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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

DIRECT TESTIMONY

OF

RONALD L. BIBLE

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

CASE NO. EC-2002-1

Jefferson City, Missouri
March 2002

FILED³

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**Missouri Public
Service Commission**

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UNION ELECTRIC COMPANY
d/b/a AMERENUE
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1 **DIRECT TESTIMONY**

2 **OF**

3 **RONALD L. BIBLE**

4 **UNION ELECTRIC dba AMERENUE**

5 **CASE NO. EC-2002-1**

6
7 Q. Please state your name, occupation and business address.

8 A. My name is Ronald L. Bible. I am employed by the Missouri Public
9 Service Commission (MoPSC) as the Manager of the Financial Analysis Department.
10 My business address is 200 Madison, Jefferson City, Missouri 65102.

11 Q. Please describe your educational and professional background.

12 A. In 1981, I earned a Master of Business Administration degree with an
13 emphasis in Finance and Investments from the Southern Illinois University at
14 Edwardsville, Illinois. In 1976, I earned a Bachelor of Arts degree in Social Science from
15 Colorado State University, Ft. Collins, Colorado.

16 Q. What is your work experience?

17 A. I was employed by Credit Union National Association from 1995 to 1997
18 and by American Express from 1991 to 1995 as a Financial and Investment
19 Analyst/Planner. Prior to that, I was with Voluntary Hospitals of America and Hospital
20 Corporation of America where I performed statistical and financial analysis. Previous to
21 these positions, I was an officer in the United States Air Force and was responsible for a
22 unit that provided statistical analysis.

23 Q. Have you previously filed testimony before this Commission?

Direct Testimony of
Ronald L. Bible

1 A. Yes. I have testified before the MoPSC a number of times addressing
2 issues including rate of return, proposed financings, and merger and acquisition issues. I
3 have previously filed testimony in this case.

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

5 A. My testimony is presented to provide a recommendation to the
6 Commission as to a fair and reasonable rate of return (cost of capital) to be applied to the
7 rate base for Union Electric Company d/b/a AmerenUE (AmerenUE). I address the same
8 issues I addressed in my previous filing for this case.

9 Q. Have you prepared any schedules to your analysis of the cost of capital for
10 AmerenUE?

11 A. Yes. I am sponsoring a study entitled "An Analysis of the Cost of Capital
12 for Union Electric d/b/a AmerenUE, Case No. EC-2002-1" consisting of 26 schedules
13 which are attached to this direct testimony (see Schedule 1).

14 Q. What do you conclude is the cost of capital for AmerenUE?

15 A. My analysis leads me to conclude that the cost of capital for AmerenUE is
16 in the range of 8.01 to 8.61 percent.

17 Q. What range are you proposing for the return on common equity (ROE) for
18 AmerenUE?

19 A. I estimate AmerenUE's return on common equity to be in the range of
20 8.91 percent to 9.91 percent with a midpoint of 9.41 percent.

21 **Economic and Legal Rationale for Regulation**

22 Q. Why are the prices charged to customers by utilities such as AmerenUE
23 regulated?

1 A. A primary purpose of price regulation is to restrain the exercise of
2 monopoly power. Monopoly power represents the ability to charge excessive or unduly
3 discriminatory prices. Monopoly power may arise from the presence of economies of
4 scale and/or from the granting of a monopoly franchise.

5 For services that operate efficiently and have the ability to achieve
6 economies of scale, a monopoly is the most efficient form of market organization. Utility
7 companies can supply service at lower costs if the duplication of facilities by competitors
8 is avoided. This allows the use of larger and more efficient equipment which results in
9 lower per unit costs. For instance, it may cost more for two or more competing
10 companies to maintain duplicate electric distribution systems to provide competing
11 residential services to one household. This situation could result in price wars and lead to
12 unsatisfactory and perhaps irregular service. For these reasons, exclusive rights may be
13 granted to a single utility to provide service within a given territory. This also creates a
14 more stable environment for operating the utility company. Utility regulation acts as a
15 substitute for the economic control of market competition and allows the consumer to
16 receive adequate utility service at a reasonable price.

