FILED September 5, 2019 Data Center Missouri Public Service Commission

Exhibit No.:009Issue:Return on EquitySeWitness:Robert B. HevertType of Exhibit:Surrebuttal TestimonySponsoring Party:Union Electric CompanyFile No.:GR-2019-0077Date Testimony Prepared:July 10, 2019

MISSOURI PUBLIC SERVICE COMMISSION

FILE NO: GR-2019-0077

SURREBUTTAL TESTIMONY

OF

ROBERT B. HEVERT

ON BEHALF OF

UNION ELECTRIC COMPANY d/b/a Ameren Missouri

Westborough, Massachusetts July 10, 2019

> Ameren Exhibit No 9 Date 8-15-19 Reporter CDT File No GR-2019-0077

TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY OF RECOMMENDATIONS		
II.	RESPO	ONSE TO TESTIMONY OF STAFF WITNESS SMITH	2
	А.	Proxy Group	.3
	В.	Constant Growth DCF Model	.5
	С.	Capital Asset Pricing Model	.6
	D.	Bond Yield Plus Risk Premium	11
III.	RESPO	ONSE TO OPC WITNESS MARKE	13
IV.	CONC	LUSIONS	16

TERM DESCRIPTION Beta Coefficient A component of the CAPM that measures the risk of a given stock relative to the risk of the overall market. Capital Asset Pricing Model A risk premium-based model used to estimate the ("CAPM") Cost of Equity, assuming the stock is added to a welldiversified 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). A form of the DCF model that assumes cash flows Constant Growth DCF Model will grow at a constant rate, in perpetuity. The model simplifies to a form that expresses the Cost of Equity as the sum of the expected dividend yield and the expected growth rate. Cost of Equity The return required by investors to invest in equity securities. The terms "Return on Equity" and "Cost of Equity" are used interchangeably. Discounted Cash Flow ("DCF") Model A model used to estimate the Cost of Equity based on expected cash flows. The Cost of Equity equals the discount rate that sets the current market price equal to the present value of expected cash flows. Dividend Yield For a given stock, the current dividend divided by the current market price. Gross Domestic Product ("GDP") The value of all finished goods and services produced within a country during a given period of time (usually measured annually). GDP includes public and private consumption, government expenditures, investments, and exports less imports. Market Return The expected return on the equity market, taken as a portfolio. The additional compensation required by investing in Market Risk Premium the equity market as a portfolio over the Risk-Free rate. The Market Risk Premium is a component of the CAPM. **Proxy Group** A group of publicly traded companies used as the "proxy" for the subject company (in this case, KCP&L). Proxy companies are sometimes referred to as "Comparable Companies." Return on Equity ("ROE") The return required by investors to invest in equity securities. The terms "Return on Equity" and "Cost of Equity" are used interchangeably. **Risk-Free Rate** The rate of return on an asset with no risk of default.

GLOSSARY OF FREQUENTLY USED TERMS

TERM	DESCRIPTION
Risk Premium	The additional compensation required by investors
	for taking on additional increments of risk. Risk
	Premium-based approaches are used in addition to the
	DCF and CAPM to estimate the Cost of Equity.
Treasury Yield	The return on Treasury securities; the yield on long-
	term Treasury bonds is considered to be a measure of
	the Risk-Free Rate.

