

Exhibit No. 255

Exhibit No.:
Issue(s): Rate of Return
Witness: Seoung Joun Won, PhD
Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: GR-2021-0241
Date Testimony Prepared: October 15, 2021

MISSOURI PUBLIC SERVICE COMMISSION
FINANCIAL AND BUSINESS ANALYSIS DIVISION
FINANCIAL ANALYSIS DEPARTMENT

REBUTTAL TESTIMONY

OF

SEOUNG JOUN WON, PhD

UNION ELECTRIC COMPANY
d/b/a Ameren Missouri

CASE NO. GR-2021-0241

Jefferson City, Missouri
October 2021

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

**TABLE OF CONTENTS OF
REBUTTAL TESTIMONY OF
SEOUNG JOUN WON, PhD
UNION ELECTRIC COMPANY
d/b/a AMEREN MISSOURI
CASE NO. GR-2021-0241**

I. EXECUTIVE SUMMARY2
II. RESPONSE TO TESTIMONY OF AMEREN MISSOURI’S WITNESSES4
 1. Recommended ROE..... 4
 2. Proxy Group Criteria..... 6
 3. Growth Rates for Discounted Cash Flow Models 8
 4. Market Risk Premium of Capital Asset Pricing Models..... 11
 5. Empirical Capital Asset Pricing Model..... 16
 6. Bond Yield Plus Risk Premium Analysis 17
 7. Regulatory and Business Risks 19
 8. The Capital Structure of Ameren Missouri for ROR..... 22
III. RESPONSE TO TESTIMONY OF OPC WITNESS MURRAY23
IV. SUMMARY AND CONCLUSIONS29

1 REBUTTAL TESTIMONY

2 OF

3 SEOUNG JOUN WON, PhD

4 UNION ELECTRIC COMPANY
5 d/b/a AMEREN MISSOURI

6 CASE NO. GR-2021-0241

7 Q. Please state your name and business address.

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

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

11 A. I am employed by the Missouri Public Service Commission (“Commission”) and
12 my title is Regulatory Compliance Manager for the Financial Analysis Department, in the
13 Financial and Business Analysis Division.

14 Q. Are you the same Seoung Joun Won who prepared the Rate of Return section of
15 Staff’s Cost of Service Report (“COS Report”), filed September 3, 2021?

16 A. Yes, I am.

17 Q. What is the purpose of your rebuttal testimony?

18 A. The purpose of my rebuttal testimony is to respond to the direct testimonies of
19 Ann E. Bulkley, Darryl T. Sagel, and David Murray. Ms. Bulkley sponsored return on equity
20 (“ROE”) testimony on behalf of Union Electric Company, d/b/a Ameren Missouri’s (“Ameren
21 Missouri” or the “Company”), a wholly-owned subsidiary of Ameren Corporation (“Ameren Corp.”
22 or the “parent Company”). Mr. Sagel sponsored rate of return (“ROR”) and capital structure
23 testimony on behalf of Ameren Missouri. Mr. Murray sponsored ROE, ROR, and capital structure
24 testimony on behalf of The Office of the Public Counsel (“OPC”). Within this testimony, Staff

1 will address issues related to a just and reasonable ROR to be applied to Ameren Missouri's gas
2 utility rate base for ratemaking purposes in this proceeding. Staff's analyses and conclusions are
3 supported by the data presented in Staff's rebuttal workpapers.

4 **I. EXECUTIVE SUMMARY**

5 Q. What is the overview of your response to the testimonies of Ms. Bulkley and
6 Mr. Sagel?

7 A. Staff's rebuttal will focus on Ms. Bulkley's recommended ROE and Mr. Sagel's
8 capital structure and recommended ROR. Ms. Bulkley recommended an ROE of 9.80% within a
9 range of 9.65% to 10.40%, and Mr. Sagel recommended an ROR of 6.94% based on a pro forma
10 capital structure, as of September 30, 2021, consisting of 47.345% long-term debt, 0.728%
11 preferred stock and 51.927% common equity with a cost of debt of 3.853% and a cost of preferred
12 stock of 4.180%.¹

13 During the audit review process, Staff discerned that Ms. Bulkley introduced a series of
14 biased estimates for her cost of equity ("COE") to recommend overstated ROE.² Ms. Bulkley
15 overestimated COE by using inflated input data and improper estimation methods in her direct
16 testimony. In this rebuttal testimony, Staff will provide a detailed explanation on how Ms. Bulkley
17 used unreasonable upwardly-biased input data in the Constant Growth form of the Discounted
18 Cash Flow ("DCF") model, the Multi-Stage DCF model, the Capital Asset Pricing Model
19 ("CAPM"), the Empirical Capital Asset Pricing Model ("ECAPM"), and the Bond Yield Plus Risk
20 Premium ("BYPRP") analysis.³

¹ Schedule DTS-D1, Sagel's Direct Testimony.

² Ms. Bulkley falsely used the terms ROE and COE interchangeably. As explained Staff's COS report, COE is the return required by investors; ROE is the return set by a regulatory utility commission.

³ On page 3, lines 14-20, Bulkley's Direct Testimony.

1 Mr. Sagel's proposed ROR is based on Ameren Missouri's standalone projected capital
2 structure and cost of debt as of September 30, 2021, with Ms. Bulkley's recommended ROE.⁴
3 Staff is investigating how Ameren Missouri is going to achieve the 51.93% equity ratio, as of
4 September 30, 2021, compared to the 50.32% as of June 30, 2021. At this time, Staff will not
5 address any major issues with the pro forma standalone capital structure of Ameren Missouri as of
6 the true-up date that Mr. Sagel recommended for ratemaking in this proceeding. Staff will keep
7 monitoring Ameren Missouri and Ameren Corp.'s capital structure during this proceeding and will
8 make a final recommendation based on the actual true-up capital structure of Ameren Missouri in
9 later testimony filings.

10 Q. What is the overview of your response to the testimony of Mr. Murray?

11 A. Mr. Murray recommended a ROE of 9.25% within a range of 8.5% to 9.5% and a
12 ROR of 6.34% based on his recommended capital structure of 45.00% common equity, 54.18%
13 long-term debt, and 0.82% preferred stock, and applying cost of long-term debt of 3.95% and cost
14 of preferred stock of 4.18%.⁵ Although it is lower than Staff's recommended authorized ROE of
15 9.50%, Mr. Murray's point recommendation ROE of 9.25% still lies within Staff's reasonable
16 range values of 9.25% and 9.75%.

17 Mr. Murray's recommended common equity to total capital ratio ("equity ratio") of 45.00%
18 is 600 basis points lower than the average level of actual Ameren Missouri common equity ratio
19 of 51%.⁶ Mr. Murray's recommended common equity ratio is based on the long-term targeting
20 equity ratio of Ameren Corp.'s consolidated capital structure.⁷ Staff expresses concern with

⁴ On page 11, Sagel's Direct Testimony.

⁵ Schedule DM-D-8, Murray's Direct Testimony.

⁶ Schedule SJW-5-2, Staff COS Repot.

⁷ On page 32, lines 13-16, Murray's Direct Testimony.

1 Mr. Murray's recommended capital structure using Ameren Corp.'s capital structure ratios instead
2 of Ameren Missouri's. Staff did not find any reason to use Ameren Corp's capital structure for
3 ratemaking purposes in this proceeding.

