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Issues: Capital Structure and  
Bank Facility  
Witness: Michael G. O'Bryan  
Sponsoring Party: Union Electric Company  
Type of Exhibit: Direct Testimony  
Case No.: ER-2011-0028  
Date Testimony Prepared: September 3, 2010

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO. ER-2011-0028**

**DIRECT TESTIMONY**

**OF**

**MICHAEL G. O'BRYAN**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY  
d/b/a AmerenUE**

St. Louis, Missouri  
September, 2010

*Ameren* Exhibit No. 147  
Date 5/10/11 Reporter SM  
File No. ER 2011-0028

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1 preferred stock. I also calculate the overall fair rate of return applied to rate base which is  
2 utilized in AmerenUE's filing in this case. I do so by using the fair rate of return  
3 applicable to the common equity component of AmerenUE's capital structure as  
4 developed by AmerenUE witness Robert Hevert in his direct testimony submitted in this  
5 case. I also address a new bank facility, which provides access for AmerenUE to short-  
6 term liquidity as needed.

7 **Q. Are you sponsoring any schedules relating to the overall fair rate of**  
8 **return in this proceeding?**

9 A. Yes, I am sponsoring Schedules MGO-E1 through MGO-E4 for that  
10 purpose. These schedules are based upon the twelve months ended March 31, 2010. The  
11 schedules are designated as follows:

12 Schedule MGO-E1 Capital Structure / Weighted Average Cost of Capital

13 Schedule MGO-E2 Embedded Cost of Long-Term Debt

14 Schedule MGO-E3 Cost of Short-Term Debt

15 Schedule MGO-E4 Embedded Cost of Preferred Stock

16 **III. METHODOLOGY AND REASONING**

17 **Q. How did you calculate the overall fair rate of return or weighted**  
18 **average cost of capital for AmerenUE?**

19 A. In order to derive AmerenUE's overall fair rate of return, I multiplied the  
20 relative weighting or proportion of each component of AmerenUE's capital structure by  
21 the cost developed for that component. I then summed these weighted costs by  
22 component to arrive at AmerenUE's overall fair rate of return or weighted average cost of  
23 capital.

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

2           A.    The primary standard used in the determination of a fair rate of return is  
3 the cost of capital. This cost, the overall rate of return or weighted average cost of  
4 capital, must produce sufficient earnings/cash flow when applied to AmerenUE's rate  
5 base at book value to enable the Company to accomplish the following:

- 6                   1) maintain the financial integrity of its existing invested capital;  
7                   2) maintain its creditworthiness; and  
8                   3) attract sufficient capital on competitive terms to continue to provide a  
9 source of funds for continued investment and enable the Company to meet  
10 the needs of its customers.

11           **Q.    Why must AmerenUE meet these requirements?**

12           A.    Beyond the fact that these three standards are effectively mandated by the  
13 landmark Bluefield and Hope U.S. Supreme Court decisions,<sup>1</sup> meeting these  
14 requirements is necessary in order for AmerenUE to effectively meet the electric utility  
15 services requirements of its customers and to provide an adequate and reasonable return  
16 to its investors, debt holders and equity holder alike. These assets exist and are available  
17 for this purpose only because investors have entrusted their funds with AmerenUE and  
18 deemed an investment in the securities issued by the Company to be sound and capable  
19 of providing a competitive return.

20           AmerenUE must maintain its creditworthiness in order to continue to attract  
21 capital on a competitive basis. This is important to assure future opportunities for  
22 AmerenUE to replace capital and various securities which must be refinanced in the

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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 future at reasonable cost. Also, the ability of AmerenUE to attract new capital on  
2 competitive terms is critical in order for the Company to continue to replace and upgrade  
3 facilities used to meet the electric utility services needs of its customers and finance  
4 investment related to meeting environmental compliance standards.