SURREBUTTAL TESTIMONY

OF

ROBERT B. HEVERT

File No. GR-2019-0077

1	I.	INTRODUCTION AND SUMMARY OF RECOMMENDATIONS			
2	Q.	Please state your name and business address.			
3	А.	My name is Robert B. Hevert and my business address is ScottMadden, Inc., 1900			
4	4 West Park Drive, Suite 250, Westborough, MA 01581.				
5	Q.	On whose behalf are you submitting this testimony?			
6	А.	I am submitting this surrebuttal testimony before the Missouri Public Service			
7	Commission	("Commission") on behalf of Union Electric Company d/b/a Ameren Missouri			
8	("Ameren M	issouri" or the "Company").			
9	Q.	Are you the same Robert B. Hevert who filed Direct and Rebuttal Testimony			
10	in File No. C	GR-2019-0077?			
11	А.	Yes, I am.			
12	Q.	What is the purpose of your Surrebuttal Testimony?			
13	А.	My Surrebuttal Testimony responds to the rebuttal testimony of Mr. Jeffrey Smith			
14	on behalf of	the Missouri Public Service Commission Utility Services Division ("Staff") as it			
15	relates to the recommended Return on Equity ("ROE" or "Cost of Equity") for the Company and				
16	to the rebuttal testimony of Dr. Geoff Marke on behalf of the Office of the Public Counsel ("OPC")				
17	as it relates to the implications of the proposed Weather and Conservation Adjustment Rider's				

1	("WCAR") for the Company's ROE. My analyses and conclusions are supported by the data			
2	presented in Schedules RBH-S1, which has been prepared by me or under my direction.			
3	Q.	Have you updated your ROE analyses from those presented in your rebuttal		
4	testimony?			
5	А.	No, I have not. I continue to rely on the analyses provided in my Rebuttal		
6	Testimony, w	which were updated based on market data through April 12, 2019.		
7	Q.	Please summarize the key issues and recommendations addressed in your		
8	Rebuttal Tes	stimony.		
9	А.	In my Rebuttal Testimony, I found the Company's Cost of Equity to be within a		
10	range of 9.80 percent to 10.60 percent. For the reasons discussed throughout my Surrebutta			
11	Testimony, ne	one of the arguments raised in Mr. Smith's rebuttal testimony has caused me to revise		
12	my recommendation. As such, I continue to believe an ROE within a range of 9.80 percent to 10.6			
13	percent is rea	sonable.		
		II. RESPONSE TO TESTIMONY OF STAFF WITNESS SMITH		
14	Q.	Please briefly summarize Mr. Smith's criticisms of your Cost of Equity		
15	analyses.			
16	А.	Mr. Smith argues: (1) that my proxy group is not correctly specified; (2) the growth		
17	rates in my C	Constant Growth DCF model are too high; (3) the Market Risk Premia used in my		
18	CAPM analy	sis are too high; and (4) I did not appropriately interpret my Bond Yield Plus Risk		
19	Premium approach which, he suggests, does not reflect what he believes is a downward drift in th			
20	Market Risk Premium.			

- 1
- A. Proxy Group

2 Q. Please summarize Mr. Smith's rebuttal testimony as it relates to your proxy 3 group screening criteria.

A. Mr. Smith believes my screening criterion excluding companies with less than
60.00 percent of operating income from regulated natural gas operations is too low; he believes
that as a result, Chesapeake Utilities Corporation ("CPK"), New Jersey Resources Corporation
("NJR"), and South Jersey Industries, Inc. ("SJI"), are inappropriately included in the proxy group.
Mr. Smith further argues I should have included a screening criterion based on assets.¹

9

Q. Do you agree with the use of assets as a screening criterion?

A. No, I do not. Measures of income are far more likely to be considered by the financial community in making credit assessments and investment decisions than are assets. From the perspective of credit markets, measures of financial strength and liquidity are focused on cash from operations, which is directly derivative of earnings. For example, Moody's assigns 40.00 percent weight to measures of financial strength and liquidity, of which 32.50 percent specifically relates to the ability to cover debt obligations with cash from operations.²

Just as rating agencies focus on measures of cash from operations, equity investors prefer measures of income in assessing equity valuation levels; common measures of relative equity valuation include the Price/Earnings ratio and the ratio of Enterprise Value/EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization). However, certain business segments may require a relatively small amount of fixed assets to produce a relatively large proportion of

¹ Rebuttal Testimony of Jeffrey Smith, at 3-4.

² See Moody's Investors Service, Rating Methodology, Regulated Electric and Gas Utilities, December 23, 2013, at 10-14.

revenue, which itself may be several steps removed from the earnings and cash flows that are the
 basis of equity valuations.

