Exhibit No.: _____
Issue(s): Rate of Return (ROR)/ Capital Structure
Witness/Type of Exhibit: Murray/Surrebuttal
Sponsoring Party: Public Counsel
Case No.: GR-2021-0108

SURREBUTTAL TESTIMONY

OF

DAVID MURRAY

Submitted on Behalf of the Office of the Public Counsel

SPIRE MISSOURI, INC.

CASE NO. GR-2021-0108

** **

Denotes Confidential Information that has been Redacted

July 14, 2021

PUBLIC

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc.'s d/b/a Spire Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Areas	)))))	Case No. GR-2021-0108

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 surrebuttal 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 14th day of July 2021.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

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

Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2023.

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SURREBUTTAL TESTIMONY

OF

DAVID MURRAY

SPIRE MISSOURI INC.

FILE NO. GR-2021-0108

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. Are you the same David Murray who filed direct and rebuttal testimony in this case?

A. Yes.

Q. What it the purpose of your testimony?

A. I will respond to the rebuttal testimonies of Spire Missouri Inc.'s ("Spire Missouri") witnesses, Dylan W. D'Ascendis and Adam Woodard. I will also respond to Staff witness, Seoung Joun Won, PhD (Dr. Won), rebuttal testimony addressing capital structure.

Q. What primary issue does Mr. D'Ascendis address in his rebuttal testimony?

A. Mr. D'Ascendis mainly addresses the appropriate return on common equity ("ROE") to allow Spire Missouri in this rate case. However, he also briefly discusses his opinion as to the reasonableness of Spire Missouri's requested capital structure as it relates to capital structures underlying his proxy group.

Q. What issue does Mr. Woodard address?

A. Mr. Woodard mainly addresses capital structure.

Q. What issues does Dr. Won address?

A. Dr. Won addresses the appropriate ROE in this case as well as the capital structure to which the ROE should be applied. Dr. Won's main disagreement with my recommended rate of

return ("ROR") relates to my recommended capital structure. He supports the Commission's decision in Spire Missouri's 2017 rate case, Case No. GR-2017-0215, adopting Spire Missouri's capital structure.

Q. What issue will you address first?

A. Capital structure.

CAPITAL STRUCTURE

Q. What is your general reaction to Mr. Woodard's response to your direct testimony?

A. Mr. Woodard does not address the details of my direct testimony. Mr. Woodard's response is fairly general and just reasserts his view that the Commission made the right decision in Spire Missouri's 2017 rate case. While I did not expect Mr. Woodard to disagree with the Commission's 2017 decision authorizing Spire Missouri a 54.2% common equity ratio, I did expect Mr. Woodard to specifically address why he believes this is the most cost efficient capital structure for Spire Missouri's ratepayers. Mr. Woodard states the following about maintaining a common equity ratio of approximately 54.2%:

> Spire Missouri has continued to manage its capital structure in a conservative manner that provides ratepayers with affordable and sustainable service while **adhering to the guidance provided by the Commission in the last rate proceeding.**[1] (emphasis added)

Therefore, the Company is placing responsibility on the Commission to set a cost efficient capital structure and the Company will manage Spire Missouri's balance sheet to this capital structure.

Q. Does Mr. Woodard claim that nothing has changed to cause the Commission to reconsider Spire Missouri's authorized capital structure?

A. Yes. This is a main theme to Mr. Woodard's rebuttal testimony. Mr. Woodard indicates the following about my capital structure position:

[1] Woodard Rebuttal, p. 7, ll. 15-17.

> He [David Murray] also insists on re-litigating issues that were fully decided in the last rate case proceeding, including offering up the inclusion of short-term debt with little to no support and without recognition of the Commission's long held exclusion of short-term debt from major utility's capital structures and its customary "point in time" analysis.[2]

Q. Are you insisting on relitigating the capital structure issue?

A. Yes.

Q. Why?

A. Because not only do I continue to assert that the facts and circumstances in the 2017 rate case justified the Commission adopting a capital structure that is guided by the cost efficient management of Spire Inc.'s capital structure, but new evidence, which includes direct admissions by the Company in this case, prove that Spire Missouri's capital structure is not managed for cost efficiency, but rather for ratemaking.

On a more general level, I would also point out that capital structure and cost of capital are issues that arise in all companies' general rate cases. Business, economic and capital markets are dynamic, which should cause companies to manage their capital structures accordingly. It is unreasonable to expect that a company, such as Spire Missouri, would maintain static capital structures without consideration for these changes.

Q. You mentioned additional evidence that Spire Missouri's capital structure is not managed for cost efficiency, but rather for ratemaking. Have you already offered much of this evidence in this case?

A. Yes, but I'll offer additional evidence in this testimony by responding to Mr. Woodard's rebuttal testimony.

[2] *Id.*, p. 8, ll. 16-19.

Q. What capital structure does Mr. Woodard recommend the Commission use to set Spire Missouri's authorized ROR?

A. Spire Missouri's capital structure as of the true-up date, May 31, 2021, which he maintains consists of 54.28% common equity and 45.72% long-term debt.[3]

Q. What capital structure ratios did the Commission authorize in Spire Missouri's 2017 rate cases, Case No. GR-2017-0215 and GR-2017-0216 (hereinafter referred to as the "2017 rate case")?

A. 54.2% common equity and 45.8% long-term debt.[4]

Q. On pages six through seven of his rebuttal testimony, Mr. Woodard cites the factors the Commission considered in the 2017 rate case to support its decision to adopt Spire Missouri's capital structure to set Spire Missouri's ROR. Did you address your disagreement with the Commission's rationale for its decision in your rebuttal testimony?

A. Yes. I addressed this on pages four through seven of my rebuttal testimony.

Q. Would you like to provide additional testimony on these issues?

A. Yes. Mr. Woodard claims that the fact that Spire Missouri issued secured bonds in May 2021 supports the facts the Commission cited in the last rate case. While I agree it is a fact that Spire Missouri issued these bonds and they are secured by a first mortgage on Spire Missouri's assets, I do not agree that this fact supports the adoption of Spire Missouri's cost inefficient capital structure.

[3] *Id.*, p. 6, ll. 1-2.
[4] Case Nos. GR-2017-0215 and GR-2017-0216, Report and Order, March 7, 2018, , p. 45

Q. How was Spire Inc. able to ensure Spire Missouri's long-term (common equity and long-term debt) capital structure ratios as of the true-up date, May 31, 2021, approximated the Commission's authorized capital structure ratios in the 2017 rate case?

A. Because this is Spire Inc.'s strategy for managing Spire Missouri's capital structure. Spire Missouri freely admitted as much in its response to Staff Data Request No. 0115 in this case:

> Spire Missouri manages its capital structure to represent the capital structure that was approved by the Commission in the last rate case (GR-2017-0215 and GR-2015-0216) (*sic*).

Q. Did Spire Missouri have the need to issue more long-term debt than the $305 million it issued?

A. It certainly could have. As of May 31, 2021, Spire Missouri had ** ~~_____~~ ** of affiliate notes payable outstanding to Spire Inc. and ** ~~_____~~ ** outstanding to third-parties on a short-term credit facility. Considering the fact that Spire Missouri should have received most of its customers' bill payments from the winter of 2020/2021 by May 31, 2021, there is no reason to expect much additional internal cash flow from operations to allow for further reduction in short-term debt balances. Additionally, as I discussed in my direct and rebuttal testimonies, if Spire Missouri provided a consistent dividend to Spire Inc., it would need to issue more capital to support its cash needs.

Q. Why does Spire Missouri have two forms of short-term debt outstanding on its balance sheet?

A. The credit facility was drawn due to cash needs associated with winter storm Uri. Although I am only aware of an additional ** ~~_____~~ **[5] of excess gas costs associated with gas purchases during the gas price spike associated with Uri, Spire Inc. decided to borrow $250 million.

[5] Spire Missouri response to Staff Data Request No. 414.

Q. Do you know how the other ** _____ ** was used?

A. No. But I imagine this reduced the amount of borrowings needed from Spire Inc. and was likely used to fund general operational needs, which likely included investment in plant.

Q. Do these events/decisions counter the position that Spire Missouri's capital structure is managed independently?

A. Yes.

Q. Is Spire Inc.'s and Spire Missouri's corporate governance and management structure organized to allow Spire Missouri's capital structure to be managed for the best interests of Spire Missouri and its customers?

