

Exhibit No.:

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Sponsoring Party: Public Counsel

Case No.: GR-2025-0107

DIRECT TESTIMONY

OF

DAVID MURRAY

Submitted on Behalf of the Office of the Public Counsel

SPIRE MISSOURI, INC.

FILE NO. GR-2025-0107

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Denotes Confidential Information that has been redacted.

April 23, 2025

PUBLIC

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DIRECT TESTIMONY

OF

DAVID MURRAY

SPIRE MISSOURI INC.

FILE NO. GR-2025-0107

Q. Please state your name and business address.

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

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

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

Q. On whose behalf are you testifying?

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

Q. What is the purpose of your testimony?

A. To recommend a fair and reasonable rate of return (“ROR”) for purposes of setting Spire Missouri Inc.’s (“Spire Missouri”) revenue requirement.

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

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

Q. What aspects of ROR will you address?

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

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

3 A. Spire Missouri's allowed ROE should be set at 9.5%, based on my recommended
4 authorized ROE range of 9.00% to 9.50%. My recommended range reflects the following
5 considerations:

- 6 • The local natural gas distribution ("LDC") industry's stock valuation levels
7 are currently similar to the electric utility industry's valuation levels;
- 8 • The electric utility industries' current price-to-earnings ("P/E") ratios are
9 trading similar to 2015 levels, when the Commission deemed 9.5%
10 authorized ROEs as fair and reasonable for Ameren Missouri and Evergy
11 Metro;
- 12 • The LDC industry's cost of common equity ("COE") is in the range of 7.8%
13 to 8.3%;
- 14 • Spire Inc.'s COE is in the range of 8.2% to 8.7%;
- 15 • My COE estimates for the LDC industry are very similar to my COE
16 estimates for the electric utility industry in Ameren Missouri's electric
17 utility rate case, Case No. ER-2024-0319;
- 18 • My COE estimates are lower than average authorized ROEs of 9.72% for
19 the LDC industry during 2024;¹
- 20 • Under the Commission's typical zone of reasonableness ("ZOR") standard,
21 a recommended ROE of 8.72% to 10.72% is generally considered
22 reasonable.

23 My recommended ROE should be applied to a common equity ratio of 41.5%, which is the
24 mid-point of Spire Inc.'s actual consolidated common equity ratios of approximately 40%
25 to 43% for the 5-quarter period September 30, 2023, through September 30, 2024.

¹ Major Energy Rate Case Decisions in the US January-December 2024, S&P Global – RRA Regulatory Focus, February 4, 2025.

1 **Q. Before you discuss the details supporting your analysis, would you summarize the**
2 **rationales for your conclusions?**

3 A. Yes. Although capital structure and the allowed ROE are interrelated as to the ultimate
4 impact on Spire Missouri's revenue requirement, I will first briefly explain my rationale
5 for each component, separately.

6 I recommend the Commission set Spire Missouri's allowed ROE at 9.5% based on a range
7 of 9.0% to 9.5%. During most of 2020 to 2022, utility stocks had not traded consistent
8 with their typical negative correlation to changes in long-term bond yields. Since the end
9 of 2022, utility stock valuation levels resumed their typical negative correlation to interest
10 rates with utilities significantly underperforming the S&P 500 through mid-2024.
11 However, for the period July 1, 2024, through April 2, 2025, LDC stocks, electric utility
12 stocks, and Spire Inc.'s stock, have increased significantly, outperforming the S&P 500 by
13 28.36 percentage points, 25.31 percentage points, and 30.49 percentage points,
14 respectively. These events explain my lower COE estimates in this case and the Ameren
15 Missouri electric and natural gas utility rate case as compared to my COE estimates in early
16 2024 in the Liberty Utilities (Midstates Natural Gas) Corp. ("Liberty Midstates")² and
17 Evergy Missouri West ("EMW") rate cases.³

18 Based on my application of several COE methods, and corroborating information from
19 investors, I estimate the COE for regulated LDCs to be in the range of 7.8% to 8.3%, which
20 is lower than the 8.0% to 8.7% range I estimated in the Liberty Midstates rate case, but
21 higher than the 7.25% to 7.5% I estimated in Spire Missouri's last natural gas distribution
22 rate case.⁴

23 I further recommend that the Commission set Spire Missouri's authorized ratemaking
24 common equity ratio at 41.5% rather than the approximate 55% ratio Spire Inc. targets for
25 Spire Missouri. Spire Inc.'s utilization of holding company debt allows it to minimize the
26 dilution of earnings to individual common equity shares from anticipated increased
27 aggregate earnings due to its investment in its subsidiaries. This strategy can result in

² Case No. GR-2024-0106

³ Case No. ER-2024-0189

⁴ Case No. GR-2021-0241, Direct Testimony of David Murray, p. 5, Ins. 15-16.

1 excessive costs to ratepayers if they are required to pay for a higher-cost capital structure
2 than Spire Inc. deems optimal for itself.

3 Spire Missouri's targeted 55% equity ratio for ratemaking purposes is higher than
4 ratemaking targets for Missouri's electric utilities—Ameren Missouri, EMW, Evergy
5 Metro ("Metro"), and The Empire District Electric Company d/b/a Liberty Utilities
6 ("Empire"). Considering investors' sentiments that the Missouri regulatory and legislative
7 environment is becoming more investor friendly, the business risk for utility investments
8 in Missouri is lower. As it relates specifically to Spire Missouri, it benefits from a weather
9 normalization adjustment rider ("WNAR"), a purchased gas adjustment ("PGA") clause,
10 and Infrastructure System Replacement Surcharge ("ISRS") riders. These rate adjustment
11 mechanisms specifically reduce the business-risk profile for Spire Missouri's natural gas
12 distribution operations. Additionally, while Spire Missouri's rates in this case will not be
13 set based on a future test year, investors are already factoring in expectations for Spire
14 Missouri to take advantage of a future test year as soon as next year. The continued
15 reduction in Spire Missouri's business risk profile allows it to have greater debt capacity
16 (*i.e.* financial risk), but instead of recognizing such in its requested ratemaking common
17 equity ratio, Spire Inc. requests Spire Missouri's ratepayers fund a capital structure that is
18 more costly than even those requested by Missouri's vertically-integrated electric utilities.
19 In fact, despite Spire Missouri's continued request for a high common equity ratio for
20 ratemaking, Spire Inc.'s consolidated capital structure has become more leveraged since
21 Spire Missouri's 2021 and 2022 rate cases. The Commission can rectify this unfair transfer
22 of debt capacity by authorizing Spire Missouri a common equity ratio consistent with Spire
23 Inc.'s on a consolidated basis.

24 **Q. What is your recommended overall ROR?**

25 A. Based on my recommended capital structure of 41.5% common equity, 51.5% long-term
26 debt and 7% short-term debt, and applying the following returns to each component
27 respectively, 9.5%, 4.25% and 4.55%, I recommend an overall after-tax ROR of 6.45%
28 (*see* Schedule DM-D-9). The remainder of my testimony supports and explains why my
29 recommendation is fair and reasonable.

FAIR RETURN ON COMMON EQUITY

Q. What is the most often cited basis for determining a fair and reasonable ROE for purposes of setting utility rates?

A. The following principles of the *Hope*⁵ and *Bluefield*⁶ Supreme Court of the United States cases are often cited as criteria in setting a fair and reasonable ROE for purposes of utility ratemaking:

1. Comparable returns for similar risk;
2. Financial integrity/maintain credit; and
3. Capital attraction.

The *Hope* (1943) and *Bluefield* (1923) principles were established well before the advent of modern cost of equity methods, such as the discounted cash flow (“DCF”) method and the Capital Asset Pricing Model (“CAPM”). Therefore, while setting ROEs based on the COE has generally been considered consistent with the *Hope* and *Bluefield* principles, other factors, such as other jurisdictions’ authorized ROEs have been cited by this Commission as a relevant factor it should consider. The authorized ROE is a regulatory ratemaking concept that quantifies the amount of net income allowed in the revenue requirement. The COE is a market-based concept that quantifies investors’ required returns on their common equity investment. I differentiate between allowed ROEs and the COE in my analysis and recommendation because ROEs have generally been set in the 9% range, despite an overwhelming amount of evidence that demonstrates that investors’ required returns (*i.e.* COE) on utility equity investments have typically been much lower.

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

A. I reconciled the principles established in *Hope* and *Bluefield* with modern financial models used to estimate the COE.

⁵ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1943).

⁶ *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923).

1 Considering these principles, I first estimate Spire Missouri's current COE and then
2 compare my current COE estimates to those I estimated in recent rate cases to determine if
3 there has been a fundamental change in the cost of capital. My analysis also includes
4 consideration of other recently authorized ROEs with specific consideration given to Spire
5 Missouri's 9.37% authorized ROE in its 2021 rate case.

6 **Q. Based on your analysis, what is your estimate of Spire Missouri's current COE?**

7 A. Spire Missouri's current COE is in the range of 7.8% to 8.3%.

8 **Q. How does this compare to your COE estimates in Spire Missouri's 2021 and 2022 rate**
9 **cases?**

10 A. It is above my COE estimates of 7.25% to 7.50% in the 2022 rate case and 6.5% to 7.5%
11 in the 2021 rate case.

12 **Q. Based on your analysis and awareness of capital market conditions, investor**
13 **expectations and recent average allowed ROEs for natural gas distribution utilities,**
14 **what do you consider to be a fair and reasonable allowed ROE for Spire Missouri?**

15 A. I consider 9.00% to 9.50% to be a reasonable range with my point recommendation at
16 9.50%. My recommended allowed ROE is within the range of the Commission's typically
17 defined ZOR range of 100 basis points above and below recent average authorized ROEs,
18 which were approximately 9.72% (*i.e.* 8.72% to 10.72%) for natural gas distribution utility
19 rate cases decided in 2024.⁷ After considering my COE estimates, the Commission's
20 authorized ROE of approximately 9.5% for Missouri's electric utilities for rate cases
21 decided in 2015, and the Commission's authorized ROE of 9.37% for Spire Missouri in
22 Case No. GR-2021-0108, I recommend the Commission authorize Spire Missouri a 9.5%
23 ROE for purposes of setting its authorized ROR.

⁷ RRA Major Rate Case Decisions Quarterly Updates, January 16, 2025.

1 **Q. How did you determine the best methods and approaches to use to estimate the COE**
2 **for Spire Missouri?**

3 A. For purposes of this case, I reviewed Spire Inc’s Board of Directors (“BOD”) strategic
4 financing and investment considerations, as well as some equity investment research
5 reports covering Spire Inc. Additionally, I generally considered the information I had
6 reviewed in past Spire Missouri rate cases. This information provided me insight as to the
7 types of methods/models typically used by investors to determine fair prices to pay for
8 utility stocks. Consequently, I decided the best approach to estimate the COE for Spire
9 Missouri was to perform a COE analysis on a proxy group of local natural gas distribution
10 utility companies (“LDCs”), which includes Spire Inc.

11 **Q. What models did you use to estimate Spire Missouri’s COE?**

12 A. I used a multi-stage DCF method, with specific emphasis on consensus analysts’ estimated
13 dividends and the modeled growth of dividends. A DCF method that focuses on dividends
14 as the proxy for cash flow is more precisely defined as the dividend discount model
15 (“DDM”). I also applied the CAPM to both Spire Inc. and the proxy group. Finally, I
16 performed simple and logical reasonableness checks of my COE estimates. These
17 reasonableness checks recognize the basic characteristics of utility stocks, mainly that the
18 investment community perceives them as yield/income investments, which implies the
19 COE should not be much higher than their own bond yields. One such reasonableness
20 check is a straight-forward bond-yield-plus-risk-premium (“BYPRP”) method included in
21 the Chartered Financial Analyst (“CFA”) Program curriculum.⁸

22 **Q. Before explaining your approach for estimating the COE, can you describe current**
23 **capital market conditions as it relates to the utility industry, in general, the LDC**
24 **industry, and Spire Inc., specifically?**

25 A. Yes. This information provides some context as to the current state of utility capital
26 markets. It is important to understand the context of authorized ROEs versus the COE over
27 a longer period than just a few years due to the rapid and steep increase in interest rates

⁸ 2021 CFA Program – Level II Refresher Reading, Equity Valuation, p. 35.

1 from 2022 to 2023, which caused utility debt costs to increase dramatically since 2020 to
2 2021. It is for this reason that I will analyze and compare utility stock valuations and
3 interest rates for most of the period since the financial crises and recession around
4 2008/2009.

