> Does the Commission “establish” Ameren Missouri’s**  
11 **cost of equity?**

12 A. No. The Commission “establishes” Ameren Missouri’s authorized ROE for designing  
13 general rates, not the cost of equity (“COE”). The COE is established/determined by  
14 capital markets. Ameren Missouri’s COE is much lower than its authorized ROE.

15 **Q. Why are you so certain?**

16 A. Because I have repeatedly discovered corroborating information in past rate cases  
17 establishing this fact.

18 PROXY GROUP:

19 **Q. Do you have concerns about Ms. Bulkley’s proxy group?**

20 A. Only to the extent she does not acknowledge the fact that some of her companies have  
21 significant exposure to non-regulated operations, which are typically much more  
22 economically sensitive than their regulated utility operations. For example, the  
23 consumption of commodities, such as energy, are highly correlated with the expansion and  
24 contraction of the economy. This explains why utility companies with exposure to

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<sup>17</sup> Bulkley Direct, p. 15, lines 17-18.

1 unregulated commodity prices typically have higher betas than pure-play regulated  
2 utilities. The following companies included in Ms. Bulkley's proxy group have significant  
3 non-regulated business exposure at least as recently as 2020: Entergy Corporation,  
4 NextEra Energy Inc., OGE Energy Corporation and Otter Tail Corporation. Unfortunately,  
5 Ms. Bulkley focuses on her perception that the regulatory ratemaking shortcomings in  
6 Missouri as compared to her proxy group cause Ameren Missouri to have a higher cost of  
7 capital than the cost of capital of her proxy companies that have considerable non-regulated  
8 business risks.<sup>18</sup>

9 **Q. Ms. Bulkley testifies that Ameren Corp owning Ameren Missouri does not affect her**  
10 **analysis of Ameren Missouri's cost of capital.<sup>19</sup> Should it have?**

11 A. Yes. Ameren Missouri is inextricably linked to its parent company, Ameren Corp. Ameren  
12 Corp.'s financial strategies, such as capital structure management, directly impact Ameren  
13 Missouri. Additionally, Ameren Corp.'s corporate governance structure does not allow for  
14 Ameren Missouri's financial health to be managed independent of Ameren Corp, which  
15 has been directly acknowledged by S&P in its past Ameren Corp and Ameren Missouri  
16 rating assessments.

17 Ameren Corp's cost of equity is based on the collective business risks of its various  
18 subsidiaries, approximately 50% of which is related to Ameren Missouri, as well as the  
19 financial risk it incurs at the consolidated level. Because Ameren Corp's business  
20 operations are predominately regulated electric utilities (both vertically integrated and  
21 transmission and distribution) and local natural gas distribution utilities, its capital structure  
22 and cost of equity are appropriate proxies for estimating Ameren Missouri's cost of capital.

23 Therefore, because Ms. Bulkley did not consider Ameren Corp in her assessment of  
24 Ameren Missouri's cost of capital, I consider her cost of capital analysis in her direct  
25 testimony to be incomplete and inadequate.

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<sup>18</sup> Bulkley Direct, p. 68, l. 3 – p. 71, l. 15.

<sup>19</sup> Bulkley Direct, p. 14, lns. 1-7.



1                    INTERPRETATION OF MARKET CONDITIONS

2    **Q.     What is Ms. Bulkley’s opinion related to consideration of current market conditions**  
3                    **as it relates to determining a fair and reasonable authorized ROR for Ameren**  
4                    **Missouri?**

5    A.     Mr. Bulkley testifies as follows:

6                    ...analysts and regulators have concluded that current market conditions  
7                    have affected the results of ROE estimation models. As a result, it is  
8                    important to consider the effect of these conditions on the ROE estimation  
9                    models when determining the appropriate range and recommended ROE for  
10                    a future period. If investors do not expect current market conditions to be  
11                    sustained in the future, it is possible that the ROE estimation models will  
12                    not provide an accurate estimate of investors’ required return during that  
13                    test year. Therefore, it is very important to consider projected market data  
14                    to estimate the return for that forward-looking period.<sup>20</sup>

15   **Q.     Do you disagree with her testimony?**

16   A.     Yes, Ms. Bulkley’s opinion violates basic tenets of efficient market prices. Apparently  
17                    Ms. Bulkley believes Ameren Missouri’s ROE should be set based on market  
18                    prognostications that long-term rates will continue to increase and cause utility stocks to  
19                    decrease. Ms. Bulkley surmises that if such prognostications materialize, this will cause  
20                    Ameren Missouri’s cost of equity to be higher in future periods.

