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Sponsoring Party: Union Electric Company  
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**MISSOURI PUBLIC SERVICE COMMISSION**

**FILE NO. ER-2014-0258**

**DIRECT TESTIMONY**

**OF**

**RYAN J. MARTIN**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY  
d/b/a Ameren Missouri**

St. Louis, Missouri  
July, 2014

UE Exhibit No. 25  
Date 3-12-15 Reporter KF  
File No. ER-2014-0258

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1 **DIRECT TESTIMONY**

2 **OF**

3 **RYAN J. MARTIN**

4 **FILE NO. ER-2014-0258**

5 **I. INTRODUCTION**

6

7 **Q. Please state your name and business address.**

8 A. My name is Ryan J. Martin. My business address is One Ameren Plaza,  
9 1901 Chouteau Avenue, St. Louis, MO 63103.

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

11 A. I am employed by Ameren Services Company, a wholly-owned subsidiary  
12 of Ameren Corporation (“Ameren”), as Assistant Vice President and Treasurer. I also  
13 serve as Assistant Vice President and Treasurer of Union Electric Company d/b/a/  
14 Ameren Missouri (“Ameren Missouri” or the “Company”). Ameren Services Company  
15 provides various corporate support services to Ameren's subsidiaries, including Ameren  
16 Missouri, such as accounting, legal, financial, and treasury services.

17 **Q. What are your current job duties and responsibilities?**

18 A. As Treasurer, I am responsible for all areas of the Company's treasury  
19 function, including corporate finance, cash and investment management, insurance, credit  
20 risk management, and investor services. Within the area of corporate finance, I am  
21 responsible for, among other things, managing Ameren and its subsidiaries' capital,  
22 including their short-term and long-term financing activities, such as debt and equity  
23 issuances and credit facility arrangements. I am also responsible for monitoring Ameren  
24 and its subsidiaries' liquidity positions, key credit metrics, and debt agreement

1 compliance, managing relationships with credit rating agencies and banks, and  
2 monitoring capital markets for key developments, emerging risks, and opportunities,  
3 among other corporate finance-related activities.

4 **Q. Please provide your educational background and relevant work**  
5 **experience.**

6 A. See my Statement of Qualifications, attached as Appendix A to my direct  
7 testimony.

8 **II. PURPOSE AND SUMMARY OF TESTIMONY**

9 **Q. What is the purpose of your direct testimony?**

10 A. The purpose of my direct testimony is to recommend a reasonable capital  
11 structure for Ameren Missouri for ratemaking purposes and an appropriate overall fair  
12 rate of return for the Company's electric utility business. The capital structure that I  
13 recommend is based on Ameren Missouri's forecasted debt, preferred stock, and common  
14 stock balances as of December 31, 2014. The actual balances as of December 31, 2014,  
15 will be provided with the true-up data. My direct testimony also reflects, for  
16 informational purposes, Ameren Missouri's actual capital structure as of March 31, 2014,  
17 the end of the test year. In recommending a fair overall rate of return, I consider Ameren  
18 Missouri's embedded cost of long-term debt, its embedded cost of preferred stock, and  
19 the fair return on equity recommended by Ameren Missouri witness Robert B. Hevert in  
20 this case.

1           **Q.     Are you sponsoring any schedules in connection with your direct**  
2 **testimony?**

3           A.     Yes, I am sponsoring and have attached to my testimony the following  
4 schedules, which have been prepared as of or for the twelve months ending December 31,  
5 2014, as appropriate:

- 6           •     Schedule RJM-1 – Capital Structure/Weighted Average Cost of Capital
- 7           •     Schedule RJM-2 – Embedded Cost of Long-Term Debt
- 8           •     Schedule RJM-3 – Cost of Short-Term Debt
- 9           •     Schedule RJM-4 – Embedded Cost of Preferred Stock

10           **III.    RATE OF RETURN AND COST OF CAPITAL CONSIDERATIONS**

11           **Q.     What is the relationship between allowed rate of return and cost of**  
12 **capital in the context of utility ratemaking?**