A. No. For a more thorough discussion on conflicts of interest related to management decisions that are counter to Spire Missouri's interests, see OPC witness Robert Schallenberg's testimony. In addition, Standard & Poor's ("S&P") Ratings Direct indicated the following about Spire Missouri's lack of sufficient separation from Spire Inc. to justify being rated based on its own stand-alone credit quality:

> Under our group rating methodology, we assess Spire Inc. as the parent of the group that includes Spire Alabama Inc. and Spire Missouri Inc. We assess the group credit profile as 'A-' which leads to a long-term issuer credit rating of 'A-'. Our view is that the current insulation measures are not sufficient to warrant separation between the parent and its subsidiaries.[6]

Q. Does S&P's opinion discredit Mr. Woodard's rebuttal testimony?

A. Yes. Mr. Woodard indicates the following in his rebuttal testimony:

> Moody's and S&P both assign Spire Missouri bond ratings supported by its stand-alone capital structure.[7]

[6] Gabe Grosberg and Evan Harris, "Spire Inc. Ratings Affirmed; Subsidiaries No Longer Under Criteria Observation; Outlook Stable," S&P Global Ratings – RatingsDirect, August 19, 2019.
[7] Woodard Rebuttal, p. 7, ll. 7-8.

At least as it relates to S&P's assigned rating to Spire Missouri, Mr. Woodard's testimony is wrong.

Q. Mr. Woodard maintains that because Spire Missouri's targeted common equity ratio of 54.2% is within the range of the equity ratios of Mr. D'Ascendis' proxy group, this supports the Commission authorizing the same common equity ratio again in this case. Is this a valid reason for the Commission to authorize this ratio?

A. No. The Commission should heavily scrutinize this logic and consider its fallacy due to Spire Inc. being a constituent of this proxy group. Mr. D'Ascendis, Dr. Won, and I analyzed a proxy group of companies that included Spire Inc. As shown in Mr. D'Ascendis' Schedule R-8 attached to his rebuttal testimony, Spire Inc.'s 5-quarter average common equity ratio for the quarter-ended March 31, 2021 was 45.69%. The range of 5-quarter average common equity ratios for Mr. D'Ascendis' original eight proxy companies is 33.10% to 57.63%. Mr. D'Ascendis eliminated NiSource from his proxy group for purpose of his rebuttal testimony, which had the lowest common equity ratio of his eight companies. However, even after eliminating NiSource, the lowest common equity ratio was 36.93% for South Jersey Industries ("SJI"). Therefore, based on Mr. D'Ascendis' test of reasonableness based on the range of average common equity ratios of his proxy groups, both Spire Inc.'s and Spire Missouri's common equity ratios could be considered reasonable for ratemaking.

Q. Did Mr. D'Ascendis also compare Spire Missouri's common equity ratio to his proxy group's subsidiaries?

A. Yes. This information is shown on page 2 of Schedule R-8. The 5-quarter average common equity ratio range for his original proxy group was 33.1% to 62.14%. The low-end was based on NiSource's average with the high-end based on Spire Alabama. After eliminating NiSource, the range is 47.91% to 62.14%. Although I do not agree with using the subsidiary capital structures to test the reasonableness of a market-tested capital structure, even on this basis, Spire Inc.'s common equity ratio would be reasonable based on the fact cited in the Commission's order.

Q. Why don't you agree with the use of subsidiary capital structures to test the reasonableness of a recommended capital structure?

A. Because each ROR witness in this case determined a reasonable recommended ROE based on his analysis of the publicly-traded parent companies of the subsidiaries (in the case of Atmos and ONE Gas Inc. the utility assets are owned directly by the publicly-traded parent company rather than indirectly through subsidiaries). Therefore, each witnesses' recommended ROEs are based on the total risk inherent in the publicly-traded companies, which encompasses additional business risks from non-regulated assets, as well as additional financial risk from debt issued by the holding companies. Therefore, because the COE is estimated based on the consolidated capital structures, the tests of reasonableness of the corresponding capital structures should be based on each company's consolidated capital structure, which captures the total financial risk evaluated by equity investors.

Q. Mr. Woodard claims that your capital structure recommendation is based on your "theory that Spire Missouri should receive credit for the debt capacity its assets support."[8] Is this theory?

A. No. This is reality. It is a fact that lower business risk assets can support more financial risk, i.e. debt. Spire Missouri, Spire Alabama and Spire Gulf have low business risk as demonstrated by the rating agencies' evaluation of such. This is also supported by Spire's own internal evaluations of events likely to have caused a decline in Spire Inc.'s equity value and the volatility of its stock, which was not its regulated utilities.[9]

Q. Considering Spire Inc.'s operations other than its regulated LDC operations have more business risk, would it not be prudent for Spire Inc.'s consolidated capital structure to have less leverage than its regulated utility subsidiaries?

A. Yes. Actually, this is how Spire Inc. managed its capital structure prior to the commencement of its acquisition strategy. Prior to Spire's acquisition of Alagasco, Spire

[8] Woodard Rebuttal, p. 8, ll. 6-8.
[9] Spire Inc. and Spire Missouri Inc. Interim Goodwill Impairment Testing, December 31, 2020.

Inc. typically had a higher common equity ratio in its consolidated capital structure as compared to the common equity ratio at its regulated utility subsidiary, Laclede Gas Company (assets now known as Spire Missouri East).

The only assets Spire Inc. owns are its subsidiaries. Spire Inc.'s other subsidiaries have not been able to operate without Spire Inc.'s credit support. The only assets that provided significant and dependable cash flows to allow Spire Inc. to provide parental guarantees of up to ** _____ **[10] are those of its regulated utilities. This is not theory. This is fact.

Q. Does Spire Inc.'s own internal analysis demonstrate that its LDCs should be supported by a more economical capital structure?

A. Yes. As it relates to Spire Inc.'s investments in ** _____
_____
_____ ** Considering the fact that Spire Inc. had to write-down its Spire Storage investment by $140.8 million last year,[12] it is illogical to assume Spire Storage's business risk can allow a higher proportion of leverage than Spire Missouri. As I will explain when addressing Dr. Won's discussion of the four factors to consider when evaluating a fair and reasonable capital structure, this demonstrates the lack of a logical relationship between business risk and financial risk (i.e. the use of a higher proportion of debt to finance lower-risk assets).

Q. Does Spire Inc. consider Spire Missouri's FFO/debt of around 20% over the last several years to be optimal for a cost efficient capital structure?

A. No. Spire Inc. communicates to its investors that it targets an FFO/debt ratio of 15% to 16%. ** _____
_____ **

[10] Spire Inc. Board of Directors Meeting, March 4, 2020, p. 60.
[11] Spire Inc. Strategy Committee Meeting, April 24, 2019, p. 103 of 227.
[12] Spire Inc. SEC Form 10-K Filing, September 30, 2020, p. 48.
[13] Spire Inc. Strategy Committee Meeting, January 27, 2021, p. 32 of 88.

Q. Mr. Woodard testifies that you suggest Spire Missouri "incur additional leverage and trigger rating agency downgrades."[14] Is this an accurate representation of your testimony?

A. No. Mr. Woodard did not cite my specific testimony as it relates to his representation. However, I gather his representation is based on my direct testimony beginning on page 50, line 14 through page 52, line 2. In this testimony I discuss my specific quantifications of the additional leverage I determined Spire Missouri could carry and still maintain a credit rating at least consistent with the group credit rating S&P currently assigns to Spire Missouri.

Q. Did Mr. Woodard, or any other Spire Missouri witness, refute your specific calculations and corresponding estimated impacts on Spire Missouri's creditworthiness?

A. No. Neither Mr. Woodard nor Mr. D'Ascendis addressed my pro forma calculations and the potential impact such additional leverage may have on Spire Missouri's or Spire Inc.'s credit rating.

Q. Did you analyze a scenario in which it was your opinion that Spire Missouri's and Spire Inc.'s credit ratings may be downgraded if it were adopted by the Commission?

A. Yes. I discussed this scenario on page 51, lines 5-22 of my direct testimony.

Q. Are there any LDCs in the proxy group used by the ROR witnesses in this case that have a similar financial risk profile as you estimated in this scenario?

A. Yes. South Jersey Industries ("SJI") has financial risk consistent with the pro forma scenario I determined.

[14] Woodard Rebuttal, p. 8, ll. 15-16.

Q. What are SJI's credit ratings?

A. Moody's does not rate SJI. S&P assigns a 'BBB' rating to SJI.

Q. Are you advocating for Spire Missouri's capital structure to be managed to a 'BBB' rating?

A. No. I provide this information to illustrate the fact that even with this additional financial risk, SJI still maintains an investment-grade credit rating. SJI is able to maintain an investment-grade credit rating at this level of financial risk, despite the fact that it is exposed to more business risk than Spire Inc. because of its significant exposure to non-regulated operations and an activist, anti-carbon environment in New Jersey.

Q. What credit rating does Spire Inc. consider to be most cost efficient?

A. **_____**[15]

Q. Mr. Woodard asserts that you include short-term debt in your recommended capital structure with "little to no support and without recognition of the Commission's long held exclusion of short-term debt from major public utility's capital structures and its customary 'point in time' analysis."[16] What is your understanding of Mr. Woodard's testimony as it relates to the Commission's customary "point in time" analysis?

