

Exhibit No.:  
Issue: Rate of Return  
Witness: Lee R. Nickloy  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Union Electric Company d/b/a AmerenUE  
Case No: GR-2000-512

FILED<sup>3</sup>  
APR 03 2000

MISSOURI PUBLIC SERVICE COMMISSION

Missouri Public  
Service Commission

CASE NO. GR-2000-512

DIRECT TESTIMONY

OF

LEE R. NICKLOY

St. Louis, Missouri  
April 3, 2000

MISSOURI PUBLIC SERVICE COMMISSION

STATE OF MISSOURI

FILED<sup>3</sup>

APR 03 2000

Missouri Public  
Service Commission

In the Matter of Union Electric Company d/b/a )  
AmerenUE for Authority to File Tariffs Increasing ) Case No. GR-2000-512  
Rates for Gas Service Provided to Customers in the )  
Company's Missouri Service Area. )

AFFIDAVIT OF LEE R. NICKLOY

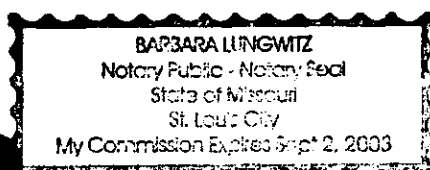
STATE OF MISSOURI )  
 ) SS.  
CITY OF ST. LOUIS )

Lee R. Nickloy, being first duly sworn on his oath, states:

1. My name is Lee R. Nickloy. I work in the City of St. Louis, Missouri, and I am Manager Corporate Development in the Treasurer's Function of Ameren Services Company.
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony consisting of pages 1 through 8 and Schedules 1 through 8, all of which testimony has been prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. GR-2000-512 on behalf of Union Electric Company.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

Lee R. Nickloy

Subscribed and sworn to before me this 29<sup>th</sup> day of March, 2000.



Barbara Lingwitz  
Notary Public

**DIRECT TESTIMONY**  
**OF**  
**LEE R. NICKLOY**  
**UNION ELECTRIC COMPANY**  
**d/b/a AmerenUE**  
**CASE NO. GR-2000-512**

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

A. My name is Lee R. Nickloy and my business address is 1901 Chouteau Avenue, St. Louis, MO 63103.

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

A. I am employed by Ameren Services Company as Manager Corporate Development in the Treasurer's Function. I also hold the position of Assistant Treasurer for subsidiaries of Ameren Corporation, the parent company of Union Electric Company, doing business as AmerenUE.

**Q. Please describe your educational background, your work experience, and the duties of your position.**

A. The attached Schedule 1 summarizes my educational background, work experience and the duties of my position.

**Q. What is the purpose of your direct testimony in this case?**

A. My testimony and attached Schedules 2 through 8 develops the overall fair rate of return for the Missouri gas operations of AmerenUE. I determine the Company's capital structure, embedded cost of long-term debt and embedded cost of preferred stock.

Direct Testimony of  
Lee R. Nickloy

1 Using the Company's fair rate of return applicable to the common equity portion of its  
2 capital structure developed by AmerenUE witness Ms. Kathleen McShane in her direct  
3 testimony submitted in this case, I will calculate the overall fair rate of return applied to the  
4 rate base which was utilized in the Company's filing in this case.

5 **Q. Have you prepared, or have there been prepared under your direction**  
6 **and supervision, a series of schedules relating to overall fair rate of return for**  
7 **presentation to the Commission in this proceeding?**

8 A. Yes. I am sponsoring Schedules 2 through 8 for that purpose. These  
9 schedules are based upon a test year ended June 30, 1999, and are designated as follows:

10 Schedule 2 Capital Structure

11 Schedule 3 Embedded Cost of Long-Term Debt

12 Schedule 4 Indicative Coupon Estimate [for] Refinancing of \$125MM  
13 6.75% FMB's due 10/99 and Estimated Issuance Costs

14 Schedule 5 Variable Rate Debt Current Effective Coupons

15 Schedule 6 Unamortized Debt Expense, Discount/Premium and Loss on  
16 Reacquired Debt and Allocation of Loss on Reacquired Debt

17 Schedule 7 Embedded Cost of Preferred Stock

18 Schedule 8 Weighted Average Cost of Capital

19 **Q. How is the Company's overall fair rate of return calculated?**

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

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 the  
3     cost of capital. This cost, the overall rate of return or weighted average cost of capital, that is  
4     established must produce sufficient earnings when applied to the Company's rate base (book  
5     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  
10                            continue to meet the needs of its customers.

11          **Q.     Why must the Company meet these three requirements?**

12          A.     Beyond the fact that these three standards are mandated by the landmark Hope  
13     and Bluefield Supreme Court decisions, meeting these requirements is necessary in order for  
14     AmerenUE to effectively serve the natural gas needs of our customers and provide an  
15     adequate and reasonable return to the Company's investors, debtholder and equity holder  
16     alike. The assets owned by the Company are employed in meeting our customers' natural  
17     gas requirements. These assets exist and are available for this purpose only because  
18     investors have entrusted their funds with the Company and deemed an investment in the  
19     securities issued by the Company to be sound and capable of providing a competitive return.  
20     The Company must maintain its creditworthiness in order to continue to attract capital on  
21     competitive returns. This is important to assure future opportunities for the Company to  
22     replace capital and various securities which must be refinanced in the future at a reasonable  
23     cost. Also, the ability of AmerenUE to attract new capital on competitive terms is critical in

1 order for the Company to continue to replace and upgrade its facilities used to continue to  
2 meet the natural gas needs of its customers.