13           A.     Under a traditional regulatory model, the interests of ratepayers and a  
14 utility’s shareholders may be considered “balanced” when the Commission authorizes a  
15 rate of return on rate base equal to the utility’s cost of capital. If the authorized rate of  
16 return is less than the utility’s overall cost of capital, the financial strength and stability of  
17 the utility could degrade, making it difficult for the utility to raise necessary capital on a  
18 timely basis, at a reasonable cost, and under reasonable terms. Ultimately, the utility’s  
19 inability to raise sufficient capital would impair service quality, or the increased cost of  
20 capital incurred by a financially weakened utility would result in increased rates.  
21 Ratepayer interests are best served when the Commission-authorized rate of return is set  
22 equal to the utility’s overall cost of capital.

1           **Q.     Please define weighted cost of capital.**

2           A.     Weighted cost of capital equals the sum of the costs of the components of  
3 an entity's capital structure, weighted by the relative contribution of each capital source  
4 to the company's total capitalization.

5           **Q.     How did you calculate the weighted average cost of capital for**  
6 **Ameren Missouri?**

7           A.     As reflected in Schedule RJM-1, I calculated Ameren Missouri's weighted  
8 average cost of capital by (1) multiplying the relative weighting or proportion of each  
9 component of Ameren Missouri's capital structure by the cost of that component and then  
10 (2) summing the weighted cost of each capital component.

11          **Q.     What is the primary standard for determining a fair rate of return?**

12          A.     According to the landmark *Bluefield* and *Hope* U.S. Supreme Court  
13 decisions<sup>1</sup>, a utility's rates must be set at a level that allows a utility to generate revenues  
14 sufficient to (1) maintain the financial integrity of its existing invested capital,  
15 (2) maintain its creditworthiness, and (3) attract sufficient capital on competitive terms to  
16 continue to provide a source of funds for continued investment and enable the Company  
17 to meet the needs of its customers. When a utility is allowed to earn its cost of capital, it  
18 is generally afforded a reasonable opportunity to accomplish these objectives.

19          **Q.     From a finance perspective, why is it important that the Commission**  
20 **allow Ameren Missouri to earn its cost of capital?**

21          A.     By earning its cost of capital, Ameren Missouri will generate strong cash  
22 flows and maintain the financial strength and stability necessary to, among other things,

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<sup>1</sup> *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923) and *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 391 (1944).

1 attract investment to finance the business and provide reliable, high quality service to its  
2 customers at a reasonable cost. Strong cash flows and overall financial health allow the  
3 Company to offer an attractive and competitive risk-adjusted return to equity investors  
4 and also maintain strong credit metrics and investment grade credit ratings that afford the  
5 Company access to debt capital at a reasonable cost and under reasonable terms and  
6 conditions.

7 **IV. AMEREN MISSOURI'S CAPITAL STRUCTURE**

8 **Q. How do you believe the reasonableness of a public utility's capital**  
9 **structure should be evaluated?**

10 A. In evaluating the reasonableness of a public utility's capital structure, one  
11 should determine whether the capital structure is consistent with the financial strength  
12 necessary for the utility to access the capital markets under reasonable terms under most  
13 economic conditions, and, if so, whether the cost of capital resulting from such a  
14 structure is reasonable. While debt, relative to equity, is generally a less expensive form  
15 of capital due in part to the tax deductibility of interest expense, incremental debt  
16 increases a firm's probability of default and the related costs of financial distress.  
17 Beyond a certain point, dependence on debt as a source of capital increases the risk  
18 associated with a utility's cash flow, which correspondingly increases a utility's overall  
19 cost of capital.