5 **Q. What ROE did you recommend the Commission authorize Spire Missouri in its 2022**
6 **rate case?**

7 A. 9.25%.⁹

8 **Q. What was your recommended authorized ROE for the most recent natural gas**
9 **distribution utility rate case filed in Missouri?**

10 A. I recommended the Commission authorize Ameren Missouri a 9.5% authorized ROE based
11 on a range of 9.00% to 9.50%.¹⁰

12 **Q. Can you describe and illustrate recent and long-term changes in long-term bond**
13 **yields?**

14 A. Yes, long-term bond yields increased dramatically from 2022 to 2023 after declining to
15 historically low levels during the Covid-19 pandemic (2020 – 2021). In fact, during the
16 Fall of 2023, investment grade utility bond yields and long-term United States Treasury
17 (“UST”) bond yields had increased to their highest levels since 2010.

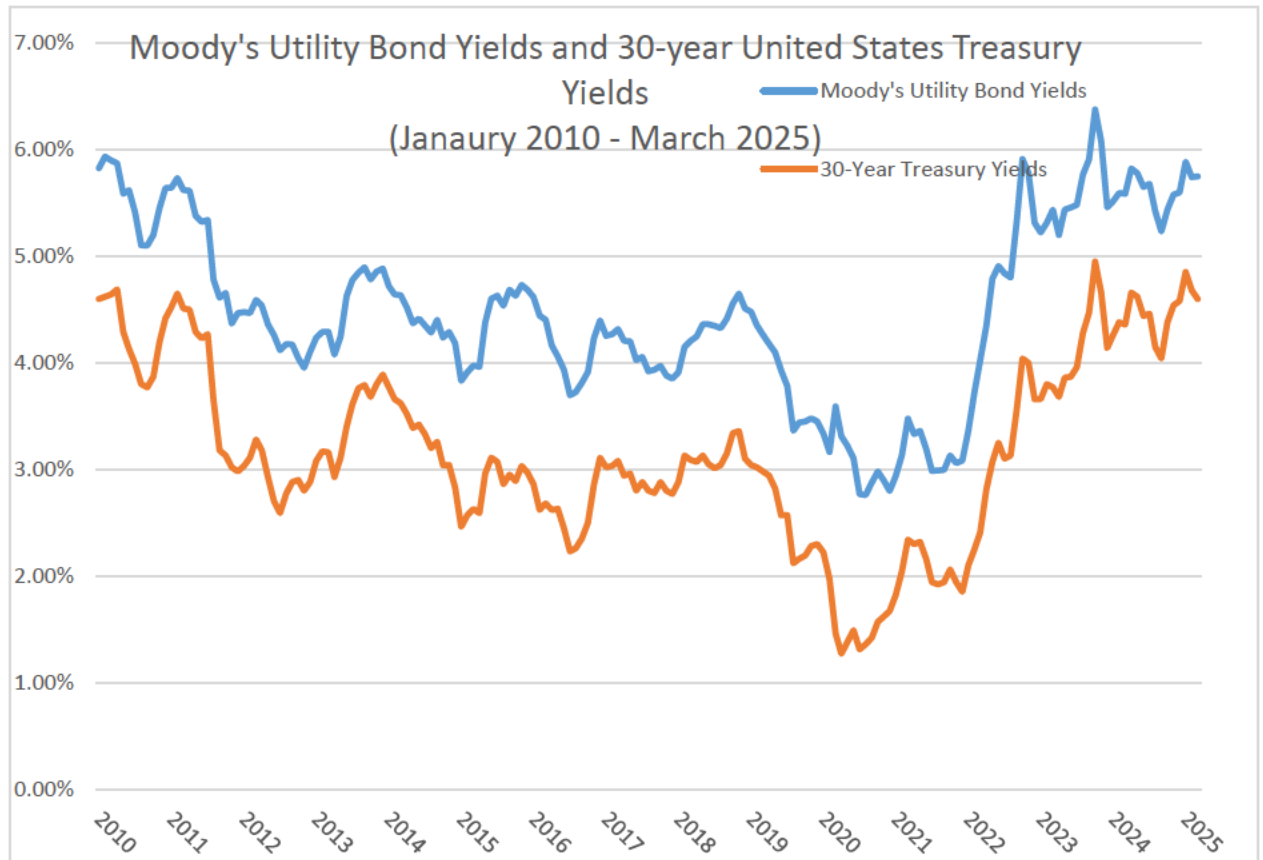
18 Some considered the early stages of lower long-term interest rates in the first half of the
19 past decade to be anomalous because of the Federal Reserve Bank’s (“Fed”) quantitative
20 easing (“QE”) programs¹¹ through October 2014. For the last half of the past decade, long-
21 term interest rates continued an overall declining trend, until they reached all-time lows in
22 2020 and 2021. However, as I previously described, long-term rates have since increased
23 significantly, peaking in October 2023.

24 The below graph shows long-term bond yields since January 1, 2010.

⁹ Case No. GR-2022-0179, Murray Direct Testimony, p. 4, lns. 22-27.

¹⁰ Case No. GR-2024-0369, Murray Direct Testimony, p. 2.

¹¹ QE involved three rounds of the Fed’s direct intervention in bond markets beyond just lowering the Fed Funds rate. The Fed’s QE programs had the express intent of reducing long-term interest rates.



As the graph shows, average utility long-term bond yields had dropped to modern all-time lows in the latter half of 2020 - levels not experienced since the late 1940s and early 1950s. Between early 2022 and October 2023, the average yield on the Moody's Public Utility Bond index had approximately doubled, before declining to around 5.25% to 5.5% in the Fall of 2024. As of early 2025, UST and utility bond yields had increased to slightly below the higher levels experienced in the Fall of 2023.

Although more simplistic COE methods may imply that the COE for utilities whipsawed along with bond yields, utility valuation levels over this period did not support this notion. As I will explain in more detail later in my testimony, the post Covid-19 economic and capital market conditions have been atypical, which is likely a consequence of both the Fed's and U.S. Congress's massive interventions through monetary and fiscal policies during the Covid-19 pandemic.

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

3 A. The investment community typically regards utility stocks as bond proxies/pseudo bonds,
4 meaning that if long-term bond yields are expected to decline, then this typically causes
5 regulated utility stock prices to increase. Although investors' total returns in utility stock
6 investments do include some capital gains, because of the slow, steady growth in earnings,
7 utility companies have typically distributed approximately 2/3 of their earnings as
8 dividends to shareholders, causing utility stocks to be characterized as yield investments.
9 Therefore, changes in utility stock valuation levels have historically had a strong inverse
10 correlation to changes in bond yields, *i.e.* as bond yields decline, utility stock prices
11 increase.

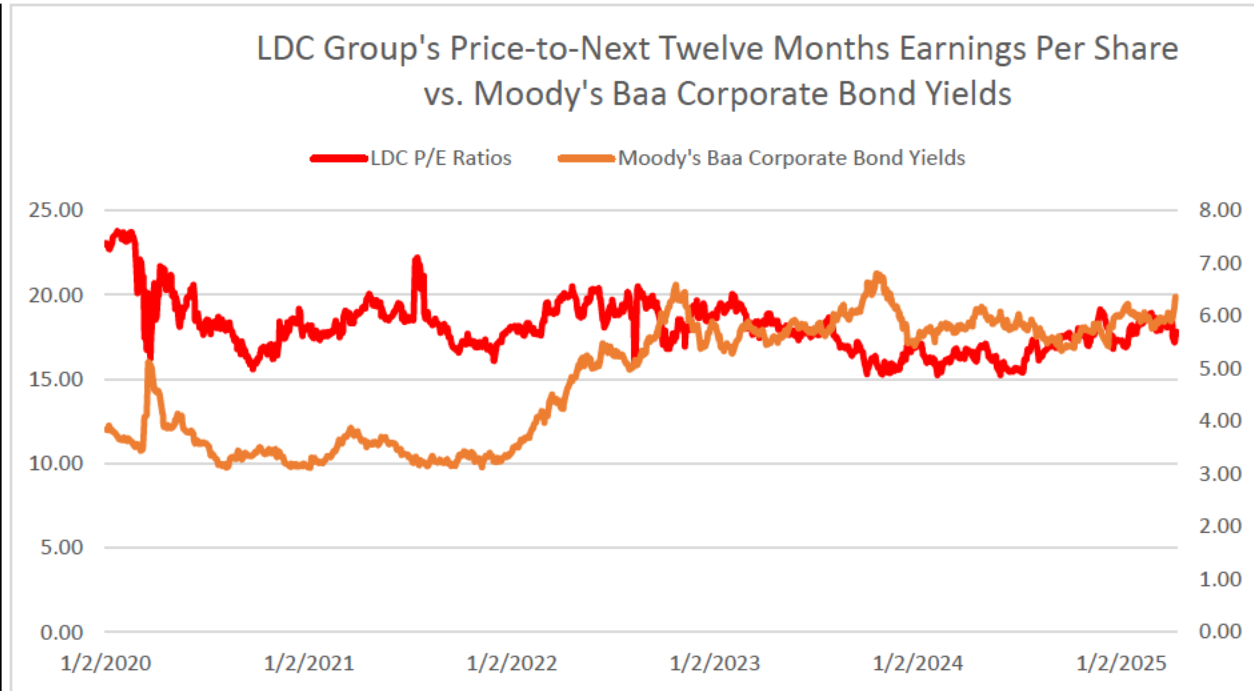
12 **Q. From April 2020 through August 2022, did utility stock valuations and bond yields**
13 **provide traditional and consistent signals about utilities' cost of capital?**

14 A. No. Following drastic and significant intervention by the Fed in monetary policy and the
15 UST in fiscal policy, in reaction to Covid-19 and its associated mitigation measures, the
16 yield-to-maturity ("YTM") on utility and corporate bonds traded at 70-to-80-year lows.
17 However, at the same time, broader utility stocks (mainly LDCs and electric utility stocks)
18 underperformed the S&P 500. The same atypical trading pattern occurred as long-term
19 bond yields began a dramatic increase in 2022. Utility stocks significantly outperformed
20 the S&P 500 on a relative basis, despite long-term yields increasing through much of 2022.
21 The increase in yields caused the S&P 500 to contract significantly, while causing only a
22 slight decline in utility stock prices, which resulted in their P/E ratios being similar to those
23 before the rapid increase in long-term interest rates.

24 Consequently, while the utility industry's debt costs fluctuated along with the macro
25 changes in interest rates, the same was not true for the utility industry's cost of equity.

26 **Q. What about since August 2022?**

27 A. Starting around mid-September 2022, LDC's P/E ratios resumed their more typical inverse
28 correlation with long-term yields, as illustrated in the following chart:



During the all-time low bond yield environment, the utility industry was able to take advantage of these extremely low debt capital costs. For example, on May 20, 2021, Spire Missouri issued 30-year, \$305 million bonds at an annual coupon rate of only 3.3%. However, during this period, utility equity valuation levels did not increase in response to the decline in bond yields, which implied investors did not expect extremely low interest rates to be sustained. Similarly, as bond yields increased significantly in 2022, utility equity valuation levels did not contract as typically expected – perhaps because investors understood that the extremely low cost of debt during 2020 to 2021 was not likely sustainable. To illustrate the significant increase in utility bond yields, the yield-to-maturity (“YTM”) on Spire Missouri’s 30-year, \$305 million bonds have been trading in the range of 5% to 6% since the fall of 2022.

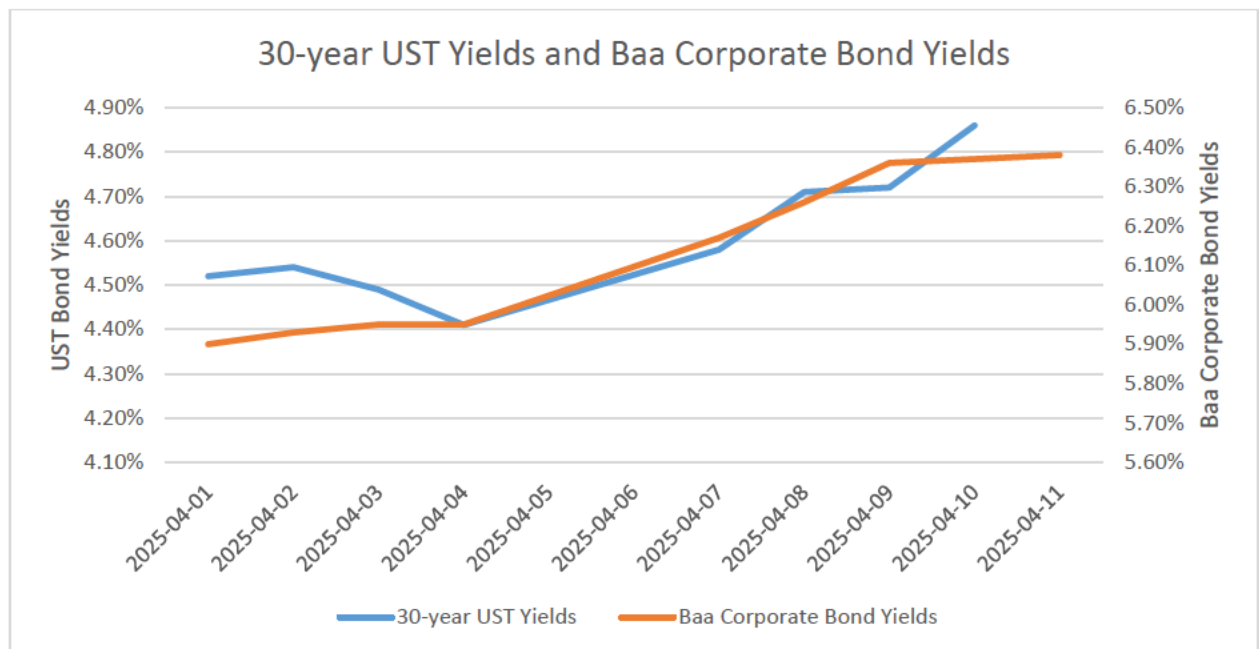
Q. How have the United States’ recent trade policies involving tariffs impacted utility securities’ prices?