A. Mr. Woodard's statement refers to the Commission's evaluation of the reasonableness of a company's rate levels as of the test year and any potential updates of this test year. However, an audit of a company's books and records should never be restricted to accepting a company's financial position as of a "point in time" as being representative of a company's potential earnings during the period rates will be in effect. A test year should not cause regulators to put on "blinders" and ignore a company's typical financial position over a ratemaking cycle. This is especially true for a company such as Spire Missouri that

[15] Spire Strategy Committee Meeting, October 16, 2019, p. 78.
[16] *Id.,* p. 8, ll. 17-19.

is allowed to collect surcharges on investments between rate cases. Therefore, the capital structure should be examined over the rate case cycle to determine how Spire Missouri typically finances its infrastructure investments. Spire Missouri's capitalization of its infrastructure investments includes a significant proportion of short-term debt. I estimated this proportion to be approximately 7.28% of Spire Missouri's capital structure.

Q. What is your response to Mr. Woodard's testimony about the "Commission's long held exclusion of short-term debt from major public utility's capital structures…"[17]?

A. While Mr. Woodard is correct that most major electric utilities in Missouri have had short-term debt excluded from their capital structures because levels of construction work in progress ("CWIP") have consistently exceeded short-term debt, this has not been the case for other utility subsectors such as LDCs and water utility companies. Specifically, before Spire Missouri acquired the Missouri Gas Energy assets (now Spire Missouri West) from Southern Union, MGE's authorized capital structure in Case No. GR-2009-0355 included a ratio of 3.26% short-term debt as well as a common equity ratio of 38.66%.[18] Additionally, before Laclede Gas Company began recovering carrying costs on its gas inventories through PGA/ACA applications starting after 2002, Laclede Gas Company regularly included short-term debt in its recommended ratemaking capital structure for purposes of setting its ROR.[19]

Q. Mr. Woodard claims that as of the true-up period, May 31, 2021, because Spire Missouri's short-term debt balance was reduced by a $305 million long-term bond issued on May 20, 2021, this justifies not including short-term debt in Spire Missouri's authorized ROR because this complies with "the 'point-in-time' rule."[20] Does this justify not including short-term debt for purposes of setting Spire Missouri's ROR?

A. No. Again, Mr. Woodard implies the Commission should put on "blinders" and ignore the reality of how Spire Missouri routinely and consistently finances its investments. In fact,

[17] *Id.*
[18] Case No. GR-2014-0007, Glenn W. Buck Direct Testimony, Schedule GWB-2.
[19] Case No. GR-2002-356, Glenn W. Buck Direct Testimony, pp. 10-11 and Case No. GR-2001-629, Glenn W. Buck Direct Testimony, pp. 9-10.
[20] Woodard Rebuttal, p. 9, l. 7.

Mr. Woodard admits that Spire Missouri "utilized short-term debt ("STD") during the test year for its replacement program."[21] But Mr. Woodard claims that because this short-term debt was refinanced with $305 million of long-term debt, it should be ignored in setting the ROR that consistently supports Spire Missouri's rate base.

Q. Mr. Woodard claims that you "offer[ed] up the inclusion of short-term debt with little to no support…"[22] What support/analysis did you perform to determine the proportion of short-term debt to include in your recommended capital structure?

A. I explain my findings on page 54, lines 1 through 9 of my direct testimony. Although I did not specifically reference the schedules in my testimony, Schedules DM-D-9-1 through DM-D-10-2 show the analysis I performed to determine first, whether it is appropriate to include short-term debt in the capital structure used to set Spire Missouri's authorized ROR, and second, if so, what proportion of short-term debt to include.

Q. Can you explain your findings from these schedules?

A. Yes. As shown on Schedule 9-1, both Spire Inc.'s and Spire Missouri's capital structures have consisted of at least 11% short-term debt, on average, for the last 3 to 5 years. I used Spire Inc.'s and Spire Missouri's fiscal year (FY) ended balance sheet information (shown on Schedules DM-D-9-2 and DM-D-9-3) to determine the proportion of their capital structures supported by short-term debt.

Although this information shows Spire Inc.'s and Spire Missouri's propensity to use a significant amount of short-term debt over several years, I recognized that this yearly information was a "snapshot," or "point-in-time" as Mr. Woodard characterizes such, based on FY-ending balances for each year over the last several years. For this reason, for purposes of determining whether and how much short-term debt to include in my recommended capital structure, I analyzed Spire Inc.'s and Spire Missouri's average quarterly short-term debt balances over the entire test year (9/30/2019 through 9/30/2020). This approach allowed me to evaluate the decline in short-term debt balances that should

[21] *Id.,* p. 9, ll. 7-10.
[22] *Id.,* p. 8, l. 17.

occur due to receipt of payments from customers after the 2019/2020 heating season. My findings from this analysis are shown on Schedules DM-D-10-1 and Schedule DM-D-10-2. As can be seen on Schedule DM-D-10-1, both Spire Inc.'s and Spire Missouri's quarterly-average capital structures for the test year consisted of at least 10% short-term debt. Even after excluding construction work in progress ("CWIP") from the short-term debt balances, over 7% of each company's capital structures was supported by short-term debt.

Q. How did you approach the proportion of short-term debt you recommended be used to set Spire Missouri's ROR in Case No. GR-2017-0215?

A. In that case, I recommended the ratio of short-term debt be based on the average ratio of short-term debt over Spire Missouri's typical rate case cycle, which is usually in the range of 3-4 years due to the statutory requirement for Spire Missouri to file within 3 years of the implementation of its first ISRS surcharge if it wants to continue to collect revenues based on additional investments.[23] I determined Spire Inc.'s average quarterly proportion of short-term debt, net of CWIP, for the period September 30, 2014 through September 30, 2017. This analysis indicated an average proportion of short-term debt, net of CWIP, of 6.47% for this period.

Q. If you had approached your recommended proportion of short-term debt using your same approach in the last rate case, what proportion of short-term debt would you recommend be included in Spire Missouri's authorized ROR?

A. 7.05% based on my analysis of Spire Missouri's average CWIP and short-term debt balances for the period December 31, 2017 through December 31, 2020.

Q. Why didn't you include the most recent quarterly period, March 31, 2021?

A. Because of the anomalous amount of short-term debt caused by higher gas prices from winter storm Uri.

[23] Section 393.1012.2 and 393.1012.3, RSMo.

Q. How does this compare to the proportion of short-term debt you recommended based on the average quarterly period covering the test year?

A. It is slightly lower. I recommended a short-term debt ratio of 7.28%.

Q. Are you changing your recommended proportion of short-term debt based on your analysis of the full rate case cycle?

A. No. Spire Inc. and Spire Missouri have shown a willingness to carry a higher proportion of short-term or shorter-term debt in its capital structure in between rate cases in order to capture additional margin. As I indicated in prior testimony, this was the rationale for Spire Missouri issuing a 3-year term loan after Spire Missouri's last rate case.

Q. Did Spire Missouri time its long-term debt issuance in the last rate case during the final month of the true-up period?

A. Yes. Spire Missouri's true-up period in its 2017 rate case was September 30, 2017. Spire Missouri issued $170 million of long-term debt on September 15, 2017. Spire Missouri's capital structure witness in that case, Glenn Buck, claimed that if this pro forma amount of long-term debt were deducted from short-term debt for the prior 13-months to the true-up date, the net balance would be less than short-term asset balances for the same 13-months, which he testified justified the exclusion of short-term debt from the authorized ROR.

Q. Do these transactions demonstrate the error of relying on "snapshot" or "point-in-time" analysis for purposes of setting fair and reasonable rates over the rate case cycle?

A. Yes. Not only does this result in an unreasonable ROR for rates set in the general rate case, but this unreasonable ROR is then allowed to be applied to ISRS related investments, which are funded by lower cost capital not reflected in the ROR used to set the ISRS surcharges.

Q. Does Staff disagree with your recommended capital structure?

A. Yes. Dr. Won provides his response to my capital structure recommendation on pages 39 to 42 of his rebuttal testimony.

Q. What is the basis for Dr. Won's disagreement with your capital structure recommendation?

A. Dr. Won cites several of the Commission's reasons from the 2017 rate case and maintains that the use of Spire Missouri's capital structure is "supported by the facts in this proceeding including that Spire Missouri has an independently determined capital structure with its own long-term debt issuances secured by its own assets."[24]

Q. Do you agree with Dr. Won's conclusion that Spire Missouri has an "independently determined capital structure?"

A. It depends on the identity of the subject. Dr. Won does not identify the entity that "independently" determines Spire Missouri's capital structure. However, because Spire Inc. has decided to manage Spire Missouri's capital structure to target the ratios the Commission authorized in the 2017 rate case, it is clear that the Commission is the defacto manager of Spire Missouri's capital structure. Therefore, I do not agree Spire Missouri nor any of Spire Missouri's affiliates are managing Spire Missouri's capital structure independent of outside influences.