3 **Q. Please describe AmerenUE's capital structure.**

4 A. At June 30, 1999, the Company's capital structure consisted of 39.614% long-  
5 term debt, 3.612% preferred stock, and 56.774% common equity. This is illustrated on  
6 Schedule 2 attached to this testimony.

7 **Q. Why isn't short-term debt included in AmerenUE's capital structure?**

8 A. The Company does not use short-term debt as a permanent source of capital,  
9 and accordingly this source of financing is not part of the Company's total capitalization.  
10 Further, after adjusting monthly short-term debt balances by Construction Work in Progress,  
11 AmerenUE's average short-term debt balance during the test year is \$0 or negative.

12 **Q. Is the Company's capital structure, as discussed above, reasonable and**  
13 **appropriate for use in this proceeding?**

14 A. Yes, it is. As shown by Ms. Kathleen McShane in her testimony, the  
15 Company's capital structure is comparable to that of other firms of comparable risk engaged  
16 in operations similar to that of AmerenUE's gas operations. I concur with her findings with  
17 regard to this issue.

18 **Q. How were the balances of the components of the Company's capital**  
19 **structure determined?**

20 A. The balance of long-term debt, \$1,690,457,143, is the carrying value of the  
21 Company's long-term debt as calculated and used in the derivation of the embedded cost of  
22 long-term debt using the net proceeds method. The long-term debt component of the  
23 Company's capital structure excludes amounts outstanding under its nuclear fuel lease as this

1 is a financing vehicle used solely to finance nuclear fuel used for electric generation purposes  
2 at AmerenUE's Callaway nuclear plant. The balance of preferred stock, \$154,124,324, is  
3 also the carrying value or net proceeds amount of AmerenUE's preferred stock as found in  
4 the embedded cost calculation for this component of capitalization. The balance of common  
5 equity, \$2,422,752,000, was derived by adjusting the Company's stated value of common  
6 equity at June 30, 1999 of \$2,410,967,251 by amounts representing the acquisition costs and  
7 undistributed earnings (\$11,784,749 in total) associated with investments in two subsidiaries,  
8 Union Electric Development Corp. and Electric Energy, Inc.

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

10 A. Using the net proceeds method, the embedded cost of the Company's long-  
11 term debt as of June 30, 1999 is 7.080%. Schedule 3 provides the details of this calculation.  
12 The calculation excludes the amounts outstanding under the Company's nuclear fuel lease  
13 and the cost of this type of financing for the reason cited above.

14 **Q. In calculating the Company's cost of long-term debt, how did you treat**  
15 **the \$125,000,000 series of first mortgage bonds which matured October 15, 1999?**

16 A. The Company had a series of first mortgage bonds (\$125,000,000 6.75%  
17 Series) which matured on October 15, 1999. This maturity occurred after the end of the test  
18 year and after the embedded cost calculation was performed but prior to AmerenUE's filing  
19 of this case. As AmerenUE has not yet determined the manner in which this capital will be  
20 replaced, I made the assumption that the maturing series would be refinanced with a similar  
21 issuance of long-term debt. The most applicable pricing (based on the forward U.S. Treasury  
22 curve for benchmark 30-year bonds) at the time of preparing the embedded cost calculation  
23 for 30-year first mortgage debt issued by an S&P AA rated electric utility was 8.00%.

Direct Testimony of  
Lee R. Nickloy

1 Schedule 4 provides the details of this calculation. Next, I included amounts representing  
2 approximate costs of issuing this new series of bonds and included these issuance expenses in  
3 the embedded cost calculation as is the case for similar expenses incurred in connection with  
4 the Company's other debt issues. Schedule 4 also provides detail supporting these estimated  
5 issuance expenses.

6 **Q. How did you treat the cost of the Company's variable interest rate**  
7 **environmental improvement obligations?**

8 A. For the Company's debt obligations with respect to tax-exempt environmental  
9 improvement securities which have variable interest rates, I had to provide an estimate of the  
10 applicable coupon or interest rate, associated with these series as part of the embedded cost  
11 calculation. For this purpose I considered the current pricing of these series to be the most  
12 relevant. Schedule 5 provides the applicable interest rates in detail.

13 **Q. Are expenses associated with the Company's issuance of long-term debt**  
14 **securities considered in developing the embedded cost of this component of the capital**  
15 **structure?**

16 A. Yes, they are. Expenses associated with the issuance of long-term debt,  
17 including discount or premium, plus the amortization of any loss incurred in  
18 acquiring/redeeming prior series, are included in the embedded cost of long-term debt  
19 calculation. These costs are illustrated in the cost calculation shown on Schedule 3 and in  
20 greater detail on Schedule 6.