4 **II. RESPONSE TO TESTIMONY OF AMEREN MISSOURI'S WITNESSES**

5 Q. What are the specific areas in which Staff is responding to Ameren Missouri's
6 witnesses?

7 A. Staff is responding to the testimonies of Ms. Bulkley and Mr. Sagel. The areas in
8 which Staff addresses issues of Ms. Bulkley's direct testimony include:

- 9 ▪ Recommended ROE,
- 10 ▪ Proxy Group Criteria,
- 11 ▪ Growth Rates for DCF Models,
- 12 ▪ Market Risk Premium for CAPM,
- 13 ▪ Empirical CAPM Method,
- 14 ▪ BYPRP Analysis, and
- 15 ▪ Regulatory and Business Risks.

16 Then, Staff will address Mr. Sagel's recommended capital structure. Staff will discuss
17 each in turn, below.

18 **I. Recommended ROE**

19 Q. What is Ms. Bulkley's recommended ROE for Ameren Missouri in this proceeding?

20 A. Ms. Bulkley recommended an ROE of 9.80%, within a range of 9.65% to 10.40%,
21 for use in this proceeding.⁸

22 Q. How did Ms. Bulkley determine her recommended ROE?

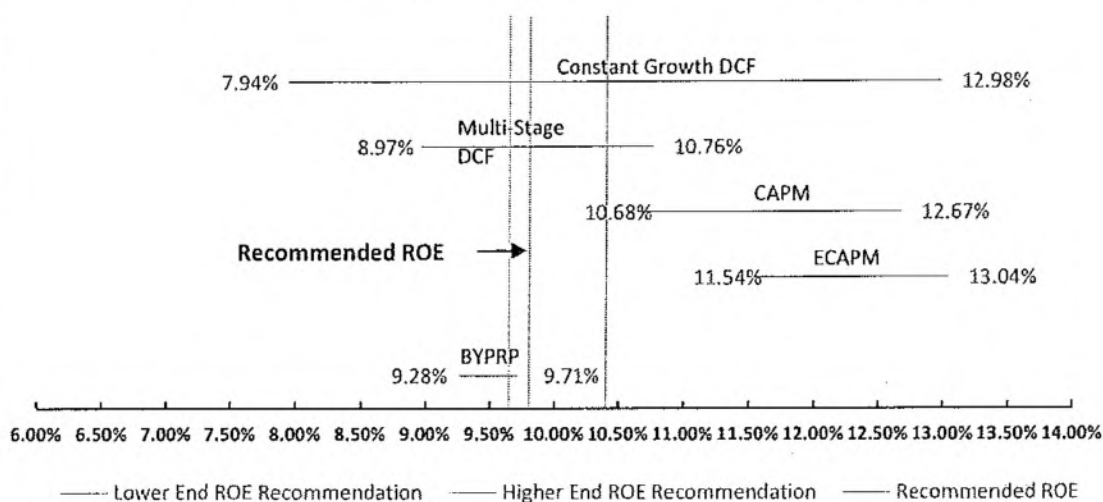
⁸ On page 7, lines 4-10, Bulkley's Direct Testimony.

1 A. Ms. Bulkley determined her recommended ROE from a range of the results of her
2 COE estimates. Ms. Bulkley calculated a COE estimate range of 7.94% to 13.04%.⁹ For her ROE
3 recommendation, Ms. Bulkley considered company-specific risk factors and current and
4 prospective capital market conditions but did not precisely state the procedure for selecting
5 the recommended point estimation of 9.80% from within the low or high end of her
6 reasonable COE range of 9.65% to 10.40% and from within her COE estimate analytic results of
7 7.94% to 13.04%.¹⁰

8 Q. How did Ms. Bulkley estimate her COE?

9 A. Ms. Bulkley applied COE estimation models such as constant-growth DCF, the
10 multi-stage DCF model, the CAPM, the ECAPM, and the BYPRP to natural gas distribution utility
11 (“NGU”) proxy group.¹¹ Ms. Bulkley’s COE estimates for each analysis method and
12 recommended ROE are summarized in Figure 1:¹²

13 **Figure 1. Ms. Bulkley’s COE Estimates and ROE Recommendation**



14 ⁹ On page 69, Figure 10, Ibid.

¹⁰ Ibid.

¹¹ On page 7, Ibid.

¹² I Summary, Won’s Rebuttal Workpaper.

1 Q. What are Staff's concerns with Ms. Bulkley's recommended ROE?

2 A. Staff's concern is that Ms. Bulkley's recommended ROE of 9.80% is too high
3 compared to the average authorized ROE of 9.52% in gas utility rate cases completed in 2021.¹³
4 Ms. Bulkley's recommended ROE is based on her overstated COE estimates. Ms. Bulkley
5 presented unreasonable COE estimation procedures using exaggerated input values for her COE
6 estimation models. Ms. Bulkley utilized a variety of data sources and analysis methods to produce
7 inflated input values. The following summarizes the steps that led to Ms. Bulkley's overestimation
8 of her COE:

- 9 1. Selecting inappropriate biased data,
- 10 2. Producing overestimated input values, and
- 11 3. Utilizing inadequate estimation methods.

12 Staff will describe how each of Ms. Bulkley's COE estimates are overstated by presenting detailed
13 investigation results later in this testimony.

14 **2. Proxy Group Criteria**

15 Q. What are Ms. Bulkley's proxy groups for estimating Ameren Missouri's COE?

16 A. Ms. Bulkley selected seven NGU companies for her proxy group for Ameren
17 Missouri's COE estimation. The NGU proxy group was selected from ten publicly-traded natural
18 gas distribution utility companies classified by Value Line as gas utilities.¹⁴ The following is the
19 list of Ms. Bulkley's natural gas utility proxy group and associated ticker symbols:

¹³ S&P Global Market Intelligence, Retrieved on August 25, 2021.

¹⁴ On page 30, lines 13-14, Bulkley's Direct Testimony.

1 financial investment industry that the typical ERPs are in the range of 3% to 6%.¹⁸ In other words,
2 a return of 7.00% with an ERP of 4.14% is well within the acceptable range.¹⁹ The selection
3 criterion that the company should have a mean constant growth DCF result greater than 7.00%
4 represents Ms. Bulkley's inappropriate screening of her proxy group to overstate COE estimates.

5 Q. Does Staff have any other concerns with Ms. Bulkley's proxy group selection
6 criteria?

7 A. Yes. Ms. Bulkley's selection criteria ignore utilities with unreasonably high mean
8 constant growth DCF results. For instance, according to her mean constant growth DCF, the COE
9 estimate result of South Jersey Industries, Inc. ("SJI") is 26.58%.²⁰ The S&P Global bond rating
10 of SJI is BBB, comparable to Moody's Baa-rated utility bonds.²¹ In July 2021, the average yield
11 on Moody's Baa-rated utility bonds was 3.20%.²² This means that, according to Ms. Bulkley's
12 argument, SJI's ERP should be 23.38%.²³ This is not acceptable as a reasonable perpetual growth
13 rate for the DCF model. If Ms. Bulkley has issues with COE estimates that are too low, she should
14 likewise have issues with unreasonably high COE estimates like the 26.58% for SJI.

15 **3. Growth Rates for Discounted Cash Flow Models**

16 Q. What is Staff's concern with Ms. Bulkley's constant-growth DCF model?

17 A. Ms. Bulkley used unreasonably high growth rates in her constant-growth DCF
18 model, which overstated her COE estimates. Ms. Bulkley exclusively used projected earnings

¹⁸ Credit Suisse Global Investment Returns Yearbook 2020, Elroy Dimson, Paul Marsh, Mike Staunton, February 2020; and Dr. Morin reported ERP of 5.7% using Moody's Natural Gas Index, on page 416, Roger A. Morin, New Regulatory Finance (Public Utilities Reports, Inc. 2006).