A. The first day after United States announced the imposition of “reciprocal” tariffs on international trading partners, utility stock prices and bond prices increased. However, beginning Friday, April 4, through the following week, utility stock and bond prices

declined in reaction to the somewhat unexpected decline in the prices of UST bonds, which caused long-term UST yields to increase by approximately 50 basis points within a few days. Utility bond yields are typically highly correlated to UST yields. Consequently, the increase in utility bond yields is due specifically to uncertainty about the impact of tariffs on the United States' economy. The increase in bond yields also caused a decline in the LDC group's P/E ratios from the 18 to 18.5x P/E ratio range to around 17 to 17.5x.

Q. Considering the recency of the impacts of proposed tariffs and the uncertainty related to the consistency of the trade policies, should these issues impact the determination of a fair and reasonable ROR in this case?

A. No. At this point, Spire Missouri had not realized higher costs of capital due to the uncertainty caused by the imposition of tariffs. If Spire Missouri had issued debt subsequent to the trade policy impacts on UST yields, then its realized cost of debt would have been higher than before the decline in bond prices subsequent to the announcement of the "reciprocal" tariffs. The change in the UST yields and corporate bond yields for the period April 1 through April 11, 2025 are shown in the following chart:

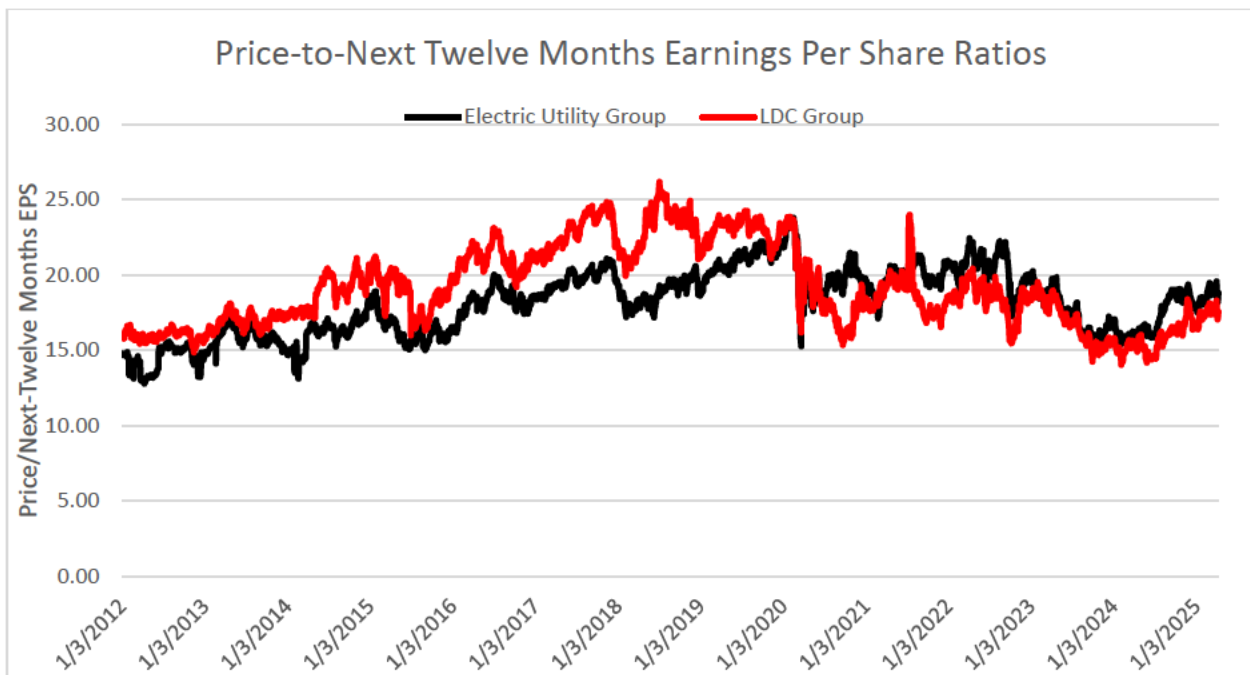


As illustrated, 30-year UST yields and Baa corporate bond yields increased by approximately 45 basis points within the week of the Trump administration's announcement

of “reciprocal” tariffs. As I mentioned above, this caused a corresponding decrease in the LDC proxy group’s P/E ratios.

Q. Would you graphically illustrate your LDC proxy group’s P/E ratios to the electric utility industry proxy group¹² you evaluated in the recent Ameren Missouri electric utility rate case, Case No. ER-2024-0319?

A. Yes. See the below graph for P/E ratios since 2012:



As illustrated in the above graph, LDCs and the electric utility industry traded in line from the spring of 2023 until mid-2024. This parity occurred after the electric utility industry had generally been trading at a premium to the LDC industry for most of 2020 to 2022. Then, in the Fall of 2024, electric utility stocks again traded at a premium to LDCs. This fact can largely be explained by investors’ optimism for higher load growth for electric utilities because of the projected build-out of data centers for data storage needs related to

¹² Unless otherwise specified, the proxy group I use to represent the electric utility industry are the following companies: Alliant Energy Corporation, American Electric Power Company, CMS Energy Corporation, DTE Energy Company, IDACORP, OGE Energy Corp, Pinnacle West Capital Corporation, Portland General Electric Company, The Southern Company, WEC Energy Group, and Xcel Energy Inc. These companies met screening criteria I used in Ameren Missouri’s 2012 or 2014 rate cases, Case Nos. ER-2012-0166 and ER-2014-0258, respectively.

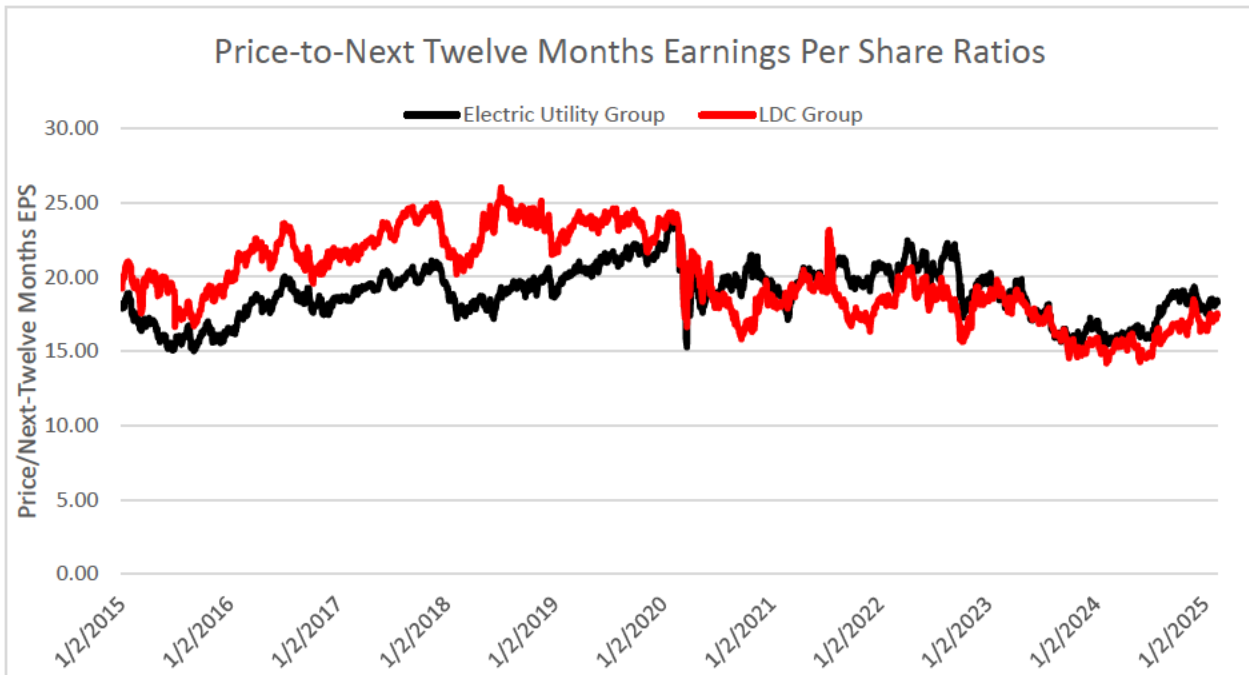
1 artificial intelligence and cloud computing. Therefore, I would not attribute the electric
2 utility industry's higher P/E's multiples to investors' perception that electric utility
3 companies' business risk profiles decreased relative to LDCs. Both subsectors traded in-
4 line prior to optimism about load growth from data centers and after the revelation that
5 DeepSeek had achieved an artificial intelligence platform that uses much less energy than
6 other artificial intelligence platforms. Therefore, I do not believe this data signals that
7 electric utilities' COE is trending lower than that of LDCs.

8 **Q. Why is it important to be aware of the historical context of the utility industry's P/E**
9 **ratios?**

10 A. Because the Commission deemed a 9.7% to 9.8% authorized ROE as fair and reasonable
11 for Missouri's large electric utilities around 2012, whereas the Commission deemed an
12 approximate 9.5% authorized ROE as fair and reasonable for Missouri's large electric
13 utilities around 2015. As illustrated in the chart, electric and natural gas distribution utility
14 industries' P/E ratios are currently trading more consistent with 2015 levels than 2012
15 levels. This fact supports the reasonableness of a 9.5% authorized ROE in the current
16 capital market environment.

17 **Q. Would you similarly illustrate a comparison of the LDC industry's P/E ratios to those**
18 **of the electric utility industry's since 2015, when the Commission first deemed a 9.5%**
19 **ROE fair and reasonable for Missouri's electric utility companies?**

20 A. Yes. I should also note that the LDC's P/E ratio data is more robust with this shorter time
21 frame because the data now includes ONE Gas Inc., a pure-play LDC, which did not
22 become a stand-alone, publicly-traded company until February 2014. The chart follows:



As is evident from the above chart, during 2015, the electric utility industry generally traded at a P/E ratio in the 15x to 17x range with a brief period at the beginning of 2015 at close to 19x. LDC P/E ratios were a few turns higher than electric utility P/E ratios for the same period. Prior to the market disruptions coinciding with the onset of the Covid-19 pandemic, the P/E ratios of both the LDC and the electric utility industries hit near-record highs of approximately 24x. Around this period,¹³ I estimated the electric utility industry's COE to be as low as approximately 6%, which is logically consistent with near-record high valuation ratios of that time.¹⁴

Subsequent to the acute capital market instability at the onset of Covid-19, which was quickly addressed by the Fed and the UST, the P/E ratios of the LDC and the electric utility industries stabilized during the remainder of 2020. Although long-term interest rates (as measured by long-term corporate bond yields and UST bonds) plummeted from the spring of 2020 through the end of 2021, the P/E ratios of both the LDC and the electric utility industries did not expand as is typical when long-term bond yields decline.

¹³ Which coincided with Ameren Missouri's 2019 rate case, Case No. ER-2019-0355.

¹⁴ Case Nos. ER-2019-0374 and ER-2019-0335, Murray Direct Testimony.

1 **Q. What are utility equity investors' reactions to the recent interest rate environment?**

2 A. Until 2022, most utility equity analysts had projected that low interest rates justified a
3 continued reduction of authorized ROEs. However, given the fact that long-term bond
4 yields have remained higher since late 2022, investors now expect regulators to at least
5 hold the line on awarded ROEs.

