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MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION FINANCIAL ANALYSIS

SURREBUTTAL TESTIMONY

OF

JEFFREY SMITH

Date 3-15-14 Reporter CDT File No. GR - 2019-0077

UNION ELECTRIC COMPANY, d/b/a AMEREN MISSOURI

CASE NO. GR-2019-0077

Jefferson City, Missouri July 2019

** Denotes Confidential Information **



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1		SURREBUTTAL TESTIMONY				
2	OF					
3		JEFFREY SMITH				
4 5		UNION ELECTRIC COMPANY, d/b/a AMEREN MISSOURI				
6		CASE NO. GR-2019-0077				
7	Q.	Please state your name.				
8	A.	My name is Jeffrey Smith.				
9	Q.	Are you the same Jeffrey Smith who prepared the Rate of Return Section of				
10	Staff's Cost of Service Report ("Staff Report") and rebuttal testimony in this case?					
11	A.	Yes.				
12	Q.	What is the purpose of your surrebuttal testimony?				
13	A.	The purpose of my surrebuttal testimony is to respond to Darryl T. Sagel's				
14	(Mr. Sagel),	and Robert B. Hevert's (Mr. Hevert) rebuttal testimonies. Mr. Sagel and				
15	Mr. Hevert s	ponsored testimony on behalf of Ameren Missouri. Mr. Sagel responded to the				
16	capital structure recommendation I sponsored in the Staff Report, and Mr. Hevert responded					
17	to the return on equity ("ROE") recommendation I sponsored in the Staff Report.					
18	EXECUTIVE SUMMARY					
19	Q.	What are Mr. Sagel's primary disagreements with Staff's capital structure				
20	recommendation?					
21	A.	Mr. Sagel disagrees with Staff's recommendation to limit the amount of				
22	equity in Ameren Missouri's rate making capital structure to 50%. Instead, Mr. Sagel contends					
23	that Ameren Missouri's recommended capital structure, containing 51.84% equity, is					
24	annronriate fo	or rate making purposes. Although Staff agrees with Mr. Sagel's propositions that				

- Ameren Missouri issues its own long-term debt and produces separate regulatory filings with the Securities and Exchange Commission (SEC), Staff disagrees with his other declarations. Specifically, Staff does not agree with Mr. Sagel's assertions that:
 - Ameren Missouri's capital structure is independently managed;
 - Equity infusions from Ameren are sourced from Ameren market equity issuances to third-party equity investors (and not debt);
 - Ameren Missouri's capital structure finances all of, and only, Ameren Missouri assets; [and]
 - Ameren Missouri assets do not support Ameren obligations. 1

Staff's review of financial transactions between Ameren ("AEE") and its operating companies leads Staff to the conclusion that AEE is using Ameren Missouri's debt capacity to leverage its investments in other jurisdictions. The comingling of funds at AEE has resulted in the siphoning away of Ameren Missouri's debt capacity, leading to a higher than required equity ratio at Ameren Missouri. Ameren Missouri's capital structure is managed for ratemaking purposes rather than to share a lower cost of capital with Ameren Missouri ratepayers, resulting in the cross-subsidization of other AEE operations at an unfair and unreasonable expense to Missouri jurisdictional ratepayers.

- Q. What are Mr. Hevert's primary disagreements with Staff's ROE recommendation?
- A. Mr. Hevert disagrees with Staff's recommendation to allow Ameren Missouri an ROE of 9.50%. Instead, Mr. Hevert contends that his revised recommended ROE of 9.95% is a more reasonable basis to balance shareholder/ratepayer interests. Specific areas of Staff's analysis which Mr. Hevert disagrees with include Staff's:

¹ Sagel Rebuttal, pg. 8, ll. 2-12.

Surrebuttal Testimony of Jeffrey Smith

- Interpretation of capital market conditions;
- Application of the Constant Growth DCF analyses;
- Application and structure of its Multi-Stage DCF model;
- Application of the CAPM and the relevance of those results in estimating the Cost of Equity; and
- Relevance of average authorized returns.²
- Although each of Mr. Hevert's contentions are addressed in Staff's response below, the fundamental flaw underlying Mr. Hevert's case is his assertion that the Cost of Equity ("COE") and ROE are the same.³
- Q. Does Staff recommend updating the capital structure and embedded costs of capital through the true-up period?
- A. Yes. Ameren Missouri has provided information through May 31, 2019. Staff's updated capital structure and embedded costs of capital inputs are displayed in the following table:

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Recommended Allowed Rate of Return as of May 31, 2019 for Ameren Missouri Allowed Rate of Return Common Equity Return of: Embedded Percentage 9.00% 9.50% 10.00% of Capital Cost Capital Component 2,28% 2.28% 48.99% 4.65% 2.28% Long-Term Debt 0.04% 0.04% Preferred Stock 1.01% 4.18% 0.04% 5.00% 4.75% 4.50% Common Equity 50.00% 7.07% 7.32% 100.00% 6.82% **Total**

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² Hevert Rebuttal, pg. 5, ll. 7-12.