¹⁹ ERP: $3\% < 4.14\%$ (414 basis points) $< 6\%$.

²⁰ Schedule AEB-D2, Attachment 3 Constant DCF, Bulkley's Direct Testimony.

²¹ Giacchino, L. R., & Lesser, J. A. (2011). Principles of Utility Corporate Finance. Public Utilities Reports, on page 62.

²² Mergent Bond Record, August 2021.

²³ ERP (23.38%) = COE (26.58%) – Bond Yield (3.20%)

1 growth rates, which she erroneously called long-term growth rates.²⁴ Analysts' projected growth
2 rates are for periods of 3 to 5 years, which is considered short given the infinite investment horizon
3 assumed in the DCF. Because of overstated growth rates Ms. Bulkley's DCF COE estimates are
4 unreasonably upward biased.

5 Q. What is wrong with using exclusively projected earnings growth rates for
6 Ms. Bulkley's constant-growth DCF COE estimates?

7 A. Analysts' projected earnings growth rates are not suitable for use, exclusively,
8 in the constant-growth DCF model because the growth rates that Ms. Bulkley utilized are
9 not perpetual growth rates and are often shorter than five-year projected growth rates.
10 The constant-growth DCF model assumes a perpetual investment horizon. By exclusively using
11 these analysts' projected growth rates in the context of the constant-growth DCF model,
12 Ms. Bulkley makes an unreasonable assumption that natural gas utilities will grow at these often
13 high and precarious shorter term growth rates, in perpetuity. Analysts are of the consensus opinion
14 that long-term growth rates for utilities will eventually converge to the level of long-term gross
15 domestic product ("GDP").²⁵ Staff has consistently held the view that while it is possible that a
16 company or industry may grow at a rate faster than the GDP in the short to medium term,
17 no company or industry may do so in perpetuity. Currently, the GDP is projected to grow at a
18 long-term rate of 3.70% to 3.80%.²⁶ An example of Ms. Bulkley's unreasonably high growth
19 rates is the 24.5% growth rate used to produce SJI's mean and high DCF COE estimates of 26.58%

²⁴ On page 39, Bulkley's Direct Testimony.

²⁵ Morin, R. A. (2006). *New Regulatory Finance*. Public Utilities Reports, page 302.

²⁶ Federal Open Market Committee, retrieved on July 18, 2021,
(<https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20200610.htm>).

An Update to the Economic Outlook: 2021 to 2031, Congressional Budget Office, July 2021,
(<https://www.cbo.gov/system/files/2021-02/56965-Economic-Outlook.pdf>).

1 and 30.69%, respectively. Such high growth rates should not be used in constant-growth DCF
2 COE estimates.

3 Q. What is wrong with the GDP growth rates used in Ms. Bulkley's multi-stage DCF
4 COE estimates?

5 A. The GDP growth rate estimate of 5.56% used in Ms. Bulkley's multistage DCF is
6 too high compared to other reliable projected nominal GDP growth rates. Ms. Bulkley's GDP
7 growth estimate of 5.56%, based on real GDP growth rate of 3.21% from 1929 through 2019, plus
8 a projected inflation rate of 2.27%, is around 180 basis points higher than the reliable nominal
9 long-term GDP growth rate estimates of 3.70% and 3.80%, reported by the Congressional Budget
10 Office ("CBO") and Federal Open Market Committee ("FOMC"), respectively.²⁷ It is unusual
11 how Ms. Bulkley estimated her projected long-term GDP growth rate; adding historical (from the
12 period 1929 to 2019) real GDP growth rate to the projected inflation rate. Staff is not aware of
13 any projected long-term GDP growth rate estimates that are as high as historical GDP growth rates.
14 Currently, the Federal Reserve ("Fed") estimates a long-term inflation rate of 2.00%, which means
15 that Ms. Bulkley's 2.27% is too high. It is Staff's position that reasonable long-term GDP growth
16 estimates should be limited to the 3.70% to 3.80% reported by the CBO and FOMC.

17 Q. What growth rates should Ms. Bulkley have used?

18 A. As Staff alluded to above, appropriate growth rates for use in the constant-growth
19 or multi-stage DCF models should give consideration to the long-term growth rates, represented
20 by the projected long-term GDP growth rates of 3.70%.²⁸ For example, the Federal Energy

²⁷ Federal Open Market Committee, retrieved on July 18, 2021,
(<https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20200610.htm>).

²⁸ An Update to the Economic Outlook: 2021 to 2031, Congressional Budget Office, July 2021,
(<https://www.cbo.gov/system/files/2021-02/56965-Economic-Outlook.pdf>).

1 Regulatory Commission (“FERC”) incorporates long-term GDP growth rates into calculations
2 within the constant-growth DCF by using a ratio of two-thirds analyst projected long-term growth
3 rates to one-third long-term GDP growth rates.²⁹ If Ms. Bulkley had used a similar approach with
4 a proper GDP growth rate in the constant-growth DCF model, her DCF COE estimate for the
5 180-day average stock price would be 8.75% instead of 9.61%.³⁰ If Ms. Bulkley had used a similar
6 approach with a proper GDP growth rate in the multi-stage DCF model, her DCF COE estimate
7 for the 180-day average stock price would be 7.97% instead of 9.44%.³¹ Therefore, reasonable
8 DCF COE results are currently much lower than Ms. Bulkley’s estimations.

9 **4. Market Risk Premium of Capital Asset Pricing Models**

10 Q. Please explain Ms. Bulkley’s CAPM COE estimation methods.

11 A. Ms. Bulkley employed the traditional CAPM and the empirical CAPM (“ECAPM”)
12 using Value Line Beta, Bloomberg Beta and long-term average Beta with three different risk-free
13 rates of 1.77%, 2.06% and 2.80% and a total market return of 14.13% resulting in three different
14 market risk premiums (“MRP”) of 12.36%, 12.07% and 11.33%.³² For her natural gas utility
15 proxy group, the ranges of Ms. Bulkley’s CAPM and ECAPM COE estimates are 10.68% to 12.67%
16 and 11.54% to 13.04%, respectively.³³

17 Q. What is Staff’s concern with Ms. Bulkley’s CAPM COE estimates?

²⁹ *Ass’n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (2019).

³⁰ 3 Constant DCF 1, Won’s Rebuttal Workpaper.

³¹ 4 Multi-Stage DCF 1, Won’s Rebuttal Workpaper.

³² Schedule AEB-D2, Attachment 7 CAPM Alt, Bulkley’s Direct Testimony.

³³ Schedule AEB-D2, Attachment 1 Summary, Bulkley’s Direct Testimony.

1 A. Ms. Bulkley's CAPM and ECAPM COE estimates are too high. Even compared
2 to her average COE estimate of 9.76% using multi-stage DCF, Ms. Bulkley's average CAPM and
3 ECAPM COE estimate of 11.69% and 12.30%, respectively, are too high.³⁴ Staff found that
4 Ms. Bulkley's CAPM COE estimates are too high because she used unreasonably high MRPs.
5 Ms. Bulkley's MRPs of 12.36%, 12.07% and 11.33% are much higher than regular US financial
6 service industry's MRP estimates of around 4.00% to 7.00%.³⁵

7 Q. How were Ms. Bulkley's MRPs estimated?

8 A. Ms. Bulkley calculated her MRPs as the difference between expected market return
9 on the S&P 500 Index and risk-free rate. For estimating expected market return, Ms. Bulkley
10 conducted several steps of calculations. First, using the data of companies on the S&P 500 Index,
11 Ms. Bulkley calculated an estimated weighted average dividend yield of 1.58% and an estimated
12 weighted average growth rate of 12.45%.³⁶ Second, using the constant growth DCF model with
13 her estimated dividend yield and growth rate, Ms. Bulkley estimated the expected market return
14 of 14.13%.³⁷ Finally, Ms. Bulkley calculated implied MRPs estimated as the difference between
15 the implied expected equity market returns and the various risk-free rates. Ms. Bulkley's implied
16 MRP over the current 30-day average of the 30-year U.S. Treasury bond yield, and projected yields
17 on the 30-year U.S. Treasury bond, ranges from 11.33% to 12.36%.³⁸ Table 2 shows
18 Ms. Bulkley's three MRP estimates and their associated estimation methods.³⁹

³⁴ 1 Summary, Won's Rebuttal Workpaper.