17 Electric distribution utility companies such as AmerenUE provide electric
18 distribution services essentially under a monopoly franchise. Therefore, it is clear that
19 AmerenUE has monopoly power.

20 Another purpose of price regulation is to provide the utility company with
21 an opportunity to earn a fair return on its capital, particularly on investments made as a
22 result of a monopoly franchise.

1 Q. What is your understanding of the legal basis you must use when
2 determining a fair and reasonable return for a public utility?

3 A. Several landmark decisions by the U.S. Supreme Court provide the legal
4 framework for regulation and for what constitutes a fair and reasonable rate of return for
5 a public utility. Listed below are some of the cases:

- 6 1. *Munn v. People of Illinois* (1877),
- 7 2. *Bluefield Water Works and Improvement Company* (1923),
- 8 3. *Natural Gas Pipeline Company of America* (1942), and
- 9 4. *Hope Natural Gas Company* (1944).

10 In the case of *Munn v. People of Illinois*, 94 U.S. 113 (1877), the Court
11 found that:

12 . . . when private property is "affected with a public interest, it
13 ceases to be *juris privati* only" Property does become clothed
14 with a public interest when used in a manner to make it of public
15 consequence, and affect the community at large. When, therefore,
16 one devotes his property to a use in which the public has an
17 interest, he, in effect, grants to the public an interest in that use,
18 and must submit to be controlled by the public for the common
19 good, to the extent of the interest he has thus created. *Id* at 126.

20 The *Munn* decision is important because it states the conceptual basis for
21 regulation of both utility and non-utility industries.

22 In the case of *Bluefield Water Works and Improvement Company v. Public*
23 *Service Commission of the State of West Virginia*, 262 U.S. 679 (1923), the Supreme
24 Court ruled that a fair return would be:

- 25 1. A return "generally being made at the same time" in that
26 "general part of the country";
- 27 2. A return achieved by other companies with "corresponding
28 risks and uncertainties";
- 29
- 30

1 3. A return "sufficient to assure confidence in the financial
2 soundness of the utility"; and
3

4 4. A fair and reasonable return can change with economic
5 conditions and capital markets.

6 The Court specifically stated:

7 A public utility is entitled to such rates as will permit it to earn a
8 return on the value of the property which it employs for the
9 convenience of the public equal to that generally being made at the
10 same time and in the same general part of the country on
11 investments in other business undertakings which are attended by
12 corresponding risks and uncertainties; but it has no constitutional
13 right to profits such as are realized or anticipated in highly
14 profitable enterprises or speculative ventures. The return should be
15 reasonably sufficient to assure confidence in the financial
16 soundness of the utility and should be adequate, under efficient and
17 economical management, to maintain and support its credit and
18 enable it to raise the money necessary for the proper discharge of
19 its public duties. A rate of return may be reasonable at one time
20 and become too high or too low by changes affecting opportunities
21 for investment, the money market and business conditions
22 generally. Id at 692-3.
23

24 In *Federal Power Commission et al. v. Natural Gas Pipeline Company of*
25 *America et al.*, 315 U.S. 575 (1942), the Court decided that:

26 The Constitution does not bind rate-making bodies to the service of
27 any single formula or combination of formulas If the
28 Commission's order, as applied to the facts before it and viewed in
29 its entirety, produces no arbitrary result, our inquiry is at an end. Id
30 at 586.

31 The U.S. Supreme Court also discussed the reasonableness of a return for
32 a utility in the case of *Federal Power Commission et al. v. Hope Natural Gas Company*,
33 320 U.S. 591 (1944). The Court stated that:

34 The rate-making process . . . , i.e., the fixing of "just and
35 reasonable" rates, involves a balancing of the investor and the
36 consumer interests. Thus we stated . . . that "regulation does not
37 insure that the business shall produce net revenues" . . . it is
38 important that there be enough revenue not only for operating
39 expenses but also for the capital costs of the business. These

1 include service on the debt and dividends on the stock By
2 that standard the return to the equity owner should be
3 commensurate with returns on investments in other enterprises
4 having corresponding risks. That return, moreover, should be
5 sufficient to assure confidence in the financial integrity of the
6 enterprise, so as to maintain its credit and to attract capital. *Id* at
7 603.