21 **Q. What is the embedded cost of the Company's preferred stock?**



1           A.     Using the net proceeds method, the embedded cost of the Company's  
2 preferred stock as of June 30, 1999 is 5.721%. Schedule 7 provides the details of this  
3 calculation.

4           **Q.     Are expenses associated with the Company's issuance of preferred stock**  
5 **considered in developing the embedded cost of this component of the capital structure?**

6           A.     Yes, they are. Expenses associated with the issuance of preferred stock,  
7 including discount and premium, plus any loss incurred in acquiring/redeeming prior series  
8 are included in the embedded cost of preferred stock calculation. These costs are illustrated  
9 in the cost calculation shown on Schedule 7. Though unlike similar expenses incurred in  
10 connection with the issuance of long-term debt, these expenses are not amortized over the  
11 life of the particular series of preferred stock due to the perpetual nature of this form of  
12 capitalization. AmerenUE's preferred stock does not have stated maturities. Dividends are  
13 payable on these securities in perpetuity.

14          **Q.     What is the cost of AmerenUE's common equity?**

15          A.     In her testimony in this case, Ms. Kathleen McShane develops and supports a  
16 fair return on common equity for AmerenUE's Missouri gas operations of 12.75-13.00%.  
17 For purposes of determining the overall rate of return in this proceeding I am using the  
18 midpoint of the range developed by Ms. McShane, 12.875%, as the Company's cost of  
19 common equity.

20          **Q.     What is the overall fair rate of return for AmerenUE?**

21          A.     As shown on Schedule 8, as of June 30, 1999, the overall fair rate of return for  
22 AmerenUE is 10.322%. This result was derived by using the capital structure and embedded  
23 costs of long-term debt and preferred stock discussed above and illustrated on the various

Direct Testimony of  
Lee R. Nickloy

- 1 Schedules attached to this testimony along with the cost of common equity developed in Ms.  
2 McShane's testimony.

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

4 **A. Yes, it does.**

Sponsoring Witness: Lee R. Nickloy  
Direct Testimony  
Sponsoring Party: Union Electric Company  
d/b/a AmerenUE  
Case No: GR-2000-512

List of Schedules

<u>Schedule No.</u>	<u>Description of Schedule</u>
1	Qualifications of Lee R. Nickloy
2	Capital Structure
3	Embedded Cost of Long-Term Debt
4	Indicative Coupon Estimate [for] Refinancing of \$125MM 6.75% FMB's Due 10/99 and Estimated Issuance Costs
5	Variable Rate Debt Current Effective Coupons
6	Unamortized Debt Expense, Discount/Premium and Loss on Reacquired Debt and Allocation of Loss on Reacquired Debt
7	Embedded Cost of Preferred Stock
8	Weighted Average Cost of Capital

## **QUALIFICATIONS OF LEE R. NICKLOY**

My name is Lee R. Nickloy, and my business address is 1901 Chouteau Avenue, St. Louis, Missouri 63103. I am Manager Corporate Development for Ameren Services Company. I also hold the position of Assistant Treasurer for several of Ameren Corporation's subsidiaries.

In my current position, I am responsible for monitoring and maintenance of the cost of capital, management and administration of long-term financing, coordination of all short-term liquidity facilities including bank lines of credit, as well as activities relating to the assessment of potential investments. I have been employed by Ameren since August 1998.

During late 1995 I became Manager of Counterparty Risk for TransCanada Energy USA Inc. In this position I managed the company's counterparty risk exposure for a broad range of energy trading and marketing businesses and natural gas processing assets. This responsibility entailed detailed assessment of the financial condition and capitalization of the company's counterparties and trading partners. I conducted financial due diligence for the company's new business and asset acquisition group. In this position I also negotiated and managed the company's domestic bank financing facilities and parental guarantees. I left the company in 1998 accepting a position with Ameren.

In 1994 I accepted the position of Assistant Treasurer with Enjet, Inc., a privately-held crude oil refining and products trading company based in Houston, TX with operations in the U.S. Gulf Coast area and internationally. I was promoted to Treasurer later that same year and was responsible for financing the company's operational and trading activities. I negotiated and managed all financing facilities, issued debt, was responsible for banking relationships and cash management, and directed the company's trading activities to maximize profitability given certain capital constraints.

Upon graduation from college I was employed by Shell Oil Company in the Chicago, IL marketing division. In 1992, I was promoted to Financial Analyst in the company's refining and marketing organization and transferred to the company's headquarters in Houston, TX.

I graduated Magna Cum Laude with a Bachelor of Science degree from Christian Brothers University in Memphis, Tennessee in 1989. I earned a triple concentration in the Economics/Finance, Management, and Marketing programs of study.

Union Electric Company (AmerenUE)  
Case No. GR-2000-512  
Capital Structure

at June 30, 1999

Line  
No.