³⁵ See Figure 2. "MRP and corresponding COE".

³⁶ Schedule AEB-D2, Attachment 9 Market Return, Bulkley's Direct Testimony.

³⁷ Ibid.

³⁸ Schedule AEB-D2, Attachment 7 CAPM Alt, Bulkley's Direct Testimony.

³⁹ On pages 35-36, Bulkley's Direct Testimony.

1 horizon, Staff further finds that the growth rates that Ms. Bulkley used are short-term in horizon,
2 which makes them unsuitable for the constant-growth DCF model she used to estimate her
3 expected market return. Staff recalculated an expected total return based on the FERC's DCF
4 model and criteria, including only companies with available dividend yields, and found a
5 reasonable total market return of 9.43%. Taking into account the current risk-free rate of 2.26%
6 results in Ms. Bulkley's estimated MRPs of less than 8%.⁴³

7 Q. What are other financial institutions' current MRP estimates?

8 A. Other financial institutions' MRP estimates range from 4.63% to 6.43%.⁴⁴
9 According to 2020 survey research based on 1,946 responses from business and economic
10 professors, the U.S. average and median MRP estimates are 5.6% and 5.4%, respectively.⁴⁵ The
11 American Appraisal Risk Premium Quarterly, Value Line, and Duff & Phelps calculated MRPs of
12 6.0%, 5.5%, and 5.0%, respectively.⁴⁶ Duff and Phelps' current MRPs range from 4.43%
13 (geometric average), to 6.07% (arithmetic average), using historical data from 1926 to 2020.⁴⁷
14 Professor Aswath Damodaran of NYU Stern School of Business, a noted equity valuation
15 professor, currently estimates MRPs in the range of 4.84% to 6.43%.⁴⁸

16
17
18
19 *continued on next page*

⁴³ 7 CAPM Alt, Won's Rebuttal Workpaper.

⁴⁴ 6 CAPM, Won's Rebuttal Workpaper.

⁴⁵ Fernandez, P., de Apellániz, E., & F Acín, J. (2020). Survey: Market Risk Premium and Risk-Free Rate used for 81 countries in 2020.

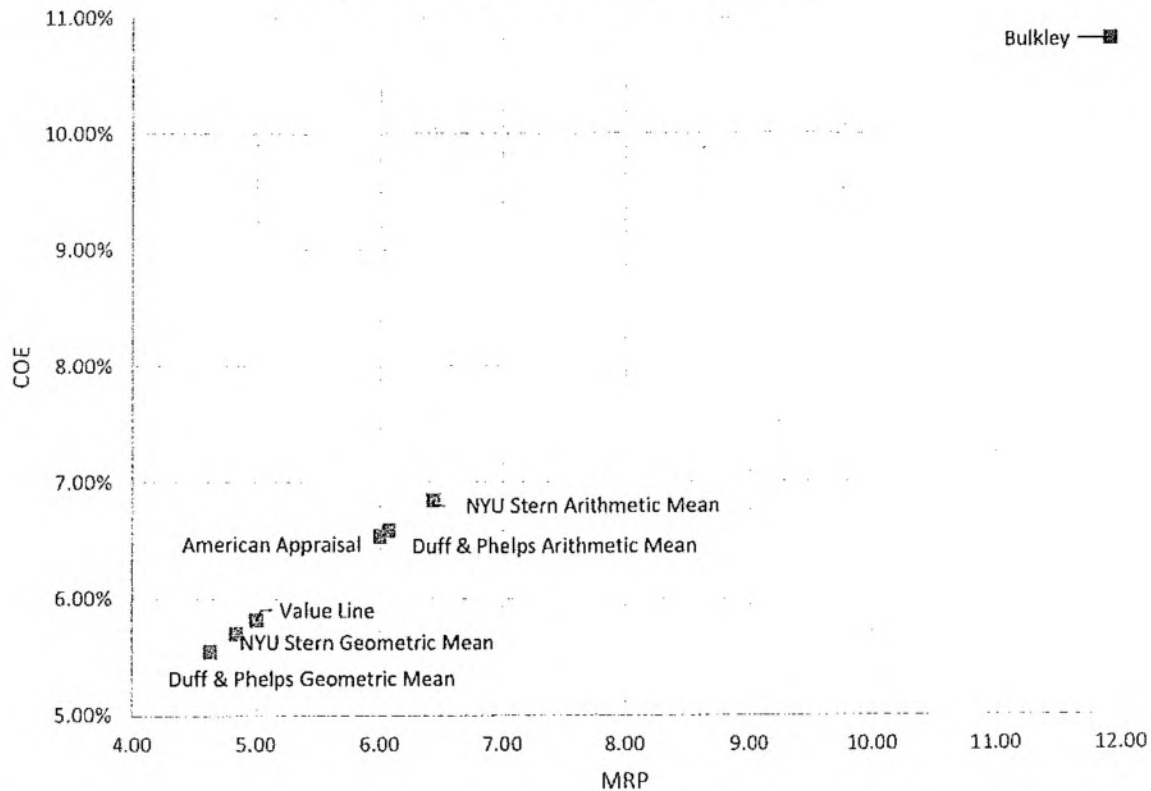
⁴⁶ FERC Opinion No. 569, 169 FERC ¶ 61,129.

⁴⁷ 2020 Cost of Capital: Annual U.S. Guidance and Examples, Duff and Phelps.

⁴⁸ Risk Premium, Damodaran Online, Stern School of Business, NYU.

1

Figure 2. MRP and corresponding COE



2

3 Figure 2 compares COE estimates with their corresponding MRPs, for Ms. Bulkley's natural gas
4 proxy group, calculated with reasonable MRPs and Ms. Bulkley's unreasonable MRPs, assuming
5 the same 30-day average of 30-Year U.S Treasury bond yield of 1.77% used in Ms. Bulkley's
6 estimation.⁴⁹ As shown in Figure 2, Ms. Bulkley's CAPM COE estimate of 11.63%, with its
7 corresponding MRP of 10.80%, is an extreme outlier when compared with the other estimates.
8 This clearly indicates that Ms. Bulkley's MRPs are too high and, consequently, her COE estimates
9 are too high as well.

10

Q. Please summarize your concern with Ms. Bulkley's MRPs.

⁴⁹ Schedule AEB-D2, Attachment 7 CAPM Alt, Bulkley's Direct Testimony.

1 A. As presented in Table 2, Ms. Bulkley used three MRP estimates. As Staff already
2 pointed out, all three MRP estimates are too high compared to other widely accepted MRP
3 estimates in the financial industry.

4 Q. What would Ms. Bulkley's CAPM COE estimates be if she had used proper
5 input data?

6 A. With more reasonable assumptions, such as an MRP of 5.50% and a risk-free rate
7 of 2.26%,⁵⁰ Ms. Bulkley's average CAPM COE estimate would be 6.22%.⁵¹ This is well within
8 the range of Staff's COE estimates of 6.14% to 8.64%, which are much lower than Ms. Bulkley's
9 average CAPM COE estimate of 10.80%.

