Exhibit No.:	
Issue:	*Rate of Return*
Witness:	*Shana Griffin*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Surrebuttal Testimony*
Case No.:	*ER-2016-0023*
Date Testimony Prepared:	*May 16, 2016*

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION
OPERATIONAL ANALYSIS

FINANCIAL ANALYSIS UNIT

SURREBUTTAL TESTIMONY

OF

SHANA GRIFFIN

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2016-0023

Jefferson City, Missouri
May 2016

** **Denotes Highly Confidential Information** **

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SHANA GRIFFIN

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2016-0023

SURREBUTTAL TESTIMONY

OF

SHANA GRIFFIN

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2016-0023

Q. Please state your name.

A. My name is Shana Griffin.

Q. Are you the same Shana Griffin who previously filed rebuttal testimony on May 2, 2016, and prepared Section VII, Rate of Return ("ROR"), of the Staff's *Cost of Service Report* ("COS Report") filed in this proceeding on March 25, 2016?

A. Yes, I am.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimonies of Dr. James H. Vander Weide and Mr. Robert W. Sager. Dr. Vander Weide and Mr. Sager sponsored testimony on behalf of The Empire District Electric Company ("Empire" or "Company").

EXECUTIVE SUMMARY OF SURREBUTTAL TESTIMONY

Q. Please summarize your surrebuttal testimony.

A. I will respond to Dr. Vander Weide's rebuttal testimony concerning the size of Staff's proxy group, Staff's application of the Discounted Cash Flow ("DCF") model, and the growth rates Staff used in its analyses. I will respond to Mr. Sager's rebuttal testimony regarding Staff's recommended disallowance of certain debt costs. I will also update my cost of debt and capital structure recommendations using Empire's financial data through the agreed-to true-up period in this case.

TRUE-UP RECOMMENDATION

Q. Has Empire provided capital structure and embedded cost of capital information that allows you to update your recommendation through the true-up period in this case?

A. Yes. They provided information through March 31, 2016.

Q. Are you revising your recommended allowed ROE in conjunction with the true-up of the capital structure and the embedded cost of debt?

A. No.

Q. What are the components of the capital structure and the cost of capital after using data through March 31, 2016?

A. They are as follows (*see also* Schedules SG-s1, SG-s2 and SG-s3):

			Allowed Rate of Return Using Common Equity Return of:		
Capital Component	Percentage of Capital	Embedded Cost	9.50%	**9.75%**	10.00%
Common Stock Equity	48.90%	-----	4.65%	**4.77%**	4.89%
Long-Term Debt	51.10%	5.33%	2.73%	**2.73%**	2.73%
Total	**100.00%**		7.37%	**7.49%**	7.62%

Source: Empire's True-Up Workpapers

Q. In Staff's true-up embedded cost of long-term debt calculation for Empire, did Staff still exclude the remaining unamortized expense balance associated with Empire's $2.5 million of debt expenses incurred to amend its mortgage bond indenture?

A. Yes. Consistent with the general rate case proceedings, Staff's cost of debt calculation still excludes the remaining unamortized expense balance associated with Empire's debt expenses incurred to amend its mortgage bond indenture in order to allow it to maintain its dividend per share of $1.28 at the time. The remaining unamortized expense balance is now approximately $1.3 million. Staff subtracted this amount from Empire's cost of debt calculation for the period ending March 31, 2016. Staff provides the underlying details of its embedded cost of debt estimate in Schedule SG-s3.

Q. How much short-term debt did Empire have outstanding as of the end of the true-up period of March 31, 2016?

A. According to Empire's true-up workpapers and Empire's response to Staff Data Request No. 0094.1, Empire had $19 million of short-term debt outstanding as of the true-up period March 31, 2016. Staff does not include the $19 million of short-term debt outstanding in its updated recommended ratemaking capital structure because for the twelve months ending March 31, 2016, Empire's average Construction Work in Progress ("CWIP") balance exceeded its short-term debt balance.

<u>RESPONSE TO DR. VANDER WEIDE'S REBUTTAL TESTIMONY</u>

Q. In his rebuttal testimony, Dr. Vander Weide discusses his concern with Staff's proxy group selection criteria. What is Staff's response?