8 *Hope* restates the concept of comparable returns to include those achieved
9 by any other enterprises that have "corresponding risks." The Supreme Court also noted
10 in this case that regulation does not guarantee profits to a utility company.

11 A more recent case heard by the Supreme Court of Pennsylvania further
12 clarifies the *Hope* decision beyond balancing the interests of the investors and the
13 consumers. The Supreme Court of Pennsylvania stated that:

14 We do not believe, however, . . . that the end result of a rate-
15 making body's adjudication *must* be the setting of rates at a level
16 that will, in any given case, guarantee the continued financial
17 integrity of the utility concerned In cases where the balancing
18 of consumer interests against the interests of investors causes rates
19 to be set at a "just and reasonable" level which is insufficient to
20 ensure the continued financial integrity of the utility, it may simply
21 be said that the utility has encountered one of the risks that imperil
22 any business enterprise, namely the risk of financial failure.
23 *Pennsylvania Electric Company, et al. v. Pennsylvania Public*
24 *Utility Commission*, 502 A.2d 130, 133-34 (1985), cert. denied,
25 476 U.S. 1137 (1986).

26 *Pennsylvania* is included in my testimony to illustrate the following point:
27 captive ratepayers of public utilities should not be forced to bear the brunt of poor or
28 inept management that results in unnecessarily higher costs. I do not believe that utility
29 companies should be casually subjected to risk of financial failure in a rate case
30 proceeding. However, in the case of poor management, I do not believe it would always
31 be appropriate for a regulatory agency to provide sufficient funds to continue operations
32 no matter what the costs are to the ratepayers.

1 Through these and other court decisions, it has generally been recognized
2 that public utilities can operate more efficiently when they operate as monopolies. It has
3 also been recognized that regulation is required to offset the lack of competition and
4 maintain prices at a reasonable level. It is the regulatory agency's duty to determine a
5 fair rate of return and the appropriate revenue requirement for the utility, while
6 maintaining reasonable prices for the public consumer.

7 The courts today still believe that a fair return on common equity should
8 be similar to the return for a business with similar risks, but not as high as a highly
9 profitable or speculative venture requires. The authorized return should provide a fair
10 and reasonable return to the investors of the company, while ensuring that excessive
11 earnings do not result from the utility's monopolistic powers. However, this fair and
12 reasonable rate does not necessarily guarantee revenues or the continued financial
13 integrity of the utility.

14 It should be noted that the courts have determined that a reasonable return
15 may vary over time as economic and business conditions change. Therefore, it is
16 important to take into consideration the concepts presented by the U. S. Supreme Court,
17 as well as, the historical and projected economic conditions and the business operations
18 of a utility in order to calculate a fair and reasonable rate of return.

19 **Historical Economic Conditions**

20 Q. Please discuss the relevant historical economic conditions in which
21 AmerenUE has operated.

22 A. One of the most commonly accepted indicators of economic conditions is
23 the Discount Rate set by the Federal Reserve Board (Federal Reserve). The Federal

1 Reserve tries to achieve its monetary policy objectives by controlling the Discount Rate
2 (the Discount Rate is the rate at which member banks borrow directly from the Federal
3 Reserve) and the Fed Funds Rate (the Federal Funds Rate is the interest rate that banks
4 charge each other for overnight lending). At the end of 1982, the U.S. economy was in
5 the early stages of recovery from the longest post-World War II recession. This
6 economic expansion began when the Federal Reserve reduced the Discount Rate seven
7 times in the second half of 1982 in an attempt to stimulate the economy. This also led to
8 a reduction in the Prime Interest Rate (the rate charged by banks on short-term loans to
9 borrowers with high credit ratings) from 16.50 percent in June 1982, to 11.50 percent in
10 December 1982. The economic expansion continued for approximately eight years until
11 July of 1990, when the economy entered into a recession.

12 In December of 1990, the Federal Reserve responded to the slumping
13 economy by lowering the Discount Rate to 6.50 percent. Over the next year and a half
14 the Federal Reserve lowered the Discount Rate another six times to a low of 3.00 percent,
15 which had the result of lowering the Prime Interest Rate to 6.00 percent. (See
16 Schedule 3.)