20 **Q. What was Ameren Missouri's capital structure as of March 31, 2014,**  
21 **the end of the proposed test year in this case?**

22 A. The table below shows Ameren Missouri's actual capital structure as of  
23 March 31, 2014:

	<u>Balance</u>	<u>%</u>
Long-term debt	\$ 3,366,400,947	45.92%
Short-term debt	\$ -	0.00%
Preferred stock	\$ 81,827,509	1.12%
Common equity	\$ 3,882,655,029	52.96%
1 Total	<u>\$ 7,330,883,485</u>	<u>100.00%</u>

2 **Q. How does Ameren Missouri's capital structure as of March 31, 2014,**  
3 **compare to the capital structure approved for Ameren Missouri by the Commission**  
4 **pursuant to the Commission's most recent rate order?**

5 A. A comparison of Ameren Missouri's capital structure as of March 31,  
6 2014, to the capital structure most recently approved by the Commission, which was  
7 based on actual balances as of July 31, 2012, is as follows:

	<u>As of March 31, 2014</u>		<u>As of July 31, 2012</u>	
	<u>Balance</u>	<u>%</u>	<u>Balance</u>	<u>%</u>
Long-term debt	\$ 3,366,400,947	45.92%	\$ 3,605,229,436	46.80%
Short-term debt	\$ -	0.00%	\$ -	0.00%
Preferred stock	\$ 81,827,509	1.12%	\$ 81,827,509	1.06%
Common equity	\$ 3,882,655,029	52.96%	\$ 4,016,120,001	52.14%
8 Total	<u>\$ 7,330,883,485</u>	<u>100.00%</u>	<u>\$ 7,703,176,946</u>	<u>100.00%</u>

9 The approximately \$239 million decrease in long-term debt from July 31, 2012, to  
10 March 31, 2014, is attributable primarily to the repayment of \$200 million of senior  
11 secured notes that matured in October 2013. The approximately \$133 million decrease in  
12 common equity from July 31, 2012, to March 31, 2014, is primarily attributable to  
13 dividends paid during the period, net of net income generated.

14 **Q. What capital structure are you recommending in this case?**

15 A. I recommend that Ameren Missouri's actual capital structure, as of the  
16 recommended true-up date of December 31, 2014, be used in this case.



1           **Q.     How do you expect Ameren Missouri’s capital structure to change**  
2 **when the balances are trued-up through December 31, 2014?**

3           A.     Based on current projections, I expect Ameren Missouri’s capital structure  
4 as of the December 31, 2014 true-up date to be as follows:

	<u>As of December 31, 2014</u>		<u>As of March 31, 2014</u>	
	<u>Balance</u>	<u>%</u>	<u>Balance</u>	<u>%</u>
Long-term debt	\$ 3,614,609,057	47.34%	\$ 3,366,400,947	45.92%
Short-term-debt	\$ -	0.00%	\$ -	0.00%
Preferred stock	\$ 81,827,509	1.07%	\$ 81,827,509	1.12%
Common equity	<u>\$ 3,938,890,562</u>	<u>51.59%</u>	<u>\$ 3,882,655,029</u>	<u>52.96%</u>
5           Total	<u>\$ 7,635,327,128</u>	<u>100.00%</u>	<u>\$ 7,330,883,485</u>	<u>100.00%</u>

6 Note that the equity percentage as of December 31, 2014, is expected to be 55 basis  
7 points less than the equity percentage approved by the Commission in the most recently  
8 decided rate case. The anticipated increase in long-term debt of approximately \$248  
9 million from March 31, 2014, to December 31, 2014, is primarily attributable to the  
10 issuance of \$350 million of senior secured notes in April 2014, offset by the May 2014  
11 maturity and repayment of \$104 million of long-term debt. The expected common equity  
12 increase of approximately \$56 million from March 31, 2014, to December 31, 2014, is  
13 attributable primarily to net income expected to be earned during the period, offset by  
14 forecasted dividends to be paid.

15           **Q.     What constitutes a healthy capital structure for a regulated utility?**

16           A.     Again, a healthy capital structure for a regulated utility is one that results  
17 in a reasonable balance between the overall cost of capital and the expected costs of  
18 financial distress.

19           **Q.     Why do you believe that the capital structure recommended in your**  
20 **testimony is appropriate?**

1           A.     The capital structure recommended in my testimony reflects a reasonable  
2 balance between capital costs and financial strength and stability. It allows Ameren  
3 Missouri to take advantage of the lower costs of debt financing without elevating the risk  
4 of default and the related costs of financial distress to an unreasonable level that would  
5 impair the creditworthiness and financial integrity of the Company.