21   **Q.     Does Ms. Bulkley’s logic mean that her COE estimates are inflated even before**  
22                    **scrutinizing other assumptions?**

23   A.     Yes. Because Ms. Bulkley relies on projected market data she claims is more consistent  
24                    with expected increases in bond yields, she is already admitting that the current COE is  
25                    lower than her projected COE estimates. Of course, even her COE estimates using current  
26                    market prices are too high because of irrational inputs. I will discuss those later.

---

<sup>20</sup> Bulkley Direct, p. 14, ln. 19 – p. 15, ln. 6.

1 **Q. Did long-term interest rates, as measured by the 30-year United States Treasury**  
2 **(“UST”) bond, increase after Ms. Bulkley prefiled her direct testimony on August 1,**  
3 **2022?**

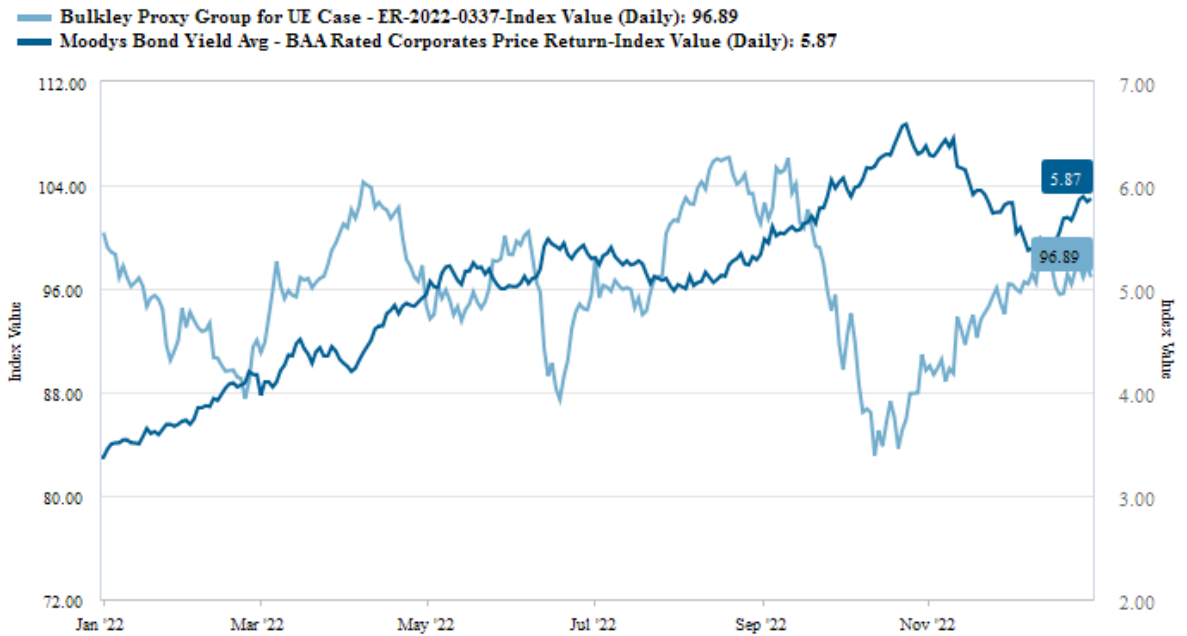
4 A. Yes. The 30-year UST bond yield continued to increase through October 2022, peaking at  
5 4.4%. Since the end of October 2022, 30-year UST bond yields have declined to a recent  
6 range of 3.55% to 3.80% for most of 2023.

7 **Q. Did utility stocks underperform the broader markets during 2022 as Ms. Bulkley**  
8 **predicted would occur at the time she filed her testimony?**

9 A. No. In fact, they outperformed the broader markets by the largest margin this century. As  
10 I discussed on page 19 of my direct testimony, utilities outperformed the S&P 500 by 1,800  
11 basis points (18%) despite a 237 basis points increase in long-term interest rates.

12 **Q. Does this mean that utility stocks achieved positive returns in 2022?**

13 A. No. As shown in the following chart using Ms. Bulkley’s proxy group, the market-  
14 weighted average stock price of her proxy group declined by 3.11%. After factoring in  
15 dividends, the market-weighted total return for Ms. Bulkley’s proxy group was a negative  
16 0.41%.