17 In 1993, newly elected President Clinton implemented a plan to raise
18 additional revenues, by increasing certain corporate and personal income tax rates, but
19 perhaps the most important factor for the U.S. economy in 1993 was the passage of the
20 North American Free Trade Agreement (NAFTA). NAFTA created a free trade zone
21 consisting of the United States, Canada and Mexico. The rate of economic growth for the
22 fourth quarter of 1993, was one which the Federal Reserve believed could not be
23 sustained without experiencing higher inflation. In the first quarter of 1994, the Federal

1 Reserve took steps to try and restrict the economy by increasing interest rates. As a
2 result, on March 24, 1994, the Prime Interest Rate increased to 6.25 percent. On
3 April 18, 1994, the Federal Reserve announced its intention to raise its targeted interest
4 rates which resulted in the Prime Interest Rate being increased to 6.75 percent. The
5 Federal Reserve took action on May 17, 1994, by raising the Discount Rate to
6 3.50 percent. The Federal Reserve took three additional restrictive monetary actions,
7 with the last occurring on February 1, 1995. These actions raised the Discount Rate to
8 5.25 percent and, in turn, banks raised the Prime Interest Rate to 9.00 percent.

9 The Federal Reserve then reversed its policy in late 1995, by lowering its
10 target for the Fed Funds Rate 0.25 percentage points on two different occasions. This
11 had the effect of lowering the Prime Interest Rate to 8.50 percent. On
12 November 17, 1998, the Federal Reserve lowered the Discount Rate to a rate of 4.50
13 percent.

14 The Federal Reserve continued its cycle of raising and lowering interest
15 rates since 1998. In August 1999, the Federal Reserve began raising the Discount Rate.
16 Increases continued until January 2001, when the Federal Reserve began lowering
17 interest rates to help stimulate a slowing economy. The Discount Rate reached 1.25
18 percent in December 2001. The Prime Interest Rate followed a similar pattern, reaching
19 4.84 percent in December 2001.

20 The actions of the Federal Reserve over the last five years have been
21 primarily focused on keeping the level of inflation under control, and they have been
22 successful. The inflation rate, as measured by the *Consumer Price Index - All Urban*
23 *Consumers* (CPI), was at a high of 3.70 percent in March 2000. The increase in CPI

1 stood at 3.30 percent for the period ending December 31, 2000 (see Schedule 4-1). What
2 is significant about the low inflation rate is that while inflation has been at historically
3 low levels, the unemployment rate has also dropped to historically low levels. In January
4 1993, the unemployment rate stood at 7.30 percent and gradually dropped to 4.20 percent
5 for the period ending February 28, 2001. Since then, the unemployment rate has risen to
6 5.60 percent as of January 2002, due largely to a slowing economy (see Schedule 6).

7 The combination of low inflation and low unemployment has led to a
8 prosperous economy, as evidenced by the real gross domestic product of the United
9 States. Over the time period of 1993 through the present, real GDP has increased every
10 quarter, although at a slower level as of recently. The stock market, as measured by the
11 Dow Jones Composite Index, has increased by 81.23 percent between August 1, 1996 and
12 February 22, 2001, while the Dow Jones Industrial Index has increased by 88.16 percent
13 over that same time frame. The stock market has increased 18.36 percent as measured by
14 The Value Line Geometric Averages Composite Index from August 1, 1996 through
15 February 22, 2001. It should be noted that the Value Line Composite Index is an equally
16 weighted geometric average of 1,594 companies as compared to the Dow Jones
17 Composite Index, which is a price-weighted arithmetic average of 65 companies.
18 Although the stock market has increased significantly since August 1, 1996, it should be
19 noted that the stock market suffered set backs last year when looking at calendar year
20 returns for the major indexes.

21 In both August and September 2000, energy movements dominated the
22 CPI. After falling by 2.90 percent in August, energy prices shot up 3.80 percent in
23 September, the biggest advance since a 5.60 percent surge in June 2000. The big rise in

1 energy prices, which consumers felt in sharply rising gasoline prices and home heating
2 oil costs, prompted President Clinton to order a release of oil from the government's
3 Strategic Petroleum Reserve. While steep price increases have been contained in the
4 energy sector, economists worried about a spillover effect that could send overall
5 inflation higher, thus setting off alarms at the Federal Reserve.