Q. Does Dr. Won discuss any other factors he considers supportive of adopting Spire Missouri's capital structure?

A. Yes. Dr. Won cites four factors identified in "The Cost of Capital – A Practitioner's Guide," by David C. Parcell, to support his position that the Commission was correct in adopting Spire Missouri's capital structure for purpose of determining its authorized ROR.[25]

[24] Won Rebuttal, p. 42, ll. 14-16.
[25] *Id.,* p. 41, ll. 7-15.

Q. Are you familiar with these factors and this curriculum?

A. Yes. I have reviewed and debated these factors in several cases over my career.

Q. Did you debate these factors in Spire Missouri's 2017 rate case?

A. Yes. Spire Missouri's ROR witness, Pauline Ahern, in Case No. GR-2017-0215, cited these factors in defending the use of Spire Missouri's capital structure.

Q. Will you discuss these factors again and update your arguments for any changes in circumstances and/or financial data?

A. Yes.

The first factor is:

> Whether the subsidiary utility obtains all of its capital from its parent, or issues its own debt and preferred stock.

Spire Missouri still issues long-term debt to third-party investors. However, Spire Missouri relies on Spire Inc. for its short-term capital needs through Spire Inc.'s consolidated commercial paper program. Spire Inc. last made a direct equity infusion into Spire Missouri in 2012. As I have discussed in my direct and rebuttal testimonies, because Spire Missouri has retained 100% of its cash flows in several quarters over the last several years, Spire Inc. has strategically funded its cash deficiencies for dividends by raising capital at the holding company. Spire Inc. has raised capital from other sources to fund $100 million of dividends during the past several years. Although I discussed this aspect of Spire Inc.'s financial management of its family of companies in my direct testimony,[26] Spire Missouri did not respond to this part of my testimony.

The second factor is:

> Whether the parent guarantees any of the securities issued by the subsidiary.

[26] Murray Direct, pp. 52-53.

Spire Inc. still does not guarantee any of Spire Missouri's securities. However, as I discussed in other areas of my testimony, Spire Missouri and its regulated utility affiliates have lower business risk profiles than Spire Inc. and its non-regulated subsidiaries. Spire Inc.'s creditworthiness depends on its regulated subsidiaries rather than the opposite. Therefore, creditors/lenders to Spire Missouri do not require credit enhancement. However, Spire Inc.'s other riskier non-regulated subsidiaries do require credit enhancement, which would not be possible but for Spire Inc.'s ownership of low-risk, regulated LDCs, including that of Spire Missouri.

The third factor is:

> Whether the subsidiary's capital structure is independent of its parent (i.e. existence of double leverage, absence of proper relationship between risk and leverage of utility and non-utility subsidiaries).

As I indicated when discussing the first factor, Spire Inc. last issued debt to make a direct equity infusion into Spire Missouri in 2012. This circumstance/situation is the most direct form of double-leverage. However, double-leverage on a broader level is simply the existence of leverage at the subsidiary and at the holding company, which defines Spire Inc.'s financing strategy. It is this broader definition that feeds into the logic provided in the quoted parenthesis, which is the absence of the proper relationship between risk and leverage of the utility and non-utility subsidiaries. If Spire Inc.'s non-regulated subsidiaries could support the debt issued at the holding company, they would not require guarantees from the holding company. Therefore, it is wholly illogical and inconsistent with the relationship between risk and leverage to conclude that Spire Inc. could issue holding company debt without the cash flow support of its low-risk regulated utility assets. The absence of a proper relationship is supported by the fact that S&P determined that Spire Missouri's hypothetical stand-alone credit profile ("SACP") is 'A+,' but ultimately assigns Spire Missouri an 'A-' credit rating due to Spire Inc.'s more leveraged capital structure.[27] This two-notch differential is even greater than the one-notch differential that existed at the time of the 2017 rate case. Additionally, as ** ____

[27] Beverly R. Gantt and Matthew L. O'Neill, "Spire Missouri Inc.," S&P Global RatingsDirect, March 23, 2020.

_____ ** Therefore, the third factor does not support setting Spire Missouri's ROR based on its cost inefficient capital structure.

The fourth factor is:

> Whether the parent (or consolidated enterprise) is diversified into non-utility operations.

The fourth factor is mainly concerned with whether one would reasonably expect the parent consolidated capital structure to be significantly different than that of its subsidiaries due to business risks that are widely diverse. Although Spire Inc. does have some exposure to non-regulated operations, this exposure to non-regulated operations should cause Spire Inc. to have a less leveraged consolidated capital structure than its LDC subsidiaries due to the fact that its non-regulated operations have more business risk. Prior to Spire Inc.'s acquisition-oriented strategy starting in 2013, Spire Inc. (then Laclede Group) was less leveraged than Spire Missouri (then Laclede Gas Company). Laclede Group only issued short-term debt prior to these acquisitions. Therefore, this factor supports the use of Spire, Inc.'s consolidated capital structure because the lower-risk regulated utilities allow Spire Inc. to have a more leveraged capital structure while maintaining a strong investment grade credit rating.

RESPONSE TO DYLAN D'ASCENDIS' REBUTTAL TESTIMONY

Q. What is Mr. D'Ascendis primary focus in his rebuttal testimony?

A. Mr. D'Ascendis is primarily addressing my and Dr. Won's ROE recommendations. He briefly discusses Spire Missouri's recommended capital structure as it relates to his proxy companies' capital structures.

[28] Spire Strategy Committee Meeting, October 16, 2019, p. 78.

Q. What is your general reaction to Mr. D'Ascendis' rebuttal testimony?

A. Mr. D'Ascendis did not provide any testimony in response to my direct testimony comparing and contrasting the electric utility and local natural gas distribution ("LDC") capital market conditions. In my opinion (and in most equity analysts' opinions over most of the past year), this has been one of the most remarkable and debated dynamics that has changed within the utility sector. This has also been of great interest and concern to Spire Inc. It is this type of information that should be closely examined and understood in determining a fair and reasonable allowed ROR in this case. This information is also important for understanding whether Spire Inc. should be pursuing a more conservative capital structure for purposes of ensuring financial flexibility to ensure Spire Missouri's credit profile is not even more unfairly constrained by Spire Inc.'s additional business and financial risk. This certainly is one of the primary issues that has caused Spire Inc. to reevaluate the types and amounts of capital it issues in order to ensure financial stability at reasonable costs. However, Spire Inc. has not been as concerned with ensuring the same for Spire Missouri's security issuances. Instead, Spire Inc. has targeted the same equity-rich capital structure for Spire Missouri as it was authorized in the 2017 rate case. This fact in and of itself should be sufficient to dismiss Spire Missouri's requested ROR as too high.

Q. What is your general reaction to Mr. D'Ascendis' conclusions as it relates to change in cost of capital environment?

A. Mr. D'Ascendis concludes that investor-required returns have increased since he filed his Direct Testimony on December 11, 2020.[29] Mr. D'Ascendis conclusion is at odds with the continued upward climb in broader stock market valuations and the decrease in yields on junk bonds. His conclusion is also at odds with ** [redacted]

[29] D'Ascendis Rebuttal, p. 8, ll. 4-6.

- _____
_____
- _____
_____
- _____
_____ **[30]

Q. Mr. D'Ascendis indicates that he does not agree that utility stock investments are "akin to bond investments."[31] Who does he disagree with?

