

Exhibit No.:
Issues: Cost of Capital;
Capital Structure
Witness: Lee R. Nickloy
Sponsoring Party: Union Electric Company
Type of Exhibit: Direct Testimony
Case No.: ER-2007-0002
Date Testimony Prepared: July 3, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

DIRECT TESTIMONY

OF

LEE R. NICKLOY

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
July, 2006

TABLE OF CONTENTS

I. INTRODUCTION.....	1
II. PURPOSE AND SUMMARY OF TESTIMONY	2
III. OVERALL FAIR RATE OF RETURN.....	3

1 **DIRECT TESTIMONY**

2 **OF**

3 **LEE R. NICKLOY**

4 **CASE NO. ER-2007-0002**

5 **I. INTRODUCTION**

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

7 A. My name is Lee R. Nickloy. My business address is 1901 Chouteau Avenue,
8 St. Louis, Missouri 63103.

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

10 A. I am employed by Ameren Services Company, which provides various
11 corporate, administrative, and technical support for Ameren Corporation and its affiliates. I
12 hold the positions of Director – Corporate Finance and Assistant Treasurer for Ameren
13 Corporation and its subsidiaries, including Union Electric Company d/b/a AmerenUE
14 (“AmerenUE” or the “Company”).

15 **Q. Please summarize your educational background and professional**
16 **experience.**

17 A. I graduated Magna Cum Laude with a Bachelor of Science degree from
18 Christian Brothers University in Memphis, Tennessee in 1989. I earned a triple
19 concentration in the Economics/Finance, Management, and Marketing programs of study.
20 Upon graduation I was employed by Shell Oil Company in the Chicago, Illinois refined
21 products division. In 1992, I was promoted to Financial Analyst and transferred to the
22 company’s U.S. headquarters in Houston, Texas. In 1994 I accepted the position of Assistant
23 Treasurer with Enjet, Inc., a privately held crude oil refining and products trading company

1 based in Houston with operations in the U.S. Gulf Coast region and internationally. I was
2 promoted to Treasurer later that same year and was responsible for financing the company's
3 operational and trading activities. I negotiated all financing facilities, issued debt, was
4 responsible for banking relationships and cash management, and directed the company's
5 trading activities to maximize profitability given certain capital constraints. In late 1995, I
6 became Manager of Counterparty Risk for TransCanada Energy USA Inc. In this position I
7 managed the company's counterparty risk exposure for a broad range of energy trading and
8 marketing businesses and natural gas processing assets. This responsibility entailed
9 assessment of the financial condition and capitalization of the company's counterparties and
10 trading partners. I conducted financial due diligence for the company's new business and
11 asset acquisition group. In this position I also negotiated and managed the company's
12 domestic bank financing facilities and parental guarantees. I left that company in 1998 to
13 accept a position with Ameren.

14 **Q. What are your responsibilities in your current position with Ameren**
15 **Services?**

16 **A.** In my current position, I am responsible for capital raising and financing
17 activities, banking, short-term liquidity and borrowing facilities, liaison/communication with
18 the rating agencies, monitoring and quantifying cost of capital, various capital budgeting
19 activities and credit risk management.

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

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

22 **A.** The purpose of my testimony is to recommend an overall fair rate of return for
23 AmerenUE's electric utility business. I determine AmerenUE's capital structure, embedded

1 cost of long-term debt and embedded cost of preferred stock. I also calculate the overall fair
2 rate of return applied to rate base which is utilized in AmerenUE's filing in this case. I do so
3 by using the fair rate of return applicable to the common equity component of AmerenUE's
4 capital structure as developed by AmerenUE witnesses Kathleen C. McShane and Dr. James
5 H. Vander Weide in their direct testimonies submitted in this case. A summary of my
6 testimony is included as Attachment A.