3 Q. Mr. Smith suggests that CPK, NJR, and SJI should not be included in the 4 proxy group because they have relatively high risks, "which are readily evident in credit 5 ratings."³ Do you agree?

6 A. No, I do not. Mr. Smith cites to S&P lowering SJI's credit rating from BBB+ to BBB in July 2018, "due to issues related to increased leverage from acquisitions."⁴ However, the 7 8 "acquisitions" that Mr. Smith notes were related to SJI's acquisition of Elkton Gas and 9 Elizabethtown Gas, both regulated natural gas utilities. As such, SJI actually has increased its 10 regulated natural gas operations which, according to Mr. Smith's own standards, makes it more 11 like the Company. Moreover, SJI's credit rating of BBB is only one notch below Ameren 12 Missouri's BBB+ rating. Similarly, as Mr. Smith notes, New Jersey Natural Gas Co.'s BBB+ credit 13 rating is consistent with Ameren Missouri's. Although CPK does not have a credit rating, as 14 explained in my Direct Testimony, it does have a Value Line Financial Strength Rating of B++, 15 and a National Association of Insurance Commissioners rating of "NAIC 1," both of which are similar to the other proxy companies.⁵ 16

³ Rebuttal Testimony of Jeffrey Smith, at 4.

⁴ *Ibid*.

⁵ Direct Testimony of Robert B. Hevert, at 31.

B. Constant Growth DCF Model

2 Q. Please summarize Mr. Smith's concerns with your application of the Constant 3 Growth DCF model.

A. Mr. Smith believes the growth rates in my Constant Growth DCF model are too
high when considered in the context of the expected growth in GDP.⁶ Mr. Smith argues, "[a]t most,
long-term GDP growth estimates should be used as an upper bound for long-term perpetually
sustainable growth."⁷

8

Q. What is your response to Mr. Smith on those points?

Mr. Smith points to GDP growth of approximately 4.00 percent.⁸ Based on the 9 A. 10 current GDP estimate Mr. Smith appears to believe any Constant Growth DCF analysis that 11 includes a growth rate above 4.00 percent is inappropriate. However, in Staff's Cost of Service 12 Report, Mr. Smith assumed a growth rate range of 4.00 percent to 5.00 percent in his Constant Growth DCF analysis.⁹ That is, the highest growth rate that Mr. Smith states is reasonable 13 represents the low end of the growth rate range in his Constant Growth DCF analysis.¹⁰ Based on 14 15 the low end of Mr. Smith's Constant Growth DCF results, Ameren Missouri's ROE should be no 16 higher than 6.67 percent. That result is over 200 basis points below the lowest authorized ROE for 17 any vertically integrated electric utility. It appears that Mr. Smith's own analysis contradicts his 18 argument that 4.00 percent is a reasonable cap on growth rates in the Constant Growth DCF model.

⁶ Rebuttal Testimony of Jeffrey Smith, at 6-7.

⁷ *Ibid*, at 7.

⁸ *Ibid*.

⁹ Staff Cost of Service Report, at 22 and Schedule JS-9-1.

¹⁰ Mr. Smith also included Staff Report Schedule JS-9-2, representing the proposed range of growth Staff presented in the most recent Spire Missouri rate cases (File Nos. GR-2017-0215 and GR-2017-0216), in which Staff utilized 4.20 percent as the low end of its growth range.