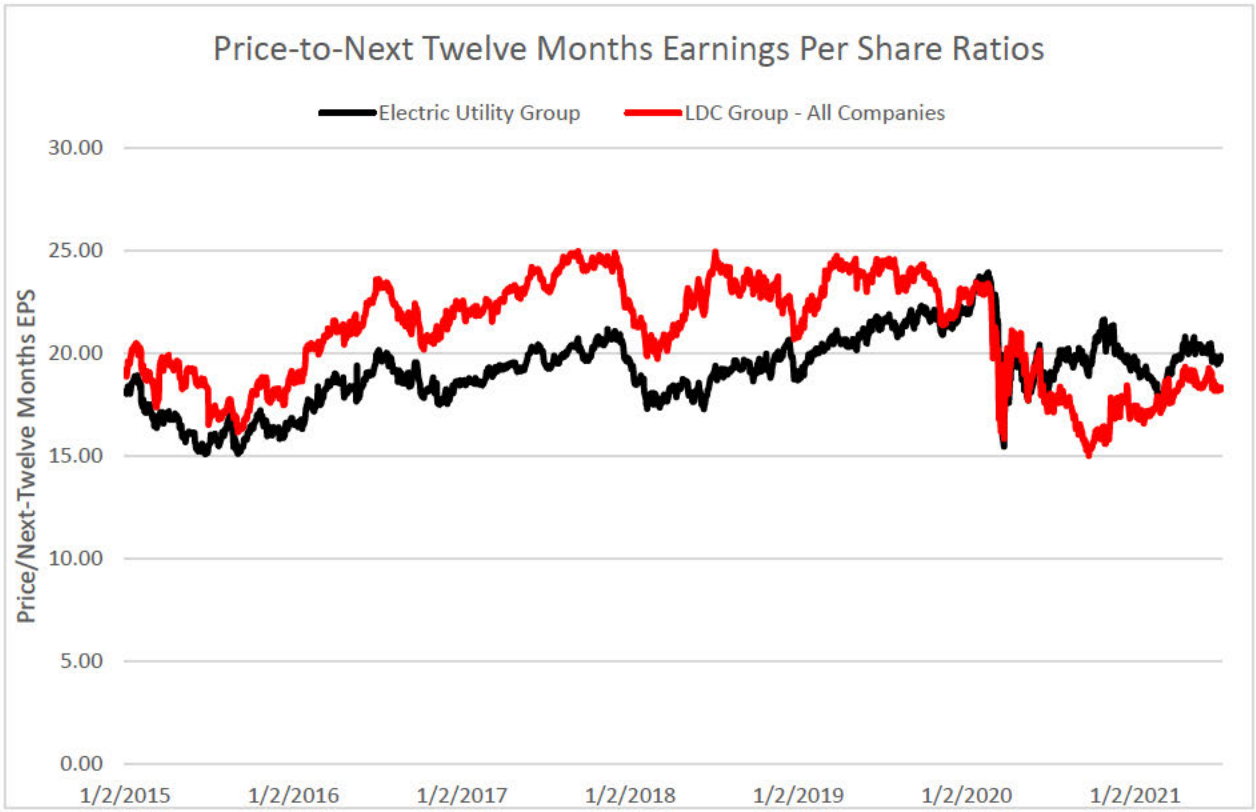
A. Investors. Mr. D'Ascendis claims that equity analysts greatly influence investor decisions as it relates to making stock investments. These same equity analysts consistently compare the valuation of utility stocks to changes in bond yields due to the fact that they consider regulated utility stocks to be bond surrogates/substitutes.[32] While there certainly are periods in which the historical ~71% correlation of utility stocks with interest rates are not as strong, analyzing utilities' P/E ratios as they relate to current interest rates routinely forms the basis for whether these equity analysts consider utility stocks to be expensive or inexpensive.[33]

Q. Mr. D'Ascendis concludes that low interest rates during 2020 were due to a "volatility-driven 'flight to safety' as opposed to a systematic lowering of capital costs."[34] Do you agree that there has been a "flight to safety?"

A. No. As is evident by consistently increasing valuation levels for the broader markets and a significant decline in junk bond yields and the declining spread of junk bond yields over United States Treasury (UST) bonds, the opposite has occurred. Although this illustrates the decline in required market risk premium, this does not necessarily imply that the required risk premium to invest in utilities has decreased since shortly prior to the onset of the COVID pandemic. However, as I discussed extensively in my testimony in Ameren Missouri's and Empire's 2019 rate cases, Case No. ER-2019-0335 and ER-2019-0374,

[30] Spire Inc. Strategy Committee Meeting, January 27, 2021, p. 34.
[31] *Id.*, p. 10, ll. 14-15.
[32] Shahriar Pourreza, CFA, et. al., "'21 Utilities Outlook: Getting Ready for Another Bumpy Ride," Guggenheim Securities LLC, January 21, 2021, p. 14.
[33] *Id.*, p. 27.
[34] D'Ascendis Rebuttal, p. 10, ll. 20-21.

respectively, utilities' COE were at all-time lows at that time. As shown in the below graph, electric utilities' and LDCs' P/E ratios are trading at similar levels versus the discount that LDCs traded at during most of 2020:



Q. Mr. D'Ascendis provides his rationale as to why utility stock investments should not be considered analogous to bond investments by comparing utility dividend yields to 'A'-rated utility bond yields on page 19 of his rebuttal testimony. In this chart he focuses on the fact that the 'A'-rated utility bond yields are historically higher than utility dividend yields. Does this surprise you?

A. No. Part of the expected return from investing in utility stocks is an expected growth in dividends over the long-term. Bond coupons do not grow based on a company's underlying fundamentals. However, if long-term interest rates decline (assuming no change in companies' risk profiles), then the value of higher historical bonds' coupons increase, causing the price of the outstanding bonds to increase. As discount rates (i.e. the cost of

capital) decrease, the value of the higher coupons increase, resulting in a higher market value of the bonds. This same relationship holds true for utility stocks.

Q. Does Mr. D'Ascendis' computation of capital gains for utility stocks for the period 2010 through 2020 prove that the characteristics of utility stocks are very much like bonds?

A. Yes. UST bonds over the same period achieved over 60% of their total returns from price appreciation. The price appreciation in bonds was not caused by expected growth in coupons because coupons are fixed when the bonds are issued. The price appreciation in bonds occurred because the cost of capital declined (the rate used to discount the higher coupons declined causing the value of the bonds to increase). The same holds true for utility stocks. Therefore, Mr. D'Ascendis' analysis of capital gains for utility stocks during the period of generally declining interest rates supports the fact that utility stocks have investment characteristics similar to bond/fixed-income securities.

Q. Mr. D'Ascendis claims that a multi-stage DCF method is "not applicable to utility companies."[35] Is his position correct?

A. No. Mr. D'Ascendis' testimony is based on his view that utility companies are in the mature stage of their growth cycle. While I appreciate the fact that the utility industry is generally considered to be a mature industry, Mr. D'Ascendis position is not supported by practical evidence. As I explained in my direct testimony, a multi-stage DCF approach was appropriate because this is in fact how utility investment analysts determine a fair value for utility stock investments. I have first-hand knowledge of at least two investment firms that use multi-stage DDM/DCFs to estimate a fair price to pay for utility stocks. There are likely several others that perform such methods, but not all analysts publish the specifics of their models in their research reports.

[35] *Id.,* p. 27, ll. 19-21.

Q. Mr. D'Ascendis indicates that it is better to use earnings growth rates in a DCF analysis because earnings expectations have a more significant influence on market prices than dividend expectations.[36] Does Spire Inc. agree with Mr. D'Ascendis?

A. No. In evaluating its dividend payment policies, Spire Inc. recognized that utility investors are focused on dividends and the growth in dividends. This is because this is a fundamental characteristic of utility stock investments and investors' expectations for their investments in utility stocks.

Q. Mr. D'Ascendis indicates Value Line is the only source he is aware of that publishes projected dividend per share (DPS) growth rates.[37] Do equity analysts provide projected DPS information for the companies that they follow?

A. Yes. This information was the basis for the projected DPS information I used in my multi-stage DCF analysis in my testimony. I obtained this information from S&P Global Market Intelligence's database. As I explained in my rebuttal testimony, investors are primarily interested in long-term growth rates in earnings per share (EPS) because this allows them to determine whether a particular company's P/E ratio (a relative valuation method) deserves a premium or discount to its peers. The long-term growth in EPS is not used as a proxy for perpetual dividend growth in a constant-growth DCF analysis.

Q. Mr. D'Ascendis claims it is "well-established in the financial literature that projected growth in EPS is the superior measure of dividend growth in the DCF model."[38] Is he correct?

A. No. Mr. D'Ascendis concludes that because security analysts' recommendations affect stock prices, this proves that investors use the security analysts' projected 5-year compound annual growth rate (CAGR) in EPS as the constant growth rate in a single-stage DCF analysis. This was not the conclusion of the seminal study by Cragg and Malkiel,[39] which

[36] *Id.,* p. 28, ll. 3-7.
[37] *Id.,* p. 30, ll. 1-7.
[38] *Id.,* p. 31, l. 27 – p. 32, l. 1
[39] Malkiel, Burton G., and John G. Cragg. "Expectations and the Structure of Share Prices." *The American Economic Review*, vol. 60, no. 4, 1970, pp. 601–617.

most subsequent studies have cited as support for the influence of equity analysts' recommendations on stock prices.