6 **Q. Why would investors expect utility commissions to hold the line on authorized ROEs
7 if the cost of capital has increased?**

8 A. Because investors recognize that utility commissions did not reduce authorized ROEs as
9 much as was justified when the cost of capital was declining. Barclays indicated the
10 following about authorized returns while the cost of capital was declining from 2010 to the
11 early 2020s:

12 **High Returns Unlikely as ROEs Sticky While Rates Were at Decade Lows**

13
14 Simplistically, from 2010 to early 2020s long term risk free yields
15 have only declined, while utility ROEs remained steady at an
16 average 9.8% authorized rate on the electric side. Utilities were
17 arguably over-earning during this timeframe in our view. We
18 believe over a long term (10yr+) time horizon there should be a case
19 for higher ROEs if risk free yields remain elevated or move higher,
20 but we see it unlikely that regulated ROEs return to 12%+ levels
21 anytime soon. This likely leads to an extended CoC [cost of capital]
22 crunch for the utility industry, which will pressure management
23 teams' abilities to raise capex budgets materially in the five-year
24 window. Please see our additional work below highlighting the CoC
25 crunch.¹⁵

26 **Q. What COE have equity analysts recently been using to estimate a fair price to pay for
27 LDC stocks?**

28 A. In a February 5, 2025, report on Atmos Energy Corp ("Atmos") and Spire Inc., Wells Fargo
29 applied an 8% COE to its estimated dividends for Atmos and an 8.25% to 8.5% COE to its
30 estimated dividends for Spire Inc.¹⁶ In a February 21, 2025, report on ONE Gas, Inc.

¹⁵ Nicholas Campanella, et. al., "U.S. Power & Utilities: Initiating Coverage: Down but Not Out," Barclays, August 22, 2023, p. 23.

¹⁶ Sarah Akers, et. al., "Fiscal Q1 LDC Earnings: ATO & SR," Wells Fargo, February 5, 2025.

1 (“ONE Gas”), Wells Fargo applied an 8% COE to its estimated dividends.¹⁷ In a February
2 28, 2025, report on Northwest Natural Holding Co. (“Northwest”), Well Fargo applied an
3 8.25% COE to its estimated dividends.

4 **Q. Why would Wells Fargo apply a higher COE to Spire Inc. and Northwest than to**
5 **Atmos and ONE Gas?**

6 A. Because Atmos and ONE Gas are pure-play regulated natural gas utilities with more
7 conservative capital structures. Atmos’ typically maintains a common equity ratio of near
8 60% and ONE Gas’ common equity ratio has typically been in the 47% ot 48% range since
9 the first quarter of 2023. Spire Inc.’s common equity ratio has consistently been in the
10 36% to 40% range since the first quarter of 2023 and Northwest’s common equity ratio has
11 been in the 42% to 45% range for the same period.

12 **Q. How does Wells Fargo’s COE estimates for LDCs compare to the COE estimates it**
13 **used to estimate a fair price for Ameren Corp and Evergy Inc.?**

14 A. Wells Fargo applies an 8.0% COE to Ameren Corp’s and Evergy Inc.’s estimated dividends
15 in its muti-stage DDM analysis.¹⁸

16 **Q. Can utilities still create value for their shareholders at a narrower spread between**
17 **the COE and allowed ROEs?**

18 A. Yes. Even at a narrower spread, as long as a company has the opportunity to earn more
19 than its cost of capital, it will create value above the initial book value investment (*i.e.*
20 investment in rate base for utility companies). The ratemaking principle of setting an
21 authorized ROE at or near parity with the COE is that utility companies will only invest in
22 projects that are expected to be economically efficient based on the merits of the projects
23 rather than simply being authorized a return higher than the cost of capital. Morningstar’s
24 DCF analysis recognizes this principle should at least hold over the long-term.

¹⁷ *Id.*, “Earnings Roundup: CNP, ED, IDA, & OGS,” Wells Fargo, February 21, 2025.

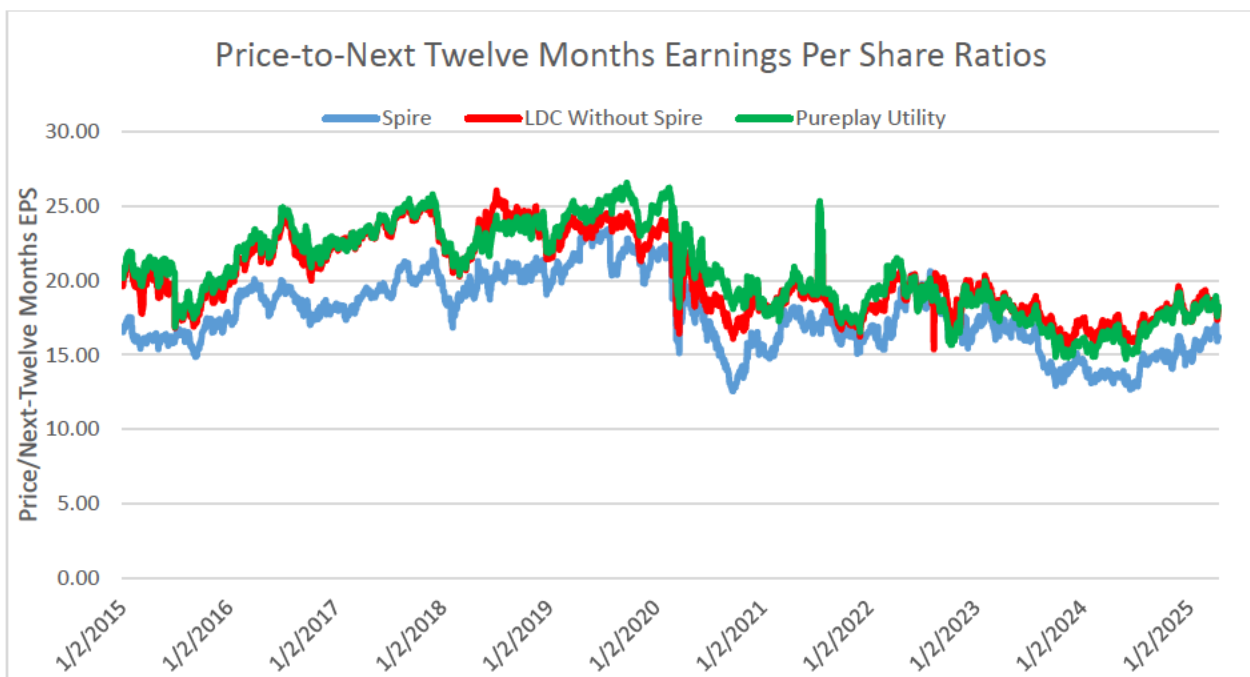
¹⁸ Neil Kalton, et. al., “Show Me the Generation! Big Numbers in MO,” Wells Fargo, February 13, 2025; and Sarah Akers, et. al., “Demand Picture Comes into Focus—Reiterate Overweight,” Wells Fargo, February 27, 2025.

Specifically, as it relates to estimating growth in cash flows in the perpetuity stage, Morningstar states the following:

Once a company's marginal ROIC [Return on Invested Capital] hits its cost of capital, we calculate a continuing value, using a standard perpetuity formula. At perpetuity, we assume that any growth or decline or investment in the business neither creates nor destroys value and that any new investment provides a return in line with estimated WACC.¹⁹

Q. How have Spire Inc.'s P/E ratios compared to the LDC industry?

A. See the below chart:



Other than brief periods in 2019 and 2022, Spire Inc. has traded at varying discounts relative to the rest of the LDC industry for most of the last ten years. Bank of America indicated the following about Spire Inc.'s underperformance compared to its peers in a July 21, 2020, report:

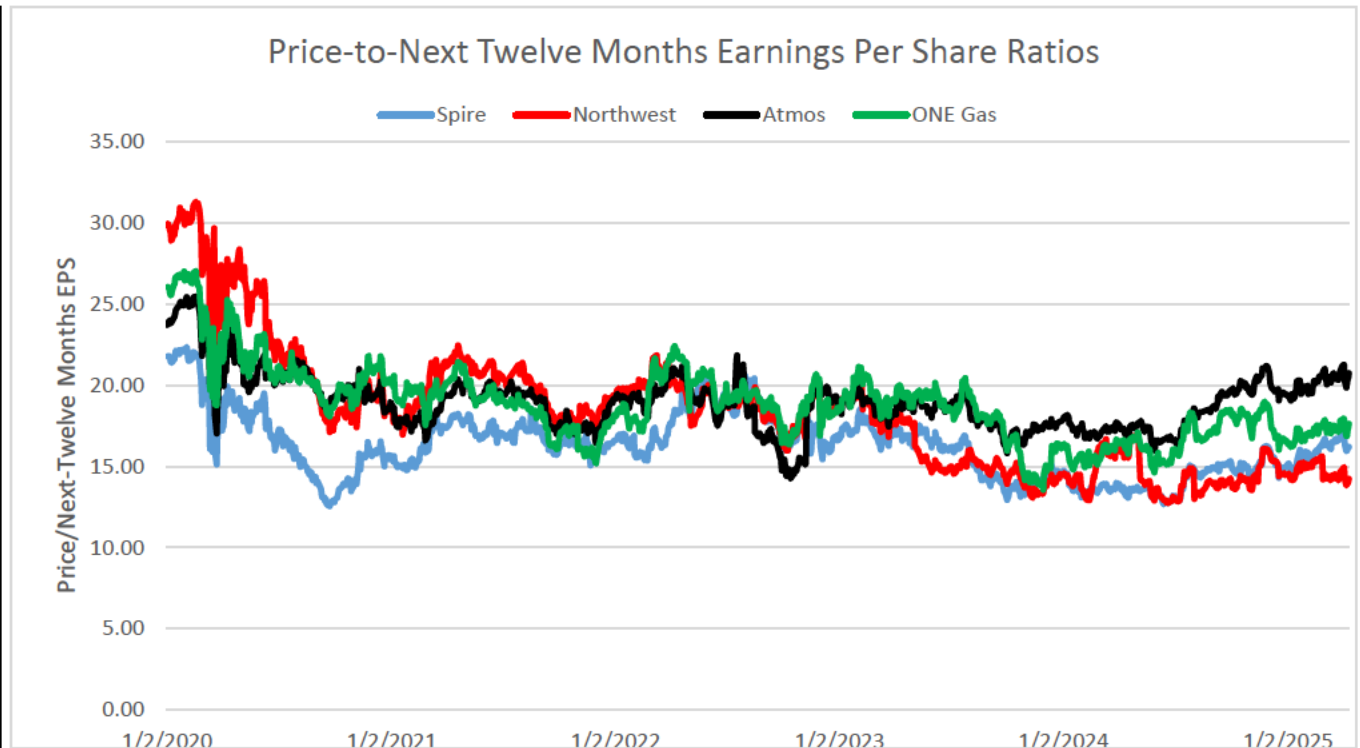
SR has traded at a discount to peers due to ongoing overhangs related to: 1) uncertainty in recovering Infrastructure System Replacement Surcharge (ISRS) revenues in MO; 2) lack of confidence in mgmt.'s storage strategy;

¹⁹ *Id.*

1 and, 3) unclear messaging from mgmt. on its long term growth target (i.e.
2 the base year for the 4-7% growth range). Given mgmt. was able to settle
3 the 2016-2018 ISRS appeal, legislation was signed by the governor to
4 clarify future ISRS recovery, and the company recently took a \$130-150mn
5 impairment charge on its storage assets, the story is becoming much
6 cleaner.²⁰

7 There are a variety of factors which explain Spire Inc.'s lower P/E ratios since then end of
8 2022, at least when compared to the comparable companies that are more consistent with
9 pure-play LDCs, which excludes New Jersey Resources and Southwest Gas. Spire Inc. has
10 always been more aggressive in its use of debt in its consolidated capital structure than
11 other LDCs. Atmos and ONE Gas have typically been much more conservative in the
12 proportion of debt in their capital structures, with the exception of the period in which they
13 issued significant amounts of debt to fund higher natural gas costs related to Storm Uri.
14 Northwest's S&P corporate credit rating was recently downgraded due to "weaker financial
15 measures." Northwest has become more active in merger and acquisition activity, which
16 also creates uncertainty related to the execution and financing of transactions. In the
17 following chart, I disaggregated Atmos, ONE Gas, Northwest Natural and Spire for the
18 period since January 1, 2020:

²⁰ Richard Ciciarelli, CFA, et. al., "2Q20 Gas LDC preview: Glimpse into the future of the gas utility outlook," Bank of America, July 21, 2020, p. 26.



As illustrated, in late 2022 to early 2023, Spire and Northwest began to trade at a similar discount to Atmos and ONE Gas. However, Spire's P/E ratio began to trade higher than Northwest in the spring of 2025, which can be attributed to investors' optimism about Spire Inc.'s outlook given the recent passage of legislation explicitly authorizing future test years for natural gas and water utilities in Missouri.

COST OF EQUITY METHODS

Q. Having provided context on recent changes in the utility capital market generally and with regard to Spire Inc. specifically, would you explain how you approached estimating the COE for Spire Missouri?