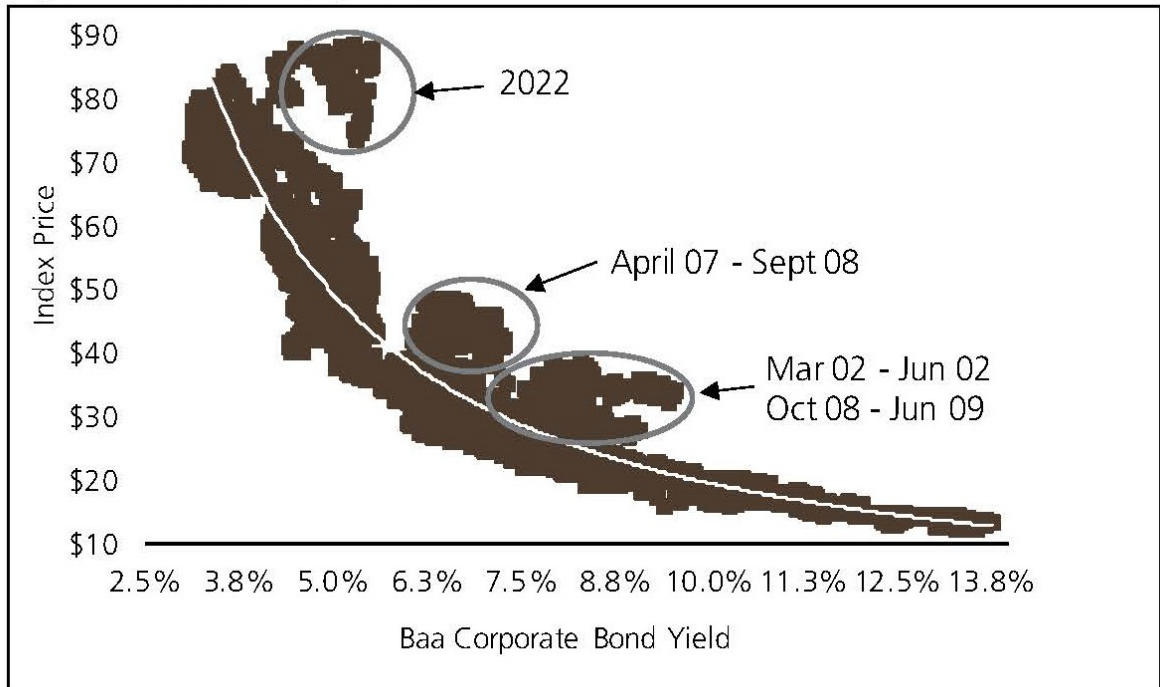
1

2 As can be seen, despite long-term Moody's Baa corporate bond yields increasing by 74%  
3 during 2022, stock prices for Ms. Bulkley's proxy group only declined by 3.11%.

4 **Q. Have investors recognized the disconnect between predicted utility stock prices based**  
5 **on historical relationships and actual prices?**

6 A. Yes. UBS Securities provided the price regression of predicted utility stocks compared to  
7 actual prices:

**Figure 1: BAA vs. Price Regression**



Source: Company Reports, Moody's, FactSet, Strategic Insights, UBS Estimates

1  
2

21

3 As illustrated, based on historical correlations of utility stocks with changes in 'Baa'  
4 Corporate Bond yields, the predicted price of utility stocks is around \$30 lower than current  
5 prices. Current utility stock prices indicate that the required equity risk premium to invest  
6 in utility stocks is lower than that predicted by historical correlations.