CAPITAL COMPONENT	AMOUNT	PERCENT OF TOTAL
Short-Term Debt	\$0	0.000%
Long-Term Debt	\$1,690,457,143	39.614%
Preferred Stock	\$154,124,324	3.612%
Common Equity	\$2,422,752,000	56.774%
TOTAL	\$4,267,333,467	100.000%

Union Electric Company (AmerenUE)  
Case No. GR-2000-512  
Embedded Cost of Long-Term Debt

At June 30, 1999

LINE NO.	SERIES C1	COUPON C3	ISSUED C4	MATURITY C5	PRINCIPAL C6	FACE AMOUNT OUTSTANDING C8	UNAMORTIZED BALANCES DEC(PREM) C7	ISSUE EXP. C9	LOSSES C10	CARRYING VALUE C11	ANNUALIZED COUPON INT. C12	ANNUALIZED AMORTIZATION DISC(PREM) C13	ISSUE EXP. C14	LOSSES C15	ANNUALIZED INT. EXP. C16	EMBEDDED COST C17
1	First Mortgage Bonds *	8.000%	2000	2030	\$100,000,000	\$100,000,000	\$1,125,000	\$88,875,000	\$0	\$88,875,000	\$8,000,000	\$37,500	\$241,718	\$8,037,500	\$8,037,500	
2	First Mortgage Bonds	8.300%	04-Dec-81	16-Dec-02	\$75,000,000	\$75,000,000	\$78,884	\$64,000	\$64,000	\$74,075,110	\$6,247,500	\$23,088	\$241,718	\$6,512,304	\$6,512,304	
3	First Mortgage Bonds	7.650%	28-Jan-82	15-Jul-03	\$100,000,000	\$100,000,000	\$280,944	\$584,912	\$584,912	\$99,124,144	\$7,650,000	\$70,238	\$148,728	\$7,868,964	\$7,868,964	
4	First Mortgage Bonds	8.875%	01-Feb-83	01-Aug-04	\$188,000,000	\$188,000,000	\$612,440	\$586,153	\$2,011,719	\$184,779,688	\$12,825,000	\$120,480	\$395,748	\$13,558,504	\$13,558,504	
5	First Mortgage Bonds	7.375%	15-Dec-82	15-Dec-04	\$95,000,000	\$95,000,000	\$132,482	\$278,510	\$3,278,264	\$81,308,764	\$6,288,750	\$24,084	\$223,518	\$6,567,172	\$6,567,172	
6	First Mortgage Bonds	6.780%	01-May-83	01-May-08	\$148,000,000	\$148,000,000	\$389,940	\$716,772	\$1,282,494	\$145,630,794	\$9,960,000	\$41,880	\$145,188	\$10,258,212	\$10,258,212	
7	First Mortgage Bonds	7.400%	01-May-80	01-May-20	\$80,000,000	\$80,000,000	\$833,250	\$835,250	\$2,142,000	\$56,389,750	\$4,440,000	\$39,896	\$102,816	\$4,813,292	\$4,813,292	
8	First Mortgage Bonds	8.750%	01-Dec-81	01-Dec-21	\$125,000,000	\$125,000,000	\$288,859	\$389,348	\$3,887,026	\$118,894,767	\$10,937,500	\$13,332	\$172,212	\$11,164,948	\$11,164,948	
9	First Mortgage Bonds	8.250%	15-Oct-82	15-Oct-22	\$104,000,000	\$104,000,000	\$837,200	\$860,880	\$1,403,030	\$100,869,080	\$8,580,000	\$35,880	\$115,318	\$8,769,370	\$8,769,370	
10	First Mortgage Bonds	8.000%	15-Dec-82	15-Dec-22	\$85,000,000	\$85,000,000	\$821,748	\$812,788	\$3,278,264	\$80,287,202	\$6,362,500	\$28,056	\$223,518	\$6,418,252	\$6,418,252	
11	First Mortgage Bonds	7.150%	01-Aug-83	01-Aug-23	\$75,000,000	\$75,000,000	\$875,682	\$867,012		\$73,857,308	\$5,362,500	\$28,056	\$27,886	\$5,418,252	\$5,418,252	
12	First Mortgage Bonds	7.000%	15-Jan-84	15-Jan-24	\$100,000,000	\$100,000,000	\$155,760	\$160,215		\$98,084,025	\$7,000,000	\$8,336	\$30,924	\$7,037,260	\$7,037,260	
13	First Mortgage Bonds	5.400%	01-Oct-85	01-Oct-28	\$44,000,000	\$44,000,000	\$285,363	\$524,043		\$43,190,584	\$2,388,000	\$9,756	\$17,916	\$2,425,872	\$2,425,872	
14	Environmental Improvement, 1985AAB **	4.083%	01-Jun-85	01-Jun-15	\$128,500,000	\$128,500,000	\$587,325	\$343,886	\$1,403,588	\$124,769,203	\$3,177,845	\$36,900	\$192,480	\$1,888,514	\$1,888,514	
15	Environmental Improvement, 1981 **	3.845%	01-Dec-81	01-Dec-20	\$42,585,000	\$42,585,000		\$372,044	\$505,878	\$46,822,080	\$1,890,500		\$22,104	\$1,928,492	\$1,928,492	
16	Environmental Improvement, 1982 **	3.880%	01-Dec-82	01-Dec-22	\$47,500,000	\$47,500,000		\$1,641,230	\$2,150,040	\$46,822,080	\$0,105,600		\$62,928	\$6,216,564	\$6,216,564	
17	Environmental Improvement, 1988ABCO **	3.818%	01-Sep-88	01-Sep-33	\$160,000,000	\$160,000,000		\$109,350		\$158,208,730	\$3,036,950	\$14,328	\$2,916	\$5,054,194	\$5,054,194	
18	Subordinated Debentures	7.890%	16-Dec-86	15-Dec-36	\$65,500,000	\$65,500,000	\$537,300	\$64,853,350		\$64,853,350	\$4,005,906	\$707,196	\$2,087,110	\$119,890,225	\$119,890,225	
19	TOTAL LONG-TERM DEBT				\$1,731,085,000	\$1,731,085,000	\$4,147,328	\$11,067,336	\$23,413,192	\$1,690,467,143	\$116,489,923	\$405,906	\$2,087,110	\$119,890,225	\$119,890,225	7.080%