A. Staff's criteria for purposes of selecting companies for its proxy group are as follows:

1. Classified as a power company by SNL;
2. Publicly-traded stock;
3. Followed by the Edison Electric Institute ("EEI") and classified as a regulated electric utility;
4. At least 50% of plant from electric utility operations;

5. At least 25% of electric plant from generation;
6. At least 80% of income from regulated utility operations;
7. No reduced dividend since 2013;
8. At least investment grade credit rating;
9. At least 2 equity analysts providing long-term growth projections in the last 90 days; and,
10. No significant merger or acquisition announced recently.

Staff used these criteria to improve the risk comparability of its proxy group to the risk of Empire. Companies incur two types of risk, business risk and financial risk. The financial risk of an entity is driven by the amount of fixed obligations created by issuing debt. Some analysts will attempt to screen their comparable companies for financial risk by selecting companies with a certain common equity percentage in their capital structure. I controlled for this type of risk by selecting companies that have at least an investment grade credit rating. The business risk of an entity is primarily driven by the dominant operations of the company. The best way to select companies that face similar business risk is to select companies that are in the same business as the operations being evaluated. Most finance textbooks commonly refer to this approach as the "pure play method." Because we are attempting to determine the appropriate cost of capital for the risks inherent in Empire's regulated electric utility operations, it is important to select for companies in the proxy group whose stock prices are primarily influenced by risks consistent with rate-regulated, integrated electric utility operations (assets included generation, transmission and distribution). Consequently, Staff chose companies that were classified as a "Regulated" electric utility by EEI, at least 50% of plant from their electric utility operations, at least 25% electric plant from generation and at least 80% of income from regulated utility operations. The combination of these criteria ensures the selection of companies that have both a large asset base and a large income base from their regulated utility operations comparable to Empire.

Q. Dr. Vander Weide criticizes Staff's comparable company criteria of requiring that companies be classified as "Regulated" by EEI to be selected as a member of the proxy group. Does Staff have any response to Dr. Vander Weide's criticism?

A. Yes, companies in EEI's "Regulated" asset group have less risk than companies in EEI's "Mostly Regulated" and "Diversified" groups; therefore, limiting the members in the proxy group to companies in EEI's "Regulated" asset group results in a better proxy group for estimating the regulated electric utility industry's cost of equity ("COE").

Q. On pages 11 through 14, in his rebuttal testimony, Dr. Vander Weide discusses a variety of matters regarding the growth rates Staff analyzed when performing Staff's constant-growth DCF analysis, including Staff's use of historical growth rates and analysts' earnings per share ("EPS") growth forecasts in estimating the growth component of its constant-growth DCF model. What is Staff's response?

A. Staff clearly explains in the ROR Section of the COS Report in this case that the constant-growth DCF method may not yield reliable results if industry and/or economic circumstances cause expected near-term growth rates to be inconsistent with sustainable perpetual growth rates.[1] Consequently, Staff decided that a multi-stage DCF analysis would provide a more reliable COE estimate. Further, Staff did not rely on the constant-growth DCF to quantify the change in the COE since the Commission last set allowed ROEs in Case Nos. ER-2014-0258 and ER-2014-0370.

[1] Dr. Aswath Damodaran, Professor of Finance of the New York University Stern School of Business, advocates using a multi-stage methodology if the constant-growth rate is expected to be 1-2% different than the earlier stage growth rates. Aswath Damodaran, *Investment Valuation: Tools and techniques for determining the value of any asset*, University Edition, John Wiley & Sons, Inc., 1996, p. 193.

Q. On page 15 of Dr. Vander Weide's rebuttal testimony, he criticizes Staff's opinion that analysts' projected growth rates for electric utilities are not sustainable in the long run. What is Staff's response to this criticism?