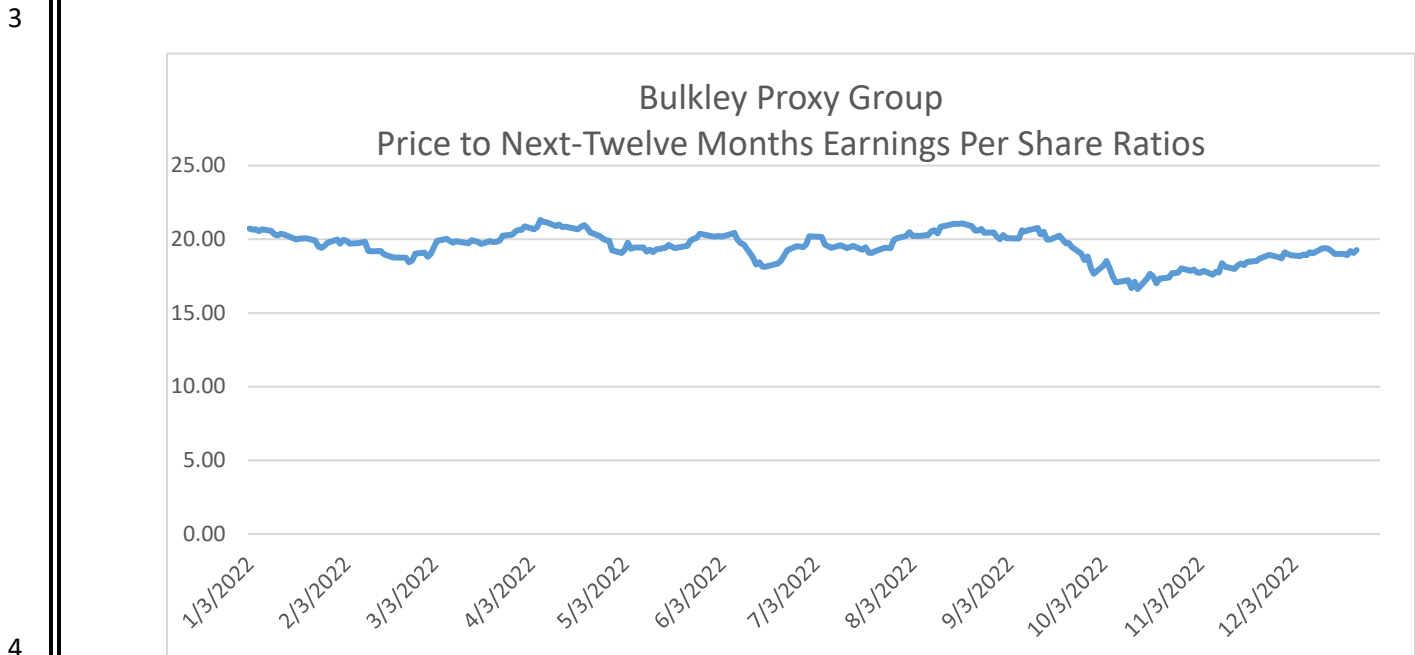
7 **Q. Is it more relevant to evaluate price-to-earnings ("P/E") ratios rather than just stock**  
8 **prices?**

9 **A.** Yes. If prices increase at the same rate as earnings growth, then this implies that the utility  
10 industry's COE is stable throughout the period. If the P/E ratio increases and growth is  
11 stable, then factors other than earnings growth are likely at play, such as a change in  
12 investors' required returns due to macro factors, such as economic cycles and/or changes  
13 in opportunity costs.

<sup>21</sup> Ross A. Fowler, CFA and Greg Orrill, "Updated Valuation Correlation to Baa Corp Bond Yields," September 2022.

1 **Q. What were the average P/E ratios for Ms. Bulkley’s proxy group during 2022?**

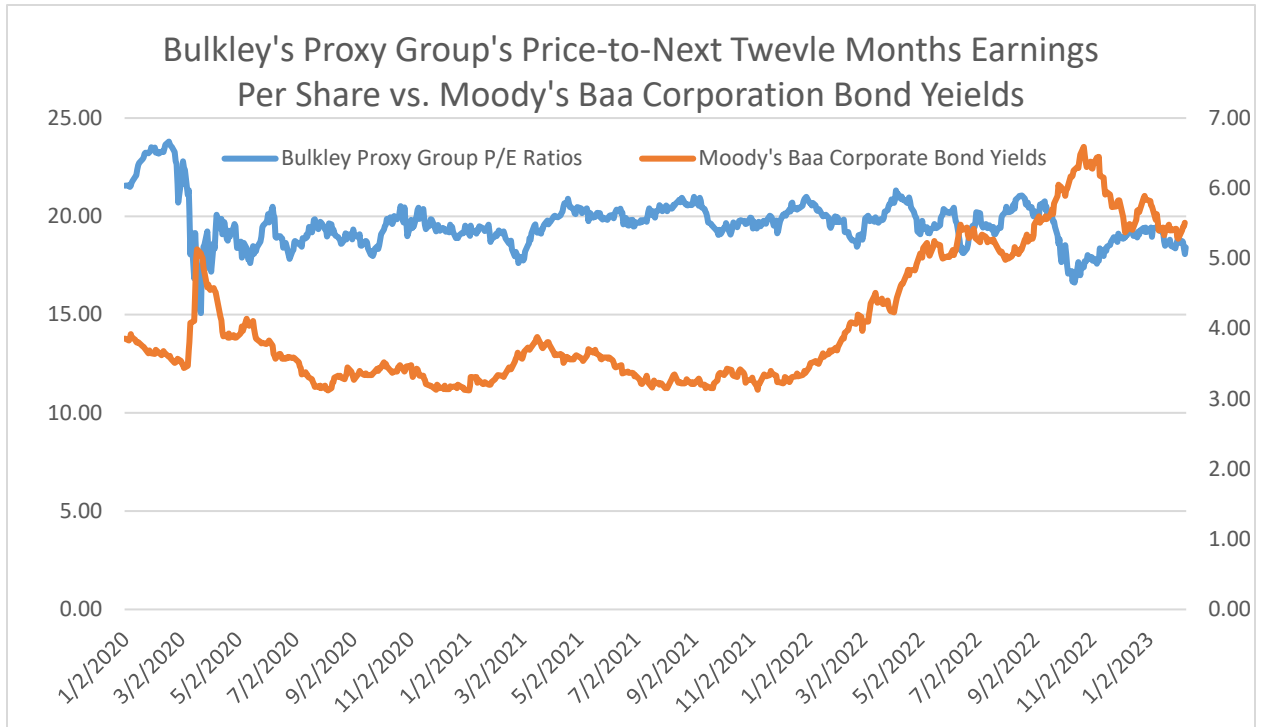
2 A. The P/E ratios for Ms. Bulkley’s proxy group for the 2022 calendar year are as follows:



5 As can be seen, Ms. Bulkley’s proxy group’s P/E ratios started the year a little over 20x,  
6 then finished the year a little under 20x.

7 **Q. What P/E ratios did Ms. Bulkley’s proxy group trade at when bond yields hit all-time**  
8 **lows later in 2020 and into 2021?**

9 A. The following chart shows Ms. Bulkley’s proxy group’s P/E ratios compared to Moody’s  
10 Baa corporate bond yields since 2020:



1

2

**Q. What does the fact that utility P/E ratios remained higher despite higher long-term interest rates indicate about investors' required risk premiums to invest in utility stocks?**

3

4

5

A. They have declined.

6

**Q. What is Ms. Bulkley's solution for her view that utility stocks will decline in the future?<sup>22</sup>**

7

8

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.<sup>23</sup>

9

10

<sup>22</sup> *Id.*, p. 25, l. 5 – p. 28, l. 11.

<sup>23</sup> *Id.*, p. 29, l. 2 – p. 30, l. 20., ll. 5-20 and p. 36, ll. 7-20.

1 **Q. Does Ms. Bulkley cite investor publications' projections to support her**  
2 **prognostication that utility stocks will decline?**

3 A. Yes. She cites to firms such as Barron and Fidelity in her testimony. She quotes Fidelity  
4 as indicating the utility sector has "poor fundamentals and expensive valuations."<sup>24</sup>

5 **Q. If a security is *expensive* to an investor, what does this mean for the issuer of the**  
6 **security?**

7 A. It is cheap to procure capital, which is synonymous with a low cost of capital. In fact, as I  
8 illustrated in various charts in my direct testimony, Ameren Corp's valuation is higher than  
9 those of its peers. Ameren Corp's low cost of equity is a function of its ownership of low-  
10 risk regulated electric and gas utility subsidiaries, which includes Ameren Missouri.

11 **Q. Is Ms. Bulkley correct that using current utility stock prices in the constant-growth**  
12 **DCF analysis results in an underestimated cost of equity?**

13 A. No.

14 **Q. Why does she believe it underestimates the COE?**

15 A. Because the constant-growth DCF assumes a constant P/E ratio. As Ms. Bulkley  
16 repeatedly emphasizes in her testimony, she predicts that the utility industry's P/E ratio  
17 will decrease.

18 **Q. Do you know whether utility P/E ratios will change?**

19 A. No. Consistent with the assumptions of the constant-growth DCF, I accept that markets  
20 are pricing utility stocks efficiently based on current market conditions and expectations.

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<sup>24</sup> *Id.*, p. 26, l. 8 – p. 27, l. 2

1 **Q. If Ms. Bulkley’s opinion that investors expect utility stock prices to decline were**  
2 **correct, would the traditionally-applied constant-growth DCF analysis cause an**  
3 **overestimation of the COE?**

4 A. Yes. Ms. Bulkley claims that utility stock prices will decline because long-term bond  
5 yields are expected to continue to increase. If Ms. Bulkley’s opinion is correct, then  
6 investors buying utility stocks are factoring in a contraction in P/E ratios. Ms. Bulkley’s  
7 constant-growth DCF does not consider this expected contraction.

8 **Q. Is there a means to adjust the constant-growth DCF method to account for Ms.**  
9 **Bulkley’s anticipated changes to utilities’ P/E ratios?**

10 A. Yes. The constant-growth model can be extended to include expected changes in the P/E  
11 ratio. This version of the constant-growth DCF is referred to as the “Grinold- Kroner”  
12 model.<sup>25</sup> It is expressed algebraically as:

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

14 Where:

15  $k$  = the cost of equity;

16  $D_1$  = the expected next 12 months dividend;

17  $P_0$  = the current price of the stock;

18  $g$  = the dividend growth rate; and

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

20 **Q. If Ms. Bulkley had used this derivative of the constant-growth DCF method to**  
21 **estimate the cost of common equity, how would this impact her cost of equity**  
22 **estimates?**

23 A. They would be lower.

---

<sup>25</sup> 2010 CFA® Program Curriculum, Level III, Volume 3, p. 35.