\* proposed new issuance to refinance 6.75% series due Oct. 15, 1999

\*\* variable rate issuances, interest rate used is the current effective rate (8/27/99)

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

C10 = C8 - C7 - C9 - C10

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

C15 = C11 + C12 + C13 + C14

Embedded Cost = Annualized Interest Expense divided by Carrying Value

C16 = C15 / C10

**Union Electric Company  
Indicative Coupon Estimate  
Refinancing \$125MM 6.75% FMB's due 10/99**

**LINE  
NO.**

1 anticipated refinancing late 1999 or during 2000  
2 30-year first mortgage debt

3 30-Year U.S. Treasury Bond futures traded at CBOT 6.670%  
4 Sept. 23, 1999 settlement prices \*

CONTRACT	PRICE		IMPLIED ANNUAL YIELD
	PTS & 32'S	DECIMAL	
Dec-99	114-14	\$114.437500	6.800%
Mar-00	94-25	\$94.781250	6.580%
Jun-00	94-08	\$94.250000	6.630%
AVG			6.670%

\* Beginning with the March 2000 contract, the notional coupon of the CBOT U.S. Treasury Bond futures contract will change from 8% to 6%.

9 Current (Sept. 20, 1999) credit spread for publicly underwritten, 1.3250%  
10 senior secured bonds issued by Electric Utilities of AA  
11 credit quality (30-year, non-callable):

12 130-135 basis points  
13 midpoint = 1.3250%

14 Indicative coupon rounded to nearest basis point: 8.00%

**Union Electric Company  
Estimated Issuance Costs  
for First Mortgage 30-Year Series**

**LINE  
NO.**

1

principal amount = \$100,000,000

2

1. Underwriting Fees - 87.5 basis points \$875,000

3

2. Other costs of issuance including: \$250,000

printing  
legal fees  
registration fees  
rating agency fees  
filing fees  
accountants fees  
notices  
miscellaneous

4

**TOTAL \$1,125,000**

5

annual amortization for a 30-year issuance = \$37,500



**Union Electric Company**  
**Variable Rate Debt**  
**Current Effective Coupons**  
at June 30, 1999

LINE  
NO.

SERIES	DATE SET	RATE (1)	FEES (2)	ALL-IN COST
1991 MATES	10-Sep-99	3.695%	0.25000%	3.945%
1992 MATES	25-Aug-99	3.730%	0.25000%	3.980%
1998 A	22-Sep-99	3.550%	0.25000%	3.800%
1998 B	01-Sep-99	3.550%	0.25000%	3.800%
1998 C	15-Sep-99	3.600%	0.25000%	3.850%
1985 A	14-Sep-99	3.650%	0.53200%	4.182%
1985 B	15-Jul-99	3.450%	0.53200%	3.982%

(1) Current rates as of Sept. 27, 1999

(2) Fees include:

MATES series: broker-dealer fees

1998 A,B&C: broker-dealer fees

1985 A&B: letter of credit fees and remarketing agent fees

Weighted Averages:

**1998 A,B&C**

SERIES	PRINCIPAL	ALL-IN COST
A	\$60,000,000	3.800%
B	\$50,000,000	3.800%
C	\$50,000,000	3.850%
<b>WTD AVG</b>		<b>3.816%</b>