7 **III. OVERALL FAIR RATE OF RETURN**

8 **Q. Have you prepared or has there been prepared under your direction and**
9 **supervision any schedules relating to overall fair rate of return in this proceeding?**

10 A. Yes, I am sponsoring Schedules LRN-E1 through LRN-E4 for that purpose.
11 These Schedules are based upon the test year twelve months ended March 31, 2006, and are
12 designated as follows:

13	Schedule LRN-E1	Capital Structure / Weighted Average Cost of Capital
14	Schedule LRN-E2	Embedded Cost of Long-Term Debt
15	Schedule LRN-E3	Cost of Short-Term Debt
16	Schedule LRN-E4	Embedded Cost of Preferred Stock

17 **Q. How did you calculate the overall fair rate of return or weighted average**
18 **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 the
21 cost developed for that component. I then summed these weighted costs by component to
22 arrive at AmerenUE's overall fair rate of return or weighted average cost of 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 the
3 cost of capital. This cost, the overall rate of return or weighted average cost of capital, must
4 produce sufficient earnings/cash flow when applied to AmerenUE's rate base at book value
5 to enable the Company to accomplish the following: maintain the financial integrity of its
6 existing invested capital; maintain its creditworthiness; and attract sufficient capital on
7 competitive terms to continue to provide a source of funds for continued investment and
8 enable the Company to meet the needs of its customers.

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

10 A. Beyond the fact that these three standards are mandated by the landmark
11 *Bluefield* and *Hope* decisions of the United States Supreme Court,¹ the Commission has
12 recognized that meeting these requirements is necessary in order for AmerenUE to
13 effectively meet the electric utility services requirements of its customers and provide an
14 adequate and reasonable return to its investors, debtholder and equity holder alike.² The
15 assets owned by AmerenUE which are employed in meeting its customers' electricity needs
16 exist and are available for this purpose only because investors have entrusted their funds with
17 AmerenUE. These investors have deemed an investment in the securities issued by the
18 Company to be sound and capable of providing a competitive return.

19 As the Commission has also underscored, AmerenUE must maintain its
20 creditworthiness in order to continue to attract capital on a competitive basis.³ This is

¹ *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).

² See *In the Matter of the Tariff Filing of the Empire District Company to Implement a General Rate Increase for Retail Electric Service Provided to Customers in its Missouri Service Area*, Case No. ER-2004-0570, at 33-34 (March 10, 2005) ("*Empire District*").

³ See *Empire District*, at 45.

1 important to assure future opportunities for AmerenUE to replace capital and various
2 securities which must be refinanced in the future at reasonable cost. Also, the ability of
3 AmerenUE to attract new capital on competitive terms is critical in order for the Company to
4 continue to replace and upgrade facilities used to meet the electricity needs of its customers,
5 to pay for the fuel and other similarly volatile costs incurred in the Company's operations, to
6 comply with environmental standards, and to continue to efficiently and successfully perform
7 in an increasingly competitive and risky industry.

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

9 A. As outlined on Schedule LRN-E1, the capital structure of AmerenUE on
10 March 31, 2006 consisted of 45.420% long-term debt, 0.099% short-term debt, 2.040%
11 preferred stock and 52.441% common equity.

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

14 A. The balance of long-term debt, \$2,549,853,256, is the total carrying value of
15 the Company's long-term debt using the net proceeds method. The net proceeds method
16 calculates the carrying value by taking the indebtedness principal amount outstanding and
17 subtracting the unamortized discount, issuance expenses and any loss on reacquired debt.

18 The balance of short-term debt, \$5,575,653, is the last twelve-month average
19 of net short-term debt. This approach measures the average monthly short-term debt balance,
20 less Construction Work in Progress ("CWIP"), over the 12 months in the test year. It
21 recognizes that short-term debt balances can fluctuate substantially during the year and
22 includes in the Company's capital structure only that portion of short-term debt which may

1 represent permanent capital – i.e. the extent to which short-term debt plays a continual role
2 on the 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 calculation
5 for this component of capitalization.

6 The balance of common equity, \$2,944,050,741, represents AmerenUE's
7 book value of common equity at March 31, 2006 adjusted to remove the effects of its
8 investment in its wholly-owned subsidiary, Union Electric Development Corporation. The
9 assets of this subsidiary are not utilized by the Company in providing utility services to its
10 customers. I further adjusted the book value by removing AmerenUE's total other
11 comprehensive income as well as the acquisition costs related to the Company's investment
12 in Electric Energy, Inc. ("EEInc.") stock.