³ Ibid., Glossary of Frequently Used Terms, pg. iii, TERM: Return on Equity ('ROE').

RESPONSE TO MR. SAGEL'S REBUTTAL TESTIMONY

Q. Why does Staff disagree with Mr. Sagel's assertion that "Ameren Missouri's capital structure is independently managed"?

A. Staff disagrees with Mr. Sagel's assertion that "Ameren Missouri's capital structure is independently managed" because financing considerations for Ameren Missouri, Ameren Illinois, and ATXI are based on what results in the lowest cost of capital for AEE, not its individual operating companies. Evidence of such is seen through careful examination of Mr. Sagel's testimony, highlighting contradictions.

Mr. Sagel states that "Ameren Missouri's capital structure, the capital structures of Ameren, Ameren Illinois and ATXI, respectively, are managed independently based on relevant business and financial risks applicable to the parent company and those other subsidiaries." Mr. Sagel also states that "Ameren Missouri should be evaluated as a stand-alone entity, including with regard to its capital structure", noting that "[t]o do otherwise violates the basic financial principle that the use of funds invested gives rise to the risk of the investment." It appears the so-called independent management of ATXI either does not ascribe to the "basic financial principle" referenced by Mr. Sagel, or that the independent management of ATXI does not view "projects under the jurisdiction of the Federal Energy Regulatory Commission's ('FERC') low-risk ratemaking framework within Ameren Illinois and Ameren Transmission Company of Illinois ('ATXI')" with the same regard as Mr. Sagel describes. ATXI operating in such a "low-risk ratemaking framework," brings into question

⁴ Sagel Rebuttal, pg. 9, ll. 10-13.

⁵ *Ibid.* pg. 5, ll. 19-22.

⁶ Ibid. pg. 3, ll. 12-14.

1	independent management's decision to capitalize ATXI with the highest equity capitalization					
2	rate (56%) of all of AEE's operating companies. ⁷ Using high cost financing in					
3	such proportions, in a "low-risk ratemaking framework" does not align with the "basic financial					
4	principle" described by Mr. Sagel.					
5	Similarly, if Ameren Missouri's capital structure were independently managed it would					
6	produce the lowest cost of capital for Ameren Missouri. Given Ameren Missouri's capacity to					
7	service more debt, this would include more debt. However, Ameren Missouri's existence					
8	within AEE's enterprise leads Ameren Missouri's capital structure to be managed to produce					
9	the lowest cost of capital for AEE. Staff submitted Data Request 0317 to identify Board of					
10	Directors ("BOD") material to support Mr. Sagel's testimony that Ameren Illinois and Ameren					
11	Missouri target specific equity ratios for purposes of raising capital at fair and reasonable costs.					
12	No such BOD materials exist. Staff concludes that operating utilities' capital structures are					
13	managed at their regulatory approved levels. **					
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16	8 **					
17	Mr. Sagel dedicates several pages of his testimony to highlight that AEE's and Ameren					
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18	Missouri's financial profiles have improved over the past several years, noting that					
19	Missouri's financial profiles have improved over the past several years, noting that AEE's financial improvement has been partially a result of its investment in ATXI. Mr. Sagel					
19	AEE's financial improvement has been partially a result of its investment in ATXI. Mr. Sagel					
19 20	AEE's financial improvement has been partially a result of its investment in ATXI. Mr. Sagel states that since 2013, S&P has upgraded Ameren's and its subsidiaries' issuer credit ratings					
19 20	AEE's financial improvement has been partially a result of its investment in ATXI. Mr. Sagel states that since 2013, S&P has upgraded Ameren's and its subsidiaries' issuer credit ratings					

AEE's and Ameren Missouri's issuer credit ratings from Baa3 to Baa1, and from Baa2 to Baa1, respectively. Mr. Sagel presumes that because the issuer credit ratings of AEE and Ameren Missouri have improved, during the timeframe within which Staff references the diverging trends between AEE and Ameren Missouri capital structures, that there has been no negative impact to Ameren Missouri.⁹

However, AEE's upgrades have been supported at the expense of Ameren Missouri ratepayers. For example, from 2014 to 2018, AEE payed \$2,090,000,000 in dividends. During that same time period, Ameren Missouri contributed \$2,007,000,000 in dividends to AEE; meanwhile, Ameren Illinois and ATXI contributed a total \$185,000,000 in dividends to AEE. Were it not for the cash flows provided by Ameren Missouri ratepayers, AEE would have found it difficult to maintain its dividend, improve its credit rating, issue its own debt, and make investments in its other operating companies. The diverging trend between AEE's and Ameren Missouri's equity ratios referenced by Staff is part and parcel why AEE's credit rating improved, i.e., higher revenue requirements generated by Ameren Missouri's higher equity ratios resulted in more cash available for dividends and the ability of the other subsidiaries to retain earnings and issue debt.