C. Capital Asset Pricing Model

- 2 О. Please summarize Mr. Smith's concerns with your CAPM. 3 Mr. Smith believes my estimate of the Market Risk Premium ("MRP") is too high A. 4 and suggests my assessment of the expected MRP relative to historical MRPs is not useful. 5 **Q**. Do you agree that the historical MRP from Duff & Phelps should be based on 6 the difference between the returns on stocks and bonds less the total return on government 7 bonds, and not the income only portion? 8 A. No, I do not. As noted on page 17 of my rebuttal testimony, Morningstar 9 specifically states the historical MRP should be calculated based on the income only portion of the 10 government bond returns. As such, Mr. Smith's concern with my calculation of the historical MRP, 11 which I used as a reference of comparison, is unfounded. 12 Q. Does Mr. Smith's observation that approximately 39.00 percent MRPs since 13 1926 and 31.00 percent since 1990 have been negative suggest that considering the expected 14 MRP within the context of historical MRPs is not useful?¹¹ 15 No, I do not. Mr. Smith's 39.00 percent observation is based on his calculation of A. 16 the MRP. As noted above, this calculation is flawed. As shown in Table 1 below, taking the income 17 only portion of government bonds (instead of the total return) suggests that negative MRPs 18 occurred approximately 35.00 percent of the time since 1926, compared to MRPs of at least 12.81 19 percent which occurred in approximately 40.00 percent of the years. Since 1990, negative MRPs 20 have occurred in approximately 29.00 percent of the years, while MRPs of at least 12.81 percent
- 21 have occurred approximately 39.00 percent of the time.

¹¹ Rebuttal Testimony of Jeffrey Smith, at 8-9.

Table	1:	MRP	Freq	uency ¹²
-------	----	-----	------	---------------------

Period	Negative	12.81% or Higher
1926-2017	34.78%	40.22%
1990-2017	28.57%	39.29%

2 Mr. Smith notes that "Staff is skeptical that any ROR witness would find it reasonable to recommend negative MRPs when they occur..."13 On this point, Mr. Smith and I agree: it is 3 inappropriate to rely on a negative estimate of the MRP in the CAPM.¹⁴ That is why I have not 4 5 done so in this, or any, proceeding. Historical MRPs have occurred within a wide range, and are 6 sometimes negative. However, it is an exaggeration, and not an extrapolation, to suggest that this 7 range makes MRPs of 12.81 percent unreasonable. It is an empirical fact that MRPs of 12.81 percent have occurred frequently. To that point, Chart 9 in my direct testimony provides a 8 9 reasonableness check on my estimate of the *ex-ante* MRP: Since 1926, the MRP has been at least 10 12.81 percent in 37 years. In that context, it is clear that my estimate of the MRP does not represent 11 an outlier. Rather, it is a reasonable estimate relative to historical data.

12

Q. Do you agree that MRPs have been on a downward trend?

A. No, I do not. Using the Duff & Phelps MRP data (consistent with the data Mr. Smith presents on page 10 of his rebuttal testimony), the trend variable from 1926 through 2017 is only slightly negative (-0.037 percent), but statistically insignificant. That is, there is not a statistical relationship between time and the MRP. Mr. Smith also considers the MRP since 1990. The trend variable since 1990 is slightly positive (0.09 percent) but again, statistically insignificant. That is, Mr. Smith's MRP chart does not confirm the existence of a "downward trend in MRPs."¹⁵

¹² Source: Duff & Phelps, <u>2018 SBBI</u>, Appendix A-1, A-7.

¹³ Rebuttal Testimony of Jeffrey Smith, at 8.

¹⁴ *Ibid*, at 8.

¹⁵ *Ibid*, at 10 - 11.