A. Dr. Vander Weide argues that Staff should use equity analysts' projected long-term compound annual growth rates ("CAGR") in EPS, regardless of whether investors consider these CAGR to be "sustainable." He also argues that Staff fails to recognize that equity analysts' growth forecasts affect stock prices. Dr. Vander Weide argues that Staff should adjust the stock prices for the companies in Staff's DCF analyses, as well as the growth forecasts, if Staff believes that the equity analysts' long-term projected CAGR in EPS are irrational. Although Staff does not believe investors blindly accept equity analysts' five-year CAGR in EPS for purposes of making investment decisions, it appears to Staff that Dr. Vander Weide is missing Staff's point. While equity analysts' opinions do matter to investors, this does not mean that investors expect the growth of electric utility companies' stock prices to be the same as equity analysts' projected five-year CAGR in EPS. Staff has **never** seen an equity analyst use his/her own projected five-year CAGR in EPS as a perpetual growth rate in a constant-growth DCF analysis. Practical investment analyses simply do not support Dr. Vander Weide's position on this matter.

Regardless, Staff believes that if a growth rate estimate does not reflect rational investor expectations of long-term sustainable growth, then an analyst is justified in rejecting that growth rate estimate, at least for periods exceeding the five years for which the growth rate was projected. According to *The Cost of Capital-A Practitioners Guide* by David Parcell, page 8-5, "The DCF method assumes that investors evaluate stocks in a classical economic framework and buy and sell securities rationally at prices which reflect that value assessment.

Classical economic, or valuation, theory maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows. As a result, DCF theory assumes that the stock price of a firm fully considers and reflects the return expected by stockholders." This assumption implies that the current stock price reflects investor expectations, which includes not only near-term growth, but also more rational long-term constant growth. Dr. Vander Weide is incorrect in assuming that rational investors would rely on equity analysts' projected five-year CAGR in EPS for a sustainable long-term growth rate in valuing a stock.

Q. Dr. Vander Weide states in his rebuttal testimony that "investors purchase information on analysts' growth forecasts at considerable expense" is further support for using analyst's growth forecasts to estimate the growth component of the DCF model. What is Staff's response?

A. Staff has reviewed numerous equity analysts' research reports published for the benefit of informing investors. Staff emphasizes that it has **never** seen an investment analysis of a utility company that used 5-year EPS CAGR forecast for purposes of estimating the growth in dividends per share ("DPS") in a single-stage, constant-growth DCF or for the final stage in a multi-stage DCF. Considering the fact that the very equity analysts that provide 5-year EPS CAGR do not use them as a proxy for expected long-term DPS growth in their own analyses should be proof in and of itself that stock prices do not reflect this assumption.

Q. On page 10 of his rebuttal testimony, Dr. Vander Weide criticizes Staff for not using the quarterly compounding version of the DCF model as he did. Do you have any response to his criticism?

A. Yes. Investors receive investment research information from publications such as Value Line, which does not publish quarterly projected dividends. Value Line provides projected dividends on an annual basis. The dividend yield provided by Value Line in its Ratings and Reports tear sheets is based on the expected dividend for the next year without quarterly compounding. The following definition of "dividend yield" is contained in the *Value Line Investment Survey for Windows: User's Manual,* © 1995 through 2002:

> The common dividends declared per share expressed as a percentage of the average annual price of the stock. Dividend yield = common dividends declared per share divided by the average annual price of a stock. The year-ahead estimated dividend yield (shown in the top right-hand corner of the Value Line page) is the estimated total of cash dividends to be declared over the next 12 months, divided by the recent price of the stock.

Staff believes that investors make their investment decisions primarily based upon the annual dividend assumption, and for that reason it is appropriate to estimate investors' required returns based on that assumption.

Q. On page 23 of his rebuttal testimony Dr. Vander Weide claims Staff's COE estimate underestimates Empire's COE by at least 200 to 300 basis points but Staff was correct to base its recommended 9.75 percent authorized ROE on the authorized ROEs found in recent proceedings rather than the results of its COE studies. What is Staff's response?