A. Yes. I performed a multi-stage DCF analysis and a CAPM analysis on a proxy group of publicly-traded LDCs, which includes Spire Inc. Then, I tested the reasonableness of my estimates by using simple reasonableness checks, such as the BYPRP method discussed in the CFA Program curriculum.²¹

²¹ 2021 CFA Program Refresher Reading, Level II, Reading 25, p. 35.

1 **Q. Is your presentation of your COE estimates in this case slightly different from your**
2 **presentation in Spire Missouri's 2021 and 2022 rate cases?**

3 A. Yes. In Spire Missouri's 2021 and 2022 rate cases, I disaggregated my company-specific
4 COE analysis of Spire Inc. from my LDC proxy group COE analysis. For purposes of this
5 case, I am still performing a COE analysis on Spire Inc., but I am only showing it in context
6 of my proxy group COE analysis.

7 **Q. Is it important and helpful to consider a company-specific analysis of Spire Inc.'s**
8 **COE?**

9 A. Yes. Spire Missouri accounts for slightly over half of Spire Inc.'s assets with a majority
10 of the remaining assets also being natural gas distribution operations in Alabama and
11 Mississippi. While Spire Inc.'s non-regulated operations have recently accounted for
12 approximately 15% of its earnings, these higher-risk operations would cause Spire Inc.'s
13 COE to be slightly higher than if Spire Inc. were a pure-play LDC. Between its higher-
14 risk non-regulated operations and a more leveraged capital structure than Spire Missouri,
15 Spire Inc.'s COE would be a conservative (*i.e.* higher) estimate of Spire Missouri's COE.

16 **Q. How did you inform yourself as to reasonable and rational inputs for your COE**
17 **approaches?**

18 A. The objective of a rate of return witness is to emulate investors' approaches to analyzing
19 and making investment decisions as it relates to investing in utility stocks. Therefore, I
20 have made it a priority to review, analyze, and understand how equity research analysts
21 estimate fair prices for utility stocks. My analysis has allowed me to test the theory of cost-
22 of-capital estimation in utility ROR testimony, as it compares to practice. I have
23 discovered investment analysts use multi-stage DCF approaches to estimate fundamental
24 values of utility stocks, and/or they use relative valuation techniques that compare a
25 company's P/E ratios to averages for the industry and/or a more tailored subset of peer
26 companies.

27 In my experience, professional equity ("Wall Street") analysts project long-term compound
28 annual growth rates ("CAGR") in earnings per share ("EPS") to determine whether a

1 company's P/E ratio deserves a premium or a discount to its peers. Wall Street analysts
2 DO NOT use these estimated long-term CAGRs in EPS for purposes of projecting a
3 perpetual dividend growth rate, as some ROR witnesses suggest. When performing an
4 absolute valuation analysis, such as a DCF/DDM, Wall Street analysts assume rational
5 perpetual growth rates in the 2.5% to 3.3% range for electric utility companies and LDCs.
6 Finally, as I discussed earlier in my testimony, these analysts estimate LDC's COE to be
7 in the 8.00% to 8.50% range.

8 **Q. Is it important to analyze the information these equity research firms rely on to**
9 **determine a fair and reasonable ROE for Spire Missouri?**

10 A. Yes.

11 **Q. Why?**

12 A. Analyzing this information is important because these Wall Street analysts are the very
13 individuals who underlie various consensus estimates widely considered by investors.
14 ROR witnesses recognize the influence Wall Street analysts have on utility stock prices by
15 the very fact that they use their consensus financial metric forecasts for purposes of
16 estimating the COE.

17 **Q. What equity research firms cover Spire Inc.'s stock?**

18 A. According to Spire Inc.'s website, the following firms cover its stock: Bank of America
19 Securities, Edward Jones, Guggenheim Securities, Janney, JP Morgan, Ladenburg
20 Thalman & Co., Mizuho Securities USA, Morgan Stanley, Stifel Nicolaus & Co., UBS and
21 Wells Fargo Securities.

22 **Q. Did you review all of the firms' research that cover Spire Inc. for purposes of**
23 **performing your cost of equity analysis and preparing your testimony?**

24 A. No. At the time I drafted this testimony, I had not been able to perform a comprehensive
25 review of all of the equity research published on Spire Inc since May 1, 2022. While I
26 receive some equity research directly from some brokerage firms, I do not receive all equity
27 research. Consequently, I routinely rely on discovery from Missouri's utility companies

1 for a more comprehensive review of equity research published on Missouri utility
2 company's publicly-traded parent companies. While I issued a data request to Spire
3 Missouri for equity research on Spire Inc., I have yet to receive the requested documents.

4 **Q. What firms equity research have you reviewed specifically for purposes of this case?**

5 A. I reviewed utility equity research from the following firms: Bank of America Securities,
6 Guggenheim Securities, JP Morgan, Mizuho Securities USA, UBS and Wells Fargo
7 Securities.

8 **PROXY GROUP COST OF EQUITY**

9 **Q. How did you approach selecting a custom proxy group for purposes of estimating**
10 **Spire Missouri's COE?**

11 A. The number of publicly-traded companies generally classified as LDCs is fairly small, with
12 Value Line giving only nine companies that classification. Additionally, based on my
13 review of equity research reports covering the LDC industry, equity analysts typically only
14 include eight to nine companies in their LDC peer groups. I decided to use the same proxy
15 group I used in Ameren Missouri's current natural gas utility rate case.²² My LDC
16 proxy group consists of the following seven companies: Atmos Energy Corporation
17 ("Atmos"), New Jersey Resources Corporation ("New Jersey Resources"), NiSource Inc.
18 ("NiSource"), Northwest Natural Holding Company ("Northwest"), ONE Gas Inc. ("ONE
19 Gas"), Southwest Gas Holdings Inc. ("Southwest") and Spire Inc.

20 **Q. Are any of these companies less comparable than others?**

21 A. Yes. While New Jersey Resources' primary business segment is its natural gas distribution
22 operations directly owned by its subsidiary, New Jersey Natural Gas Corporation, it also
23 has significant exposure to non-regulated business risks through its Clean Energy Ventures
24 and Energy Services business segments. Also, although Southwest's primary business
25 segment is its natural gas distribution operations directly owned by its subsidiary,

²² Case No. GR-2024-0369.

Southwest Gas Corporation, it has significant exposure to non-regulated utility construction services through its subsidiary, Centuri Group Inc.

Atmos, ONE Gas, NiSource and and Northwest are generally considered pure-play regulated utility companies. However, Atmos and ONE Gas are the only two that are truly pure-play regulated natural gas companies.

Q. Is it appropriate to include Spire Missouri's parent company, Spire Inc., in your LDC proxy group?

A. Yes. Although I am not creating separate schedules for Spire Inc. in this rate case, I still provide company-specific COE analyses for Spire Inc.

Q. Why do some analysts argue against including the parent company of the subject utility in estimating the COE?

A. Some ROR witnesses claim that including the parent company causes circular outcomes because the parent company's stock price may be impacted by the subject company's regulatory environment. For example, some may argue that investors' expectations of a commission's authorized ROR may impact investors' projected long-term growth rates in the parent company's earnings per share ("EPS"). However, it is investors' expectations about the parent company's investment growth and demand growth which primarily drive expected growth in EPS. Spire Inc. itself recognized such when it stated the following during a Strategy Committee meeting:

** _____

_____ **²³

Additionally, considering the fact that investors factor in the risk premium they require for the subject utility's regulatory risk profile when purchasing the parent company's stock, it is actually ideal to perform a company-specific COE analysis rather than making subjective adjustments to a proxy group's COE based on the ROR analysts' subjective assessment of perceived risk differences between the proxy group and the subject company.

²³ Spire Inc. Strategy Committee Meeting, April 24, 2024, p. 72.

1 **Q. Are there any other benefits in analyzing the COE of the parent company?**

2 A. Yes. Investors not only factor in a required risk premium for the regulatory risks of the
3 subject utility, but they also factor in a required risk premium for the financial risk caused
4 by a parent company's use of debt to finance its investments. As I will explain, Spire Inc.
5 utilizes more debt in its capital structure than most of the other proxy companies. Because
6 Spire Missouri's subsidiary capital structure contains much less debt than Spire Inc. and
7 unlike Spire Inc., it does not own riskier non-regulated operations, its COE would be lower
8 than Spire Inc.'s if it were a standalone entity.

9 **Q. How do your proxy group's credit ratings compare to the credit rating assigned to**
10 **Spire Missouri?**

11 A. The average S&P issuer credit rating for the LDC proxy group is in the range of 'BBB+'
12 to 'A-' as compared to Spire Missouri's 'BBB+' S&P credit rating.

13 **Q. What is the average common equity ratio of your proxy group as of the most recent**
14 **fiscal year?**

15 A. The simple average common equity ratio as a percentage of total capital is 43.91%. The
16 simple average common equity ratio as a percentage of long-term capital is 46.89%.

17 **Q. What methods/models did you use to estimate Spire Inc.'s and the proxy group's**
18 **COE?**

19 A. I used the DCF method and the CAPM.

20 *MULTI-STAGE DCF/DDM*

21 **Q. What version of the DCF did you use for your DCF analysis?**

22 A. For my DCF analysis, I used the multi-stage version because it allows for a modeling of
23 changes in dividend growth due to varying capital expenditure cycles occurring within the
24 LDC industry.

Q. What are the required inputs for estimating the COE using a multi-stage DCF/DDM analysis?

A. The following inputs are needed at least based on my multi-stage DCF/DDM approach:

- 1) Stock price and
- 2) Estimated dividends per share (“DPS”) for all periods with the following specifics based on my approach:
 - a. Consensus equity analysts’ discrete DPS estimates for the first five years;
 - b. Estimated final constant/perpetual compound annual growth rate (“CAGR”) in DPS in the terminal year at which the company is expected to retain sufficient earnings to internally finance a sustainable growth rate (*i.e.* the stage at which earnings per share (“EPS”), dividends per share (“DPS”) and book value per share (“BPS”) grow at the same constant growth rate;
 - c. An expected terminal earned ROE to determine the terminal dividend payout ratio;
 - d. An estimate of the duration for the transition from the first five years of discrete consensus equity analysts’ DPS estimates to the terminal year in which constant growth begins.

Q. What is typically the most consequential assumed input for estimating the COE as well as the value of a firm or business segment?

A. The assumed constant/sustainable growth rate that extends into perpetuity.

Q. What type of growth has the LDC industry been able to achieve historically?

A. For the period 1968 through 2016, the 10-year rolling compound growth rates in dividends per share (“DPS”), earnings per share (“EPS”) and book value per share (“BVPS”) for the LDC group were in the range of 2.5% to 5.5% with an average of around 4.25%.²⁴ This

²⁴ See Schedules 9-5 to 9-8 in Appendix 2 Attached to Staff’s Cost of Service Report filed in Case No. GR-2017-0215.

1 information suggests a constant growth rate of approximately 4% could be achieved.
2 However, in recent years, there has been significant debate in the investment community
3 as to what value, if any, should be assigned to the LDC industry several decades into the
4 future, let alone a constant-growth rate as high as 4%. However, for sake of testing the
5 reasonableness of my multi-stage DDM and CAPM, a constant-growth DDM estimate can
6 be easily determined by adding the LDC group's average dividend yield to the 4% growth
7 rate. The broad LDC proxy group average dividend yield is approximately 3.6% to 3.65%.
8 A simple constant-growth DDM using a 4% growth rate suggests an LDC COE of
9 approximately 7.6% to 7.65%.

10 **Q. What is a rational and reasonable perpetual growth rate for LDCs?**

11 A. Anywhere from 0% to 3.3%. However, I primarily rely on perpetual growth rates of 2%
12 (inflationary growth) to 3.3% (highest growth rate that had been used by Wells Fargo to
13 estimate a fair value for LDCs).²⁵ A perpetual growth rate within this range is also
14 consistent with the "sustainable growth model," which estimates EPS growth by
15 multiplying an average long-term industry retention rate by an expected book ROE.
16 Assuming the LDC industry reverts to its long-term earnings retention rate of
17 approximately 30% and allowed ROEs stabilize at around 9.50%, this supports a 2.85%
18 perpetual growth rate (9.50% terminal ROE multiplied by 30%).

19 The reasonableness of my assumed perpetual growth rates are corroborated by the
20 perpetual growth rates used by Evercore ISI²⁶ and Wells Fargo.²⁷

21 **Q. What is your basis for an assumed terminal ROE of 9.5%?**

22 A. In recent rate cases, I had assumed a terminal ROE of 9.25%, which was generally
23 consistent with terminal ROE assumptions used by Wells Fargo (9.0%) and Evercore ISI
24 (9.25%). However, due to recent, sustained increases in long-term bond yields, and the
25 fact that average authorized ROEs generally did not decline to 9% to 9.25% when the cost

²⁵ Neil Kalton, Sarah Akers, and Jonathan Reeder, "DDM Analysis Supports Sector Valuation & Quality/Growth Trade," August 19, 2019, Wells Fargo.