1	Mr. Smith also points to the average MRP from 1926 through 1989 (7.45 percent) and
2	compares that to the average MRP from 1990 through 2017 (6.19 percent) and concludes that the
3	MRP has declined in recent years. ¹⁶ The 28-year period since 1990 is significantly influenced by
4	a single year (2008), which had an MRP of negative 41.45 percent. Excluding that one year
5	increases the average MRP from 6.19 percent to 7.96 percent, above the 7.45 percent average
6	through 1989. Similarly, considering the 28-year period prior to 1990 (i.e., 1962 through 1989)
7	results in an average MRP of 3.72 percent, well below the average MRP since 1990. As such, Mr.
8	Smith's suggestion of a downward trend in the MRP, and his assumption of 1990 as an inflection
9	point, are not appropriate.
10	Q. Do you agree that your "reliance on projected Treasury yields is also an
11	unreasonable input in [your] CAPM"?"
11 12	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors'
11 12 13	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term." ¹⁸ In support of his position, Mr. Smith compares the
 11 12 13 14 	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term." ¹⁸ In support of his position, Mr. Smith compares the consensus forecast of Treasury yields from Blue Chip as of October 2017 to actual quarterly yields
 11 12 13 14 15 	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term." ¹⁸ In support of his position, Mr. Smith compares the consensus forecast of Treasury yields from Blue Chip as of October 2017 to actual quarterly yields from the fourth quarter 2017 through the first quarter 2019. Because the actual Treasury yields
 11 12 13 14 15 16 	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term." ¹⁸ In support of his position, Mr. Smith compares the consensus forecast of Treasury yields from Blue Chip as of October 2017 to actual quarterly yields from the fourth quarter 2017 through the first quarter 2019. Because the actual Treasury yields were below the forecast Mr. Smith reasons the Blue Chip forecasts are "unreliable." ¹⁹
 11 12 13 14 15 16 17 	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term." ¹⁸ In support of his position, Mr. Smith compares the consensus forecast of Treasury yields from Blue Chip as of October 2017 to actual quarterly yields from the fourth quarter 2017 through the first quarter 2019. Because the actual Treasury yields were below the forecast Mr. Smith reasons the Blue Chip forecasts are "unreliable." ¹⁹ Although Mr. Smith suggests current yields already reflect expectations of future yields,
 11 12 13 14 15 16 17 18 	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term." ¹⁸ In support of his position, Mr. Smith compares the consensus forecast of Treasury yields from Blue Chip as of October 2017 to actual quarterly yields from the fourth quarter 2017 through the first quarter 2019. Because the actual Treasury yields were below the forecast Mr. Smith reasons the Blue Chip forecasts are "unreliable." ¹⁹ Although Mr. Smith suggests current yields already reflect expectations of future yields, he has not indicated that they are more accurate than projected Treasury yields. As Chart 1 (below)
 11 12 13 14 15 16 17 18 19 	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term. ¹⁸ In support of his position, Mr. Smith compares the consensus forecast of Treasury yields from Blue Chip as of October 2017 to actual quarterly yields from the fourth quarter 2017 through the first quarter 2019. Because the actual Treasury yields were below the forecast Mr. Smith reasons the Blue Chip forecasts are "unreliable." ¹⁹ Although Mr. Smith suggests current yields already reflect expectations of future yields, he has not indicated that they are more accurate than projected Treasury yields. As Chart 1 (below) demonstrates, using the same long-term quarterly convention applied in Mr. Smith's chart on page
 11 12 13 14 15 16 17 18 19 20 	A. No, I do not. Mr. Smith argues "[c]urrent bond prices already reflect investors' interest rate expectations over the long-term." ¹⁸ In support of his position, Mr. Smith compares the consensus forecast of Treasury yields from Blue Chip as of October 2017 to actual quarterly yields from the fourth quarter 2017 through the first quarter 2019. Because the actual Treasury yields were below the forecast Mr. Smith reasons the Blue Chip forecasts are "unreliable." ¹⁹ Although Mr. Smith suggests current yields already reflect expectations of future yields, he has not indicated that they are more accurate than projected Treasury yields. As Chart 1 (below) demonstrates, using the same long-term quarterly convention applied in Mr. Smith's chart on page 11 (that is, comparing forecasts six quarters in the future to the actual yields observed in those

¹⁶ Ibid, at 11. Based on the MRP calculated as the total return on stocks and bonds minus the income only return on government bonds.

¹⁷

Ibid. Ibid. 18

¹⁹ Ibid.

forecast quarters) shows actual yields were not accurate predictors of future yields. In fact, the forecast error generally was positive through 2015, indicating that observed yields over-predicted actual yields. In other words, Mr. Smith's methodology cannot be considered the superior approach.