- Q. Does this assessment support Mr. Sagel's assertion that "Ameren Missouri's capital structure finances all of, and only, Ameren Missouri assets"?
- A. It supports the conclusion that Ameren Missouri's capital structure finances all of Ameren Missouri's assets. It does not, however, support the conclusion that Ameren Missouri's capital structure finances only Ameren Missouri assets. AEE's dividend policy,

⁹ Sagel Rebuttal, pg. 22-23, ll. 17-11.

¹⁰ AEE's SEC 10-K.

with regard to the timing and amount of dividends AEE extracts from its operating companies, leads Staff to conclude that Ameren Missouri's cash flows are managed around AEE, with AEE determining the amount of, and sourcing of funding. This comingling of funding has led to the cross-subsidization of other AEE assets by Missouri ratepayers. Given the proportion of dividends Ameren Missouri contributed to AEE, contrasted to Mr. Sagel's explanation for the "declining equity ratio at Ameren during the 2014-2018 timeframe" highlights directly the cross-subsidization. Mr. Sagel states that one of the drivers of the declining equity ratio at AEE was due to

Ameren declaring and paying dividends to its common shareholders over the past several years at levels that are well in excess of dividend distributions received from its regulated subsidiaries, including Ameren Missouri. This is a function of Ameren Missouri, and other regulated subsidiaries, reinvesting significant operating cash flow and retained earnings into their long-term regulated assets. ¹² [Emphasis added.]

- Q. Does this assessment support Mr. Sagel's assertion that "Ameren Missouri assets do not support Ameren obligations"?
- A. It does not. In fact, it shows that the cash flows generated by the favorable regulatory treatment that AEE received for its Ameren Missouri assets allowed it to float its dividend while affording AEE's other operations the opportunity to reinvest significant operating cash flow and retained earnings into their long-term regulated assets, and simultaneously allowed AEE the cash flows to issue and service increased amounts of debt. Evidence of such is readily apparent in Mr. Sagel's comments, "Ameren's lower consolidated common equity ratio also, reflects the use of long-term debt to fund investment in electric

¹¹ Sagel Rebuttal, pg. 14, ll. 3-4.

¹² *Ibid.* 11. 13-18.

transmission projects within the ATXI subsidiary." Mr. Sagel states that Ameren's equity investment in ATXI consisted of "capital infusions funded with Ameren short-term debt and long-term debt, as well as ATXI retained earnings." ¹³

During the 2014 to 2018 time period, Ameren Missouri could have supported more debt. From 2014 to 2017¹⁴ key S&P financial metrics reflected more favorably on Ameren Missouri than on AEE: FFO/Debt (%) averaged 26.6% at Ameren Missouri compared to 22.6% at AEE, and Debt/EBITA (x) averaged 3.0x at Ameren Missouri¹⁵ compared to 3.7x at AEE. ¹⁶ S&P's most recent report grades Ameren Missouri's stand-alone credit profile A-, while grading AEE's bbb+. ¹⁷ However, if Ameren Missouri were allowed to capitalize with more debt, AEE would not have had the higher cash flows that correspond to higher equity levels at Ameren Missouri. Had Ameren Missouri not been providing the dividends for AEE to distribute to shareholders, AEE's investments in its other operations would have been limited because AEE would have found it difficult to issue debt while improving its credit rating and allowing its other operations high levels of retained earnings for reinvestment.

- Q. Why does Staff disagree with Mr. Sagel's statement that "Equity infusions from Ameren are sourced from Ameren market equity issuances to third-party equity investors (and not debt)"?
- A. Staff disagrees with Mr. Sagel's statement because Staff calculated the difference between the tax equity contributions from AEE to Ameren Missouri and the returned

¹³ Ibid., pg. 10-11, ll. 21-2.

¹⁴ 2017 is the most recent full year information available from S&P.

¹⁵ S&P Global Ratings, Ratings Direct, Union Electric Co. d/b/a Ameren Missouri, February 14, 2019.