²⁶ *Id.*

²⁷ *Id.*

1 of capital was at all-time lows, I determined a 9.5% terminal ROE is a more reasonable
2 assumption at this time.

3 **Q. How did you determine the stock price you assumed as the initial cash outflow?**

4 A. I used a three-month average of the proxy group's stock prices for the period January 1,
5 2025 through March 31, 2025. A 3-month average of stock prices is a reasonable period,
6 in that it smooths out potential day-to-day volatility in stock prices, but still captures more
7 recent information factored into investors' views of a company's risk profile and growth
8 prospects. Additionally, an average of the past three-months of stock prices typically
9 captures investors' consideration of the expected next quarter DPS. It may be reasonable
10 to use a longer time period of stock prices to evaluate potential trends and volatility in the
11 COE, but the first quarter of 2025 was fairly stable.

12 **Q. Can you now explain the specifics of your multi-stage DCF/DDM analysis?**

13 A. Yes. My explanation of my analysis corresponds to the the information shown on
14 Schedules DM-D-2 through DM-D-4 attached to my testimony.

15 For the first stage,²⁸ (March 31, 2025, through early to mid-2029) I used Wall Street
16 analysts' consensus discrete DPS estimates to the extent they were available. For the
17 second stage (early to mid-2029 through early to mid-2039), I allowed for a gradual decline
18 from Wall Street analysts' projected 5-year CAGR in EPS to a perpetual growth rate in the
19 range of 2% to 3.3% starting in 2039. In order to estimate investors' anticipated annual
20 DPS over the second stage, I determined consensus analysts' estimated dividend payout
21 ratios as of 2029. I then allowed the dividend payout ratios to gradually converge to a
22 sustainable payout ratio in the range of 65.26% (3.3% perpetual growth at 9.5% terminal
23 ROE) to 78.95% (2% perpetual growth at 9.5% terminal ROE) starting in 2039. The
24 terminal payout ratios are consistent with the constant/sustainable-growth DCF theory that
25 requires DPS, EPS and book value per share ("BVPS") to grow in perpetuity at the same
26 rate.

²⁸ March 31, 2025, through early to mid-2029

As it relates to my assumed timing of investors' receipt of dividends, I assumed investors receive the entire annual DPS estimate at the middle of the fiscal year. This discounting convention mitigates the potential under- or over-estimating of the COE based on either end-of-year or beginning-of-year discounting conventions.

Using a 3-month average of LDC stock prices, my industry COE estimate based on application of the multi-stage DCF to the proxy group indicates a COE in the range of approximately 7.8% to 8.05% (see Schedules DM-D-2 through DM-D-4).

CAPM

Q. Did you use any other models to estimate Spire Inc.'s and the LDC proxy group's cost of equity?

A. Yes. In my experience, many Wall Street analysts use the CAPM to determine a discount rate, *i.e.* the COE, to apply to expected cash flows to the equity investor. The CAPM shows the potential impact of changes in interest rates on the cost of capital. COE estimates can be manipulated with the CAPM by using unreasonable market risk premium estimates, fortunately there are a variety of authoritative sources that provide equity risk premium estimates that can form the basis for a consensus view of reasonable risk premiums based on current capital market conditions.

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

A. The CAPM is based on capital market theory in which it is recognized that although the total risk of a company and/or industry consists of market ("systematic") risk and asset/business-specific ("unsystematic") risk, investors are only compensated for systematic risk because holding a diversified portfolio allows the investor to avoid unsystematic risk. Systematic risks are unanticipated events in the economy, such as economic growth, changes in interest rates, demographic changes, etc., that affect almost all assets to some degree. The required risk premium for incurring the market risk as it relates to the investment/portfolio is determined by adjusting the market risk premium by the beta of the stock or portfolio. The adjusted risk premium is then added to a risk-free

rate to determine the cost of equity. The CAPM is typically expressed in equation form as follows:

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

Where: K_e = the cost of equity for a security;
 R_f = the risk-free rate;
 β = beta; and
 RP_m = market risk premium.

For purposes of my CAPM analysis, I relied on Kroll's recommended equity risk premium of 5.0% provided as of June 6, 2024²⁹ and a range of realized historical equity risk premiums of 5.42%³⁰ to 6.83%³¹ derived from data provided by Ibbotson Associates' Stocks, Bonds, Bills and Inflation database.

Although each of these equity risk premium estimates use various methods and risk-free rates to arrive at their final estimates, I do not consider an estimate outside of these to be consistent with the investment community's "consensus." I specifically used a market risk premium range of 5% to 6% to estimate the COE for the LDC industry. One of the primary drivers of using a higher market risk premium versus a lower market risk premium is whether this market risk premium is applied to a normalized risk-free rate or a current risk-free rate (higher market risk premiums applied to lower current low risk-free rates). Long-term expected nominal market returns for the S&P 500 are approximately 7%.³² Therefore, market risk premiums in the 5.0% to 6.0% range may actually be excessive for purposes of a CAPM analysis.

²⁹ <https://www.kroll.com/-/media/kroll-images/pdfs/kroll-lowers-its-recommended-us-equity-risk-premium-effective-june-5-2024.pdf>

³⁰ The geometric historical annual mean for the period 1926 through 2024.

³¹ The arithmetic historical annual mean for the period 1926 through 2024.

³² <https://www.philadelphiafed.org/-/media/FRBP/Assets/Surveys-And-Data/survey-of-professional-forecasters/2025/spfQ125.pdf>; <https://am.jpmorgan.com/content/dam/jpm-am-aem/global/en/insights/portfolio-insights/lcma/noindex/lcma-full-report.pdf>

1 **Q. In your direct testimony in Ameren Missouri's natural gas utility rate case, Case No.**
2 **GR-2024-0369, you calculated a range of realized historical market risk premiums of**
3 **5.14% to 6.56%.³³ Considering such, why don't you recommend a higher market risk**
4 **premium in this case than the 5% to 6% you used in the Ameren Missouri rate case?**

5 A. Because blindly accepting earned market risk premiums causes illogical conclusions about
6 required market risk premiums based on market valuation levels. At least until the
7 disruption in the capital markets caused by the Trump administration's trade policy, the
8 S&P 500 was trading at higher P/E ratios. The expansion in the S&P 500's P/E ratios
9 contributed to the S&P 500's 22% market return in 2024. The S&P 500's high total market
10 return in 2024 compared to the negative long-term government bond return in the same
11 year caused a significant earned risk premium. It is illogical to suggest that a more
12 expensive stock market implies a higher required return going forward. The opposite is
13 true. As stocks become more expensive, this implies that investors require lower returns
14 going forward (*i.e.*, issuers of stock benefit from a lower COE).

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

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

³³ Case No. GR-2024-0369, Direct Testimony of David Murray, p. 32, lns. 9-12.

1 **Q. Are stock betas typically calculated based on historical market prices and**
2 **relationships?**

3 A. Yes. For example, Value Line's published betas are based on a regression of five years of
4 historical weekly returns of a stock or portfolio of stocks as compared to the weekly returns
5 of the market.

6 **Q. Did Value Line's historical stock betas capture an abnormal period, which caused**
7 **utility betas to be skewed higher than under normal market conditions?**

8 A. Yes. Since the market contraction at the onset of the Covid-19 pandemic (spring of 2020),
9 historical utility betas that captured this period were skewed higher than normal. For
10 purposes of my cost of equity analysis in rate cases as recently as the Ameren Missouri
11 2024 natural gas utility rate case, I excluded this abnormal period in calculating utility
12 betas. However, because a current 5-year historical period (April 17, 2020 through April
13 11, 2020) excludes the synchronized market contraction that occurred at the onset of
14 Covid-19, it is no longer necessary to exclude any of the data from the last five years.

15 **Q. What beta do you consider appropriate for purposes of estimating the LDC proxy**
16 **group's COE?**

17 A. 0.70.

18 **Q. Based on your CAPM analysis, what is your estimated COE for the LDC group?**

19 A. Approximately 8.25% (see Schedules DM-D5).

20 *SIMPLE TESTS OF REASONABLENESS*

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

23 A. Yes. First, as I indicated earlier in my testimony, a simple rule of thumb the Chartered
24 Financial Analyst ("CFA") suggests in its curriculum is to estimate the COE by adding a
25 3% to 4% risk premium to a company's bond yield, providing a simple, yet objective COE.
26 Being that the investment community views utility stocks as bond surrogates/substitutes, it

1 is logical and reasonable to not add a risk premium any higher than 3% to the bond. Simply
2 adding a 3% risk premium to a 3-month (January 1, 2025 through March 31, 2025) average
3 YTM of 5.64% on Spire Missouri's \$305 million bonds maturing on June 1, 2051, implies
4 a COE of 8.64%.

5 Second, investors typically view utility stocks as yield investments. An analysis performed
6 by Alliance Bernstein (an equity research firm) showed that between 1974 to 2010,
7 approximately 68% of returns from utility stocks were from the income received through
8 dividends, with the remaining from capital gains.³⁴ Assuming LDC stocks generated 50%
9 of returns from capital gains over the long-term, this attribution translates into a 7.2%
10 required return based on the current average LDC dividend yield of approximately 3.6%.

11 RECOMMENDED AUTHORIZED ROE

12 **Q. Based on your analysis and understanding of Spire Inc.'s COE, the LDC industry's**
13 **COE, utility stock valuation levels since 2012, investor expectations on allowed ROEs,**
14 **average authorized ROEs for natural gas utility companies, and Spire Missouri's**
15 **previous authorized ROE, what would be a fair and reasonable allowed ROE range**
16 **in this case?**

17 A. 9.00% to 9.50% with 9.5% being my point ROE recommendation to set Spire Missouri's
18 authorized ROR for its natural gas distribution operations.

19 **Q. Considering you estimate the COE for Spire Missouri's LDC operations to be in the**
20 **7.8% to 8.3% range, why do you consider a 9.5% authorized ROE reasonable?**

21 A. While it certainly may be a worthwhile debate to quantify the amount of "premium," if
22 any, over the COE that is fair and reasonable to allow a utility, the Commission has
23 repeatedly communicated in its orders that it should consider average authorized ROEs in
24 setting a fair and reasonable ROE for its Missouri utilities. As it relates to this instant case,
25 I believe the fact that although the cost of capital has increased over the last couple of years,
26 an authorized ROE of 9.5% still allows Spire Missouri the ability to create shareholder

³⁴ Hugh Wynne, Francois D. Broquin, and Saurabh Singh, "U.S. Utilities: Our Dividend Growth Model Identified Utilities Poised to Pay More," May 20, 2011, Bernstein Research.

value by simply investing in rate base because a 9.5% ROE is higher than the COE for investments in natural gas utility infrastructure.

CAPITAL STRUCTURE

Q. Will you briefly explain capital structure?

A. Capital structure represents how a company finances its assets. The typical capital structure consists of common equity, long-term debt, and short-term debt. Some utilities' capital structures may also include a small portion of preferred stock, though that inclusion has become rare in recent years. Although short-term debt is a typical component of a utility company's capital structure, whether to reflect short-term debt in a utility's authorized ROR must be evaluated based on each utility's financing practices. For example, for electric and water utility companies, it is fairly standard to compare short-term debt balances to construction work in progress ("CWIP") balances to determine if short-term debt should be captured in the authorized ROR. This is due to the expectation that the short-term debt and its corresponding rates are used to calculate the allowance for funds used during construction ("AFUDC") capitalization rate. However, as was evident in Spire Missouri's 2021 and 2022 rate cases, its situation is not as straightforward as electric and water utilities.

Q. Why?

A. Spire Missouri consistently carries a short-term debt balance much higher than its CWIP balances. For the period 2002 through 2017, Spire Missouri recovered financing costs incurred to carry natural gas inventories through its PGA clause. Because parties understood that it was customary to use short-term debt to finance natural gas inventories, the parties agreed to allow a carrying costs based on a proxy for short-term debt interest rates for purposes of compensating Spire Missouri for carrying costs. Before carrying costs for natural gas inventories were recovered through the PGA/ACA mechanism, they were recovered in rate base through a general rate case. Under that scenario, even Spire Missouri (then Laclede Gas Company) agreed that short-term debt should be captured in the authorized ROR in a general rate case.

1 In Spire Missouri's 2017 rate case, it recommended reverting back to including natural gas
2 inventories in rate base in the general rate case. However, Spire Missouri did not include
3 short-term debt in its recommended ROR. Spire Missouri's changed position was
4 inconsistent with the parties' prior logic that it is customary to finance natural gas
5 inventories with short-term debt.