6           **V.    BALANCE AND EMBEDDED COST OF LONG-TERM DEBT**

7           **Q.    How was the balance of long-term debt determined?**

8           A.     The long-term debt balance of \$3,614,609,057 reflected in the proposed  
9 Ameren Missouri capital structure represents the projected total carrying value of the  
10 Company's long-term debt as of December 31, 2014. As detailed in Schedule RJM-2,  
11 the carrying value of long-term debt was computed using the net proceeds method, which  
12 adjusts the face amount of long-term debt to properly account for unamortized discounts  
13 and premiums, long-term debt issuance expenses, and any gains or losses incurred in  
14 connection with long-term debt redemptions.

15           **Q.    Did you make any adjustments to Ameren Missouri's actual long-**  
16 **term debt balance in determining the long-term debt balance proposed in this**  
17 **proceeding?**

18           A.     I did not include in the proposed long-term debt balance the Company's  
19 obligations under capital leases related to the Chapter 100 financing of its Penno Creek  
20 (City of Bowling Green) and Audrain County gas-fired generating facilities. These  
21 transactions and related capital leases did not generate any proceeds, nor were they a  
22 source of new capital for the Company. This treatment is consistent with that reflected in  
23 the Company's prior rate case order.

1           **Q.     How was the embedded cost of long-term debt determined?**

2           A.     As reflected in Schedule RJM-2, the embedded cost of long-term debt of  
3 5.565% was computed by dividing forecasted annualized interest expense for the year  
4 ended December 31, 2014, by the forecasted average long-term debt carrying value as of  
5 such date.

6           Included in Ameren Missouri's forecasted long-term debt balance as of  
7 December 31, 2014, are two series of variable rate environmental improvement bonds  
8 with a forecasted total outstanding principal balance as of such date of \$207.5 million.  
9 The interest rates of the issues are reset by a Dutch auction process every 35 days. The  
10 effective interest cost assumed for this indebtedness for purposes of this proceeding is  
11 consistent with expected rates for these securities as of December 31, 2014, including  
12 related auction broker/dealer fees.

13   **VI.    BALANCE OF SHORT-TERM DEBT**

14           **Q.     How was the balance of short-term debt determined?**

15           A.     The balance of short-term debt of \$0 reflected in the proposed Ameren  
16 Missouri capital structure represents the forecasted average short-term debt balance  
17 during the year ending December 31, 2014, net of cash and construction work in progress  
18 balances. As reflected in Schedule RJM-3, the Company expects to have no net short-  
19 term borrowings during the period.

20   **VII.   BALANCE AND EMBEDDED COST OF PREFERRED STOCK**

21           **Q.     How was the balance of preferred stock determined?**

22           A.     The preferred stock balance of \$81,827,509 reflected in Ameren  
23 Missouri's proposed capital structure reflects the expected carrying value of, and the net

1 proceeds received for, Ameren Missouri's projected preferred stock outstanding as of  
2 December 31, 2014. The calculation of the preferred stock balance is shown in Schedule  
3 RJM-4.

4 **Q. How was the embedded cost of Ameren Missouri's preferred stock**  
5 **determined?**

6 A. As reflected in Schedule RJM-4, the embedded cost of preferred stock of  
7 4.180% was computed by dividing forecasted annualized dividends by the net proceeds  
8 received for forecasted preferred stock outstanding as of December 31, 2014.

9 **Q. Did you consider expenses incurred in connection with Ameren**  
10 **Missouri's issuance of preferred stock in calculating the embedded cost of this**  
11 **component of the Company's capital structure?**

12 A. Yes. As reflected in Schedule RJM-4, considered in the embedded cost of  
13 preferred stock is not only the cost of dividends but also the cost of preferred stock  
14 issuance, including discounts, premiums, expenses, and any losses incurred in connection  
15 with redeeming prior preferred stock series. Unlike similar costs incurred in connection  
16 with the issuance and redemption of long-term debt, these expenses are not amortized  
17 over the life of the security due to the perpetual nature of preferred stock. Nonetheless, it  
18 is important and appropriate to consider these costs in order to accurately quantify the  
19 true economic cost of Ameren Missouri's preferred stock and establish a fair overall rate  
20 of return for the Company.