**1985A&B**

SERIES	PRINCIPAL	ALL-IN COST
A	\$70,000,000	4.182%
B	\$56,500,000	3.982%
<b>WTD AVG</b>		<b>4.093%</b>

UNION ELECTRIC COMPANY  
UNAMORTIZED DEBT EXPENSE, DISCOUNT / PREMIUM AND LOSS ON REACQUIRED DEBT

LINE NO.	TITLE	BALANCE AT 6/30/99					ANNUAL AMORTIZATION OF BALANCES			
		UNAMORTIZED DEBT EXPENSE		LOSS ON REACQUIRED DEBT	DISCOUNT ON LONG TERM DEBT	TOTAL	181 OR 226		TOTAL	
		MINOR ACCOUNT 181	ACCOUNT 189	ACCOUNT 226	189		226			
1	\$50 MILLION 7%	20		318,000		318,000	36,000		36,000	
2	\$35 MILLION 7.375%	21		280,478		280,478	31,752		31,752	
3	\$40 MILLION 7%	22		484,134		484,134	38,148		38,148	
4	\$60 MILLION 9%	23		550,658		550,658	137,664		137,664	
5	\$50 MILLION 7.875%	24		455,853		455,853	89,676		89,676	
6	\$50 MILLION 7.625%	25		574,944		574,944	65,088		65,088	
7	\$60 MILLION 8.125%	26		617,930		617,930	121,560		121,560	
8	\$70 MILLION 8.375%	27		937,936		937,936	184,512		184,512	
9	\$70 MILLION 10.5%	28		222,068		222,068	18,252		18,252	
10	\$70 MILLION 8.875%	29		1,880,188		1,880,188	154,536		154,536	
11	\$27.085 MILLION 5.8%	31		186,534		186,534	8,676		8,676	
12	\$60 MILLION 8.625%	32		1,792,032		1,792,032	122,184		122,184	
13	\$55 MILLION 9.35%	33		1,783,890		1,783,890	79,284		79,284	
14	\$100 MILLION 9.95%	34		1,487,839		1,487,839	68,372		68,372	
15	\$60 MILLION 9.625%	35		2,142,000		2,142,000	102,816		102,816	
16	\$100 MILLION 9.375%	39		4,764,496		4,764,496	324,852		324,852	
17	\$100 MILLION 8.875%	40		846,006.00		846,006	241,716		241,716	
18	\$60 MILLION 7.4%	41	635,000		833,250	1,468,250	30,480	39,996	70,476	
19	\$125 MILLION 8 3/4%	42	939,348		298,859	1,238,207	41,904	13,332	55,236	
20	\$75 MILLION 8.33%	43	78,884		-	78,884	23,088		23,088	
21	\$100 MILLION 7.65%	44	280,944			280,944	70,236		70,236	
22	\$100 MILLION 6.75%	45	37,452		21,524	58,976	93,830	53,810	147,440	
23	\$104 MILLION 8.25%	46	890,880		837,200	1,727,880	38,172	35,880	74,052	
24	\$85 MILLION 7.375%	47	279,510		132,482	411,972	50,820	24,084	74,904	
25	\$85 MILLION 8%	48	612,788		821,748	1,434,534	26,076	34,968	61,044	
26	\$188 MILLION 6.875%	49	596,153		612,440	1,208,593	117,278	120,480	237,758	
27	\$148 MILLION 6.75%	50	716,772		369,940	1,086,712	81,144	41,880	123,024	
28	\$7 MILLION 10.75%	52		22,865		22,865	1,020		1,020	
29	\$5 MILLION 8%	55		66,722		66,722	5,484		5,484	
30	\$12 MILLION 9.375%	56		174,581		174,581	7,788		7,788	
31	\$7 MILLION 7.75%	57		109,074		109,074	12,348		12,348	
32	\$10 MILLION 10%	58		259,854		259,854	11,592		11,592	
33	\$4 MILLION 9.375%	62		51,648		51,648	2,304		2,304	
34	\$6 MILLION 8.5%	63		44,256		44,256	11,064		11,064	
35	\$10 MILLION 8.25%	68		74,606		74,606	6,132		6,132	
36	\$4 MILLION 7.95%	69		44,384		44,384	3,648		3,648	
37	\$6 MILLION 9.25%	70		86,349		86,349	3,852		3,852	
38	\$16.5 MILLION EIRB 1974 SERIES	80		75,078		75,078	3,492		3,492	
39	\$22 MILLION EIRB 1975 SERIES	81		1,141,976		1,141,976	180,312		180,312	
40	\$46 MILLION EIRB 1981 SERIES	82	-	599,931		599,931	37,692		37,692	
41	\$20 MILLION EIRB 1982 SERIES	83		50,042		50,042	3,144		3,144	
42	\$160 MILLION EIRB 1984 A&B	84	-	2,150,040		2,150,040	62,928		62,928	
43	\$47.5 MILLION EIRB 1984C SERIES	85		505,876		505,876	22,104		22,104	
44	\$126.6 MILLION EIRB 1985 A&B	86	494,499		587,325	1,081,824	31,068	36,900	67,968	
45	\$42.585 MILLION EIRB 1991	87	343,886			343,886	16,056		16,056	
46	\$47.5 MILLION EIRB 1992	88	372,044			372,044	15,888		15,888	
47	\$65.5 SDID 1997	89	109,350		537,300	646,650	2,916	14,328	17,244	
48	\$160 MILLION EIRB 1998	90	1,641,230			1,641,230	48,036		48,036	
49	\$75 MILLION 7.15%	101	867,012		675,682	1,342,694	27,696	28,056	55,752	
50	\$44 MILLION 5.45%	102	524,043		285,383	809,406	17,916	9,756	27,672	
51	\$100 MILLION 7%	103	760,215		155,760	915,975	30,924	6,336	37,260	
52			9,979,788	24,782,262	6,168,853	40,910,903	0	2,961,318	459,806	3,421,124