A. The COE is the return required by investors and therefore is equivalent to the discount rate investors use to estimate a fair price to pay for utility stock. Staff continues to find extensive corroborating evidence that investors expect commissions to set allowed ROEs higher than the COE. As Staff explained in Staff's COS Report, because the Commission recently decided that a 9.50% allowed ROE was fair and reasonable for Missouri's lower risk electric utilities, an allowed ROE of 9.75% for Empire is reasonable. The capital market information Staff analyzed at the time it prepared the COS Report was not compelling enough to cause Staff to attempt to convince the Commission recognize a change in capital costs for purposes of setting an allowed ROE. Consequently, Staff recommended the Commission authorize an ROE for Empire in the range of 9.50% to 10.00%, with a midpoint of 9.75%. Staff's midpoint recommended ROE of 9.75% for Empire is approximately 25 basis points higher than the recent allowed ROEs for Ameren Missouri and KCPL because Staff added 25 basis points due to Empire's lower credit rating, which is based on the business and financial risks of Empire's regulated utility operations. Ameren and KCPL have corporate credit ratings of 'BBB+' while Empire has a corporate credit rating of 'BBB.' The spreads between 'A' rated utility bonds and 'BBB'/'Baa' rated utility bonds have historically averaged approximately 45 basis points. This spread would normally suggest a 15-basis point risk premium is acceptable for a company rated one notch lower (45/3 = 15). As mentioned earlier, Staff noticed from the Mergent Bond Record that spreads between 'A' rated and 'BBB'/'Baa' rated utility bond yields had significantly increased recently to over double the historical average. Staff's analysis using Mergent's utility bond yield constituent list (excluding the energy companies) and FINRA data for the twelve weeks ended March 14, 2016, showed a spread of approximately 65 basis points between 'A' rated and 'BBB'/'Baa' rated utility bonds. This spread would suggest approximately a 22-basis point risk premium is acceptable for a company rated one notch lower (65/3 = 21.67). Therefore, because of the recent increase in spreads between 'A' and 'BBB'/'Baa' rated utility bonds, Staff recommends a 25-basis point adjustment.

<u>RESPONSE TO MR. SAGER'S REBUTTAL TESTIMONY</u>

Q. In his rebuttal testimony, Mr. Sager challenges Staff's disallowance of the remaining unamortized expense balance of approximately $1.3 million associated with Empire's $2.5 million of debt expenses incurred to amend its mortgage bond indenture in order to provide a larger cushion in Empire's retained earnings balance so that shareholder dividends could continue to be paid during the Company's construction period. What is Staff's response?

A. Mr. Sager states on page 3 of his rebuttal testimony, "The Company's retained earnings balance had dropped to approximately $17.2 million by year-end 2007, in part because it had absorbed $85.5 million of fuel and purchased power costs in the 2003-2006 period due to the lack of a fuel adjustment clause in Missouri (Staff's Cost of Service Report, Case No. ER-2008-0093). Prior to 2008, the Company's Indenture did not allow Empire to pay dividends with a negative retained earnings balance. " Therefore, according to Empire's 2008 Annual Report, Empire amended the Indenture on March 11, 2008, to provide it with the flexibility to pay dividends up to a negative retained earnings balance of $10.75 million. Empire chose to pay a $1.28 annual dividend per share from 1993 through 2010 and only had sufficient earnings per share to support that level of dividends per share in 6 of those 18 years.

Q. Mr. Sager implies in his rebuttal testimony that if Empire had reduced or been unable to pay its dividend, Empire's COE would be higher. Did any other Missouri utility request a higher allowed ROE because of an alleged higher COE after it reduced its dividend?

A. No. In fact, according to a S&P summary analysis of Ameren Corp. in August 2009 after Ameren Corp. reduced its dividend in February 2009, S&P stated, "The financial profile of the consolidated entity is maintained as 'significant,' enhanced by the company's decision to reduce its dividend by $1 per share, which we view as **credit supportive**." (Emphasis added) Also, in a September 2009 S&P summary analysis of Great Plains Energy, Inc., (the parent company of KCPL) after it reduced its dividend in February 2009, S&P stated, "Additionally, the company has taken concrete measures to **improve its credit quality**. These include the issuance of equity, a 50% dividend reduction, and the operational improvement of its existing power plants." (Emphasis added).