The conclusion of this academic study was that equity analysts' expectations had a greater influence on stock prices compared to simple extrapolations of historical financial data. This conclusion is logical considering the vast amounts of resources dedicated to the discipline of securities analysis. This does not translate into proof that investors use projected five-year CAGR in EPS as a constant growth rate in the single-stage DCF methodology. In fact, the Cragg and Malkiel study did not even use the DCF valuation model when testing their hypothesis regarding the influence of analysts' projections on stock prices. It is more plausible to conclude that, because investors rely on equity analysts' expectations, they rely on their investment recommendations (e.g. buy, sell or hold), which is exactly how ** [redacted]**[40]

Equity analysts' investment recommendations are based on their assessment of the intrinsic value of a given stock. Analysts' methodologies for estimating a fair price varies, but most at least assess the current price-to-forward earnings ratios both on a consensus basis and on the analyst's own estimates. If the analyst believes the company can grow its earnings faster than the consensus and/or the company deserves a higher price-to-earnings ("P/E") ratio than the consensus, then the analyst will expect a higher return than the consensus. In my experience, this is the primary purpose for providing both discrete EPS forecasts and EPS growth rate forecasts. It allows investors to estimate a potential justified P/E multiple.

Cragg and Malkiel specifically indicated the following in their study:

> We would not argue that these estimates necessarily give an accurate picture of general market expectations. It would, however, seem reasonable to suggest that they are representative of opinions of some of the largest professional investment institutions and that they may not be wholly unrepresentative of more general expectations. **Since investors consult professional investment institutions in forming their own expectations, individuals' expectations may be strongly influenced—and so reflect—those of their advisers.** That several of our participating firms find it worthwhile to publish these projections and provide them to their customers

[40] Spire Inc. Board of Director Meeting, April 30, 2020, p. 7.

> provides prima facie evidence that a certain segment of the market places some reliance on such information in forming its own expectations. Also, insofar as other security analysts and investors follow the same sorts of procedures as those used by our sample analysts in forming expectations, general investors' expectations would resemble those of the analysts. Consequently, these predictions may well serve as acceptable proxies for general expectations and surely seem worthy of detailed analysis.[41] (emphasis added)

Considering the above information, in which the foundation for the study concludes that investors rely and depend on their investment advisors, and therefore, stock prices reflect these expectations, it is imperative for ROR witnesses to understand how these advisors perform their investment analyses rather than using their growth rates without understanding the context in which they are used. In my experience analyzing investment analysts' research reports, I have *NEVER* seen an investment analyst assume a utility stock will grow at a constant rate in perpetuity consistent with the analyst's projected 5-year CAGR in EPS. To assume that investors utilize the information provided by equity analysts in a way that is wholly inconsistent with how the very analysts that provide them use them, is not supported by practical evidence.

Equity analysts often use the dividend discount model ("DDM") to estimate a fair price to pay for the stock. The DDM is synonymous with the DCF in utility ratemaking settings. The DCF in utility ratemaking is simply solving for the required return/cost of equity variable. In valuation, the goal is to solve for the fair price of the stock. Consequently, if equity analysts are of value to their clients, then the stock prices will reflect their estimates of future dividends and the required return on these dividends. Consequently, if one accepts the studies that security analysts' expectations influence investors, which is the conclusion made by Malkiel and Cragg, then this means that stock prices reflect the cost of equity used by these very same analysts. My experience has been that these equity discount rates are usually much lower than cost of equity estimates provided by ROR witnesses in utility rate cases. I have provided many examples in this case and in past rate cases, which proves that equity analysts use equity discount rates as low as in the 5% range, with very few as high as 7%. This clearly refutes Mr. D'Ascendis'

[41] *Id.*

constant-growth DCF COE estimates in the 9% range, which assumes that dividends will grow perpetuity at the equity analysts' projected 5-year CAGR in EPS.

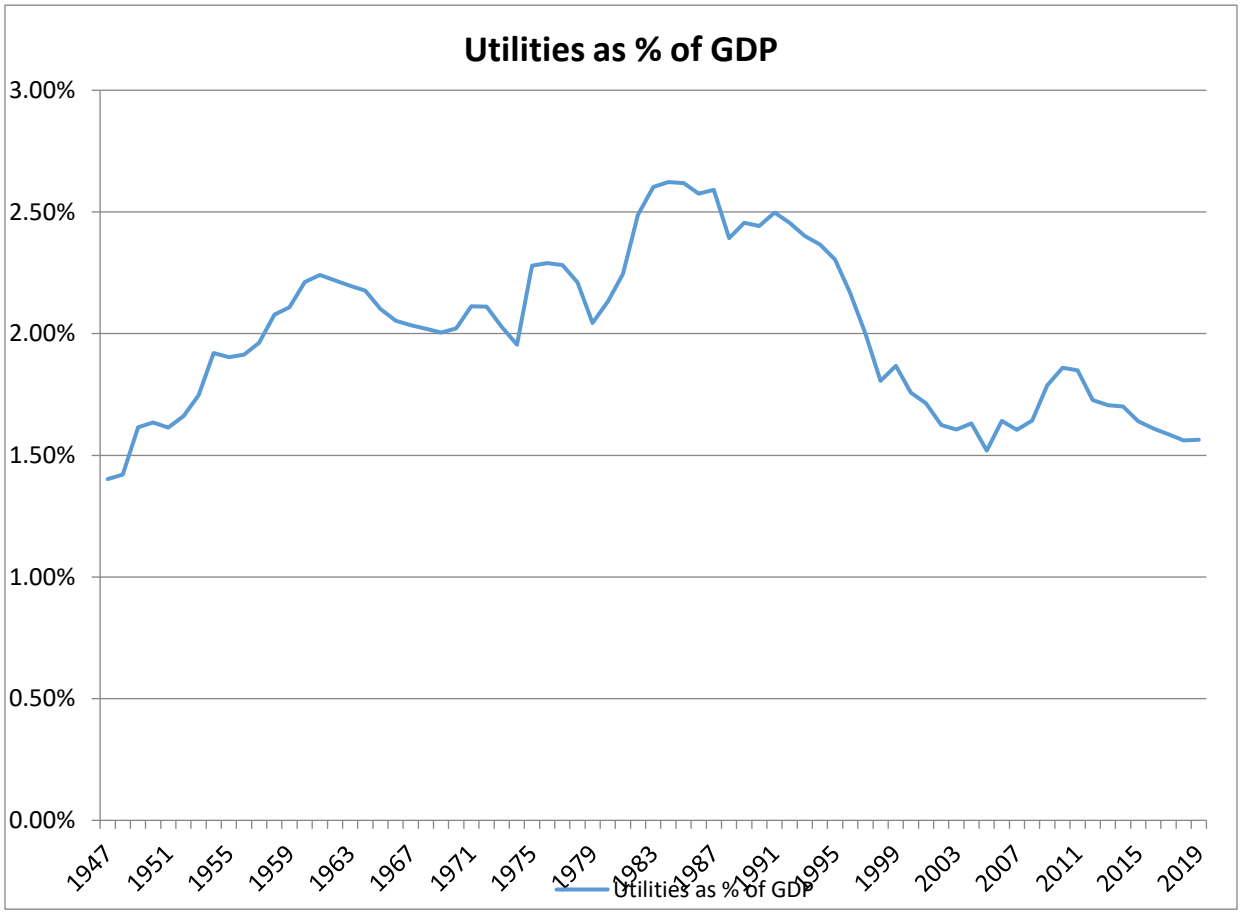
Consequently, Mr. D'Ascendis' testimony is wrong as it relates to his statement that it is "well-established in the financial literature that projected growth in EPS is the superior measure of dividend growth in the DCF model."[42]

Q. Mr. D'Ascendis claims that the GDP information he provided on Schedule DWD R-4 proves that the utility industry can be expected to grow at a rate faster than the overall economy.[43] What does he fail to recognize in his analysis?

A. The fact that the utility industry has become a shrinking portion of the economy over the last 20+ years. As can be seen in the following graph, the utility industry increased as a contribution to GDP from the years 1947 through approximately the mid-1980s. However, since this time, the utility industry has become a shrinking part of the economy with a leveling off of its contribution since around the turn of the century. If utilities were to continue to contribute approximately 1.5% to the economy, then it may be rational to expect utilities to grow at the same rate of the economy for the foreseeable future. However, this would be based on the aggregate growth of the industry, rather than growth of the earnings of the industry. In fact, history has shown that because utility companies need to issue external equity (additional common shares), the expected growth in

[42] D'Ascendis Rebuttal, p. 31, l. 27 – p. 32, l. 1
[43] *Id.,* p. 32, ll. 3-5.

earnings/dividends per share is less than an aggregate expected earnings growth rate.



Q. What is your response to Mr. D'Ascendis' suggestion that cost of capital estimation methods such as the CAPM or risk premium analyses should use projected interest rates?