5 **IV. CAPITAL STRUCTURE AND COSTS OF CAPITAL**

6 **Q. Please describe the capital structure of AmerenUE.**

7 A. As outlined in Schedule MGO-E1, the capital structure of AmerenUE on  
8 March 31, 2010, consisted of 47.591% long-term debt, no short-term debt, 1.490%  
9 preferred stock and 50.919% common equity.

10 **Q. How were the balances of the components of AmerenUE's capital**  
11 **structure determined?**

12 A. The balance of long-term debt, \$3,657,492,156, is the total carrying value  
13 of the Company's long-term debt using the net proceeds method. The net proceeds  
14 method calculates the carrying value by taking the indebtedness principal amount  
15 outstanding and subtracting the unamortized discount, issuance expenses and any loss on  
16 reacquired debt.

17 The zero balance of short-term debt is the last twelve-month average net short-  
18 term debt, which is shown in Schedule MGO-E3. This approach measures the average  
19 monthly short-term debt balance, less cash, cash equivalents and Construction Work in  
20 Progress ("CWIP"), over the twelve months ended March 31, 2010. It recognizes that  
21 short-term debt balances can fluctuate substantially during the year and includes in the  
22 Company's capital structure only that portion of short-term debt which may represent

1 permanent capital, i.e., the extent to which short-term debt plays a continual role on the  
2 financing of long-term assets.

3 The balance of preferred stock, \$114,502,040, is also the carrying value or net  
4 proceeds amount of AmerenUE's preferred stock, as found in the embedded cost  
5 calculation for this component of capitalization.

6 The balance of common equity, \$3,913,191,356, represents AmerenUE's actual  
7 stated book value of common equity at March 31, 2010. This amount is typically  
8 adjusted for total other comprehensive income, which was zero as of March 31, 2010.

9 **Q. What is the embedded cost of AmerenUE's long-term debt?**

10 A. AmerenUE's embedded cost of long-term debt was 5.944% as of  
11 March 31, 2010. Schedule MGO-E2 provides the calculation of the embedded cost of  
12 long-term debt. AmerenUE has \$207.5 million principal amount of variable rate  
13 environmental improvement indebtedness (in various series) outstanding under which the  
14 interest rates are reset by a "Dutch Auction" process every 35 days. The effective cost  
15 used for this indebtedness for purposes of this proceeding was derived using prevailing  
16 rates as of May 31, 2010 for these securities, including related auction broker/dealer fees.

17 **Q. Did you make any adjustments to AmerenUE's long-term debt**  
18 **balance?**

19 A. I did not include the Company's obligations under capital leases related to  
20 the Chapter 100 "financing" of its Peno Creek (City of Bowling Green) and Audrain  
21 County gas-fired generating facilities. These transactions and related capital leases did  
22 not generate any proceeds nor were they a source of new capital for the Company.



1           **Q.    What is the embedded cost of AmerenUE's preferred stock?**

2           A.    AmerenUE's embedded cost of preferred stock was 5.189% as of  
3    March 31, 2010. Schedule MGO-E4 provides the calculation of the embedded cost of  
4    preferred stock. Using the net proceeds method of calculating the balance of preferred  
5    stock, the balance outstanding as of March 31, 2010 was \$114,502,040.

6           **Q.    Did you consider expenses associated with AmerenUE's issuance of**  
7    **preferred stock in developing the embedded cost of this component of the**  
8    **Company's capital structure?**

9           A.    Yes, I did. I included expenses associated with the issuance of preferred  
10   stock, including discount and premium, plus any loss incurred in acquiring/redeeming  
11   prior series, in the embedded cost calculation. These costs are illustrated in the cost  
12   calculations shown on Schedule MGO-E4. Unlike similar expenses incurred in  
13   connection with the issuance of long-term debt, for accounting purposes these expenses  
14   are not amortized over the life of the particular series of preferred stock due to the  
15   perpetual nature of this form of capitalization. Nonetheless, for economic purposes it is  
16   reasonable to recognize these costs in establishing an overall fair rate of return for the  
17   Company.