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

14 A. AmerenUE's embedded cost of long-term debt was 5.427% as of March 31,
15 2006. Schedule LRN-E2 provides the calculation of the embedded cost of long-term debt.
16 AmerenUE has about \$437 million principal amount of variable rate environmental
17 improvement indebtedness (in various series) outstanding under which the interest rates are
18 reset by a Dutch auction process every 7 or 35 days. The effective cost used for this
19 indebtedness for purposes of this proceeding was derived using current rates for these
20 securities including related auction broker/dealer fees.

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

22 A. I did not include the Company's obligations under capital leases related to the
23 Chapter 100 "financing" of its Peno Creek (City of Bowling Green) and recently acquired

1 Audrain County gas-fired generating facilities. These transactions and the related capital
2 leases did not generate any proceeds nor were they a source of capital for the Company.

3 **Q. What is the cost of AmerenUE's short-term debt?**

4 A. AmerenUE's cost of short-term debt was 5.11% based on the Company's
5 borrowing rate on outstanding commercial paper as of June 7, 2006.

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

7 A. AmerenUE's embedded cost of preferred stock was 5.189% as of March 31,
8 2006. Schedule LRN-E4 provides the calculation of the embedded cost of preferred stock.
9 Using the net proceeds method of calculating the balance of preferred stock, the balance
10 outstanding as of March 31, 2006 was \$114,502,040.

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

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

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

3 A. AmerenUE expects to continue to issue its own long-term debt and preferred
4 stock securities in the external capital markets. Short-term borrowings can be obtained from
5 the capital or bank markets, Ameren Corporation, or through Ameren Corporation's Utility
6 Money Pool, depending on the best borrowing rates available.

7 **Q. Please describe your calculation of AmerenUE's balance of common**
8 **equity.**

9 A. I derived AmerenUE's balance of common equity, \$2,944,005,741, by
10 adjusting the Company's book value of common equity at March 31, 2006 of \$2,908,062,618
11 by the amount representing the common stockholder's equity associated with AmerenUE's
12 investment in its wholly-owned subsidiary, Union Electric Development Corporation –
13 (\$6,524,572). I further adjusted the stated book value by removing AmerenUE's March 31,
14 2006 total other comprehensive income –(\$32,979,551) -- as well as the acquisition costs
15 related to the Company's investment in EEInc. of (\$3,516,000).

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

17 A. In her direct testimony in this case, Ms. McShane develops and supports a fair
18 return on common equity for AmerenUE's electric utility operations in the range of 11.60% –
19 12.30% with a recommended cost of equity for AmerenUE of 12.00%. Dr. Vander Weide's
20 analysis indicates that AmerenUE would require a fair rate of return on equity equal to 12.2%
21 to have the same weighted average cost of capital as comparable companies. For purposes of
22 determining the overall fair rate of return for AmerenUE in this proceeding, I have
23 conservatively used 12.00% as the Company's cost of common equity.

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

2 A. As shown on Schedule LRN-E1, as of March 31, 2006, the overall fair rate of
3 return for AmerenUE is 8.869%. I derived this result by using the capital structure and
4 embedded costs of long-term debt, short-term debt and preferred stock discussed above, and
5 shown on the various Schedules attached, along with the cost of common equity for
6 AmerenUE developed by Ms. McShane and Dr. Vander Weide in their direct testimony.

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

8 A. Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company)
d/b/a AmerenUE for Authority to File)
Tariffs Increasing Rates for Electric) Case No. ER-2007-0002
Service Provided to Customers in the)
Company's Missouri Service Area.)

AFFIDAVIT OF LEE R. NICKLOY

STATE OF MISSOURI)
)**ss**
CITY OF ST. LOUIS)

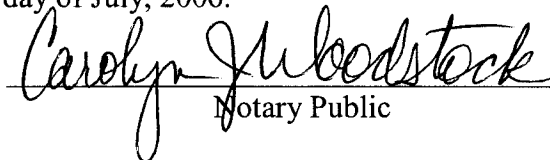
Lee R. Nickloy, being first duly sworn on his oath, states:

1. My name is Lee R. Nickloy. I work in the City of St. Louis, Missouri, and I am employed by Ameren Corporation as Assistant Treasurer.
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 9 pages, Attachment A and Schedules LRN-E1 through LRN-E4, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.