10 **5. Empirical Capital Asset Pricing Model**

11 Q. What is your concern with Ms. Bulkley's ECAPM model?

12 A. Like her average CAPM COE estimate of 11.69%, Ms. Bulkley's average ECAPM
13 COE estimate of 12.30% assumes too high an MRP.⁵² In addition, the ECAPM model itself
14 overestimates COE because of an adjustment to account for the supposed tendency of the CAPM
15 method to underestimate COE for companies with low Beta coefficients.

16 Q. How did Ms. Bulkley adjust her CAPM COE to ECAPM COE?

17 A. Ms. Bulkley multiplied 75% of her MRPs by the Beta coefficient and added the
18 remaining 25% MRPs, unadjusted.⁵³ This adjustment is consistent with Dr. Roger Morin's

⁵⁰ The assumption of the estimated MRP of 5.51% is the average of the eight MRP estimates in Figure 2. The risk free rate of 2.26% is an average of 30-year Treasury bond at yields of three months ending June 2021.

⁵¹ 7 CAPM Alt, Won's Rebuttal Workpaper.

⁵² 1 Summary, Ibid.

⁵³ Original CAPM COE estimate equals Risk-Free Rate + Beta × MRP but ECAMP COE estimate equals Risk-Free Rate + 0.25 × MRP + 0.75 × Beta × MRP or Risk-Free Rate + Alpha + Beta × (MRP – Alpha) where Alpha = 0.25 × MRP.

1 formula.⁵⁴ Dr. Morin's formula was based on his finding, with data between 1926 and 1984, that
2 the regular CAPM underestimated returns by about 2.00%. However, there is no evidence that
3 Dr. Morin's adjustment factor of 25% would hold with data after 1984.⁵⁵ Furthermore, Dr. Morin
4 also cited other studies that found that the CAPM produced returns between - 9.61% and 13.56%,
5 meaning that the CAPM actually overestimated COE in some instances.⁵⁶ Such variations in
6 findings do not lend credibility to Ms. Bulkley's use of the ECAPM.

7 **6. Bond Yield Plus Risk Premium Analysis**

8 Q. What is Ms. Bulkley's BYPRP method?

9 A. The conventional BYPRP method is based on the idea that since investors in stocks
10 take greater risks than investors in bonds, the former expect to earn a return on a stock investment
11 that reflects a premium over and above the return they expect to earn on a bond investment.⁵⁷ This
12 premium required by investors for an investment in common stock over an investment in
13 corresponding debt is called the risk premium.⁵⁸ Multiple approaches have been developed to
14 determine the risk-premium for a utility. Ms. Bulkley's BYPRP is different from the conventional
15 method. Ms. Bulkley's BYPRP used a regression analysis based on authorized ROEs for utility
16 companies relative to risk-free rates (Treasury yields).⁵⁹ Ms. Bulkley used monthly data of
17 risk-free rates and authorized ROEs derived from 678 natural gas utility rate cases from 1992

⁵⁴ Morin, R. A. (2006). *New Regulatory Finance*. Public Utilities Reports, page 190.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Brigham, E. F., Shome, D. K., & Vinson, S. R. (1985). The risk premium approach to measuring a utility's cost of equity. *Financial Management*, 33-45.

⁵⁸ Morin, R. A. (2006). *New Regulatory Finance*. Public Utilities Reports, page 108.

⁵⁹ On page 52, lines 7-17, Bulkley's Direct Testimony.

1 through January 2021 as reported by Regulatory Research Associates (“RRA”).⁶⁰ Because
2 Ms. Bulkley defined the risk premium as the authorized ROE minus the risk-free rate,
3 Ms. Bulkley’s BYPRP analysis method can directly estimate the authorized ROE, while in contrast,
4 her DCF and CAPM are only able to directly estimate COE. Ms. Bulkley’s regression analysis
5 result is the following equation:

$$\text{Risk Premium (\%)} = 8.54 - 0.5803 \text{ Risk-Free Rate (\%)}.$$
⁶¹

7 Q. What are Ms. Bulkley’s BYPRP ROE estimates?

8 A. Ms. Bulkley’s BYPRP ROE estimates range from 9.28% to 9.71%, with a mean of
9 9.46%.⁶² For her BYPRP ROE estimation, Ms. Bulkley used three risk-free rates: 30-day average
10 of the 30-year U.S. Treasury bond yield (i.e., 1.77%), the near-term (Q2 2021 – Q2 2022)
11 projections of the 30-year U.S. Treasury bond yield (i.e., 2.06%), and a longer-term (2022 – 2026)
12 projection of the 30-year U.S. Treasury bond yield (i.e., 2.80%).

13 Q. What is Staff’s concern with Ms. Bulkley’s BYPRP ROE estimates?

14 A. Staff does not have a major concern with Ms. Bulkley’s BYPRP ROE estimates
15 because all her BYPRP ROE estimates, ranging from 9.28% to 9.71%, with a mean of 9.46%, are
16 within Staff’s recommended authorized ROE range of 9.25% to 9.75%. Staff recalculated
17 Ms. Bulkley’s BYPRP ROE estimate using a risk-free rate of 2.26% that is an average of 30-year
18 Treasury bond at yields of three months ending June 2021, resulting in an estimated ROE of 9.48%
19 that is only 2 basis points lower than Staff’s point recommended authorized ROE of 9.50%.

⁶⁰ According to Ms. Bulkley this analysis began with a total of 1,084 natural gas cases across the U.S., which were screened to eliminate limited issue rider cases, transmission cases, and cases that did not specify an authorized ROE. After applying those screening criteria, the analysis was based on data for 678 cases.

⁶¹ Schedule AEB-D2, Attachment 10 Risk Premium, Bulkley’s Direct Testimony.

⁶² Page 53, line 4 to page 54, line 2, Bulkley’s Direct Testimony.

1 7. **Regulatory and Business Risks**

2 Q. What adjustments did Ms. Bulkley make to her COE regarding Ameren Missouri's
3 business and regulatory risks?

4 A. Ms. Bulkley did not make specific adjustments to her COE while she estimated the
5 effect of Ameren Missouri's business and regulatory risks on the ROE. Ms. Bulkley considered
6 other risks such as small size risk and regulatory risk to determine where Ameren Missouri's
7 required ROE falls within the range of her analytic results.

8 Q. What is Staff's concern with Ms. Bulkley's size consideration?

9 A. Ms. Bulkley insisted that Ameren Missouri's natural gas distribution operations are
10 substantially smaller than the median for the proxy group companies in terms of market
11 capitalization. Ms. Bulkley made an argument that, "[t]he impact of weather variability, the loss
12 of large customers to bypass opportunities, or the destruction of demand as a result of general
13 macroeconomic conditions or fuel price volatility will have a proportionately greater impact on
14 the earnings and cash flow volatility of smaller utilities."⁶³ However, Ameren Missouri is not a
15 small-size company in terms of its utility services even if its gas utility service is small. Ameren
16 Missouri is the largest utility company in Missouri.⁶⁴ In addition, the Commission has granted
17 many favorable regulatory mechanisms to Ameren Missouri to protect it from such variability, as
18 explained in Staff witness John P. Cassidy's rebuttal testimony for the current Ameren Missouri
19 electric utility service rate case, Case No. ER-2021-0240. Therefore, Ms. Bulkley's size
20 consideration is meaningless for Ameren Missouri operations as a whole with her upwardly-biased
21 COE estimates.