1 DISCOUNTED CASH FLOW ASSUMPTIONS:

2 **Q. Although Ms. Bulkley dismisses her DCF estimates for purposes of her recommended**  
3 **ROE, do you agree with her assumptions in her DCF analysis?**

4 A. No. Ms. Bulkley argues that her constant-growth DCF results under-estimate the electric  
5 utility industry's COE because she predicts that electric utility industry stock prices will  
6 decline. As I testified before, I disagree that this causes her constant-growth DCF results  
7 to under-estimate the COE. However, even without an adjustment for changes in P/E  
8 ratios, her DCF analysis still overestimates the COE. Ms. Bulkley's DCF analysis assumes  
9 her proxy groups' dividends per share ("DPS") can grow in perpetuity at the same rate as  
10 equity analysts' consensus projected 5-year CAGR (compound-annual-growth-rate) in  
11 EPS. This is not how equity analysts determine fair prices to pay for utility stocks.

12 CAPM ASSUMPTIONS:

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

14 A. Because she uses irrational expected market returns. Ms. Bulkley estimates a total  
15 compound annual market return for the S&P 500 of 12.94% for the foreseeable future  
16 (perpetually based on her use of a constant-growth DCF to estimate S&P 500 returns).  
17 Subtracting long-term risk-free rates from Ms. Bulkley's estimated market return results in  
18 her equity risk premium estimates of 9.14% to 9.76%.<sup>26</sup>

19 **Q. Why are Ms. Bulkley's equity risk premium estimates so high?**

20 A. Because she assumes that the S&P 500 can grow its earnings at a compound annual rate of  
21 11.02% in perpetuity.

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<sup>26</sup> Bulkley Direct, p. 49, line 19 – p. 50, line 3.

1 **Q. Are you aware of any authoritative sources, academic or actual investors, that use**  
2 **Ms. Bulkley’s approach for estimating market returns?**

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

7 **Q. Of what academic support are you aware?**

8 A. The 2010 curriculum for Level III of the Chartered Financial Analyst (“CFA”) Program  
9 discusses how analysts often use the Gordon growth model (synonymous with the constant  
10 growth DCF model used in utility ratemaking) to formulate the long-term expected return  
11 for the broader equity markets. In the case of a broad-based equity index, such as the S&P  
12 500, it is reasonable to estimate the long-term potential capital gains for the index by using  
13 estimated nominal GDP over a long-term period. The curriculum specifically provides the  
14 following formula for estimating the constant growth rate with an explanation that follows:

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

17  
18 where the term *excess corporate growth* may be positive or negative  
19 depending on whether the sectoral composition of the index companies is  
20 viewed as higher or lower growth than that of the overall economy. If the  
21 analyst has chosen a broad-based equity index, the excess corporate growth  
22 adjustment, if any, should be small.<sup>27</sup>

23 Combining Ms. Bulkley’s S&P 500 dividend yield of 1.83% and projected growth in U.S.  
24 nominal GDP of approximately 4.0%, implies a much lower expected long-term return for  
25 the S&P 500.

---

<sup>27</sup> 2010 CFA® Program Curriculum, Level III, Volume 3, p. 34.

1 **Q. Are you aware of any common valuation metrics that highlight Ms. Bulkley's**  
2 **irrational assumptions about market growth rate expectations?**

3 A. Yes. A comparison of a broad equity market capitalization amount to that of the total size  
4 of the U.S. economy. This valuation metric provides a sanity check on potential growth for  
5 capital markets. Warren Buffett made it popular when he provided insight on how high  
6 the market, as measured by the Wilshire 5000, became valued as compared to U.S. GDP  
7 at the time of the "dot com" bubble around March 2000. At that time, the Wilshire 5000  
8 was around 1.4x that of GDP. As of September 30, 2022, it was around 1.49x.

9 **Q. What would this ratio be in 50 years if the market grew at the 11.02% compound**  
10 **annual growth rate Ms. Bulkley suggests is appropriate?**

11 A. The Wilshire 5000 index would be approximately 39x times the GDP level. Based on the  
12 market capitalization of the Wilshire 5000 of approximately \$38.35 trillion as of September  
13 30, 2022, the Wilshire 5000 would have a market capitalization of \$7.17 quadrillion in 50  
14 years. U.S. GDP was \$25.72 trillion as of the same date. Based on a 4.0% long-term  
15 growth rate for the U.S. economy, GDP would be approximately \$182.81 trillion in 50  
16 years. It is not rational to assume corporate wealth will become much larger than the  
17 economy in which it operates, let alone 39x the size of the economy. This explains why  
18 the CFA Program advises not using a perpetual growth rate much, if any, higher than the  
19 GDP growth rate of the economy(ies) in which a company operates.