¹⁶ S&P Global Ratings, Ratings Direct, Ameren Corp. February 20, 2019.

¹⁷ Ibid.

No. ER-2016-0179. ²⁰ Sagel Rebuttal, pg. 19, II. 9-12.

1	dividends to AEE from Ameren Missouri, since the 1st Quarter of 2010, and found that the					
2	contributions and dividends do not net to zero as Mr. Sagel's testimony suggests. 18 Staff has					
3	calculated a balance of approximately \$129,000,000 in excess tax equity infusions from AEF					
4	to Ameren Missouri. 19					
5	Q. Are there any other areas of Mr. Sagel's rebuttal testimony with which					
6	Staff disagrees?					
7	A. Yes, however, because Staff thinks they are moot points I will summarize the					
8	nature of these disagreements briefly. A portion of Mr. Sagel's testimony attempts to discredi					
9	how Staff calculated AEE's and Ameren Illinois' capital structure relative to Ameren					
10	Missouri's, stating that Staff's goodwill exclusion adjustment is unreasonable. Mr. Sagel also					
11	attempts to parse Staff's characterization of the agreement Ameren Illinois has in Illinois related					
12	to a reasonable amount of equity for AEE's Illinois assets. Facts resolving these issues are					
13	readily apparent in the Future Energy Jobs Act ("FEJA") language quoted in Mr. Sagel's					
14	testimony, where the language specifically states,					
15 16 17 18	the utilities actual year-end capital structure that includes a common equity ratio, excluding goodwill, of up to and including 50% of the capital structure shall be deemed reasonable and used to set rates' [Emphasis added.]					
19	Clearly, the statute's language excludes goodwill from the equity component of the capital					
20	structure, and places a ceiling of 50% on equity. **					
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	¹⁸ Sagel Rebuttal, pg. 7, ll. 12-17. ¹⁹ Company responses to Data Request No. 0088 in Case No. GR-2019-0077, and Data Request No. 0407 in Case					
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1	Surrebuttal Testimony of Jeffrey Smith
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3	21 **
4	Mr. Sagel introduces a group of peer utility companies, along with their equity ratios
5	dating as far back as 2010, in an attempt to justify Ameren Missouri's recommended equity
6	ratio. Staff notes that Mr. Sagel's peer group differs from Mr. Hevert's peer group, and that
7	Mr. Sagel makes no description of how his peer group was selected. Mr. Sagel states that the
8	Ameren Missouri recommended capital structure "of 51.84% is consistent with the
9	51.8% common equity ratio authorized by the Commission in File No. ER-2016-0179." ²² Staff
10	notes that ER-2016-0179 was settled and that the Commission did not make a formal ruling on
11	capital structure issues. Finally, Mr. Sagel attempts to discredit the use of Staff's recommended
12	capital structure on grounds that use of parent company/hypothetical capital structure for
13	ratemaking purposes is inappropriate, employing the term double leverage. Staff does not
14	make use of the theory of double leverage. Instead, Staff views cross-subsidization as an
15	unreasonable use of Ameren Missouri's capital resources, leading to an unfair and unreasonable
16	expense to ratepayers.
17	RESPONSE TO MR. HEVERT'S REBUTTAL TESTIMONY
18	Q. Does Mr. Hevert correctly interpret Staff's methodology for estimating a fair
19	and reasonable ROE?

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²² Sagel Rebuttal, pg. 21, ll. 14-16.

A. It appears that Mr. Hevert has difficulty accepting Staff's operationalization of COE and ROE. Mr. Hevert uses the two terms interchangeably, ²³ misconstruing Staff's analysis. Staff does not view the COE as equivalent to the ROE. Mr. Hevert's insistence that the two terms are equivalent, and not independent, runs counter to basic financial principles and market evidence. Staff's definition of COE is the minimum return investors are willing to accept for their investment in a company compared to returns on other available investments. ²⁴ Staff's definition of ROE is the adjudicated return granted to monopoly industries extending them the opportunity to earn fair and reasonable compensation. ²⁵ If the two terms were in fact equivalent, as Mr. Hevert suggests, monopoly industries not earning their authorized ROE's would find it difficult to access equity capital because they would not be providing investors with the minimum return required.

Similarly, if the two terms were equivalent, as Mr. Hevert pursues, then it appears that commissions across the country consistently leave the assurance of utilities' financial integrity to chance, because a common refrain in utility commission decisions is that granted ROEs are not a guarantee, but an opportunity. Assessing all Commission authorized ROEs for natural gas companies since 2014 shows that the average of authorized ROEs was 9.64%, the median was 9.60%, and the lowest was 8.70%. Comparing that to the average earned ROEs for the companies in Mr. Hevert's proxy group during the same time period shows that five of the eight companies in Mr. Hevert's proxy group earned average ROEs lower than the average authorized ROE. Four of those five companies earned average ROEs lower than the lowest authorized

²³ Hevert Rebuttal, Glossary of Frequently Used Terms, TERM: Cost of Equity, pg. ii.