18           **Q.    In what manner will AmerenUE obtain debt and preferred stock**  
19   **capital in the future?**

20           A.    AmerenUE expects to continue to issue its own long-term debt and  
21   preferred stock securities in the external capital markets. Short-term borrowings can be  
22   obtained from the capital or bank markets, Ameren Corporation, through Ameren

1 Corporation's Utility Money Pool, or under the bank facility addressed below, depending  
2 on the best borrowing rates and availability.

3 **Q. What is the cost of common equity for AmerenUE?**

4 A. In his direct testimony in this case, Mr. Hevert develops and supports a  
5 fair rate of return on common equity for AmerenUE's electric utility operations of 10.9%.  
6 Therefore, for purposes of determining the overall fair rate of return for AmerenUE in  
7 this proceeding, I use 10.9% as the Company's cost of common equity.

8 **V. FAIR RATE OF RETURN**

9 **Q. What is the overall fair rate of return for AmerenUE for this**  
10 **proceeding?**

11 A. As shown on Schedule MGO-E1, as of March 31, 2010, the overall fair  
12 rate of return for AmerenUE is 8.456%. I derived this result by using the capital structure  
13 and embedded costs of long-term debt, short-term debt and preferred stock discussed  
14 above, as shown on the various schedules attached, along with the cost of common equity  
15 for AmerenUE developed by Mr. Hevert in his testimony.

16 **VI. BANK FACILITY**

17 **Q. You earlier referred to bank facilities. What is a bank facility?**

18 A. A bank facility is essentially a committed revolving bank credit line under  
19 which AmerenUE may borrow on a short-term basis – typically 30 days. These facilities  
20 are syndicated by a group of bank lenders (such as JPMorgan Chase, Barclays Bank,  
21 UBS, U.S. Bank, Commerce Bank and UMB Bank to name several) which lend by  
22 funding borrowing requests under the facility on a pro-rata basis. These short-term  
23 borrowings are very often priced at a pre-defined spread based on the borrower's credit

1 ratings (in the pricing schedule contained in the underlying credit agreement) over  
2 LIBOR,<sup>2</sup> which is a widely used benchmark short-term interest rate.

3 For example, AmerenUE often needs to fund large cash requirements such as  
4 payments to equipment suppliers for components purchased for construction projects,  
5 payments to suppliers of coal, funding of payroll, making of tax payments, etc. On a  
6 given day, payments such as these or other large payments may need to be made, but the  
7 Company's incoming cash receipts, surplus cash and cash equivalents balances may be  
8 insufficient to provide the necessary funding. In those instances, AmerenUE could  
9 borrow under its bank facility to obtain the funds it needed to make the payments.

10 **Q. How do bank facilities relate to this rate case?**

11 A. AmerenUE's existing bank facility will expire on July 14, 2011. In  
12 anticipation of its expiration, a new bank facility is being put into place (and when it  
13 becomes effective it will replace the existing facility), and is expected to be in place and  
14 effective on or about September 10, 2010. In the Company's last rate case, the  
15 Commission approved a stipulation regarding how the fees under the Company's existing  
16 bank facility will be treated for accounting and ratemaking purposes. AmerenUE witness  
17 Gary S. Weiss describes that treatment in his direct testimony in this case. I mention the  
18 new bank facility here because the Company is proposing that the same accounting and  
19 ratemaking treatment be afforded the fees that will be incurred under the new and  
20 subsequent facilities.

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<sup>2</sup> "LIBOR" stands for the London Interbank Offered Rate.

1           **Q.    What are those fees and when will they be incurred?**

2           A.    The fees have not yet been finalized, but are expected to be significantly  
3 lower than under the existing facility because the capital market conditions at this time  
4 are substantially more stable than they were when the existing facility was put into place.  
5 I would expect AmerenUE to incur fees under the new facility as early as September,  
6 2010.