5



Chart 1: Forecast Error of Spot 30-Year Treasury Yields²⁰

6

7 The results in Chart 1 make intuitive sense. During much of the review period (2000 8 through 2018), interest rates were undergoing a secular decline; with the 2008/2009 recession, 9 interest rates became the subject of Federal monetary policies specifically designed to keep them 10 low. Because yields fell during that time, prior quarters were likely to over-estimate future 11 quarters.

12 Although interest yields had steadily declined between 2000 and 2015, as noted in my 13 Direct Testimony, in December 2015 the Federal Reserve began its process of monetary policy 14 normalization.²¹ The effect of that change in policy and improving economic conditions is shown

²⁰ Source: Bloomberg Professional

²¹ Direct Testimony of Robert B. Hevert, at 18.

1 in Chart 2 (below), which limits the review period to the eighteen quarters from December 2014 2 through March 2019. As interest rates have begun to increase, spot Treasury yields have begun to 3 under-project future yields.

Since December 2014²²

- 4 5
- 1.50 1.00 0.50 0.0008x + 33.315 $R^2 = 0.5395$ 0.00 Sep-15 Sep-16 Dec-16 Mar-15 Jun-15 Jun-16 Dec-15 Dec Mar-16 Mar-17 Jun-17 sep-17 ħ -18 -0.50 -1.00

6

7 To the extent interest rates increase, Mr. Smith's suggested approach of relying exclusively 8 on current yields as a measure of forecast yields will systematically under-estimate Treasury 9 yields, and therefore systematically bias downward his model results.

10 Lastly, it is important to remember that the Return on Equity analysis is a forward-looking 11 process. Even if Mr. Smith is concerned that the Blue Chip projections may not come to pass, the 12 consensus expectation demonstrates investors believe interest rates are likely to rise. Because our 13 analyses are predicated on market expectations, on what investors believe, the expected increase in 14 Treasury yields is a measurable and relevant data point.

Chart 2: Forecast Error of 30-Year Treasury Yields



²² Source: Bloomberg Professional.

D. Bond Yield Plus Risk Premium

2 Q. Please summarize Mr. Smith's concerns with your bond yield plus risk 3 premium approach.

A. Mr. Smith argues that the results of my Bond Yield Plus Risk Premium approach should be viewed with caution because it "ignores the overarching downward drift in the economic environment portending to lower risk premiums," which suggests the data are not stationary.²³ In addition, Mr. Smith argues I have interpreted the model results incorrectly, because I rely on the natural log of Treasury yield estimates in the regression equation.²⁴

9

Q. What is your response to Mr. Smith on those points?

10 A. First, although my regression coefficients do not change over the study period, the 11 intent of the study was to measure the effect of the Equity Risk Premium over a long-term average, 12 including interest rates and authorized ROEs that are quite high during one period (i.e., the 1980s) 13 and quite low during another (for example, during the Federal Reserve's various forms of market intervention). To account for that variability I used the semi-log regression,²⁵ in which the 14 15 relationship is measured based on a proportionate, rather than a linear change in Treasury yields. 16 In essence, the model assumes that the relationship between interest rates and the Equity Risk 17 Premium is non-linear; it increases more as interest rates decline and decreases more as interest 18 rates increase (see Chart 3, below).

²³ Rebuttal Testimony of Jeffrey Smith, at 12.

²⁴ *Ibid*, at 14.

²⁵ Under the semi-log regression, the Equity Risk Premium is expressed as a function of the natural log of the 30year Treasury yield: RP = a + B(LN(T30)).



Chart 3: Equity Risk Premium and the Cost of Equity

2

1

Because the relationship between the Risk Premium and Treasury yields is not linear, I
believe the Bond Yield Plus Risk Premium analysis reflects changing investor behavior,
specifically as it relates to periods of low Treasury yields associated with Federal Reserve polices.