6 After raising the federal funds rate six times in 1999 and 2000 to hold
7 down inflation in a rapidly growing economy, Federal Reserve policy-makers began
8 expressing concern about a slowdown in December 2000. On January 3, 2001, the
9 Federal Open Market Committee lowered the federal funds rate by 50 basis points to
10 6.00 percent. In a related action, the Board of Governors approved a decrease in the
11 discount rate to 5.75 percent. These actions were taken in light of further weakening of
12 sales and production, and in the context of lower consumer confidence, tight conditions
13 in some segments of financial markets, slowing of real GDP and high energy prices
14 weakening household and business purchasing power. On January 31, 2001, the Federal
15 Reserve again lowered the federal funds rate by 50 basis points to 5.50 percent in an
16 attempt to provide lower rates for many business and consumer loans. At the same time,
17 the discount rate was also lowered by 50 basis points to 5.00 percent (see Schedule 2-1).
18 In cutting its benchmark rate by a full point in the first month of 2001, the Federal
19 Reserve has taken its most aggressive action to boost the economy since December 1991.
20 The Federal Reserve justified its actions by citing eroding consumer and business
21 confidence and rising energy costs. Further weakening in the economy prompted the
22 Federal Reserve to reduce interest rates more. On December 11, 2001, the discount rate
23 was lowered to 1.25 percent.

1 The Federal Reserve claims it does not make interest rate decisions based
2 on stock market activity. However, it is important to reflect on the results of the major
3 indexes in the past year. Based on *The Value Line Investment Survey, Selection and*
4 *Opinion*, January 1, 2002, the 12-month percentage change in market stock price
5 averages shows the S&P 500 suffered a 17.00 percent decline and the NASDAQ suffered
6 a 32.10 percent decline, as of January 24, 2002. Therefore, as mentioned earlier, the
7 stock market has fared well since 1996, although, it has suffered some set backs when
8 compared to more recent levels.

9 These economic changes have resulted in cost of capital changes for
10 utilities and are closely reflected in the yields on public utility bonds and yields of
11 Thirty-Year U.S. Treasury Bonds (see Schedules 5-1 and 5-2). Schedule 5-3 shows how
12 closely the Mergent "Public Utility Bond Yields" have followed the yields of Thirty-Year
13 U.S. Treasury Bonds during the period from 1986 to the present. The average spread for
14 this time period between these two composite indices has been 136 basis points, with the
15 spread ranging from a low of 80 basis points and a high of 249 basis points (see
16 Schedule 5-4). These spread parameters can be utilized with numerous published
17 forecasts of Thirty-Year U.S. Treasury Bond yields to estimate future long-term debt
18 costs for utility companies.

19 **Economic Projections**

20 Q. What are the inflationary expectations for the remainder of 2002 and
21 beyond?

22 A. The latest inflation rate, as measured by the *Consumer Price Index-All*
23 *Urban Consumers* (CPI), was 2.80 percent for the 12 months ended December 2001. *The*

1 *Value Line Investment Survey: Selection & Opinion*, November 30, 2001, predicts
2 inflation to be 2.10 percent for 2002, 2.40 percent for 2003 and 2.60 percent for 2004.
3 One of the major fears of the Federal Reserve is the United States will experience
4 weakness in key areas of the economy that could lead to a recession.

5 Q. What are the interest rate forecasts for 2002, 2003 and 2004?

6 A. Short-term interest rates, those measured by Three-Month U.S. Treasury
7 Bills, are expected to be 2.30 percent in 2002, 4.00 percent in 2003 and 4.30 percent in
8 2004 according to Value Line's predictions. Value Line expects long-term interest rates,
9 those measured by the Thirty-Year U.S. Treasury Bond, to average 5.20 percent in 2002,
10 6.10 percent in 2003 and 6.10 percent in 2004. The rates for the period ending
11 December, 2001 are 1.72 percent for 3-month T-Bills and 5.48 percent for 30-year
12 T-Bonds, as noted on the Federal Reserve website (www.stls.frb.org).