**Union Electric Company**  
**Allocation of Loss on Recquired Debt**  
**at 6/30/99**

LINE NO.	SERIES	ALLOCATED TO CURRENT SERIES				TOTAL BY SERIES			
		LOSS ON REACQUIRED DEBT	ANNUAL AMORTIZATION	SERIES	LOSS ON REACQUIRED DEBT	ANNUAL AMORTIZATION	SERIES	LOSS ON REACQUIRED DEBT	ANNUAL AMORTIZATION
1	Series \$50MM, 7%	\$318,000	\$36,000	Series \$148MM, 6.75%	\$318,000	\$36,000	Series \$148MM, 6.75%	\$1,282,494	\$145,188
2	Series \$35MM, 7.375%	\$280,476	\$31,752	Series \$148MM, 6.75%	\$280,476	\$31,752	Series \$100MM, 6.75%	\$1,349,070	\$110,882
3	Series \$40MM, 7%	\$484,134	\$38,148	Series \$100MM, 6.75%	\$227,517	\$18,700	Series \$104MM, 8.25%	\$1,403,030	\$115,318
4				Series \$104MM, 8.25%	\$236,617	\$19,448	Series \$100MM, 7.65%	\$594,912	\$148,728
5	Series \$60MM, 9%	\$550,856	\$137,664	Series \$100MM, 7.65%	\$550,656	\$137,664	Series \$188MM, 6.875%	\$2,011,719	\$395,748
6	Series \$50MM, 7.875%	\$455,853	\$89,676	Series \$188MM, 6.875%	\$455,853	\$89,676	Series 1991 MATES	\$1,403,588	\$192,480
7	Series \$50MM, 7.625%	\$574,944	\$65,088	Series \$148MM, 6.75%	\$574,944	\$65,088	Series \$85MM, 7.375%	\$3,278,264	\$223,518
8	Series \$60MM, 8.125%	\$617,930	\$121,560	Series \$188MM, 6.875%	\$617,930	\$121,560	Series \$85MM, 8%	\$3,278,264	\$223,518
9	Series \$70MM, 8.375%	\$937,936	\$184,512	Series \$188MM, 6.875%	\$937,936	\$184,512	Series \$125MM, 8.75%	\$3,867,026	\$172,212
10	Series \$70MM, 10.5%	\$222,066	\$18,252	Series \$100MM, 6.75%	\$108,856	\$8,947	Series \$60MM, 7.4%	\$2,142,000	\$102,816
11				Series \$104MM, 8.25%	\$113,210	\$9,305	Series \$75MM, 8.33%	\$846,006	\$241,716
12	Series \$70MM, 8.875%	\$1,880,188	\$154,536	Series \$100MM, 6.75%	\$921,661	\$75,753	Series 1985A&B	\$649,973	\$40,836
13				Series \$104MM, 8.25%	\$958,527	\$78,783	Series 1992 MATES	\$505,876	\$22,104
14	Series \$27.085MM, 5.8%	\$186,534	\$8,676	Series 1991 MATES	\$186,534	\$8,676	Series 1998AB&C	\$2,150,040	\$62,928
15	Series \$60MM, 8.625%	\$1,792,032	\$122,184	Series \$85MM, 7.375%	\$896,016	\$61,092		\$24,762,262	\$2,197,992
16				Series \$85MM, 8%	\$896,016	\$61,092			
17	Series \$55MM, 9.35%	\$1,783,890	\$79,284	Series \$125MM, 8.75%	\$1,783,890	\$79,284			
18	Series \$100MM, 9.95%	\$1,487,839	\$66,372	Series \$125MM, 8.75%	\$1,487,839	\$66,372			
19	Series \$60MM, 9.625%	\$2,142,000	\$102,816	Series \$60MM, 7.4%	\$2,142,000	\$102,816			
20	Series \$100MM, 9.375%	\$4,764,496	\$324,852	Series \$85MM, 7.375%	\$2,382,248	\$162,426			
21				Series \$85MM, 8%	\$2,382,248	\$162,426			
22	Series \$100MM, 8.875%	\$846,006	\$241,716	Series \$75MM, 8.33%	\$846,006	\$241,716			
23	Series \$7MM, 10.75%	\$22,865	\$1,020	Series \$125MM, 8.75%	\$22,865	\$1,020			
24	Series \$5MM, 8%	\$66,722	\$5,484	Series \$100MM, 6.75%	\$32,707	\$2,688			
25				Series \$104MM, 8.25%	\$34,015	\$2,796			
26	Series \$12MM, 9.375%	\$174,581	\$7,788	Series \$125MM, 8.75%	\$174,581	\$7,788			
27	Series \$7MM, 7.75%	\$109,074	\$12,348	Series \$148MM, 6.75%	\$109,074	\$12,348			
28	Series \$10MM, 10%	\$259,854	\$11,592	Series \$125MM, 8.75%	\$259,854	\$11,592			
29	Series \$4MM, 9.375%	\$51,648	\$2,304	Series \$125MM, 8.75%	\$51,648	\$2,304			
30	Series \$6MM, 8.5%	\$44,256	\$11,064	Series \$100MM, 7.65%	\$44,256	\$11,064			
31	Series \$10MM, 8.25%	\$74,606	\$6,132	Series \$100MM, 6.75%	\$36,572	\$3,006			
32				Series \$104MM, 8.25%	\$38,034	\$3,126			
33	Series \$4MM, 7.95%	\$44,384	\$3,648	Series \$100MM, 6.75%	\$21,757	\$1,788			
34				Series \$104MM, 8.25%	\$22,627	\$1,860			
35	Series \$6MM, 9.25%	\$86,349	\$3,852	Series \$125MM, 8.75%	\$86,349	\$3,852			
36	Series, \$16.5MM, 1974	\$75,078	\$3,492	Series 1991 MATES	\$75,078	\$3,492			
37	Series \$22MM, 1975	\$1,141,976	\$180,312	Series 1991 MATES	\$1,141,976	\$180,312			
38	Series \$45MM, 1981	\$599,931	\$37,892	Series 1985A&B	\$599,931	\$37,892			
39	Series \$20MM, 1982	\$50,042	\$3,144	Series 1985A&B	\$50,042	\$3,144			
40	Series \$160MM, 1984A&B	\$2,150,040	\$62,928	Series 1998AB&C	\$2,150,040	\$62,928			
41	Series \$47.5MM, 1984C	\$505,876	\$22,104	Series 1992 MATES	\$505,876	\$22,104			
42		\$24,762,262	\$2,197,992		\$24,762,262	\$2,197,992			