²⁴ Staff Direct Report, pg. 10, ll. 22-24.

²⁵ Ibid, 11, 24-26.

²⁶ Market Intelligence.

ROE. Yet somehow, during the same timeframe, only one of all the companies in Mr. Hevert's proxy group had a lower total shareholder return than the S&P 500.²⁷ Staff is skeptical that any company earning below the minimum amount its investors are willing to accept, as Mr. Hevert contends, would outperform the market over a long period of time, because that implies that investors would continue to invest in a company, pushing the stock price higher, even though they are earning below their minimum requirement. Below are the earned ROEs for the companies in Mr. Hevert's proxy group.²⁸

	FY2014	FY2015	FY2016	FY2017	FY2018	Average
Atmos Energy Corporation	10.23	9.73	10.38	10.40	13.91	10.93
Chesapeake Utilities Corporation	12.47	12.50	11.11	12.47	11.26	11.96
New Jersey Resources Corporation	15.32	17.46	NA	10.99	17.58	15.34
Northwest Natural Holding Company	7.73	6.94	7.65	9.05	8.94	8.06
ONE Gas, Inc.	7.24	6.55	7.51	8.47	8.61	7.68
South Jersey Industries, Inc.	11.10	10.72	10.23	-0.27	1.46	6.65
Southwest Gas Holdings, Inc.	9.67	8.95	9.30	11.09	8.76	9.56
Spire Inc.	6.62	8.88	8.63	8.60	10.07	8.56

Q. Do Mr. Hevert's criticism of Staff's views toward current capital market conditions align with capital market evidence?

A. No, Mr. Hevert's use of the Volatility Index ("VIX") to attempt to discredit Staff's view that current capital market data suggests that the COE has come down since the Spire Missouri rate case in 2017 is unfounded. Mr. Hevert suggests that because volatility has increased that risk has increased, implying therefore, that the COE could not have come down. Although Staff does not disagree with Mr. Hevert's premise that volatility can be used as a

 $^{^{27}}$ South Jersey Industries, Inc. is the only company that did not outperform the S&P 500 on a total return basis from 2014-2018.

²⁸ Market Intelligence.

broad measure of risk for some asset classes, Staff cannot find evidence that it has affected the COE for utilities as he suggests. Reviewing Mr. Hevert's Capital Asset Pricing Model ("CAPM") data and comparing it to the periods he references for changes in the VIX shows that the COE for Mr. Hevert's utility proxy group came down amid increases in volatility, discrediting his comments.

Mr. Hevert states "[s]ince the analytical period in my Direct Testimony (October 12, 2018), the VIX has averaged 17.98, which is above the 2018 average noted in my Direct Testimony (15.23) and the 2017 average (11.09).²⁹ Mr. Hevert defines the CAPM as:

A risk-premium based model used to estimate the Cost of Equity, assuming the stock is added to a well-diversified portfolio. The CAPM assumes that investors are compensated for the time value of money (represented by the Risk-Free Rate), and risk (represented by the combination of the Beta Coefficient and the Market Risk Premium).³⁰ [Emphasis added.]

Reviewing the CAPM calculations Mr. Hevert presented in his Direct Testimony, corresponding to when the VIX averaged 15.23, shows that he estimated a Market Risk Premium of 12.10%, ³¹ and Bloomberg and Value line Beta Coefficients of 0.604 and 0.68, respectively. ³² Reviewing Mr. Hevert's revised CAPM calculation presented in his Rebuttal Testimony, corresponding to when the VIX average 17.98, shows that he estimated a Market Risk Premium of 10.48%, ³³ and Bloomberg and Value Line Beta Coefficients of 0.573 and 0.69, respectively. ³⁴ Mr. Hevert's calculations show that investors' compensation for risk has

²⁹ Hevert Rebuttal, pg. 6, ll. 6-8.

³⁰ Ibid., Glossary of Frequently Used Terms, TERM: Capital Asset Pricing Model ('CAPM'), pg. ii.

³¹ Hevert Direct, Schedule RBH-D3, pg. 1 of 12.

³² Ibid., Schedule RBH-D4, pg. 1 of 1.

³³ Hevert Rebuttal, Schedule RBH-R3, pg. 1 of 12.