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

8           A.    Yes, it does.



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

at 3/31/2010:

CAPITAL COMPONENT	AMOUNT	PERCENT OF TOTAL	COST	WEIGHTED COST
Long-Term Debt	\$3,657,492,156	47.591%	5.944%	2.829%
Short-Term Debt	\$0	0.000%	0.000%	0.000%
Preferred Stock	\$114,502,040	1.490%	5.189%	0.077%
Common Equity	\$3,913,191,356	50.919%	10.900%	5.550%
<b>TOTAL</b>	<b>\$7,685,185,552</b>	<b>100.000%</b>		<b>8.456%</b>

Union Electric Company d/b/a AmerenUE  
Embedded Cost of Long-Term Debt

As March 31, 2010

SERIES C1	COUPON (a) C2	ISSUED C3	MATURITY C4	PRINCIPAL C5	FACE AMOUNT OUTSTANDING C6	UNAMORTIZED BALANCES			CARRYING VALUE C10	ANNUALIZED COUPON INT. 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	5.250%	22-Aug-02	01-Sep-12	\$173,000,000	\$173,000,000	\$48,923	\$296,003			\$9,082,500	\$20,244	\$122,484			
Senior Secured Notes	4.650%	07-Oct-03	01-Oct-13	\$200,000,000	\$200,000,000	\$139,062	\$555,450			\$9,300,000	\$39,732	\$158,700			
Senior Secured Notes	5.500%	18-May-04	15-May-14	\$104,000,000	\$104,000,000	\$147,750	\$311,100			\$5,720,000	\$35,460	\$74,664			
Senior Secured Notes	4.750%	09-Apr-03	01-Apr-15	\$114,000,000	\$114,000,000	\$77,460	\$378,120			\$5,415,000	\$15,492	\$75,624			
Senior Secured Notes	5.400%	08-Dec-05	01-Feb-16	\$260,000,000	\$260,000,000	\$429,692	\$1,117,327			\$14,040,000	\$72,624	\$188,844			
Senior Secured Notes	6.400%	15-Jun-07	15-Jun-17	\$425,000,000	\$425,000,000	\$271,092	\$2,279,052			\$27,200,000	\$37,392	\$314,352			
Senior Secured Notes	6.000%	08-Apr-08	01-Apr-18	\$250,000,000	\$250,000,000	\$603,936	\$1,487,328			\$15,000,000	\$75,492	\$185,916			
Senior Secured Notes	5.100%	28-Jul-03	01-Aug-18	\$200,000,000	\$200,000,000	\$58,900	\$956,500			\$10,200,000	\$7,068	\$114,780			
Senior Secured Notes	6.700%	19-Jun-08	01-Feb-19	\$450,000,000	\$450,000,000	\$1,100,386	\$2,782,606			\$30,150,000	\$124,572	\$315,012			
Senior Secured Notes	5.100%	23-Sep-04	01-Oct-19	\$300,000,000	\$300,000,000	\$61,624	\$1,526,574			\$15,300,000	\$8,592	\$160,892			
Senior Secured Notes	5.000%	27-Jan-05	01-Feb-20	\$85,000,000	\$85,000,000	\$441,320	\$468,578			\$4,250,000	\$4,880	\$47,652			
First Mortgage Bonds	5.450%	15-Oct-93	01-Oct-28	\$44,000,000	\$44,000,000	\$180,486	\$331,446			\$2,398,000	\$9,756	\$17,916			
Senior Secured Notes	5.500%	10-Mar-03	15-Mar-34	\$184,000,000	\$184,000,000	\$1,586,880	\$1,392,768			\$10,120,000	\$66,120	\$58,032			
Senior Secured Notes	5.300%	21-Jul-05	01-Aug-37	\$300,000,000	\$300,000,000	\$868,544	\$2,546,920			\$15,900,000	\$31,776	\$93,180			
Senior Secured Notes	8.450%	20-Mar-09	15-Mar-39	\$350,000,000	\$350,000,000	\$1,126,476	\$3,360,636			\$29,575,000	\$38,844	\$115,884			
Subordinated Debentures	7.690%	16-Dec-96	15-Dec-36	\$65,500,000	\$65,500,000	\$383,274	\$88,596			\$5,036,950	\$14,328	\$3,312			
Environmental Improvement, Series 1992	0.775%	01-Dec-92	01-Dec-22	\$47,500,000	\$47,500,000		\$345,847			\$368,125		\$97,800			
Environmental Improvement, Series 1998 ABC	1.008%	04-Sep-98	01-Sep-33	\$160,000,000	\$160,000,000		\$1,578,501			\$1,613,300		\$391,452			
<b>TOTAL LONG-TERM DEBT</b>				<b>\$3,712,000,000</b>	<b>\$3,712,000,000</b>	<b>\$7,545,805</b>	<b>\$21,803,352</b>	<b>\$25,158,687</b>	<b>\$3,657,492,156</b>	<b>\$210,668,875</b>	<b>\$642,372</b>	<b>\$2,536,296</b>	<b>\$3,548,280</b>	<b>\$217,395,823</b>	<b>5.944%</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 5/31/10 and includes ongoing broker dealer fees.