6 Fast forward to Spire Missouri's 2021 rate case in which other complicating and confusing
7 factors were debated. The first of which was that for purposes of comparing short-term
8 debt balances to CWIP and deferred gas cost balances (not natural gas inventories), Spire
9 Missouri made a backdated pro forma adjustment to its short-term debt balances to net out
10 long-term debt it issued in the final month of the true-up period. In Spire Missouri's
11 opinion, this fictitious scenario (Spire Missouri characterized it as a "pro forma"
12 adjustment), which assumed the long-term debt had been issued over a year earlier,
13 justified excluding short-term debt from its ratemaking capital structure. A second,
14 extraordinary, complicating factor in the 2021 rate case was Spire Missouri's incurrence
15 of much higher natural gas costs due to extreme constraints in natural gas supply during
16 Storm Uri. Spire Missouri initially financed the purchase of the high-cost gas with short-
17 term debt, later refinancing the short-term debt with a three-year bond, which matured in
18 December 2024.

19 **Q. Was your recommended ratemaking capital structure in Spire Missouri's 2021 and**
20 **2022 rate cases premised on Spire Missouri's standalone capital structure?**

21 A. No. I recommended Spire Missouri's ratemaking capital structure be consistent with Spire
22 Inc.'s capital structure ratios.

23 **Q. Is this still your position?**

24 A. Yes. My recommended ratemaking capital structure is premised on Spire Inc.'s recent
25 capital structure ratios, after adjusting short-term for Spire Missouri's typical amounts of
26 CWIP and deferred gas costs. However, when responding to the Company's direct
27 testimony in my rebuttal testimony, I will provide my recommendation for Spire Missouri's
28 capital structure based on the Commission's logic from its decision in Spire Missouri's
29 2021 rate case.

1 **Q. What capital structure do you recommend for purposes of setting Spire Missouri's**
2 **ROR?**

3 A. I recommend a capital structure that consists of approximately 41.5% common equity,
4 51.5% long-term debt and 7% short-term debt. While not exactly the same as Spire Inc.'s
5 consolidated capital structure as of September 30, 2024, this recommendation is in line
6 with Spire Inc.'s recent consolidated capital structures.

7 **Q. Did you attach schedules to your testimony showing the analysis you performed to**
8 **determine the capital structure ratios you consider the most reasonable for purposes**
9 **of setting Spire Missouri's ROR?**

10 A. Yes. Schedules DM-D-6 and DM-D-7 attached to my testimony provide the quantitative
11 details I analyzed to support my capital structure recommendation.

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

13 A. My recommended capital structure is consistent with Spire Inc.'s consolidated capital
14 structure ratios with an adjustment to short-term debt based on the percentage of Spire
15 Missouri's short-term debt which is attributed to CWIP and deferred gas cost balances. For
16 the period September 30, 2023 through September 30, 2024, I determined Spire Missouri's
17 CWIP and deferred gas cost balances consisted of a weighted-average of 41.17% of Spire
18 Missouri's outstanding short-term debt. Therefore, I multiplied Spire Inc.'s outstanding
19 short-term debt by 58.83% to determine the proportion of short-term debt to include in my
20 recommended ratemaking capital structure.

21 Spire Inc.'s capital structure best represents the amount of debt capacity Spire Inc.
22 considers reasonable and appropriate for its regulated utility assets, including Spire
23 Missouri. Use of this capital structure ensures that Spire Missouri receives credit for the
24 debt capacity its assets actually support. Since Spire Inc. acquired Alagasco (now Spire
25 Alabama) on September 2, 2014,³⁵ Spire Inc.'s has had a much more leveraged capital
26 structure. Although Spire Inc.'s goal had been to reduce the amount of consolidated

³⁵ Spire Inc.'s 2014 SEC 10-K Filing.

1 leverage over time in order to show improvement in Spire Inc.'s consolidated credit
2 metrics, it has not made meaningful progress. As shown on Schedule DM-D-6, Spire Inc.'s
3 consolidated common equity ratio declined to below 40% in 2021. This was largely due
4 to increased debt levels Spire Inc. incurred to fund higher natural gas costs from Storm Uri.
5 However, even after Spire Inc. recovered most of the funds it expended to finance higher
6 gas costs from Storm Uri, its common equity ratio still had not recovered to 40% as of
7 September 30, 2024.

8 **Q. Has Spire Inc.'s S&P credit rating been affected by Spire Inc.'s higher debt levels?**

9 A. Yes. On June 3, 2024, S&P Global Ratings downgraded Spire Inc.'s corporate credit rating
10 from 'A-' to 'BBB+' on "weak financial measures."³⁶

11 **Q. How could Spire Inc. improve its financial measures to improve its credit profile?**

12 A. Instead of issuing holding company debt to support its investment in its subsidiaries, it
13 could issue common equity. Spire Inc. would have additional incentive to issue common
14 equity to improve its credit metrics if Spire Missouri's authorized ratemaking capital
15 structure at least considered the discrepancy between Spire Missouri's per books capital
16 structure and that of Spire Inc. on a consolidated basis.

17 **Q. Considering Spire Inc.'s current weaker credit metrics, does it have a conflict of
18 interest in managing Spire Missouri's capital structure for cost efficiency?**

19 A. Yes. Spire Inc. cannot improve its consolidated credit metrics if Spire Missouri issues
20 more debt for its own benefit or else this would eliminate any benefit to Spire Inc. reducing
21 leverage at the holding company. Consequently, Spire Missouri's capital structure is not
22 managed for the best interest of Spire Missouri, but rather for the best interest of Spire Inc.
23 Spire Missouri's targeting of a higher common equity ratio for ratemaking, rather than for
24 changes in business risk and/or economic conditions, contradicts one of the primary
25 purposes of managing a capital structure – to achieve the lowest reasonable cost without
26 jeopardizing financial stability. As I will discuss later in my testimony, Spire Missouri's

³⁶ William Hernandez and Gerrit W. Jepsen, CFA, "Spire Inc. And Subsidiaries Downgraded to 'BBB+' From 'A-'
On Weak Financial Measures; Outlook Stable," S&P Global Ratings – RatingsDirect, June 3, 2024.

1 lower business risk affords it the ability to utilize more leverage, but for its affiliation with
2 Spire Inc. and its decisions to use significant leverage to pursue and execute its acquisitions
3 of other companies.

4 **Q.**

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16 **Q. What capital structure has Spire Inc. managed for purposes of taking advantage of**
17 **debt capacity afforded by Spire Inc.'s low-risk regulated utility subsidiaries?**

18 **A.** Spire Inc. has managed its consolidated capital structure for purposes of taking advantage
19 of debt capacity afforded by Spire Inc.'s low-risk regulated utility subsidiaries. Spire Inc.
20 issued a significant amount of holding company debt for purposes of acquiring Alagasco
21 in 2014. This acquisition caused Spire Inc.'s common equity ratio to drop from 51.46% at
22 the end of the 2013 fiscal year to 41.36% at the end of the 2014 fiscal year.³⁷ While none
23 of the proceeds from holding company debt were used for purposes of investing in Spire
24 Missouri, this should not form the basis for determining whether this debt should be
25 considered for purpose of determining a fair and reasonable capital structure to set Spire
26 Missouri's allowed ROR. If not for Spire Missouri's and Spire Alabama's low-risk
27 regulated utility operations, Spire Inc. would not be able to carry this much leverage and

³⁷ Spire Inc. Board of Director Meeting, December 5, 2022, p. 25.

³⁸ Schedule DM-D-10, p. 2.

maintain strong investment grade credit ratings. In fact, Moody's indicated the following about Spire Inc.'s ability to service this debt:

Spire's growth by acquisition several years ago has resulted in substantial, albeit declining, amount of holding company debt, which is serviced by upstream distributions from its operating companies. The annual parent level interest expense is essentially a fixed obligation that, at times, relies heavily on residual cash flows from the regulated utilities, since the unregulated net income and distributable cash of Spire's other unregulated businesses, such as Spire Marketing, can be more volatile, less certain and may be insufficient to service the debt.

We also consider the corporate dividend to be akin to a fixed obligation, since utility management teams are unlikely to reduce this cash distribution unless under significant financial duress. Through the LTM [last twelve months] 30 June 2024, Spire's dividend was about \$177 million. We expect that the majority of parent level cash requirements are likely to come from Spire Missouri, the largest utility in the Spire corporate family.

At roughly 27% of consolidated debt, Spire's holding company leverage, although lower than in prior years, remains substantial and increases the financial risk of the entire corporate family. As such, the holding company debt constrains the credit profiles of both Spire Missouri and Spire Alabama. Spire's parent debt is mainly used to finance the company's non-utility businesses, which provide cash flow than can be volatile from year to year, and can help service the debt.³⁹

In essence, Spire Inc. has used Spire Missouri's (and Spire Alabama's) debt capacity to enhance its shareholder returns utilizing a sizeable amount of leverage to acquire Spire Alabama. Authorizing Spire Missouri a lower common equity ratio and a corresponding higher debt ratio, along with its lower cost, would reduce the amount of cash flow Spire Inc. has available for holding company debt capacity.

Q. What proof do you have that Spire Missouri's debt capacity is impaired by the holding company's use of leverage?

A. The rating agencies observations of the impact Spire Inc.'s holding company debt has on Spire Missouri's financial flexibility. For example, in the aforementioned Moody's report on Spire Missouri it explicitly indicated that Spire Inc.'s substantial amount of holding

³⁹ Moody's Credit Opinion on Spire Missouri, August 22, 2024.

1 company debt puts pressure on Spire Missouri to provide upstream dividends to support
2 the holding company's debt serviced needs.⁴⁰ S&P assigns Spire Missouri a corporate
3 credit rating of 'BBB+' rather than its hypothetical stand-alone credit profile of 'A-'
4 because of its association with Spire Inc.'s higher financial risk associated with its use of
5 leverage, as well as its higher-risk non-regulated operations.

6 **Q. How can this be looked at differently?**

7 A. If Spire Missouri had issued the debt rather than Spire Inc., its corporate credit rating would
8 be the same because Spire Inc.'s consolidated debt levels would be the same, rather the
9 debt was issued directly by the subsidiaries. Of course, if this debt were recognized in the
10 authorized capital structure, then Spire Missouri's ratepayers would be charged less for a
11 lower ROR associated with the more cost efficient capital structure, which would reduce
12 the amount of cash flow available to distribute to Spire Inc. However, at least Spire
13 Missouri's reduced financial flexibility would be due to use of leverage for its own
14 investment rather than Spire Missouri's debt capacity being misappropriated to Spire Inc.
15 for purposes of funding acquisitions and investments in non-regulated businesses.

16 **Q. Does Spire Inc. use the creditworthiness conferred to it from its regulated LDC**
17 **companies to directly support credit for its non-regulated subsidiaries?**

18 A. Yes. Spire Inc. explicitly guarantees obligations for Spire Marketing Inc.

19 **Q. Why is considering Spire Inc.'s consolidated capital structure for ratemaking more**
20 **appropriate than making adjustments to Spire Missouri's current book value capital**
21 **structure?**

22 A. Because it is impossible to unwind all of the transactions that have occurred to determine
23 how Missouri Gas Energy ("MGE") was originally capitalized, which is the intent of such
24 regulatory exercises. Unlike the original Spire East assets, which had been organically
25 funded by capital issued by Spire Missouri, this has not been the case for the Spire West
26 system for at least 25 years. Because the Spire West system was owned directly at the

⁴⁰ *Id.*

parent level (not a subsidiary corporation) by its previous owner, Southern Union, no legacy debt (and therefore, capital structure) followed MGE, as it was an asset acquisition. If MGE had been a separate subsidiary corporation with its own capital structure, then Spire Inc. could have issued all of the capital for the acquisition, much like it did for Alagasco.

Q. Does this mean that Spire Missouri's capital structure already contains capital that wasn't used to invest organically into Spire Missouri's system?

A. Yes.

Q. Did you opine on this lack of an identifiable original capital structure in Spire Missouri's 2017 rate case?

A. Yes. I indicated the following:

Spire Missouri's capital structure ideally would represent the financing that had been issued to directly fund capital expenditures in Spire Missouri's utility systems. But as we know from Spire Missouri's acquisition of MGE's assets, this is not the case. Spire Missouri acquired MGE from Southern Union on September 1, 2013. Because MGE was not a subsidiary corporation that issued its own debt, no legacy debt followed MGE. Consequently, the debt issued by Spire Missouri and the equity issued by Spire Inc. essentially recapitalized the system. However, now that Spire Missouri owns both the MGE and LAC systems, all of the funding issued to complete the acquisition of the MGE assets is now consolidated with all of Spire Missouri's securities. This was very similar to what transpired in Spire Inc.'s other acquisitions, except for the fact that Spire Inc. issued all of the capital, including the debt capital.