³⁴ Ibid., Schedule RBH-R4, pg. 1 of 1.

declined during his referenced periods where the VIX increased, directly contradicting his proposition that increases in the VIX since the Spire Missouri rate case preclude Staff's assertion that the COE has declined.

Q. How does Staff respond to Mr. Hevert's concerns with Staff's conclusion that Staff's range of Constant Growth DCF results in a lower ROE in this proceeding, compared to the Spire Missouri proceedings?

hased solely on the range of Constant Growth DCF results, which is driven solely by the expansion of the range on the low end." Mr. Hevert correctly describes how Staff's growth rate range in the current proceeding has decreased to 4.00% - 5.00%, from 4.20% - 5.00% in the Spire Missouri proceedings. Mr. Hevert continues by stating that Staff's "conclusion that the ROE has decreased since mid-2017 is almost entirely based on an arbitrary decrease in the low end of [Staff's] proposed range of growth rates." The decrease in Staff's range of growth reflects Staff's use of a Multi-Stage DCF in these proceedings to give weight to analysts' near term growth estimates. More importantly, it reflects lower projected sustainable long-term GDP growth rate estimates since the Spire Missouri proceedings. In the Spire Missouri proceedings, Staff did not use a Multi-Stage DCF; therefore, Staff elevated the DCF growth rate to give weight to analysts' near term growth estimates. Evidence of such is found in Staff's Direct Cost of Service Report, for the Spire Missouri rate cases, Case Nos. GR-2017-0216 and GR-2017-0216, where Staff notes,

[b]ecause the gas distribution industry only achieved growth in the low 4.2% to 4.6% during a period of high capital investment and higher average economic growth of 6.54%, a constant—growth rate closer to 4% is more logical considering projected growth rates for the U.S. economy

³⁵ *Ibid.* pg. 7, ll. 13-15.

are much lower in the future as compared to the period I analyzed. In

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order to give some consideration to some of the higher near-term expected growth rates, especially in DPS rather than EPS, I will use a growth rate range of 4.2% to 5.0%.36

How does Staff respond to Mr. Hevert's concerns with the growth rates used in

Staff's DCF analysis?

While Staff agrees with Mr. Hevert's assessment that it is important to consider analysts' near term forecasts, Staff does not agree that it is appropriate to use analysts' near term forecasts in a single stage dividend discount model ("DDM") such as the DCF. For example, the CFA curriculum notes that:

> the Gordon growth model form of the DDM is most appropriate for companies with earnings expected to grow at a rate comparable to or lower than the economy's nominal growth rate. Businesses growing at much higher rates than the economy often grow at lower rates in maturity, and the horizon in using the Gordon growth model is the entire future stream of dividends... Publicly traded companies constitute varying amounts of the total corporate sector, but always less than 100 percent. As a result, the overall growth rate of the public corporate sector can diverge from the nominal GDP growth rate during a long horizon; furthermore, within the public corporate sector, some subsectors may experience persistent growth rate differentials. Nevertheless, an earnings growth rate far above the nominal GDP growth rate is not sustainable in perpetuity.³⁷ [Emphasis added.]

A Multi-Stage DCF model is more appropriate for use when analysts' near term growth forecasts are to be used as inputs, because it gives weight to higher near term growth forecasts while maintaining the perpetual growth rate near the sustainable nominal GDP growth rate.

³⁶ Case No. GR-2017-0215, Staff Cost of Service Report, pg. 39, II. 17-22.

³⁷ Henry, E., Pinto, J., Robinson, T., & Stowe, J., Discount Dividend Valuation, Reading 29, Level II Chartered Financial Analyst Curriculum, 2019.

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Q. How does Staff respond to Mr. Hevert's concerns regarding Staff's Multi-Stage DCF model?

Mr. Hevert notes that Staff's Multi-Stage DCF indicating a seven-basis point A. difference is a minor decrease. Mr. Hevert states that he does "not believe that such a minor change in the results over an 18-month period can be relied on as an indicator of a change in investors' expectations."38 Staff's Multi-Stage DCF is one of several components Staff utilized in estimating the COE and formulating Staff's recommended ROE. While some of Staff's measurement techniques reflected larger decreases in the COE than others, all of Staff's Staff's overall ROE recommendation components reflected decreased COE estimates. incorporated evidence from all components while taking into account the evolution of economic conditions.

How does Staff respond to Mr. Hevert's disagreements concerning Staff's Q. CAPM analysis?