Q. Do you agree with Mr. Smith that you have not interpreted the results of your regression equation correctly?

A. No, I do not. Table 2, below, recreates the resulting Equity Risk Premia based on
the Treasury yields assumed in Schedule RBH-R6.

10

Table 2: Equity Risk Premia

	30-Year	Equity Risk
	Treasury Yield	Premium
Current	2.95%	6.93%
Near-Term Projected	3.13%	6.76%
Long-Term Projected	4.05%	6.06%

11

In addition to the regression analysis results in Schedules RBH-D6 and RBH-R6, I also
 provided a chart with the trendline consistent with the regression model coefficients.²⁶ Chart 4,
 below, recreates the chart from Schedule RBH-R6 and overlays the estimates from Table 2.



5





All three points fall on the trendline, which demonstrates that my calculation of the Equity
Risk Premium is consistent with the model results. Mr. Smith's concerns therefore are unfounded.

III. RESPONSE TO OPC WITNESS MARKE

Q. Please summarize Dr. Marke's rebuttal testimony as it relates to the WCAR's effect on the ROE.

10 A. Dr. Marke states that the Company's ROE should be reduced by 20 basis points 11 because it "reduces risk for shareholders" and "such risk-shifting policy should be tied to a 12 reduction in reward."²⁷

²⁶ See columns [1] and [2] in Schedules RBH-D6 and RBH-R6.

²⁷ Rebuttal Testimony of Dr. Geoff Marke, at 8.

2

Q. Should the ROE in this proceeding be adjusted to reflect the Company's risk profile as a result of the implementation of the WCAR?

3 No, it should not. In estimating the Cost of Equity, the relevant analytical issue is A. 4 whether the Company is so less risky than its peers as a direct result of the rate mechanisms that investors would specifically and measurably reduce their return requirement.²⁸ The fact that the 5 6 Company's revenues may be affected by the WCAR does not bear on the estimated Cost of Equity 7 unless it can be demonstrated that: (1) the Company is materially less risky than the proxy group 8 by virtue of the WCAR; and (2) the financial markets react to the incremental effect of the WCAR. 9 Further, the position that a reduction in volatility (whether of revenues, income, or cash flow) or 10 the timing of cash flows necessarily requires a reduction in the Cost of Equity runs counter to 11 Modern Portfolio Theory, which is the fundamental basis of the CAPM. Under Modern Portfolio 12 Theory, risk is defined as the uncertainty, or variability, of returns. Modern Portfolio Theory was 13 advanced by recognizing that total risk may be separated into two distinct components: non-14 diversifiable risk, which is that portion of risk that can be attributed to the market as a whole; and 15 non-systematic (or diversifiable) risk, which is attributable to the idiosyncratic nature of the subject 16 company, itself. As noted in my Direct Testimony, non-diversifiable risk is measured by the Beta coefficient within the CAPM structure.²⁹ 17

Under Modern Portfolio Theory (and the CAPM), an investor would not be indifferent to a reduction in expected ROE in return for a reduction in volatility of revenues, unless the reduction in volatility specifically relates to reduced non-diversifiable risk. That is, any reduction in the Cost of Equity depends critically on the type of risk that is reduced; if the risk assumed to be mitigated by the WCAR is diversifiable, there would be no reduction in the Cost of Equity even if total risk

²⁸ See generally Bluefield and Hope.

²⁹ Direct Testimony of Robert B. Hevert, at 40.

(diversifiable plus non-diversifiable risk) has been reduced. If, however, the WCAR mitigates
 increased systematic risk associated, the factors that the Commission would like to address to
 approve the WCAR, there likewise would be no effect on the Cost of Equity.