20 **Q. Why are Ms. Bulkley's ECAPM results higher than her standard CAPM results?**

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

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

3 A. Yes.

4 **Q. Can you provide an example?**

5 A. Yes. Ms. Bulkley assumes a market risk premium of approximately 9.14% to 9.76%  
6 compared to more rational estimates used by investors of approximately 6%. If Ms.  
7 Bulkley had used a more reasonable market risk premium of 6%, her ECAPM would have  
8 only been approximately 20 basis points higher than her standard CAPM. Because Ms.  
9 Bulkley uses extremely high market risk premiums, and these market risk premiums  
10 received more weight in her ECAPM, this causes her ECAPM results to be approximately  
11 32 basis points higher than her standard CAPM.

12 *BOND YIELD PLUS RISK PREMIUM ANALYSIS*

13 **Q. What are your thoughts on Ms. Bulkley's Bond-Yield-Plus Risk Premium**  
14 **("BYPRP") analysis?**

15 A. Ms. Bulkley's BYPRP is a regression analysis of allowed ROEs to interest rates. Ms.  
16 Bulkley concludes from her regression analysis that because allowed ROEs haven't  
17 declined as much as interest rates, an adjustment needs to be made to recognize that  
18 regulators have been hesitant to reduce allowed ROEs as much as lower interest rates  
19 would suggest. This approach does not allow sufficient compression of allowed ROEs  
20 versus the utility industry's COE. It only serves to maintain the current wide spread  
21 between the utility industry's COEs and allowed ROEs.

1                    CONSIDERATION FOR SPECIFIC BUSINESS AND REGULATORY RISK

2    **Q.     What is your response to Ms. Bulkley’s discussion related to her views on Ameren**  
3           **Missouri’s specific business and regulatory risks?**

4    A.     Ms. Bulkley essentially argues that because Ameren Corp will be investing more in  
5           Ameren Missouri over the next few years, customers have to pay a higher ROR because of  
6           higher risk. As I discussed and has been recognized by equity investors, since 2018 when  
7           Missouri passed the legislation that allows PISA, Ameren Corp has been generally viewed  
8           as a “premium” utility, which means that investors believe Ameren Corp’s P/E ratio should  
9           be higher than the average for the electric utility industry. Ameren Corp’s prospects have  
10          improved further since 2018 with Missouri passing legislation to extend the period for  
11          Ameren Missouri to be allowed to use PISA without needing Commission approval to  
12          2028, and the potential to continue to use PISA with Commission authority through 2033.  
13          Additionally, Ameren Corp’s transmission investment prospects have also added to it  
14          potential investment pipeline, and Illinois passed legislation that allows Ameren Illinois to  
15          request multi-year rate plans for its electric utility operations.

16          The magnitude of the scale of investment Ameren Corp plans to make in the Ameren  
17          Missouri system will create a tremendous amount of value for Ameren Corp’s  
18          shareholders. As the scale of investment increases, the higher the allowed ROR over the  
19          cost of capital, the higher the net present value created for shareholders. If the authorized  
20          ROR is set higher than the cost of capital, then the investment creates additional value for  
21          its shareholders, but this is at the expense of ratepayers. This is the economic rationale for  
22          attempting to set utility companies’ ROR as close to the cost of capital as possible, because  
23          otherwise the scales are tilted in favor of inefficient investing for the sake of building  
24          shareholder value.

1 SEOUNG JOUN WON'S RECOMMENDED ROE:

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

3 A. Dr. Won uses the Commission's authorized ROE of 9.25% for The Empire District Electric  
4 Company in its 2019 electric rate case<sup>28</sup> as his starting point for determining whether he  
5 believes capital market conditions justify authorizing Ameren Missouri a different ROE.  
6 Dr. Won relies primarily on implied DCF COE estimates from the period of Empire's 2019  
7 rate case (fourth quarter of 2019) to implied DCF COE estimates during the third quarter  
8 of 2022 in order to conclude that the COE has increased by 34 basis points since the  
9 Commission made its decision in the 2019 rate case. This forms the basis for Dr. Won's  
10 point estimate recommended ROE of 9.59%. Dr. Won then decided to allow for a range  
11 of +/- 25 basis points around his point estimate to recommend a range of 9.34% to 9.84%.