Mr. Hevert prefers a forward-looking, or ex-ante, CAPM analysis and disagrees A. with Staff's use of a historical, or ex-post, CAPM analysis, noting that "[b]ecause the purpose of this proceeding is to establish the Company's Cost of Equity on a forward-looking basis, it is important to develop a CAPM analysis that reflects investor's expectations." 39 Mr. Hevert's contention revolves around the Market Risk Premium ("MRP"), specifically, Staff's use of ex-post analysis to derive the MRP. Although Mr. Hevert may prefer an ex-ante CAPM, nothing in his rebuttal testimony discredits the use of an ex-post CAPM to estimate the MRP.

³⁸ Hevert Rebuttal, pg. 12, ll. 14-16.

³⁹ *Ibid.* pg. 14, ll. 10-12.

In fact, the CFA Institute curriculum describes both the ex-ante and the ex-post method as broad 1 approaches for estimating the MRP. Specifically, the CFA curriculum states that: 2 [t]wo broad approaches are available for estimating the equity risk 3 premium. One is based on historical average differences between equity 4 market return and government debt returns, and the other is based on 5 current expectational data. A historical equity risk premium estimate is 6 usually calculated as the mean value of the difference between broad-7 based equity-market-index returns and government debt returns over 8 some selected sample period. When reliable long-term records of 9 equity returns are available, historical estimates have been a 10 familiar and popular choice of estimation... The fact that historical 11 estimates are based on data also gives them an objective quality.⁴⁰ 12 [Emphasis added.] 13 Additionally, Staff's estimate of a reasonable MRP (4.50% - 6.00%) more closely aligns with 14 Duff and Phelps MRP recommendation (5.50%)⁴¹ ** 15 ** than the revised 16 MRP estimate provided by Mr. Hevert (10.48%). 43 17 Another of Mr. Hevert's contentions, related to Staff's MRP estimate, revolves 18 around using the geometric average or the arithmetic average. Mr. Hevert contends that 19 the arithmetic average is the appropriate MRP average to use. Staff's Direct Testimony did 20 not specify a preference to either the geometric average or the arithmetic average. However, 21 the CFA Institute curriculum describes both methods as being used in professional practice. 22 Specifically, the curriculum states, 23 [a] decision with an important impact on the risk premium estimate is the 24 choice between an arithmetic mean and a geometric mean: the geometric 25 ⁴⁰ Henry, E., Pinto, J., Robinson, T., & Stowe, J., Return Concepts, Reading 27, Level II Chartered Financial Analyst Curriculum, 2019. https://www.duffandphelps.com/insights/publications/cost-of-capital/recommended-us-equity-risk-premiumand-corresponding-risk-free-rates ⁴² Board of Directors material, Finance Committee, Equity Financing Considerations, February, 2018.

⁴³ Hevert Rebuttal, Schedule RBH-R3, pg. 1 of 12.

mean is smaller by an amount equal to about one half the variance of returns, so it is always smaller than the arithmetic mean given any variability in returns (the geometric mean is equal to the arithmetic mean when the returns for all periods are equal). In actual professional practice, both measures have been used in equity risk premium estimation... In contrast to the sample arithmetic mean, using the sample geometric mean does not introduce bias in the calculated terminal value of an investment. Equity risk premium estimates based on the geometric mean have tended to be closer to supply-side and demand-side estimates from economic theory than arithmetic mean estimates. For the above reasons, the geometric mean is increasingly preferred for use in historical estimates of the equity risk premium.⁴⁴

Although Staff's Direct Testimony did not specify a preference between the arithmetic average and geometric average, the differences between Staff's estimates shows that Staff's CAPM calculated reduction in the COE was a 32-basis point reduction using the geometric mean, and a 46-basis point reduction using the arithmetic mean. Mr. Hevert's insistence on using specifically the arithmetic average would reduce the estimated COE further.

Mr. Hevert also contends that the appropriate calculation of the historical MRP involves subtracting the income only portion of government bond returns from the total return on large company stocks, indicating that the income return is the only true riskless portion of the return. Although that may hold true for an *ex-ante* estimate of the MRP, Staff does not hold the same view with regard to an *ex-post* estimate of the MRP. For example, the CFA curriculum states,

[t]he equity risk premium is the incremental return (premium) that investors require for holding equities rather than a risk-free asset. Thus, it is the difference between the required return on equities and a specified expected risk-free rate of return. The equity risk premium, like the required return, depends strictly on expectations for the future because the investor's returns depend only on the investment's future cash flows. Possibly confusingly, equity risk premium is also commonly used to refer to the realized excess return of stocks over a risk-free asset over a given past time period. The realized excess return could be very different

⁴⁴ Henry, E., Pinto, J., Robinson, T., & Stowe, J., Return Concepts, Reading 27, Level II Chartered Financial Analyst Curriculum, 2019.

from the premium that, based on available information, was contemporaneously being expected by investors.⁴⁵ [Emphasis added.]