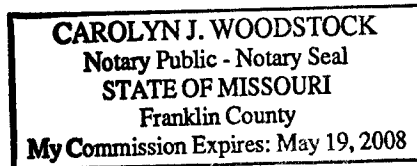
Lee R. Nickloy

Subscribed and sworn to before me this 3rd day of July, 2006.



Notary Public

My commission expires:



EXECUTIVE SUMMARY

Lee R. Nickloy

Director – Corporate Finance and Assistant Treasurer

* * * * *

The purpose of my testimony is to recommend an overall fair rate of return for AmerenUE's electric utility business. I determine AmerenUE's capital structure, embedded cost of long-term debt and embedded cost of preferred stock. I also calculate the overall fair rate of return applied to rate base which is utilized in AmerenUE's filing in this case. I do so by using the fair rate of return applicable to the common equity component of AmerenUE's capital structure as developed by AmerenUE witnesses Kathleen C. McShane and Dr. James H. Vander Weide in their direct testimonies submitted in this case.

Ms. McShane develops and supports a fair return on common equity for AmerenUE's electric utility operations in the range of 11.60% – 12.30% with a recommended cost of equity for AmerenUE of 12.00%. Dr. Vander Weide's analysis indicates that AmerenUE would require a fair rate of return on equity equal to 12.2% to have the same weighted average cost of capital as comparable companies. For purposes of determining the overall fair rate of return for AmerenUE in this proceeding, I have conservatively used 12.00% as the Company's cost of common equity.

Using the capital structure (45.420% long-term debt, 0.099% short-term debt, 2.040% preferred stock and 52.441% common equity) and embedded costs of long-term debt (5.427%), short-term debt (5.11%) and preferred stock (5.189%), as shown on the

various schedules attached to my testimony, along with this conservative estimate of the cost of common equity of 12.0% for AmerenUE supported by the analyses of Ms. McShane and Dr. Vander Weide, I derive an overall fair rate of return for AmerenUE of 8.869%.

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

at 3/31/2006:

CAPITAL COMPONENT	AMOUNT	PERCENT OF TOTAL	COST	WEIGHTED COST
Long-Term Debt	\$2,549,853,256	45.420%	5.427%	2.465%
Short-Term Debt	\$5,575,653	0.099%	5.110%	0.005%
Preferred Stock	\$114,502,040	2.040%	5.189%	0.106%
Common Equity	\$2,944,050,741	52.441%	12.000%	6.293%
TOTAL	\$5,613,981,690	100.000%		8.869%