13 Q. What are the growth expectations for real GDP in the future?

14 A. Value Line expects real GDP to increase by .50 percent in 2002,
15 3.50 percent in 2003, and by 3.60 percent in 2004. The Budget and Economic Outlook,
16 Fiscal Years 2001-2011 published by the Congressional Budget Office in August 2001
17 stated that real GDP is expected to increase by 2.60 percent in 2002, 3.30 percent in 2003
18 and 3.20 percent in 2004. (See Schedule 6.)

19 Q. Please summarize your projections of the economic conditions that will
20 affect AmerenUE for the next few years.

21 A. Considering the previously mentioned sources, inflation is expected to be
22 in the range of 2.10 to 2.70 percent, increase in real GDP in the range of .50 to
23 3.60 percent and long-term interest rates are expected to range from 5.20 to 6.20 percent.

1 *The Value Line Investment Survey: Selection & Opinion*, January 11, 2002, article, The
2 2001 Stock Market in Review, states that:

3 **Wall Street just closed the books on what will go down as one**
4 **of the poorer years in recent memory. What's more, if we**
5 **count the losses in human terms, owing to the tragedy of**
6 **September 11th, it also will go down as one of the sadder, if not**
7 **the saddest, years ever.** In the meantime, just in terms of the stock
8 market, the year that closed its books on December 31, 2001 was
9 forgettable, as most of the major equity averages fell for a second
10 year in succession, with the losses being comparatively close to
11 what they had been in the prior 12 months.

12
13 S&P states the following in the January 16, 2002, issue of *The Outlook*:

14 Expectations should be modest. The bull market of October 1990
15 to March 2000 was the longest and strongest in modern history.
16 Nothing like it will be seen any time soon. Indeed, the excesses of
17 the last decade will probably have to be paid for in the form of
18 restrained stock gains for some time ahead...

19
20 **Business Operations of Ameren**

21 Q. Please describe Ameren's business operations.

22 A. After their merger, Union Electric (UE) and Central Illinois Public Service
23 (CIPS) became subsidiaries of St. Louis, MO-based Ameren, a registered public utility
24 holding company created on December 31, 1997. UE (doing business as AmerenUE)
25 remains headquartered in St. Louis and CIPS (doing business as AmerenCIPS) in
26 Springfield, IL. Ameren's unregulated operations include the recently formed
27 unregulated generation subsidiary, AmerenEnergy Generating Company (AEGC) and
28 other unregulated businesses, such as energy marketing and trading.

29 AmerenUE, originally incorporated in Missouri in 1922, supplies electric
30 service in Missouri and Illinois. AmerenUE accounts for 70 percent of Ameren's
31 revenues, 74 percent of cash flow. AmerenUE mainly engages in selling electricity

1 (95 percent of AmerenUE's operating revenues) in Missouri and in a small area of
2 Illinois. The Missouri service territory covers 24,500 square miles, including the
3 metropolitan St. Louis area, and has an estimated customer base of 2.6 million. Retail
4 natural gas (5 percent of operating revenues) is distributed in 90 Missouri communities
5 and in Alton, Illinois and its surrounding area. Business risk is tempered by a diverse and
6 healthy economy [Source: S&P's *Ratings Direct*, dated November 1, 2001.]

7 Q. Please describe the credit ratings of AmerenUE.

8 A. Currently, Standard & Poor's Corporation gives AmerenUE a corporate
9 credit rating of A+ and a senior secured debt rating of A+. These ratings are considered
10 to be of "investment grade" ("investment grade" is defined as a "BBB" rating or higher).
11 The Corporate Credit Rating issued by Standard & Poor's reflects a negative outlook for
12 AmerenUE.

13 Q. Please provide Standard & Poor's Corporation's most recent outlook
14 concerning the credit rating assigned to AmerenUE.

15 A. Standard & Poor's Corporation's *Ratings Direct*, dated November 1, 2001,
16 provides a summary explaining the outlook for Ameren. Specifically, the report states:

17 The negative outlook reflects expectations for continued
18 deterioration in key consolidated financial measures, which
19 management will be challenged to stem, as well as weakness in the
20 financial profile of CIPS, whose ratings are based more on a stand-
21 alone basis.