⁶³ On page 55, lines 12-15, Bulkley's Direct Testimony.

⁶⁴ Ameren Fact Sheet, retrieved September, 29, 2021, (<https://www.ameren.com/company/about-ameren>).

1 Q. Do you agree with Ms. Bulkley's statement that the RRA jurisdictional ranking and
2 the S&P credit supportiveness ranking for Missouri indicates greater risk than the average for the
3 proxy group?

4 A. No, I do not. According to a recently published S&P Global Ratings' article,
5 Updated Views On North American Utility Regulatory Jurisdictions - June 2021, Missouri is
6 classified in the category of "Very Credit Supportive," with a "Strong and Adequate" utility
7 regulatory environment in jurisdictions among U.S. states and Canadian provinces.⁶⁵ In addition,
8 it is unclear how Ms. Bulkley compared her proxy group to Ameren Missouri's regulatory
9 environment; when questioned on this point by Staff she just provided the RRA jurisdictional
10 ranking without a specific comparison.⁶⁶ Furthermore, the Commission has allowed several
11 favorable regulatory mechanisms for Ameren Missouri's gas utility service. On the expense side,
12 Ameren Missouri has cost recovery mechanisms consisting of the Purchased Gas Adjustment
13 ("PGA") and the Actual Cost Adjustment ("ACA"). On the income side, Ameren Missouri has
14 the revenue stabilization mechanism of the Delivery Charge Adjustment ("DCA") rider that is
15 designed to isolate usage ranges where variations are primarily related to weather and
16 conservation.⁶⁷ In addition, Ameren Missouri has an ability to use a capital tracking mechanism
17 consisting of an Infrastructure System Replacement Surcharge ("ISRS") rider that allows it to
18 recover a portion of capital investment costs between rate cases. Currently, Ameren Missouri uses
19 various and considerable protections against business risks that were granted to it by the
20 Commission. On April 9, 2021, the Commission authorized Ameren Missouri to track and defer

⁶⁵ S&P Global Ratings, Updated Views On North American Utility Regulatory Jurisdictions - June 2021,
(<https://www.spglobal.com/ratings/en/research/articles/210629-updated-views-on-north-american-utility-regulatory-jurisdictions-june-2021-11998892>).

⁶⁶ Staff's Data Request No. 0327.

⁶⁷ Tariff Sheet No. 31, Union Electric Company Gas Service.

1 into a regulatory asset the incremental costs caused by the COVID-19 pandemic.⁶⁸ Staff witness
2 John P. Cassidy addresses in more detail the regulatory lag mitigation - business risk reduction
3 mechanisms such as the Plant In Service Accounting (“PISA”) and Renewable Energy Standard
4 Rate Adjustment Mechanisms (“RESRAM”) in his rebuttal testimony in the current Ameren
5 Missouri electric utility service rate case, Case No. ER-2021-0240. Considering the series of
6 favorable regulatory mechanisms and accounting authority orders granted by the Commission to
7 Ameren Missouri, Ms. Bulkley’s arguments alleging unusually high regulatory risk for the
8 Company are baseless.

9 Q. What is Staff’s recalculated COE estimate for Ameren Missouri with proper inputs
10 and models?

11 A. Staff’s recalculated average estimates with proper inputs and models are
12 summarized in Table 3:

13 **Table 3. Bulkley’s Estimation and Staff’s Recalculation⁶⁹**

COE Estimation Methods	<u>Cost of Equity</u>	
	Bulkley' Estimate	Staff Recalculation
Discounted Cash Flow	9.96%	8.74%
Capital Asset Pricing Model	12.00%	8.14%

ROE Estimation Method	<u>Return on Equity</u>	
	Bulkley' Estimate	Staff Recalculation
Bond Yield Plus Risk Premium Analysis	9.46%	9.48%

14 As is evident in Table 3, Ms. Bulkley’s COE estimates are too high compared to Staff’s
15 recalculated COE. In contrast, Ms. Bulkley’s ROE estimation based on her BYPRP analysis is

⁶⁸ Order Approving Stipulation and Agreement, Case No. GU-2021-0112.

⁶⁹ 1 Summary, Won’s Rebuttal Workpaper.

1 lower than Staff's. Considering her upwardly-biased input data, Staff recommends that
2 Ms. Bulkley's DCF and CAPM COE estimates should not be utilized for calculating a just and
3 reasonable authorized ROE.

4 **8. The Capital Structure of Ameren Missouri for ROR**

5 Q. What capital structure and ROR did Mr. Sagel recommend for Ameren Missouri's
6 ratemaking in this proceeding?

7 A. Mr. Sagel recommended a projected capital structure, as of September 30, 2021,
8 with 51.93% common equity, 0.73% preferred stock and 47.34% long-term debt, for Ameren
9 Missouri.⁷⁰ Ameren Missouri requested an update of all elements of the capital structure at the
10 proposed September 30, 2021, true-up date. Mr. Sagel recommended an authorized ROR of
11 6.943%, calculated using Ms. Bulkley's recommended ROE of 9.80%, cost of preferred stock of
12 4.180%, and embedded cost of debt of 3.853%, applied to a capital structure consisting of 4.345%
13 long-term debt, 0.728% preferred stock and 54.25% common equity.⁷¹

14 Q. Does Staff have concerns with the capital structure recommended by Ameren
15 Missouri's witness?

16 A. Staff is investigating how Ameren Missouri's recommended capital structure, as of
17 September 30, 2021, is achievable. As of June 30, 2021, Ameren Missouri's capital structure was
18 50.32% common equity, 48.95% long-term debt and 0.73% preferred stock.⁷² Ameren Missouri
19 explained that its expected strong cash flow in the third quarter of 2021 will help raise the equity
20 ratio to 51.93%, from the 50.32% as of June 30, 2021.⁷³ Ameren Missouri is yet to provide detailed

⁷⁰ Page 11, Table 2, Sagel Direct Testimony.

⁷¹ WE Schedule DTS-DI, Ibid.

⁷² Staff's Data Request No. 0114.

⁷³ Staff's Data Request No. 0651, Case No. ER-2021-0240.

1 information to support its higher equity ratio as of September 30, 2021. Staff will keep monitoring
2 the actual changes in Ameren Missouri's recommended capital structure and cost of debt through
3 September 30, 2021, the end of the true-up period. Staff will address its final recommended capital
4 structure in its surrebuttal and true-up testimony at a later point of the case.

5 III. RESPONSE TO TESTIMONY OF OPC WITNESS MURRAY

6 Q. What is Mr. Murray's recommended ROE for use in this proceeding?

7 A. Mr. Murray recommended that the Commission set Ameren Missouri's authorized
8 ROE at 9.25%, in the range of 8.50% to 9.50%, based on his COE estimates range of 6.5% to
9 7.0%.⁷⁴ Mr. Murray estimated his COE using a multi-stage DCF approach and a CAPM analysis.

10 Q. Do you have any concerns with Mr. Murray's recommended ROE?

11 A. Staff does not have major concerns with Mr. Murray's ROE recommendation.
12 Mr. Murray's recommended ROE of 9.25% is 25 basis points lower than Staff's 9.50%, but within
13 Staff's reasonable range of 9.25% to 9.75%.⁷⁵ Mr. Murray's recommended ROE is the same as
14 the Commission's authorized ROE of 9.25% in the Empire District's electric rate case (Case No.
15 ER-2019-0374).⁷⁶ Although Staff does not agree with Mr. Murray's estimation procedures for his
16 recommended ROE, Staff found no substantial deficiency in Mr. Murray's ROE recommendation.