**Union Electric Company (AmerenUE)**  
**Case No. GR-2000-512**  
**Embedded Cost of Preferred Stock**

at June 30, 1999

LINE NO.	SERIES, TYPE, PAR C1	DIVIDEND C2	ISSUED C3	MATURITY C4	SHARES OUTSTANDING C5	PAR VALUE OUTSTANDING C6	PREMIUM C7	ISSUANCE EXPENSE/DISCOUNT C8	NET PROCEEDS C9	ANNUAL DIVIDEND C10	EMBEDDED COST C11
1	\$4.50 Series, Perpetual, \$100 par	\$4.500	01-May-41	-	213,595	\$21,359,500	(\$412,500)	\$27,794	\$21,744,206	\$961,178	
2	\$5.50 Series, Perpetual, \$100 par	\$5.500	01-Oct-41	-	14,000	\$1,400,000			\$1,400,000	\$77,000	
3	\$3.70 Series, Perpetual, \$100 par	\$3.700	01-Oct-45	-	40,000	\$4,000,000	(\$21,996)	\$21,392	\$4,000,604	\$148,000	
4	\$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	
5	\$4.30 Series, Perpetual, \$100 par	\$4.300	01-Jul-46	-	40,000	\$4,000,000			\$4,000,000	\$172,000	
6	\$4.75 Series, Perpetual, \$100 par	\$4.750	01-Oct-49	-	20,000	\$2,000,000			\$2,000,000	\$95,000	
7	\$4.00 Series, Perpetual, \$100 par	\$4.000	01-Nov-49	-	150,000	\$15,000,000	(\$125,985)	\$68,881	\$15,057,104	\$600,000	
8	\$4.56 Series, Perpetual, \$100 par	\$4.560	01-Nov-63	-	200,000	\$20,000,000	(\$16,000)	\$47,633	\$19,968,367	\$912,000	
9	\$7.64 Series, Perpetual, \$100 par	\$7.640	01-Jan-93	-	330,000	\$33,000,000		\$342,278	\$32,657,722	\$2,521,200	
10	\$1.735 Series, Perpetual, \$25 par	\$1.735	01-Aug-93	-	1,657,500	\$41,437,500		\$1,798,407	\$39,639,093	\$2,875,763	
11	<b>TOTAL PREFERRED STOCK</b>					<b>\$155,197,000</b>	<b>(\$1,486,481)</b>	<b>\$2,559,157</b>	<b>\$154,124,324</b>	<b>\$8,817,140</b>	<b>5.721%</b>

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

$$C9 = C6 + C7 - C8$$

Embedded Cost = Annual Dividend divided by Net Proceeds

$$C11 = C10 / C9$$

**Union Electric Company (AmerenUE)**  
**Docket No.**  
**Weighted Average Cost of Capital**

at June 30, 1999

**LINE  
NO.**

CAPITAL COMPONENT	AMOUNT	PERCENT OF TOTAL	COST	WEIGHTED COST
Short-Term Debt	\$0	0.000%	-	0.000%
Long-Term Debt	\$1,690,457,143	39.614%	7.080%	2.805%
Preferred Stock	\$154,124,324	3.612%	5.721%	0.207%
Common Equity	\$2,422,752,000	56.774%	12.875%	7.310%
<b>TOTAL</b>	<b>\$4,267,333,467</b>	<b>100.000%</b>		<b>10.322%</b>

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<b>overall rate of return</b>	<b>10.322%</b>
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