22 Because there are no regulatory mechanisms or other structural
23 barriers in Missouri that sufficiently restrict access by the parent to
24 the cash flow of UE, Standard & Poor's views the default risk of
25 UE as being the same as that of Ameren.
26

27
28 Q. What historical financial information have you relied upon for
29 AmerenUE?

1 A. Schedules 7 and 8 present historical capital structures and selected
2 financial ratios from 1996 to 2000 for AmerenUE. AmerenUE's common equity ratio
3 has ranged from a high of 57.30 percent to a low of 53.85 percent over the time period of
4 1996 through 2000. *The Value Line Investment Survey: Ratings & Reports* dated January
5 4, 2002, reported that the average common equity ratio (figured excluding short-term
6 debt) for the electric utility (central) industry for 2000 was 40.50 percent, estimated to be
7 42.50 percent and 44.50 percent for 2001 and 2002, respectively, and 48.5 percent for the
8 period 2004 to 2006. According to Standard & Poor's Corporation: *Ratings Direct*, dated
9 November 10, 2001, "Management's financial strategy, which until last year was viewed
10 as conservative, is now moderate. This is evident in the rising level of debt in the
11 company's capital structure and recent expansion of its riskier unregulated generation
12 business".

13 AmerenUE's reported return on year-end common equity (ROE) has
14 fluctuated during this time period ranging from a low of 12.38 percent in 1996 to a high
15 of 14.60 percent in 2000 (see Schedule 8). AmerenUE's ROE of 14.60 percent for 2000
16 is above the average of 7.4 percent for the electric utility (central) industry according to
17 *The Value Line Investment Survey: Ratings & Reports*, January 4, 2002. *The Value Line*
18 *Investment Survey: Ratings & Reports*, January 4, 2002 estimates that Ameren's return on
19 equity for 2001 will be 14.00 percent. AmerenUE's market-to-book ratio has varied from
20 a low of 1.46 in 1999 to a high of 1.99 in year 2000 (see Schedule 8).

21 **Determination of the Cost of Capital**

22 Q. Please describe your approach for determining a utility company's cost of
23 capital.

1 A. The total dollars of capital for a utility company are determined for a
2 specific point in time. This total dollar amount is proportioned into each specific capital
3 component. A weighted cost for each capital component is determined by multiplying
4 each capital component ratio by the appropriate embedded cost or the estimated cost of
5 common equity. The individual weighted costs are summed to arrive at a total weighted
6 cost of capital. This total weighted cost of capital is synonymous with the fair rate of
7 return for the utility company.

8 Q. Why is a total weighted cost of capital synonymous with a fair rate of
9 return?

10 A. From a financial viewpoint, a company employs different forms of capital
11 to support or fund the assets of the company. Each different form of capital has a cost
12 and these costs are weighted proportionately to fund each dollar invested in the assets.

13 Assuming that the various forms of capital are within a reasonable balance
14 and are costed correctly, the resulting total weighted cost of capital, when applied to rate
15 base, will provide the funds necessary to service the various forms of capital. Thus, the
16 total weighted cost of capital corresponds to a fair rate of return for the utility company.

17 **Capital Structure and Embedded Costs**

18 Q. Can an investor directly invest in AmerenUE?

19 A. No. An investor can only indirectly invest in AmerenUE through a direct
20 investment in Ameren, AmerenUE's parent company. As a result, potential investors can
21 only look at the earnings potential of the entire consolidated corporate entity of Ameren
22 when evaluating decisions such as whether or not to invest in AmerenUE's common
23 stock. Ultimately, that investor is purchasing the earnings power of the entire

1 consolidated corporation, consisting of its operating divisions and its subsidiaries.
2 Therefore, in order to analyze AmerenUE's divisional cost of capital, an investor must
3 derive AmerenUE's divisional cost of capital from Ameren's overall cost of capital.

4 Q. What capital structure have you employed in developing a weighted cost
5 of capital for AmerenUE?

6 A. I employed AmerenUE's capital structure as of September 30, 2001,
7 which is the end of the ordered update period. Schedule 9 presents AmerenUE's capital
8 structure and associated capital ratios. The resulting capital structure consists of 59.08
9 percent common stock equity, 3.52 percent preferred stock and 37.40 percent long-term
10 debt for September 30, 2001.