12 **Q. Do you agree that it is appropriate to consider the Commission's 9.25% allowed ROE**  
13 **in the recent Empire rate case for determining a fair and reasonable for ROE for**  
14 **Ameren Missouri?**

15 A. Yes.

16 **Q. Do you agree that capital market conditions justify an allowed ROE of up to 9.84%?**

17 A. No. Considering the Commission authorized Ameren Missouri a 9.53% ROE in its 2014  
18 rate case, Case No. ER-2014-0258, it is not logical to consider an ROE any higher than this  
19 level. In recent years, equity capital market conditions for the electric utility industry have  
20 consistently been more favorable than they were in 2015. Additionally, despite Ms.  
21 Bulkley's attempt to characterize Missouri's legislative and regulatory environment as  
22 riskier than other electric utility companies, it is indisputable that Ameren Missouri's  
23 business risks have declined since 2014, mainly due to its ability to elect PISA, but also  
24 now the ability to pursue securitization for the early retirement of coal generating facilities.  
25 Otherwise, Ameren Missouri would not be deploying massive amounts of capital in its  
26 Ameren Missouri system. Ameren Corp's projected rate base growth for Ameren Missouri

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<sup>28</sup> Case No. ER-2019-0374, Report and Order, July 1, 2020.

1 is 6.5% for the period 2021 through 2026.<sup>29</sup> As it relates to the Commission's assessment  
2 of Ameren Missouri's business risk, it simply needs to observe investment decisions and  
3 capital market activity, rather than be influenced by subjective assessments by ROR  
4 witnesses.

## 5 **SUMMARY AND CONCLUSIONS**

6 **Q. Would you summarize your main points in response to the direct testimonies of**  
7 **Ameren Missouri's and Staff's rate-of-return witnesses?**

8 A. Yes. Staff and the Company recommend the Commission authorize Ameren Missouri a  
9 ROR based on Ameren Missouri's capital structure balances. As I have demonstrated,  
10 Ameren Missouri's common equity ratio has been managed to approximately 52% over  
11 the past decade. Because Ameren Missouri's business risk has declined with its ability to  
12 elect PISA, its capital structure should include a higher debt ratio rather than remain static.  
13 Instead of managing Ameren Missouri's capital structure to allow Ameren Missouri's  
14 ratepayers to receive the benefit of lower capital costs their rates support, Ameren Corp is  
15 retaining the cost of capital savings for shareholders by issuing holding company debt. The  
16 Commission needs to correct this misappropriation of debt capacity by authorizing a lower  
17 common equity ratio for purposes of setting Ameren Missouri's ROR.

18 Additionally, it simply makes no sense to authorize a ROE at a level consistent with that  
19 which the Commission determined reasonable over seven years ago when utility stock  
20 valuation levels were lower. However, Ms. Bulkley urges the Commission to set the  
21 authorized ROE based on her prediction that utility valuations levels will decline. Staff  
22 views the current cost of capital for utility companies as being slightly higher than when  
23 the Commission decided a 9.25% ROE for Empire was appropriate. However, Staff's  
24 assessment does not consider the longer-term trend since the Commission deemed 9.5%  
25 ROEs as being reasonable starting in 2015. Even with recent long-term interest rates  
26 increases, utility stocks have maintained higher valuation levels than in 2015. These

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<sup>29</sup> "Transforming For Our Future," Evercore ISI Utility Conference, January 12, 2023, p. 11

1 conditions support a lower authorized ROE than the 9.5% the Commission authorized in  
2 2015.

3 I reaffirm my recommendation in my direct testimony<sup>30</sup> for the Commission to order  
4 Ameren Missouri to apply a short-term debt rate to all CWIP balances. Ameren Corp has  
5 been issuing large amounts of short-term debt at the holding company level. This strategy  
6 disrupts the standard allowance for funds used during construction (“AFUDC”) formulas  
7 which by its very nature, supports the logic that short-term debt would almost always be  
8 used as a bridge to fund CWIP (100% weighting applied to short-term debt before allowing  
9 long-term capital costs).

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

11 **A. Yes.**

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<sup>30</sup> Murray Direct, p. 50, lines 12-18.



**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company     )  
d/b/a Ameren Missouri's Tariffs to Adjust    ) Case No. ER-2022-0337  
Its Revenues 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:

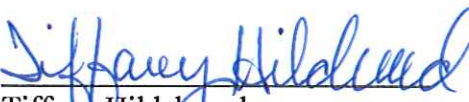
1.    My name is David Murray. I am a Utility Regulatory Manager for the Office of the Public Counsel.
  
2.    Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
  
3.    I hereby swear and affirm that my statements contained in the attached testimony are true and correct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

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

Subscribed and sworn to me this 15<sup>th</sup> day of February 2023.



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

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

My Commission expires August 8, 2023.