4

Q. How common are weather normalization mechanisms?

5 There is little question that weather normalization mechanisms are becoming A. increasingly common. Schedule RBH-S1 provides a summary of weather normalization 6 7 mechanisms currently in effect at each natural gas utility subsidiary of the proxy group companies.³⁰ As Schedule RBH-S1 demonstrates, 22 of the 26 the operating companies within the 8 9 proxy group have a weather normalization mechanism. Under the comparable earnings standard, 10 the allowed Return on Equity should represent a return commensurate with the returns on 11 investments of similar risk. To the extent the proxy companies have mechanisms in place to 12 address weather volatility, the Company's use of the WCAR makes it more comparable to its peers. 13 Consequently, the adoption and implementation of weather normalization mechanisms is quite 14 common and has become an increasingly visible issue to investors.

15 Q. What is your conclusion regarding the effect of the WCAR on the Company's

16 **Cost of Equity**?

A. As noted above, weather normalization mechanisms are common among the proxy companies. Consequently, investors increasingly expect that some form of stabilization will be implemented in utility rate regulation. I, therefore, conclude that the WCAR should have no downward effect on my ROE estimate.

21

³⁰ Schedule RBH-S1 includes companies that have implemented both full decoupling mechanisms and weather normalization adjustment mechanisms. The full decoupling mechanisms include weather normalization adjustments.

IV. CONCLUSIONS

Q. What are your conclusions?
 A. None of Mr. Smith's rebuttal testimony has caused me to change the conclusions
 and recommendations presented in my Direct and Rebuttal Testimonies. I continue to believe my
 models are correctly specified and support my recommended ROE of 9.95 percent within a range
 of 9.80 percent through 10.60 percent. In addition, Dr. Marke's position that the Company's ROE
 should be reduced if the proposed WCAR is adopted is without merit.

- 7 Q. Does this conclude your Surrebuttal Testimony?
- 8 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase Its Revenues for Natural Gas Service.

File No. GR-2019-0077

AFFIDAVIT OF ROBERT B. HEVERT

)

COMMONWEALTH OF MASSACHUSETTS)) ss COUNTY OF WORCESTER)

Robert B. Hevert, being first duly sworn on his oath, states:

1. My name is Robert B. Hevert and my office is located in Westborough, Massachusetts and I am a Partner of ScottMadden, Inc.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of <u>16</u> pages and Schedule(s) <u>RBH-S1</u>, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

Robert B. Hever

Subscribed and sworn to before me this <u>3</u> day of <u>July</u>, 2019. My commission expires:

			Decoupling
Company	Parent	State	(F/P) [1]
Atmos Energy	ATO	Colorado	
Atmos Energy	ATO	Kansas	Р
Atmos Energy	ATO	Kentucky	Р
Atmos Energy	ATO	Louisiana	Р
Atmos Energy	ATO	Mississippi	Р
Atmos Energy	ATO	Tennessee	Р
Atmos Energy	ATO	Texas	Р
Atmos Energy	ATO	Virginia	Р
Chesapeake Utilities	CPK	Delaware	
Chesapeake Utilities	CPK	Maryland	Р
Florida Public Utilities Company	CPK	Florida	
New Jersey Natural Gas	NJR	New Jersey	F
Northwest Natural Gas	NWN	Oregon	P
Northwest Natural Gas	NWN	Washington	
Kansas Gas Service	OGS	Kansas	P
Oklahoma Natural Gas	OGS	Oklahoma	P
Texas Gas Service	OGS	Texas	Р
Elizabethtown Gas	SJI	New Jersey	P
South Jersey Gas	SJI	New Jersey	F
Alabama Gas Corporation	SR	Alabama	P
Spire Gulf Inc. (Mobile Gas Corporation)	SR	Alabama	Р
Spire Missouri East	SR	Missouri	Р
Spire Missouri West	SR	Missouri	Р
Southwest Gas Corporation	SWX	Arizona	F
Southwest Gas Corporation	SWX	California	F
Southwest Gas Corporation	SWX	Nevada	F

Summary of Adjustment Clauses & Alternative Regulation/Incentive Plans

Notes:

[1] Full or partial decoupling (such as Fixed Variable rate design, weather normalization clauses, and recovery of lost revenues as a result of Energy Efficiency programs). All full or partial decoupling mechanisms include weather normalization adjustments.