21 **VIII. BALANCE AND COST OF COMMON EQUITY**

22 **Q. How was the balance of Ameren Missouri's common equity**  
23 **determined?**



1

**X. CONCLUSION**

2

**Q. Does this conclude your direct testimony?**

3

**A. Yes, it does.**

**APPENDIX A**  
**STATEMENT OF QUALIFICATIONS**  
**RYAN J. MARTIN**

My name is Ryan J. Martin. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri, 63103. I am employed by Ameren Services Company as Assistant Vice President and Treasurer. In this role, I am responsible for all areas of the Company's treasury function, including, among others, corporate finance, cash and investment management, insurance, credit risk management, and shareholder services.

I received my Bachelor of Business Administration degree, with a concentration in Accountancy, in 1995 from the University of Notre Dame. I earned my CPA certificate from the state of Illinois in 1997. I received my Master of Business Administration degree, with concentrations in finance, marketing, and strategy, in 2004 from Northwestern University's Kellogg School of Management.

I have more than eighteen years of experience in various audit, accounting, financial reporting, and finance roles. I began my career in 1995 at Arthur Andersen LLP and worked in the firm's Audit and Business Advisory practice for six years. I left Arthur Andersen in 2000 to join Career Education Corporation, a Chicago-based public company that owns and operates for-profit, post-secondary schools. At Career Education Corporation, I managed the company's accounting and financial reporting functions and at various times was also responsible for accounts payable, payroll, cash management, and insurance, ultimately being promoted to the role of Vice President of Finance and Accounting. In 2007, I joined Ameren Services Company as Assistant Controller. In that role, I managed the Company's general accounting function and plant accounting function and was also responsible for accounting research and policy. In March of 2010, I transitioned to the Finance department of Ameren Services Company as the Assistant

Treasurer and Manager of Corporate Finance. In this role, I was responsible for managing the Ameren and subsidiary company short-term and long-term financing activities, including debt and equity issuances and credit facility arrangements, monitoring the company's liquidity position and key credit metrics, monitoring compliance with our debt agreements, managing relationships with credit rating agencies and banks, and monitoring capital markets for key developments, emerging risks, and opportunities, among other corporate-finance related activities.



**Union Electric Company d/b/a Ameren Missouri**  
**Weighted Average Cost of Capital**

at 12/31/2014:

CAPITAL COMPONENT	AMOUNT	PERCENT OF TOTAL	COST	WEIGHTED COST
Long-Term Debt	\$3,614,609,057	47.341%	5.565%	2.635%
Short-Term Debt	\$0	0.000%	0.000%	0.000%
Preferred Stock	\$81,827,509	1.072%	4.180%	0.045%
Common Equity	\$3,938,890,562	51.588%	10.400%	5.365%
<b>TOTAL</b>	<b>\$7,635,327,128</b>	<b>100.000%</b>		<b>8.045%</b>