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> 45 Ibid. 46 Hevert Rebuttal, pg. 14, ll. 3-5.

Staff Report Cost of Service, Appendix 2, Schedule JS-12.

Considering that ex-post returns are returns that display no risk because they have already been realized, and that the "realized excess return could be very different from the premium that, based on available information, was contemporaneously being expected by investors," the calculated difference between the realized total return to the risk-free asset and the realized total return to stocks best resolves these issues because it acts as an unbiased estimator.

Finally, Mr. Hevert does not believe that Staff's CAPM analysis should be used to justify a lower ROE for Ameren Missouri compared to that allowed by the Commission in the Spire Missouri rate cases because as he suggests, "the change in DCF results does not suggest a decrease in the ROE. If the CAPM analysis is provided as a reasonableness test, the results appear to be out of line with the results of the DCF analysis."46 Not only do Staff's DCF results suggest a decrease in the COE, but all of Staff's results suggest a decrease in the COE. Staff's results reflect average decreases in the COE ranging from a low of 7 basis points implied by Staff's Multi-Stage DCF models, to a high of 39 basis points implied by Staff's CAPM models.⁴⁷ In fact, Staff's analysis appear to be more reliable than Mr. Hevert's because Mr. Hevert's models had a higher range of estimates than Staff's, casting doubt on their reliability.

Intra-model ranges of Mr. Hevert's analysis were from 495 basis points for his DCF results, 223 basis points for his CAPM results, and 29 basis points for his Risk Premium results.

Mr. Hevert's inter-model range was 493 basis points from the low range of his DCF to the high range of his CAPM. Meanwhile, Staff's intra-model ranges were from 100 basis points for Staff's DCF results, 34 basis points for Staff's Multi-Stage DCF results, and 92 basis points for Staff's CAPM results. Staff's inter-model range was 191 basis from the low range of Staff's CAPM results to the high range of Staff's DCF results. The higher amount of variability in Mr. Hevert's Models, compared to Staff's, implies that they are less reliable than Staff's.

SUMMARY AND CONCLUSONS

Q. Please summarize the conclusions of your Surrebuttal testimony.

A. Mr. Sagel and Staff disagree over the appropriate ratemaking capital structure for Ameren Missouri. Mr. Sagel believes Ameren Missouri's authorized capital structure should include the 51.85% equity suggested by Ameren Missouri. Staff recommends that the Commission order an authorized capital structure limited to a 50% equity ratio for Ameren Missouri. Staff reasons that Ameren Missouri's capital structure has been managed to benefit AEE and its other operating companies, at an unreasonable expense to Missouri jurisdictional ratepayers. Limiting Ameren Missouri's capital structure to a 50% equity ratio will stem the divergence between AEE's and Ameren Missouri's capital structure, ameliorating imbalances in financing considerations in a manner that is fair and reasonable for ratepayers and shareholders.

Mr. Hevert and Staff disagree over the appropriate ROE for Ameren Missouri. Mr. Hevert recommends an ROE of 9.95%. Staff recommends an ROE of 9.50%. Mr. Hevert's belief that the COE and the ROE are equivalent defies basic financial logic and market

⁴⁸ Hevert Direct, pg. 17.

⁴⁹ Staff Report Cost of Service, Appendix 2, Schedule JS-12.

Surrebuttal Testimony of Jeffrey Smith

- 1 evidence. Mr. Hevert's attempts to discredit Staff's analysis on the basis of preference is
- 2 unwarranted. Apart from the fundamental flaw contained in Mr. Hevert's analyses, and
- 3 | ideological differences in modeling preferences, Mr. Hevert's analyses also contain significant
- 4 variability, further casting doubt on its reliability, relative to Staff's.
 - Q. Does this conclude your surrebuttal testimony?
 - A. Yes, it does.

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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Eld/b/a Ameren Missouri's its Revenues for Natural C	Tariffs to Increase)	Case No. GR-2019-0077
	AFFIDAVIT OF J	ÆFFRE	CY SMITH
STATE OF MISSOURI)	•	
COUNTY OF COLE) ss.)		
	ated to the foregoing	Surrebut	n declares that he is of sound mind and ttal Testimony; and that the same is true
Further the Affiant saye	th not.	FREY	SMITH
	JUR	AT	
			ind authorized Notary Public, in and for ferson City, on this 9H day of
D. SUZIE MANKIN Notary Public - Notary Seal State of Missourt Commissioned for Cole Cour My Commission Explires: December 1: Commission Number: 124120	nty 2, 2020	<u>O</u>	(sullanken) Notaty Public