17 Q. What is Mr. Murray's recommended capital structure for use in this proceeding?

18 A. Mr. Murray recommended Ameren Corp.'s capital structure consisting of
19 approximately 45.00% common equity, 0.82% preferred stock, and 54.18% long-term debt for use
20 in setting Ameren Missouri's ROR.⁷⁷ Mr. Murray's recommended common equity ratio is not

⁷⁴ On page 2, lines 16-19, Murray's Direct Testimony.

⁷⁵ On page 2, lines 20-22, Ibid.

⁷⁶ On page 6, lines 2-5, Ibid.

⁷⁷ On page 32, lines 12-13, Ibid.

1 exactly the same as Ameren Corp's consolidated capital structure as of December 31, 2020.
2 Mr. Murray argued that the capital structure he recommended is the capital structure that is in line
3 with the capital structure ratios Ameren Corp. is targeting for its consolidated operations over the
4 long-term.⁷⁸

5 Q. What is Staff's concern with Mr. Murray's capital structure recommendation?

6 A. Staff has one major concern with Mr. Murray's recommendation. Mr. Murray's
7 recommended capital structure was developed based on Ameren Corp.'s consolidated capital
8 structure, instead of Ameren Missouri's. Mr. Murray argued that because Ameren Corp., the
9 parent company of Ameren Missouri, manages Ameren Missouri for purposes of taking advantage
10 of debt capacity afforded by Ameren Corp.'s low-risk regulated utility subsidiaries, the appropriate
11 capital structure for Ameren Missouri ratemaking should be the same as Ameren Corp.'s.⁷⁹

12 Q. Please explain why Staff disagrees with Mr. Murray's recommendation to use
13 Ameren Corp.'s capital structure instead of Ameren Missouri's own capital structure, for
14 ratemaking.

15 A. It is Staff's position that Ameren Missouri's stand-alone capital structure represents
16 the actual capital structure used to finance Ameren Missouri's respective jurisdictional rate base.
17 In addition, Ameren Missouri's own capital structure is consistent with the capital structure ratios
18 maintained by, or authorized for, other natural gas utilities. Mr. Murray's recommended equity
19 ratio of 45% is much lower than the average of his natural gas proxy group's equity ratio of

⁷⁸ On page 32, lines 13-16, *ibid.*

⁷⁹ On page 33, lines 7-11, *ibid.*

1 approximately 51%.⁸⁰ Also, the recent average equity ratio for other gas utility companies
2 throughout the U.S. is approximately 51%.

3 Q. Please explain more about equity ratios used in other NGU rate cases.

4 A. In 2021, the average equity ratios from fully litigated and settled rate cases are
5 50.71% and 50.61%, respectively. Table 4 presents information compiled and published by RRA,
6 which details the average equity ratios from Commissions around the U.S. in the years 2011 - 2021,
7 along with the number of cases considered:

8 **Table 4. Equity Ratios of Natural Gas Utility Rate Cases (2011-2021)⁸¹**

Year	Fully Litigated		Natural Gas Settled		Natural Gas Total	
	Equity (%)	Case (No.)	Equity (%)	Case (No.)	Equity (%)	Case (No.)
2011	52.64	8	51.82	8	52.33	16
2012	51.06	21	50.97	14	51.03	35
2013	51.98	12	48.53	9	50.60	21
2014	52.86	15	48.61	11	51.06	26
2015	51.17	5	49.32	11	49.94	16
2016	52.11	10	48.60	16	50.01	26
2017	50.39	7	50.63	17	50.55	24
2018	50.56	17	50.27	23	50.39	40
2019	52.00	12	52.30	20	52.18	32
2020	52.38	12	52.68	22	52.57	34
2021	50.71	7	50.61	13	50.64	20

9
10 Considering the historical equity ratio of approximately 51% used for calculating the allowed ROR
11 for NGU rate cases, Mr. Murray's recommended equity ratio of 45% appears to be too low.

12 Q. Does Mr. Murray's recommendation to use the parent company's capital structure
13 meet the standard of generally-accepted utility ratemaking procedures?

⁸⁰ 15 Proxy Capital Structure, Won's Rebuttal Workpaper.

⁸¹ Regulated Research Associates, S&P Global Market Intelligence, Retrieved September 22, 2020.

1 A. No. Mr. Murray's recommendation is not compatible with typical regulatory
2 practices on when to use a parent company's capital structure instead of a subsidiary's own capital
3 structure for the subsidiary's ratemaking. The Society of Utility and Regulatory Financial
4 Analysts ("SURFA") lists the following four guidelines for determining when to use a parent
5 company's capital structure, in its guidebook, *The Cost of Capital – A Practitioner's Guide*
6 ("*CRRA Guide*"):

- 7 1. Whether the subsidiary utility obtains **all** of its capital from its parent, or
8 issues its own debt and preferred stock;
- 9 2. Whether the parent guarantees **any** of the securities issued by the
10 subsidiary;
- 11 3. Whether the subsidiary's capital structure is independent of its parent
12 (i.e., existence of double leverage, absence of proper relationship
13 between risk and leverage of utility and **non-utility** subsidiaries); and,
- 14 4. Whether the parent (or consolidated enterprise) is diversified into
15 **non-utility** operations.⁸²

16 There is nothing in these guidelines that suggests that it is appropriate to use Ameren Corp.'s
17 (the parent company of Ameren Missouri) capital structure to set Ameren Missouri's ROR.

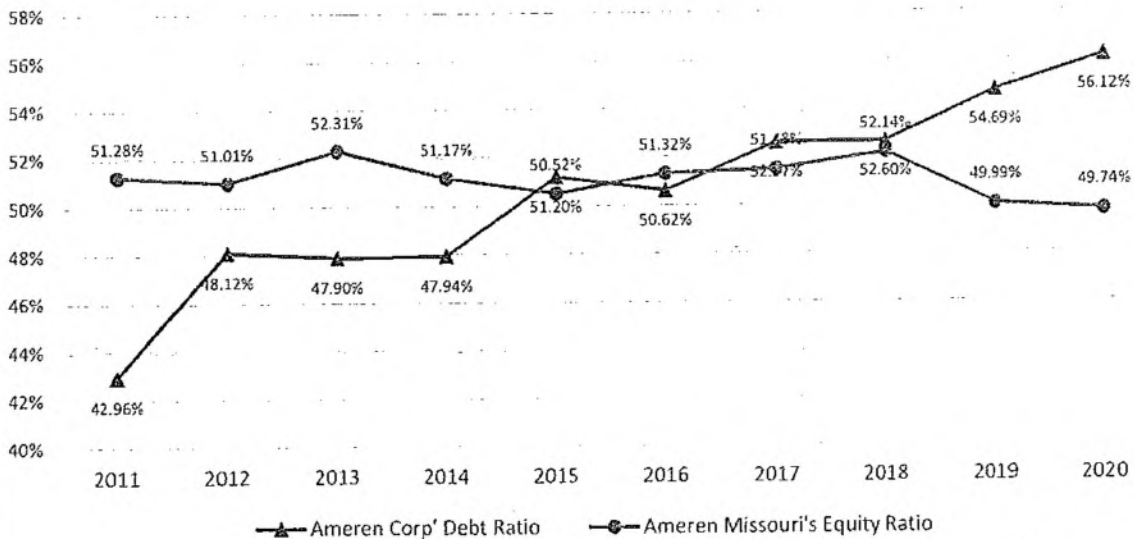
18 For the first guideline, except for common stock and equity contributions, Ameren
19 Missouri has not received any other long-term financing or preferred stock, from Ameren Corp.⁸³
20 Although Ameren Missouri has predominantly issued commercial paper to external investors for
21 short-term funds, it has borrowed from affiliates via the utility money pool from time to time. This
22 is a usual financial relationship between the holding company and its subsidiaries. Also, Ameren

⁸² David C. Parcell in *The Cost of Capital – A Practitioner's Guide* prepared for SURFA.