A. This defies the efficiency of capital markets that Mr. D'Ascendis embraces when discussing the use of published betas and equity analysts' earnings growth rates. Mr. D'Ascendis is correct that investors take all of this information into consideration when determining a fair price to pay for stocks in utility companies. Investors also consider the forward expectations of interest rates when deciding on a fair price to pay for their investments, whether it is an investment in utility stocks or an investment in bonds. If it is investors' consensus that long-term interest rates will increase over the next year, then this is factored into the price they are willing to pay for bonds. Mr. D'Ascendis' suggestion that the cost of capital should be based on higher forward interest rate estimates implies

that investors in bonds today do so with the expectation that bond prices will decrease when interest rates increase. This is not the case. The current price of long-term bonds reflect investors' expectations of an average return over the life of the bond.

Additionally, as I will discuss later in my testimony, Spire Inc.'s own cost of capital analysis, performed for purposes of ensuring the carrying value of its LDC assets are fairly reported on its balance sheet, used current interest rates rather than projected interest rates.

Q. Mr. D'Ascendis indicates that you are incorrect in your position that "market-based ROE analyses are not equal to the authorized ROE…"[44] Does Mr. D'Ascendis disagree with others besides you on this matter?

A. Yes. He disagrees with investors and Spire Inc. Equity analysts have become accustomed to commissions allowing ROEs higher than the COE. In fact, influential equity research analysts, such as Evercore ISI, that publish CAGRs in EPS, determine a final terminal allowed ROE to COE spread of 2.25% when determining a fair price to pay for utility stocks. Additionally, Spire Inc. estimates a much lower COE when determining a reasonable fair value for its utility assets. I provided this information in my rebuttal testimony. I found that Spire Inc. uses reasonable market risk premium of approximately **~~ ** when making its own investment and valuation assessments.

Q. Mr. D'Ascendis takes issue with your comparison of Spire Missouri to the Empire District Electric Company for purposes of determining a fair and reasonable allowed ROE in this case.[45] How do you respond?

A. My comparison of the LDC subsector of the utility sector to the electric utility subsector of the utility sector is a routine aspect of investors' evaluations of the attractiveness or unattractiveness of potential investments in utilities at any given time. The inversion of LDCs trading at a premium to the electric utility subsector to trading at a discount to the electric utility subsector has been the subject of much debate by investors and the analysts advising such investors through their published research. In fact, equity research analysts

[44] *Id.,* p. 46, l. 19, through p. 47, l. 3.
[45] *Id.,* p. 48.

covering the utility sector have been evaluating potential justifications for LDCs trading at discounts to electric utilities as opposed to premiums. To the extent that such a change in relationship is due to a higher COE relevant to the electric utility industry, the Commission should consider such in determining a fair and reasonable allowed ROE for Spire Missouri. In my direct testimony, I decided such uncertainty justified recommending the high-end of my recommended ROE range exceed the 9.25% allowed ROE for Empire. However, due to the fact that a significant aspect of the debate on the decline in LDC stock prices involved a potential decline in the industry, a lower terminal value/perpetual growth rate for the industry would also explain the decline in the LDC subsectors' stock prices (i.e. same COE applied to lower expected future cash flows causes a lower fair price for a share of LDC stock).

Consequently, this is the type of comparison investors routinely make when deciding which subsectors of the utility industry are attractive investments in the current market environment. In the recent MAWC rate case, I analyzed the valuation levels of the electric, gas and water subsectors of the utility industry in order to provide some context as to why the water utility industry traded at valuation levels that often exceeded the electric and gas industries by at least 10x P/E in recent periods. I concluded that the higher P/E ratios in for the water utility subsector could be explained by a lower overall discount rate (cost of capital including the debt used in the capital structure) and a higher expected terminal value/perpetual growth rate because of the confidence in the need for safe and reliable water and sewer utility service in perpetuity.

Q. Mr. D'Ascendis indicates that you did not consider your CAPM and Bond Yield Plus Risk Premium results in determining your ROE recommendation.[46] Is this an accurate representation of your testimony?

A. No. As Mr. D'Ascendis notes in his testimony, I performed a CAPM and Bond Yield Plus Risk Premium analysis to test my DCF estimates. Because my COE estimates using these

[46] *Id.* p. 51, ll. 3-9.

methods indicate that my multi-stage DCF are likely too high, I used these lower estimates to establish the lower-end of my COE range, which was 6.5%.

Q. Mr. D'Ascendis claims that you dismissed your COE estimates when recommending a 9.25% ROE for Spire Missouri. Is this accurate?

A. No. My recommended authorized ROE of 9.25% takes into consideration many different factors. A fundamental principle of shareholder value creation is for a company to invest in projects that allow the company to at least earn its cost of capital. An allowed ROE of 9.25% allows for a margin of 225 basis points over my estimate of Spire Missouri's COE. I am aware investors have become accustomed to regulators allowing utility companies returns that are higher than their cost of capital. In fact, some investors, such as Evercore ISI, use investment models that assume that regulators currently allow an ROE to COE spread of approximately 440 basis points (9.75% ROE – 5.35% COE), but will eventually reduce the spread to a range of 225 to 275 basis points as either the COE increases, the allowed ROEs decrease or a combination of both.[47]

As I discussed in my Direct Testimony, as recently as Spire Missouri's 2017 rate case, I had estimated that the LDC industry's COE was approximately 25 basis points lower than that of the vertically-integrated electric utility industry. Therefore, I suggested that an authorized ROE that is 25 basis points lower than that which the Commission considered reasonable for electric utilities was fair and reasonable. I understood the Commission would apply its zone of reasonableness standard in determining the lowest and highest recommended ROEs it would consider. Knowing that the Commission had applied this standard when deciding a 9.5% allowed ROE was fair and reasonable for Missouri's largest electric utility companies, it was my opinion that the Commission should recognize Spire Missouri's lower risk as compared to Missouri's larger electric utilities. Again, in my opinion, an allowed ROE as low as the cost of capital would be sufficient to attract capital, but if the Commission were to authorize an ROE consistent with such, then Spire's stock price would decline considerably because investors expect some consistency within how

[47] Durgesh Chopra and Michael Lonegan, "Utes Mid-Year Quick Update," Evercore ISI, July 5, 2021, p. 6.

Missouri sets the rates for its utility companies. Based on my analysis of capital market conditions and consideration of investor communications of the typical relationship between LDCs and the electric utility industry, a 9.25% authorized ROE applied to a reasonable equity ratio is factored into the price investors are willing to pay for Spire's stock.

Q. Mr. D'Ascendis takes issue with the betas, interest rates, and market risk premium estimates you used in your COE analysis.[48] What issue does he raise about the beta and market risk premiums ("MRP") you use?

A. He indicates that the information I used is not published by a "widely available source" and the MRP as estimated by Duff & Phelps is "not transparent."

Q. Does his criticism make any sense considering the eighteen risk premium estimates he used to estimate the cost of equity for Spire Missouri?

A No. Of the 18 different risk premium estimates Mr. D'Ascendis provides to estimate Spire Missouri's COE, only one of these estimates is published and widely available, which is the 7.01% market risk premium he shows on page 2 of Schedule DWD-D5.[49] The remainder of Mr. D'Ascendis risk premium estimates are determined through his misuse of financial and market data provided by Value Line and Bloomberg. Although Value Line and Bloomberg are reputable sources for financial and market data, they do not advise investors as to appropriate market risk premiums. There are no reputable "widely available sources" that estimate market risk premium estimates anywhere close to the 10.45% Mr. D'Ascendis estimates based on his use of data from these sources. As I indicated on page 24 of my rebuttal testimony, Spire Inc. itself used a ** ___ ** market risk premium for purposes of determining if the value of its regulated utility assets are fairly reported on its balance sheet.

[48] *Id.,* p. 51-53.
[49] *Id.,* Schedules DWD-D4, pp. 8, 12 and 13; and DWD-D5, p. 2

Q. What source does Spire Inc. use for purposes of determining a fair and reasonable market risk premium?

A. Spire Inc. has used many different sources to determine a ** ** market risk premium is reasonable. According to its December 10, 2018, Impairment of Analysis of Goodwill, this market risk premium was based on the following information considered by PricewaterhouseCoopers: ** [redacted] ** In an internal memorandum regarding its own assessment of the value of its regulated LDC assets, Spire Inc. indicated the following about the sources it relied on for a ** [redacted]

[redacted]

- [redacted]
- [redacted]

[redacted] **

As indicated in Spire Inc.'s memorandum, this market risk premium is consistent with those it uses for other valuations. I confirmed such when I analyzed the inputs Spire Inc. used for purposes assessing the value of its Spire Storage business segment. For purposes of determining this value, Spire Inc. used a market risk premium of ** [redacted] **

[50] Spire Inc. Board of Directors Meeting, April 24, 2019, p. 103 of 227.