**Union Electric Company d/b/a Ameren Missouri  
Embedded Cost of Long-Term Debt**

at December 31, 2014

SERIES C1	COUPON (a) C2	ISSUED C3	MATURITY C4	PRINCIPAL C5	FACE AMOUNT OUTSTANDING C6	UNAMORTIZED BALANCES			CARRYING VALUE C10	ANNUALIZED COUPON INT.(b) C11	ANNUALIZED AMORTIZATION			ANNUALIZED INT. EXP. C15	EMBEDDED COST C16
						DISC/(PREM) C7	ISSUE EXP. C8	LOSS C9			DISC/(PREM) C12	ISSUE EXP C13	LOSS C14		
Senior Secured Notes	4.750%	09-Apr-03	01-Apr-15	\$114,000,000	\$114,000,000	\$3,873	\$18,906			\$5,415,000	\$15,492	\$75,624			
Senior Secured Notes	5.400%	08-Dec-05	01-Feb-16	\$260,000,000	\$260,000,000	\$84,728	\$220,318			\$14,040,000	\$72,624	\$188,844			
Senior Secured Notes	6.400%	15-Jun-07	15-Jun-17	\$425,000,000	\$425,000,000	\$93,480	\$785,880			\$27,200,000	\$37,392	\$314,352			
Senior Secured Notes	6.000%	08-Apr-08	01-Apr-18	\$250,000,000	\$178,520,000	\$175,188	\$440,349			\$10,711,200	\$53,904	\$135,492			
Senior Secured Notes	5.100%	28-Jul-03	01-Aug-18	\$200,000,000	\$198,657,000	\$25,155	\$408,715			\$10,131,507	\$7,020	\$114,060			
Senior Secured Notes	6.700%	19-Jun-08	01-Feb-19	\$450,000,000	\$329,283,000	\$372,204	\$957,460			\$22,061,961	\$91,152	\$234,480			
Senior Secured Notes	5.100%	23-Sep-04	01-Oct-19	\$300,000,000	\$244,311,000	\$33,231	\$629,508			\$12,459,861	\$6,896	\$132,528			
Senior Secured Notes	5.000%	27-Jan-05	01-Feb-20	\$85,000,000	\$85,000,000	\$228,140	\$242,231			\$4,250,000	\$44,880	\$47,652			
Senior Secured Notes	3.500%	04-Apr-14	15-Apr-24	\$350,000,000	\$350,000,000	\$58,275	\$2,574,583			\$12,250,000	\$6,300	\$277,500			
First Mortgage Bonds	5.450%	15-Oct-93	01-Oct-28	\$44,000,000	\$5,000	\$15	\$28			\$273	\$1	\$2			
Senior Secured Notes	5.500%	10-Mar-03	15-Mar-34	\$184,000,000	\$184,000,000	\$1,272,810	\$1,117,116			\$10,120,000	\$66,120	\$58,032			
Senior Secured Notes	5.300%	21-Jul-05	01-Aug-37	\$300,000,000	\$300,000,000	\$717,608	\$2,104,315			\$15,900,000	\$31,776	\$93,180			
Senior Secured Notes	8.450%	20-Mar-09	15-Mar-39	\$350,000,000	\$350,000,000	\$941,867	\$2,810,187			\$29,575,000	\$38,844	\$115,884			
Senior Secured Notes	3.900%	11-Sep-12	15-Sep-42	\$485,000,000	\$485,000,000	\$2,359,638	\$4,469,859			\$18,915,000	\$85,032	\$161,076			
Environmental Improvement, Series 1992	0.443%	01-Dec-92	01-Dec-22	\$47,500,000	\$47,500,000		\$172,615			\$286,425		\$21,804			
Environmental Improvement, Series 1998 ABC	0.548%	04-Sep-98	01-Sep-33	\$160,000,000	\$160,000,000		\$1,035,104			\$1,212,000		\$55,452			
<b>TOTAL LONG-TERM DEBT</b>				<b>\$4,004,500,000</b>	<b>\$3,711,276,000</b>	<b>\$6,366,312</b>	<b>\$17,987,174</b>	<b>\$72,313,457</b>	<b>\$3,614,609,057</b>	<b>\$194,528,227</b>	<b>\$557,533</b>	<b>\$2,025,962</b>	<b>\$4,037,580</b>	<b>\$201,149,302</b>	<b>5.565%</b>

Carrying Value = Face Amount Outstanding less Unamortized Discount, Issuance Expenses, and Loss on Reacquired Debt

C10 = C6 - C7 - C8 - C9

Annualized Interest Expense = Annual Coupon Interest plus Annual Amortization of Discount, Issuance Expenses, and Loss on Reacquired Debt

C15 = C11 + C12 + C13 + C14

Embedded Cost = Annualized Interest Expense divided by Carrying Value

C16 = C15 / C10

(a) Coupon rate for variable rate auction securities reflects prevailing rates as of 06/04/14 and includes ongoing broker dealer fees.

(b) Annualized coupon interest (C11) includes annual bond insurance premiums, where applicable.