The details of post-acquisition capital structures of utilities generally get muddled over the long run. Consequently, an attempt to reconcile capital issued to capital expenditures in the systems is futile. Traditional ratemaking typically assumes that the rate base can be reconciled with the capital in the capital structure. This is no longer possible after utility systems change owners and additional capital is issued to acquire the systems. While some would claim that if the transaction occurred solely at the utility holding company level, this allows for the original capital in the subsidiary corporation to be undisturbed, this ignores the fact that the capital issued at the holding company impacts the risk profile of the subsidiary. If the holding company's capital structure had consistent financial risk with that of the subsidiary, then it would be reasonable to use a subsidiary capital structure. However, when the subsidiary is affiliated with a holding

company that has a more leveraged capital structure, then the subsidiary's less leveraged capital structure no longer attracts debt at costs consistent with its more conservative capital structure. This fact should be given consideration when determining the appropriate capital structure to use when setting the utility company's allowed ROR.⁴¹

Q. Do the above complications apply even if goodwill is removed from the capital structure?

A. Yes. Spire Missouri's capital costs are impacted by the use of holding company leverage regardless of the attempt to reconcile funding sources and uses. As cost of capital experts (including company ROR witnesses) frequently recognize in determining a fair and reasonable ROR, it is not the source of the capital that defines the cost of the capital, but it is the risk of the investment. Spire Inc.'s liberal use of leverage to capitalize its acquisitions of regulated local gas distribution companies proves that these assets can and do support much higher amounts of leverage than that which is recognized in setting a fair and reasonable ROR for ratemaking. Not recognizing such, is unfair to ratepayers.

Q. If you adjusted Spire Inc.'s common equity balance by the amount of goodwill on its books, what is its indicated average common equity ratio for the period September 30, 2023 through September 30, 2024?

A. 26.68% without adjusting preferred stock and short-term debt. 30.19% after adjusting for preferred stock and short-term debt net of CWIP and deferred gas costs.⁴²

Q. Why is Spire Inc.'s goodwill adjusted common equity ratio so low?

A. Because Spire Inc. paid a sizeable premium for Alagasco (now Spire Alabama). Spire Inc. booked \$727.6 million of goodwill for the Alagasco purchase in 2014, which equates into an approximate 51% premium over the book value of Spire Alabama's assets as of September 30, 2014.⁴³ Spire Inc. booked \$218.9 million of goodwill for the EnergySouth purchase in 2016, which equated into an approximate 79% premium over the book value

⁴¹ Case No. GR-2017-0215, Staff Cost of Service Report, pages 25-26.

⁴² Schedule DM-D-7.

⁴³ Laclede Group 2014 SEC 10-K Filing, p. 39.

1 of EnergySouth as of December 31, 2016.⁴⁴ The combined goodwill balances associated
2 with Spire Alabama, Spire EnergySouth and Spire Missouri results in a consolidated
3 goodwill asset value of \$1.17 billion, which represents approximately 10.8% of Spire Inc.'s
4 total assets as of September 30, 2024.

5 **Q. If all of Spire Inc.'s regulated local gas distribution operations can support this much**
6 **debt at the holding company, why not just issue this debt at the subsidiary level?**

7 A. Because this would reduce Spire Missouri's revenue requirement due to a more cost-
8 efficient capital structure. It is obvious from Spire Inc.'s use of leverage at the holding
9 company to finance its acquisition of these regulated utility assets, they can support much
10 more leverage.

11 **Q. What would happen if regulators recognized the true debt capacity associated with**
12 **the regulated utility subsidiaries in determining an authorized ROR?**

13 A. This would reduce the amount of cash flows generated by the utility properties, which
14 would provide less cash flow to support the ability of the holding company to issue debt to
15 leverage shareholder returns. However, if the holding company reduced the amount of
16 debt it issued, then this would improve the consolidated company's financial stability and
17 flexibility.

18 **Q. Is this self-correcting balance eliminated when regulators ignore the use of leverage**
19 **at the holding company?**

20 A. Yes. If a company's management knows regulators will ignore holding company debt and
21 continue to authorize capital structures based on subsidiary per books capital structures,
22 then they can target such for ratemaking and use the higher cash flows to issue less costly
23 holding company debt rather than issuing common equity.

⁴⁴ Spire Gulf and Spire Mississippi regulatory financial statements as of December 31, 2016.

1 **Q. Are other companies in your LDC proxy group organized in a fashion that creates**
2 **transparency and trust in the consolidated company's real capital structure rather**
3 **than the disparity that exists between Spire Inc.'s consolidated capital structure and**
4 **that of Spire Missouri?**

5 A. Yes. ONE Gas and Atmos are not organized as holding companies that own regulated
6 utility assets under separate subsidiary corporations. Consequently, to the extent that they
7 desire their commissions recognize a higher common equity ratio in their ratemaking
8 capital structures, they have to issue equity to third-party shareholders. In a past report
9 addressing Atmos' capital structure, Bank of America indicated the following:

10 While mgmt. is likely to defer equity needs as much as possible and be
11 opportunistic in the market, another potential solution could be to establish
12 a HoldCo. structure. That said, mgmt. has been somewhat opposed to this
13 in the past given the impact to leverage and minimization of questions from
14 regulators on the equity capitalization.⁴⁵

15 A review of Spire Inc. transactional structures for acquiring the MGE systems compared
16 to the Alagasco System reveals the disparate treatment of regulatory capital structures
17 based solely on how a company is organized and at what level it makes its acquisitions. If
18 Spire Inc. owned all of its LDC assets directly, then all of the capital funding the
19 acquisitions would require third-party investors. Because the LDCs would be funded
20 directly by the parent company, only real third-party equity would be considered in the
21 ratemaking capital structure. To the extent this capital structure is more conservative, this
22 directly benefits the LDCs because of the financial stability and flexibility this capital
23 structure affords. However, this stability and flexibility comes at the expense of existing
24 shareholders due to dilution of their ownership, but only until the higher equity ratio is
25 recognized in a subsequent rate case.

⁴⁵ Julien Dumoulin-Smith, et. al., "Gas LDC 1Q21EPS preview: The day after the storm; measuring the Feb Uri," Bank of America, April 19, 2021.

1 **Q. What evidence can you provide that shows Spire Missouri's capital flows are not**
2 **managed as if it were a stand-alone entity?**

3 A. If Spire Missouri's capital structure were being managed for its own benefit, then one
4 would expect that it would have a carefully managed dividend payment policy, similar to
5 Spire Inc. recent consistent dividend payout ratio of approximately 64% to 69%. However,
6 in three of the last five years, Spire Missouri has not paid any dividends and only had
7 dividend payout ratios of 26% and 49% in the two years it did pay dividends to Spire Inc.
8 If Spire Missouri were financially managed as a stand-alone entity accountable to third-
9 party equity investors, it would be required to maintain a higher and more consistent payout
10 ratio, similar to how Spire Inc. manages its dividends. Spire Missouri's retention of a
11 significant amount of its earnings in recent years results in Spire Missouri's capital
12 structure not receiving the benefit of the use of debt rather than retaining equity to meet it
13 cash deficiencies.

14 **Q. What other tools allow Spire Inc. to manage its subsidiaries' common equity ratios?**

15 A. First, I should emphasize that technically, Spire Inc. does not specifically manage all of
16 Spire Inc.'s subsidiaries, rather this function is performed by Spire Missouri employees
17 that lend their services to Spire Inc. and its other subsidiaries.

18 Spire Inc. has a consolidated commercial paper program backed by a consolidated credit
19 facility with borrowing sub-limits for Spire Inc., Spire Missouri, and Spire Alabama.
20 Investors purchase Spire Inc.'s commercial paper issuances and then Spire Inc. loans these
21 proceeds to its subsidiaries through intra-company short-term loans. Being that Spire
22 Missouri and Spire Alabama have been retaining a significant amount of cash flow for
23 reinvestment, Spire Inc. has not received sufficient cash from its subsidiaries to fund the
24 payment of its dividend to third-party shareholders. For example, in 2024, Spire Inc. only
25 received \$53.4 million of dividends from Spire Alabama despite the fact that it paid \$181.9
26 million of dividends to third-party shareholders. While Spire's marketing and midstream
27 business segments earned \$56.9 million in 2024, assuming 100% of these funds were
28 distributed to Spire Inc. to fund dividend, this still results in a \$71.6 million shortfall in
29 internal dividends available for Spire Inc. to pay dividends to third-party shareholders.

1 **Q. Why do you consider Spire Inc.'s equity ratio to be the most appropriate for setting**
2 **Spire Missouri's allowed ROR?**

3 A Spire Inc. allocates capital to its companies to target and achieve ratemaking common
4 equity ratios. The most objective and practical measure of the capital structure that
5 captures the debt capacity of Spire Inc.'s regulated utility assets, is that of Spire Inc. on a
6 consolidated basis. Consequently, this is why I recommend Spire Missouri's common
7 equity ratio be set no higher than that which Spire Inc. typically considers reasonable for
8 its consolidated capital structure, which has recently been in the 40% to 43% range.

9 **Q. What cost of long-term debt should be applied to your recommended capital**
10 **structure?**

11 A. I recommend applying Spire Missouri's embedded cost of long-term debt of 4.25% at
12 September 30, 2024 to my recommended long-term debt ratio of 51.5%. I will update this
13 cost of debt along with my recommended capital structure when true-up financial data
14 through May 31, 2025 is available.

15 **Q. What cost of short-term debt do you recommend applying to the ratio of short-term**
16 **debt in your recommended capital structure?**

17 A. 4.55% based on the approximate cost of 30-day A2/P2 commercial paper since January 1,
18 2025. At December 31, 2024, Spire Missouri's cost of short-term debt was 4.8% and Spire
19 Inc.'s holding company (*i.e.* not consolidated) cost of short-term debt was 4.4%.
20 Considering the fact that Spire Inc. and its subsidiaries participate in a consolidated/shared
21 commercial paper program, with Spire Inc. issuing the commercial paper and then making
22 affiliate loans to the subsidiaries, I am not sure why Spire Inc. and Spire Missouri have
23 differing costs of short-term debt.

24 **Q. Will Spire Missouri's cost of short-term debt fluctuate subsequent to the effective date**
25 **of rates in this case?**

26 A. Yes. The future path of short-term rates is difficult to predict, especially in the current
27 market environment. Due to the uncertainty of the path of short-term rates, I recommend
28 the Commission use the most recent known cost of commercial paper, which is 4.55%.

SUMMARY AND CONCLUSIONS

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

A. Yes. While Spire Missouri's COE has increased since its 2021 and 2022 rate cases, Spire Missouri's COE is still below my recommended authorized ROE of 9.5%. Electric and natural gas utility companies' P/E ratios are currently quite similar to electric utility P/E ratios in 2015. At that time, the Commission had consistently found that 9.5% authorized ROEs were fair and reasonable for Missouri's vertically-integrated electric utility companies. Also, my recent multi-stage DCF COE estimates for the LDC industry and the vertically-integrated electric utility industries are almost the same. Therefore, a 9.5% authorized ROE is fair and reasonable for Spire Missouri.

My recommended 9.5% authorized ROE should be applied to a 41.5% common equity ratio. Spire Inc.'s COE even at this lower common equity ratio is still around 8.5%. It is impossible to know for certain how much lower Spire Inc.'s COE would be if it financed itself more conservatively similar to Atmos and ONE Gas, but based on my estimates, Atmos' and ONE Gas' COE is likely about 100 basis points lower. However, Atmos and ONE Gas' more conservative capital structures are true market-based capital structures which support each company's direct access to third-party capital markets. Spire Inc. will continue to be aggressive in its use of holding company leverage, causing a less financially stable enterprise, unless the Commission proves to Spire Missouri it will not make ratepayers fund a higher-cost capital structure Spire Inc. does not consider economical for itself.

Q. Does this conclude your testimony?

A. Yes.

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

In the Matter of Spire Missouri Inc. d/b/a Spire's	)	
Request for Authority to Implement a General	)	<u>Case No. GR-2025-0107</u>
Rate Increase for Natural Gas Service Provided in	)	
the Company's Missouri Service Areas	)	

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

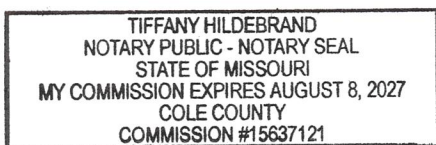
David Murray, of lawful age and being first duly sworn, deposes and states:

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

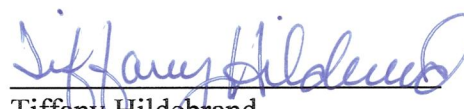


David Murray
Utility Regulatory Manager

Subscribed and sworn to me this 22nd day of April 2025.



My Commission expires August 8, 2027.



Tiffany Hildebrand
Notary Public