Q. What company publishes the Ibbotson Associates, Inc.'s Stock, Bonds, Bills and Inflation ("SBBI") data?

A. Duff & Phelps. Duff & Phelps has been publishing this data for approximately the last five years.

Q. Does the CFA Institute make this data available to its members?

A. Yes. This data is updated monthly and made available to all CFA members in good standing.

Q. Is this how you accessed this data?

A. Yes.

Q. Mr. D'Ascendis also takes issue with your use of a 20-year risk-free rate in addition to your use of a 30-year risk-free rate when estimating the cost of equity.[51] Why did you show a CAPM analysis with a 20-year risk-free rate?

A. Because the historical earned return spread between returns on large company stocks and returns on long-term government bonds is based on 20-year UST bonds. Although I agree with Mr. D'Ascendis that it is desirable to use the longer 30-year UST bonds for the risk-free rate for the first variable in the CAPM, if so, it should also should be used to determine the earned return to subtract from large company stocks. Ibbotson's database of returns on long-term government bonds is based on the return on 20-year UST bonds. Therefore, the return spread is based on realized returns on 20-year UST bonds, not 30-year UST bonds. Shorter-term UST bonds provided lower returns than longer-term UST bonds over the long-term. Therefore, adding the higher earned return spread to the higher yield of the 30-year UST bond causes an upward bias.

[51] D'Ascendis Rebuttal, p. 52, l. 4 through p. 53, l. 2

Q. Can you provide an example to illustrate your position?

A. Yes. The arithmetic total return on 30-day UST bills for the period 1926 through 2020 was 3.34%. Subtracting this total return from the arithmetic total return from large company stocks of 12.16% results in an earned return spread of 8.82%. It is not proper to add this earned return spread to a current 30-year UST bond of approximately 1.5% to project a 10.32% return going forward. This 8.82% return spread would be added to a current 30-day UST bill yield of 0.05% to arrive at an expected return of 8.87%.

Q. Are you familiar with the first source used by Spire Inc. in its goodwill impairment analysis?

A. Yes. This is the website maintained by Dr. Aswath Damadoran, PhD, New York University Stern School of Business. Dr. Damadoran's treatises have historically been used as part of the curriculum for the CFA Program administered by the CFA Institute.

Q. What does Dr. Damadoran estimate as the current market risk premium?

A. 4.72% as of the end of 2020.[52]

Q. Are you familiar with the second source used by Spire Inc.?

A. I am familiar with KPMG, but I have not regularly reviewed their published market risk premiums.

Q. What is the most recent market risk premium estimate you could find from KPMG?

A. The most recent market risk premium I could find published by KPMG was as of March 31, 2021, which was 5.75%.[53]

[52] http://pages.stern.nyu.edu/~adamodar/
[53] https://home kpmg/nl/nl/home/insights/2020/04/equity-market-risk-premium-2020 html

Q. Considering Mr. D'Ascendis' emphasis on the efficient market hypothesis and his view that investors use widely-available information that is easy to understand, does it make sense that he suggests estimating the risk premium using the "Predictive Risk Premium Method?"

A. No. I have never observed the Predictive Risk Premium Method ("PRPM") being used to estimate the COE in utility cost of capital proceedings other than by Mr. D'Ascendis' colleague, Spire Missouri's ROR witness from the 2017 rate case, Ms. Pauline Ahern. I have yet to see the PRPM used by utility equity analysts to estimate a fair price to pay for utility equities. Based on Mr. D'Ascendis emphasis that only straightforward, transparent information is reflected in utility stock prices, it is illogical to assume an obscure method that requires users to purchase Eviews© statistical software to validate and also have ready access to the University of Chicago's Center for Research in Security Prices ("CRSP") database, would accurately measure the COE. Of course, there is no reason to do so for purposes of estimating an investors' COE because Mr. D'Ascendis could not provide a practical example of any investors using this method because apparently he does not track this type of information.[54]

Q. Mr. D'Ascendis compares expected returns to actual returns on page 55 of his testimony. Does this information illustrate the fact that investors have realized unexpected returns due to the continued decline in costs of capital?

A. Yes. Mr. D'Ascendis claims that it is inappropriate to subtract total returns (both yield and capital gains) for UST bonds from total returns for stocks to estimate a required equity risk premium because the only true risk-less return on bonds is that of the coupon.[55] This fact illustrates the fallacy of comparing actual realized returns to projected returns and concluding that this proves investors' projections are inconsistent with their required returns. Fama and French studied the period from 1950 through 2000 and determined that investors realized an extra 2.55% to 4.32% additional compound annual return over their expected/required returns, which was especially pronounced during the last 20 years of the

[54] Dylan W. D'Ascendis' response to OPC DR No. 3020.
[55] D'Ascendis Rebuttal, p. 40, l. 13 through p. 41, l. 13.

20th century (1980 – 2000).[56] Fama and French attributed the unexpected returns to the decline in the discount rate (cost of capital), which caused not only bond investors to realize unexpected returns, but also stock investors.

Q. Mr. D'Ascendis claims that your Bond Yield Plus Risk Premium analysis is premised on the notion that utility stocks are "bond-like" investments. Is he correct?

A. No. I relied on the CFA Program curriculum for purposes of this simple and straightforward test of reasonableness. The specific language from the CFA Program curriculum is as follows:

> **4.3.2 *Bond Yield Plus Risk Premium***
>
> For companies with publicly traded debt, the **bond yield plus risk premium method** [bold in original] provides a quick estimate of the cost of equity. The estimate is
>
> BYPRP cost of equity = YTM on the company's long-term debt + Risk premium
>
> The YTM on the company's long-term debt includes
> - a real interest rate and a premium for expected inflation, which are also factors embodied in a government bond yield; and
> - a default risk premium.
>
> The default risk premium captures factors such as profitability, the sensitivity of profitability to the business cycle, and leverage (operating and financial) that also affect the returns to equity. The **risk premium** in Equation 13 [above**] is the premium that compensates for the additional risk of the equity issue compared with the debt issue** (recognizing that debt has a prior claim on the cash flows of the company). In US markets, the typical risk premium added is 3%–4%, based on experience.[57] (emphasis added)

As is clear from the above language (especially that which I emphasized), the risk premium added to a company's yield on its long-term debt is not dependent on the company's equity having bond-like characteristics. In fact, this test of reasonableness can be applied to any

[56] Eugene F. Fama and Kenneth R. French, "The Equity Premium," The Journal of Finance, April 2002, pp. 637-659.
[57] Refresher Reading, 2021 CFA Program, Level II, Reading 25, p. 35.

company that has publicly-traded debt, whether it is a growth company that does not pay a dividend because it is retaining capital for reinvestment, or a company in financial distress that does not pay a dividend because it is required to retain cash to pay its debt service. As is clear from the quoted language, bond investors are subject to all of the same business risk factors as equity investors, but they have first claim to cash flows. My testimony simply emphasized that utility equity investors' required risk premium would be at the low-end (3%) because of the fact that utility investors do consider the dividend to be fairly safe. The main uncertainty to the utility equity investor is estimating the expected growth rate of the dividend.

SUMMARY AND CONCLUSIONS

Q. Can you summarize your surrebuttal testimony?

A. Yes. The way in which Spire Inc. has managed Spire Missouri's capital structure since the 2017 rate case confirms the appropriateness of using Spire Inc.'s capitalization policies and strategies as a guide to determining a fair and reasonable capital structure to which to apply the authorized ROE in this case. As Spire Inc. has demonstrated through its own strategic decisions on the types of capital to issue to maintain financial soundness, but also not dilute existing shareholder value, Spire Inc.'s capital structure is not managed for the primary purpose of achieving a higher equity ratio for ratemaking. The same is not true for Spire Missouri. Spire Missouri has relinquished the responsibility for managing its capital structure on a cost efficient basis to the Commission. If Spire Inc. desires to be authorized a higher equity ratio for ratemaking for Spire Missouri, it should manage itself to a more conservative capital structure, which will result in a family of companies that has a stronger and more flexible financial position.

The Commission should also ensure that the authorized capital structure recognizes Spire Inc.'s and Spire Missouri's consistent and significant use of short-term debt to fund its rate base and its investments that are allowed surcharges through ISRS applications in between general rate cases. Spire Inc.'s financial management of Spire Missouri's security issuances shows that it attempts to lower its cost of capital in between rate cases, but have

its authorized ROR set based on higher costs associated with long-term capital. The Commission can rectify this manipulation by including this low cost short-term debt in the authorized capital structure.

A 9.25% allowed ROE is fair and reasonable considering it allows for at least a 225 basis point margin over Spire Missouri's COE. My own analysis, corroborating information from equity analyst, internal information from Spire Inc. and common sense tests of reasonableness prove that Spire Missouri's COE is likely not higher than 7%.

Q. Does this conclude your testimony?

A. Yes.