⁸³ Staff's Data Request No. 0328.

1 Missouri's stand-alone capital structure supports its own bond rating.⁸⁴ Both Ameren Missouri
2 and Ameren Corp. are rated BBB+ and Baa1 by S&P and Moody's, respectively.⁸⁵ Therefore,
3 Ameren Missouri meets the first criterion. For the second guideline, Ameren Corp. or Ameren
4 Corp.'s other subsidiaries do not guarantee the securities issued by Ameren Missouri.⁸⁶ For the
5 third guideline, Staff has not found the existence of double leverage, or absence of a proper
6 relationship between risk and leverage of utility and non-utility subsidiaries.⁸⁷ Staff reviewed
7 10-year historical data of Ameren Corp's debt ratio and Ameren Missouri's equity ratio to see if
8 there is any evidence of double-leverage.⁸⁸ Figure 3 shows Ameren Corp's debt ratio and Ameren
9 Missouri's equity ratio in the period between 2011 and 2020:

10 **Figure 3. Ameren Corp's Debt Ratio and Ameren Missouri's Equity Ratio (2011-2020)**



⁸⁴ RatingDirect®, S&P Global Ratings, Union Electric Co. d/b/a/ Ameren Missouri, April 30, 2021.

⁸⁵ Credit Opinion (April 1, 2021), Moody's Investors Service.

⁸⁶ Staff's Data Request No. 0328.

⁸⁷ Staff's Data Request No. 0122.

⁸⁸ Ameren Corp's debt ratio is defined as the ratio of long-term debt plus current maturities long-term debt to total capital. Ameren Missouri's equity ratio is defined as the ratio of total shareholder's equity minus goodwill to total capital. Both data sources are 10-K.

1 As presented in Figure 3, Ameren Corp's debt ratio significantly increased from 42.96% to 56.12%
2 during the 10-year period ended 2020, while Ameren Missouri's equity ratio only fluctuated
3 around 50% and 52% in the same period. If Ameren Corp. borrowed money to invest in the
4 subsidiary (Ameren Missouri), we would see a significant increase in the equity ratio on the books
5 of Ameren Missouri that corresponds to an increase in the debt ratio on the books of Ameren Corp.,
6 a scenario called double-leverage.⁸⁹ Based upon this analysis, Staff is not concerned that Ameren
7 Missouri's current capital structure is the result of double-leveraging. For the fourth guideline,
8 according to Ameren Corp.'s consolidated balance sheet in 2020, Ameren Corp.'s non-utility
9 assets and revenue are less than 1.0% of Ameren Corp.'s total assets and total revenue.⁹⁰ This is
10 not concerning because Ameren Corp's non-utility operations are insignificant.

11 Q. Do you agree with Mr. Murray that Ameren Missouri should have a lower common
12 equity ratio than the 52% because of Ameren Missouri's decision to elect use of the PISA
13 mechanism?⁹¹

14 A. No, I do not. It is true that Ameren Missouri's business risk has declined due to the
15 passage of SB 564, passed by the Missouri Legislature in 2018, and Ameren Missouri's decision
16 to elect PISA. However, this does not justify using the consolidated capital structure of Ameren
17 Corp, the parent company, for ratemaking purposes. The issue of business risk can be considered
18 when determining the reasonable ROE for ratemaking, not capital structure.

19 Q. Do you agree that Ameren Corp's capital structure with about 45% equity ratio is
20 the capital structure that reflects Ameren Missouri's debt capacity?

⁸⁹ Giacchino, L. R., & Lesser, J. A. (2011). Principles of Utility Corporate Finance. Public Utilities Reports.

⁹⁰ Staff's Data Request No. 0329.

⁹¹ Page 34, line 21 to page 35, line 3, Murray's Direct Testimony.

1 A. No, I do not. If Ameren Missouri's equity ratio is changed from 50.32% to 45%,
2 its credit rating would likely be lower than the current BBB+ because of a higher debt ratio.
3 According to S&P Ratings, as of September 16, 2021, Ameren Missouri's credit rating is BBB+
4 with "Excellent" business risk profile ("BRF") and "Significant" financial risk profile ("FRP").⁹²
5 Staff does not think that it is Mr. Murray's intention to impair Ameren Missouri's credit rating but
6 his capital structure recommendation might do just that. It is also important to note that Ameren
7 Missouri's projected capital expenditures require financial investment that can be accomplished
8 by its ability to access both equity and debt. The debt capacity that Mr. Murray claims Ameren
9 Missouri has can be used for that.

10 Q. Do you have any other concerns with Mr. Murray's recommendation?

11 A. Yes, I do. Mr. Murray recommended a cost of debt of 3.95% based on projected
12 debt values as of September 30, 2021.⁹³ Mr. Murray adjusted Ameren Missouri's cost of debt as
13 of June 30, 2021 to reflect additional long-term debt of \$626.7 million he added to Ameren
14 Missouri's capital structure.⁹⁴ Staff is of the position that the appropriate cost of debt for Ameren
15 Missouri is 3.91% that matches Ameren Missouri's capital structure as June 30, 2021 at this time.⁹⁵
16 Staff will review Ameren Missouri true-up embedded cost of debt as of September 30, 2021 when
17 data is available.

18 **IV. SUMMARY AND CONCLUSIONS**

19 Q. Please summarize the conclusions of your rebuttal testimony.

⁹² RatingDirect®, S&P Global Ratings, Union Electric Co. d/b/a/ Ameren Missouri, April 30, 2021.

⁹³ Schedule DM-D-8, Murray's Direct Testimony.

⁹⁴ Ibid.

⁹⁵ Staff Data Request No. 0114.

1 A. Ms. Bulkley's recommended ROE of 9.80% for Ameren Missouri is not just and
2 reasonable considering her inappropriate reliance on unreasonable inputs to her DCF and CAPM
3 analyses. Staff accepts Ms. Bulkley's BYPRP ROE estimates, ranging from 9.28% to 9.71%,
4 because they support Staff's recommended ROE. Staff recommends that the reasonable authorized
5 ROE to use in this proceeding is 9.50%, in a reasonable range of 9.25% to 9.75%. Staff does not
6 have major concerns with OPC witness Murray's recommended authorized ROE of 9.25% because
7 it is within Staff's zone of reasonableness.

8 Staff recommends that the appropriate capital structure to use to set Ameren Missouri's
9 allowed ROR of 6.72% in this proceeding is Ameren Missouri's stand-alone capital structure
10 consisting of 48.93% long-term debt, 0.75% preferred stock and 50.32% common equity with 4.18%
11 cost of prepared stock and 3.91% cost of debt, as of June 30, 2021. Staff will keep monitoring
12 Ameren Missouri's updated capital structure and cost of debt until the true-up period and will
13 make its final recommendation at that time.

14 Q. Does this conclude your rebuttal testimony?

15 A. Yes.

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 Its)
Revenues for Natural Gas Service) Case No. GR-2021-0241

AFFIDAVIT OF SEOUNG JOUN WON, PhD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

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

Further the Affiant sayeth not.

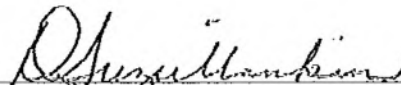


SEOUNG JOUN WON, PhD

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 14th day of October 2021.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070



Notary Public