**Union Electric Company d/b/a Ameren Missouri  
Cost of Short-term Debt**

MONTH	BALANCE OF SHORT-TERM DEBT (a)	BALANCE OF TOTAL CWIP	BALANCE OF CWIP ACCRUING AFUDC	NET AMOUNT OUTSTANDING	INTEREST RATE
January 2014	\$248,500,000	\$786,309,714	\$754,242,329	\$0	0.586%
February	\$226,000,000	\$817,353,526	\$753,933,006	\$0	0.371%
March	\$290,000,000	\$897,953,289	\$782,707,641	\$0	0.341%
April	\$113,000,000	\$908,490,172	\$817,641,155	\$0	0.318%
May	\$185,500,000	\$927,052,323	\$834,347,091	\$0	0.306%
June	\$352,784,789	\$842,299,815	\$758,069,834	\$0	--
July	\$244,117,438	\$828,609,249	\$745,748,324	\$0	--
August	\$79,583,020	\$855,813,627	\$770,232,264	\$0	--
September	\$50,120,404	\$892,806,845	\$803,526,161	\$0	--
October	\$21,246,792	\$934,970,395	\$841,473,356	\$0	--
November	\$46,205,867	\$627,140,492	\$564,426,443	\$0	--
December	\$275,236,135	\$384,141,737	\$345,727,563	\$0	--
<b>AVERAGE</b>	<b>\$177,691,204</b>	<b>\$808,578,432</b>	<b>\$731,006,264</b>	<b>\$0</b>	

C5 Net Amount Outstanding = Balance of Short-Term Debt less Balance of CWIP Accruing AFUDC

C5 = C2 - C4

(a) Short-term debt amounts are net of cash and short-term investments. Negative amounts are excluded.

- Denotes estimates

**Union Electric Company d/b/a Ameren Missouri  
Embedded Cost of Preferred Stock**

at December 31, 2014

SERIES, TYPE, PAR C1	DIVIDEND C2	ISSUED C3	MATURITY C4	SHARES OUTSTANDING C5	PAR ISSUED/ OUTSTANDING C6	PREMIUM C7	ISSUANCE EXPENSE/DISCOUNT C8	NET PROCEEDS C9	ANNUAL DIVIDEND C10	EMBEDDED COST C11
\$3.50 Series, Perpetual, \$100 par	\$3.500	01-May-46	-	130,000	\$13,000,000	(\$910,000)	\$252,772	\$13,657,228	\$455,000	
\$3.70 Series, Perpetual, \$100 par	\$3.700	01-Oct-45	-	40,000	\$4,000,000	(\$70,000)	\$69,396	\$4,000,604	\$148,000	
\$4.00 Series, Perpetual, \$100 par	\$4.000	01-Nov-49	-	150,000	\$15,000,000	(\$384,000)	\$326,896	\$15,057,104	\$600,000	
\$4.30 Series, Perpetual, \$100 par	\$4.300	01-Jul-46	-	40,000	\$4,000,000			\$4,000,000	\$172,000	
\$4.50 Series, Perpetual, \$100 par	\$4.500	01-May-41	-	213,595	\$21,359,500	(\$825,000)	\$440,294	\$21,744,206	\$961,178	
\$4.56 Series, Perpetual, \$100 par	\$4.560	01-Nov-63	-	200,000	\$20,000,000	(\$266,000)	\$297,633	\$19,968,367	\$912,000	
\$4.75 Series, Perpetual, \$100 par	\$4.750	01-Oct-49	-	20,000	\$2,000,000			\$2,000,000	\$95,000	
\$5.50 Series, Perpetual, \$100 par	\$5.500	01-Oct-41	-	14,000	\$1,400,000			\$1,400,000	\$77,000	
<b>TOTAL PREFERRED STOCK</b>					<b>\$80,759,500</b>	<b>(\$2,455,000)</b>	<b>\$1,386,991</b>	<b>\$81,827,509</b>	<b>\$3,420,178</b>	<b>4.180%</b>

issuance expenses, discount/premium, and any loss incurred in acquiring/redeeming prior series are not amortized due to the perpetual nature of the company's preferred stock

Net Proceeds = Par Value Outstanding plus Premium less Issuance Expense and Discount

C9 = C6 + C7 - C8

Embedded Cost = Annual Dividend divided by Net Proceeds

C11 = C10 / C9