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

MONTH C1	BALANCE OF SHORT-TERM DEBT (a) C2	BALANCE OF TOTAL CWIP C3	BALANCE OF CWIP ACCRUING AFUDC C4	NET AMOUNT OUTSTANDING C5	INTEREST RATE C6
April 2009	\$291,600,000	\$1,005,301,389	\$904,934,162	\$0	1.050%
May	\$377,000,000	\$1,009,251,434	\$942,616,402	\$0	0.928%
June	\$429,800,000	\$994,051,873	\$935,996,231	\$0	5.118%
July	\$319,800,000	\$983,146,622	\$938,371,524	\$0	3.107%
August	\$295,800,000	\$1,019,542,409	\$930,393,144	\$0	3.081%
September	\$0	\$1,080,097,600	\$968,836,847	\$0	--
October	\$0	\$1,124,749,504	\$965,154,859	\$0	--
November	\$0	\$1,068,451,669	\$931,233,564	\$0	--
December	\$0	\$1,163,059,062	\$933,442,289	\$0	--
January 2010	\$0	\$1,137,667,477	\$965,607,760	\$0	--
February	\$0	\$1,149,786,391	\$912,446,441	\$0	--
March	\$0	\$1,200,927,798	\$1,104,957,095	\$0	--
<b>AVERAGE</b>	<b>\$142,833,333</b>	<b>\$1,078,002,769</b>	<b>\$952,832,526</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.



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

at March 31, 2010

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
\$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	
\$5.50 Series, Perpetual, \$100 par	\$5.500	01-Oct-41	-	14,000	\$1,400,000			\$1,400,000	\$77,000	
\$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	
\$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	
\$4.30 Series, Perpetual, \$100 par	\$4.300	01-Jul-46	-	40,000	\$4,000,000			\$4,000,000	\$172,000	
\$4.75 Series, Perpetual, \$100 par	\$4.750	01-Oct-49	-	20,000	\$2,000,000			\$2,000,000	\$95,000	
\$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	
\$4.56 Series, Perpetual, \$100 par	\$4.560	01-Nov-63	-	200,000	\$20,000,000	(\$266,000)	\$297,633	\$19,968,367	\$912,000	
\$7.64 Series, Perpetual, \$100 par	\$7.640	01-Jan-93	-	330,000	\$33,000,000		\$325,469	\$32,674,531	\$2,521,200	
<b>TOTAL PREFERRED STOCK</b>					<b>\$113,759,500</b>	<b>(\$2,455,000)</b>	<b>\$1,712,460</b>	<b>\$114,502,040</b>	<b>\$5,941,378</b>	<b>5.189%</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

$$C11 = C10 / C9$$