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

At March 31, 2006

SERIES C1	COUPON (a) C2	ISSUED C3	MATURITY C4	PRINCIPAL C5	FACE AMOUNT OUTSTANDING C6	UNAMORTIZED BALANCES DISC.(PREM) C7 ISSUE EXP. C8 LOSS C9	CARRYING VALUE C10	ANNUALIZED COUPON INT. C11	ANNUALIZED AMORTIZATION DISC.(PREM) C12 ISSUE EXP. C13 LOSS C14	ANNUALIZED INT. EXP. C15	EMBEDDED COST C16
First Mortgage Bonds	6.750%	01-May-93	01-May-08	\$148,000,000	\$148,000,000	\$87,250	\$169,050	\$9,990,000	\$41,880	\$61,144	
Senior Secured Notes	5.250%	22-Aug-02	01-Sep-12	\$173,000,000	\$173,000,000	\$129,899	\$785,939	\$9,082,500	\$20,244	\$122,484	
Senior Secured Notes	4.650%	07-Oct-03	01-Oct-13	\$200,000,000	\$200,000,000	\$297,990	\$1,190,250	\$9,300,000	\$39,732	\$158,700	
Senior Secured Notes	5.500%	18-May-04	15-May-14	\$104,000,000	\$104,000,000	\$289,590	\$609,756	\$5,720,000	\$35,460	\$74,664	
Senior Secured Notes	4.750%	09-Apr-03	01-Apr-15	\$114,000,000	\$114,000,000	\$139,428	\$680,616	\$5,415,000	\$15,492	\$75,624	
Senior Secured Notes	5.400%	08-Dec-05	01-Feb-16	\$260,000,000	\$260,000,000	\$720,188	\$1,870,323	\$14,040,000	\$72,624	\$188,604	
Senior Secured Notes	5.100%	28-Jul-03	01-Aug-18	\$200,000,000	\$200,000,000	\$87,172	\$1,415,620	\$10,200,000	\$7,068	\$114,780	
Senior Secured Notes	5.100%	23-Sep-04	01-Oct-19	\$300,000,000	\$300,000,000	\$115,992	\$2,169,342	\$15,300,000	\$8,592	\$160,692	
Senior Secured Notes	5.000%	27-Jan-05	01-Feb-20	\$85,000,000	\$85,000,000	\$659,186	\$620,840	\$4,250,000	\$44,880	\$47,652	
First Mortgage Bonds	5.450%	15-Oct-93	01-Oct-28	\$44,000,000	\$44,000,000	\$219,510	\$403,110	\$2,398,000	\$9,756	\$17,916	
Senior Secured Notes	5.500%	10-Mar-03	15-Mar-34	\$184,000,000	\$184,000,000	\$1,851,360	\$1,624,896	\$10,120,000	\$66,120	\$58,032	
Senior Secured Notes	5.300%	21-Jul-05	01-Aug-37	\$300,000,000	\$300,000,000	\$995,648	\$2,919,648	\$15,900,000	\$31,776	\$93,180	
Subordinated Debentures	7.690%	16-Dec-96	15-Dec-36	\$65,500,000	\$65,500,000	\$440,586	\$1,011,844	\$5,036,950	\$14,328	\$3,312	
Environmental Improvement, Series 1991	3.749%	01-Dec-91	01-Dec-20	\$42,585,000	\$42,585,000	\$860,112	\$1,596,512	\$1,596,512	\$58,644		
Environmental Improvement, Series 1992	3.800%	01-Dec-92	01-Dec-22	\$47,500,000	\$47,500,000	\$737,047	\$1,805,000	\$1,805,000	\$97,800		
Environmental Improvement, Series 1998 ABC	3.714%	04-Sep-98	01-Sep-33	\$160,000,000	\$160,000,000	\$3,144,309	\$5,943,000		\$391,452		
Environmental Improvement, Series 2000 ABC	3.283%	09-Mar-00	01-Mar-35	\$186,500,000	\$186,500,000	\$5,047,115	\$6,122,713		\$174,540		
TOTAL LONG-TERM DEBT				\$2,614,085,000	\$2,614,085,000	\$6,033,799	\$24,349,809	\$132,219,675	\$407,952	\$1,919,220	\$138,384,303
											5.427%

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 includes ongoing broker dealer fees.

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

April 1, 2005 - March 31, 2006

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 2005	0	455,976,217	463,511,721	0	2.9678%
May	250,000,000	447,469,871	454,105,029	0	3.0000%
June	440,950,000	310,338,088	480,125,781	0	3.2400%
July	275,100,000	329,769,798	364,567,062	0	3.3700%
August	139,350,000	346,087,817	386,031,063	0	3.5600%
September	96,475,000	359,959,751	394,797,938	0	3.7300%
October	89,725,000	331,115,750	278,490,627	0	4.0200%
November	91,950,000	169,585,882	298,735,535	0	4.1100%
December	83,500,000	172,961,290	260,982,348	0	4.5500%
January 2006	136,500,000	256,411,192	211,271,430	0	4.5984%
February	175,150,000	246,797,587	220,577,457	0	4.6116%
March	301,650,000	269,957,693	234,742,158	66,907,842	4.9133%
AVERAGE	173,362,500	308,035,911	337,328,179	5,575,653	

(a) Monthly averages are calculated by adding the beginning and ending balances each month and dividing by two.
Negative amounts are excluded.

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

at March 31, 2006

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	
TOTAL PREFERRED STOCK					\$113,759,500	(\$2,455,000)	\$1,712,460	\$114,502,040	\$5,941,378	5.189%

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