Q. Mr. Sager implies in his rebuttal testimony, on page 2 and 4, that the actions Empire took in 2008 to amend Empire's Indenture, to provide it additional flexibility to pay its dividend, were essential to maintaining an investment grade credit rating. Did S&P or Moody's downgrade Empire's corporate credit rating in response to Empire suspending its dividend for the last two quarters of 2011?

A. No. In fact Moody's stated the following in its May 26, 2011, Global Credit Research On Empire:

> ** ____
> ____
> ____
> ____
> ____
> ____
> ______________________________ **

<u>SUMMARY AND CONCLUSIONS</u>

Q. Would you please summarize Staff's conclusions presented in your surrebuttal testimony?

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A. Yes. Staff continues to believe its ROE recommendation of 9.75% for Empire is reasonable and has presented evidence that supports this recommendation in relation to the ROEs authorized in the 2014 electric rate cases. Dr. Vander Weide's criticism of Staff's smaller proxy group is misplaced. A larger proxy group should not come at the expense of comparability. Also, Staff believes that its debt disallowance is necessary and appropriate at this time.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service	)))	Case No. ER-2016-0023

AFFIDAVIT OF SHANA GRIFFIN

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

COMES NOW SHANA GRIFFIN and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing SURREBUTTAL TESTIMONY; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Shana Griffin

SHANA GRIFFIN

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 16th day of May, 2016.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2016
Commission Number: 12412070

D Suzie Mankin

Notary Public

The Empire District Electric Company
Case No. ER-2016-0023

Recommended Allowed Rate of Return as of March 31, 2016
for The Empire District Electric Company

			Allowed Rate of Return Using Common Equity Return of:		
Capital Component	Percentage of Capital	Embedded Cost	9.50%	**9.75%**	10.00%
Common Stock Equity	48.90%	-----	4.65%	**4.77%**	4.89%
Long-Term Debt	51.10%	5.33%	2.73%	**2.73%**	2.73%
Total	**100.00%**		7.37%	**7.49%**	7.62%

Notes:

See Schedule SG- s2 for the Capital Structure Ratios.

The Empire District Electric Company
Case No. ER-2016-0023

Capital Structure as of March 31, 2016
for The Empire District Electric Company

Capital Component		**Dollar Amount (000's)**	**Percentage of Capital**
Common Stock Equity	$	808,314,415	48.90%
Preferred Stock	$	-	0.00%
Long-Term Debt	$	844,739,497	51.10%
Short-Term Debt	$	-	0.00%
Total Capitalization	**$**	**1,653,053,912**	**100.00%**

Source: Empire's True up workpapers

The Empire District Electric Company
Case No. ER-2016-0023
Embedded Cost of Long-Term Debt
as of March 31, 2016 For The Empire District Electric Company

	Amount Outstanding	Annual Cost
Bonds and Unsecured Notes Series:		
7.2% Series, Due 2016	$25,000,000	$1,800,000
6.375% Series due 2018	$90,000,000	$5,737,500
5.2% Series, due in 2040	$50,000,000	$2,600,000
6.7% Sr. Notes, Series, Due 2033	$62,000,000	$4,154,000
5.8% Sr. Notes, Series, Due 7/1/2035	$40,000,000	$2,320,000
4.65% Series, Due 6/1/2020	$100,000,000	$4,650,000
5.875%, Due 2037	$80,000,000	$4,700,000
6.82% Series, Due 6/1/2036-EDG	$55,000,000	$3,751,000
3.58% Series, due 4-2-2027	$88,000,000	$3,150,400
3.73% Series, Due 5/30/2033	$30,000,000	$1,119,000
4.32% Series, Due 5/30/2043	$120,000,000	$5,184,000
4.27% Series, due 12-1-2044	$60,000,000	$2,562,000
3.59% FMB Series due 8-20-2030	$60,000,000	$2,154,000
Premium, Discount and Expense	-$15,260,503 [1]	$1,169,080 [1]
Total	**$844,739,497**	**$45,050,980**

Embedded Cost of Long-term Debt	**5.33%**

Source: Empire's True Up Workpapers

[1] Adjustment made for disallowance associated with Empire's debt expenses incurred to amend its mortgage bond indenture in order to provide additional flexibility to pay its dividend.