11 It is the Staff's opinion that only the short-term debt that exceeds the
12 amount of construction work in progress (CWIP) should be included in the capital
13 structure. An assumption is made that CWIP, which is not yet included in rate base, is
14 financed with short-term debt. In this case, AmerenUE's CWIP at September 30, 2001
15 exceeded the amount of short-term debt; therefore, no short-term debt is being included
16 in the capital structure.

17 Q. What was the embedded cost of long-term debt for AmerenUE on
18 September 30, 2001?

19 A. I determined the embedded cost of long-term debt for AmerenUE to be
20 6.82 percent on September 30, 2001. I arrived at these figures by adopting AmerenUE's
21 response to Staff Data Request No. 3802.

22 Q. What was the embedded cost of preferred stock for AmerenUE on
23 September 30, 2001?

1 A. I determined the embedded cost of preferred stock for AmerenUE to be
2 5.72 percent on September 30, 2001. I arrived at these figures by adopting AmerenUE's
3 response to Staff Data Request No. 3802.

4 **Cost of Equity**

5 Q. How do you propose to analyze those factors by which the cost of equity
6 for AmerenUE may be determined?

7 A. I have selected the discounted cash flow model (DCF) model as the
8 primary tool to determine the cost of equity for AmerenUE.

9 **The DCF Model**

10 Q. Please describe the DCF model.

11 A. The DCF model is a market-oriented approach for deriving the cost of
12 equity. The return on equity calculated from the DCF model is inherently capable of
13 attracting capital. This results from the theory that security prices adjust continually over
14 time, so that an equilibrium price exists and the stock is neither under-valued nor
15 over-valued. It can also be stated that stock prices continually fluctuate to reflect the
16 required and expected return for the investor.

17 The continuous growth form of the DCF model was used in estimating the
18 cost of equity for AmerenUE. This model relies upon the fact that a company's common
19 stock price is dependent on the expected cash dividends and on cash flows received
20 through capital gains or losses that result from stock price changes. The rate that
21 discounts the sum of the future expected cash flows to the current market price of the
22 common stock is the calculated cost of equity. This can be expressed algebraically as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{\text{Discounted by } k} + \frac{\text{Expected Price in 1 year}}{\text{Discounted by } k} \quad (1)$$

Since the expected price of a stock in one year is equal to the present price multiplied by one plus the growth rate, equation (1) can be restated as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{(1 + k)} + \frac{\text{Present Price } (1+g)}{(1 + k)} \quad (2)$$

where g equals the growth rate, and k equals the cost of equity. Letting the present price equal P_0 and expected dividends equal D_1 , the equation appears as:

$$P_0 = \frac{D_1}{(1 + k)} + \frac{P_0(1+g)}{(1 + k)} \quad (3)$$

The cost of equity equation may also be algebraically represented as:

$$k = \frac{D_1}{P_0} + g \quad (4)$$

Thus, the cost of common stock equity (k), is equal to the expected dividend yield (D_1/P_0) plus the expected growth in dividends (g) continuously summed into the future. The growth in dividends and implied growth in earnings will be reflected in the current price. Therefore, this model also recognizes the potential of capital gains or losses associated with owning a share of common stock.

The DCF method is a continuous stock valuation model. The DCF theory is based on the following assumptions:

1. Market equilibrium,
2. Perpetual life of the company,
3. Constant payout ratio,
4. Payout of less than 100% earnings,

- 1 5. Constant price/earnings ratio,
- 2 6. Constant growth in cash dividends,
- 3 7. Stability in interest rates over time,
- 4 8. Stability in required rates of return over time; and
- 5 9. Stability in earned returns over time.

6 The DCF method also assumes that an investor's growth horizon is
7 unlimited and that earnings, book values and market prices grow hand-in-hand. Even
8 though the entire list of above assumptions is rarely met, the DCF model is a reasonable
9 working model describing an actual investor's expectations and resulting behaviors.

10 Q. Can you directly analyze the cost of equity for AmerenUE?

11 A. No. In order to arrive at a company-specific DCF result, the company
12 must have common stock that is publicly-traded and must pay dividends. AmerenUE's
13 stock is not publicly traded. However, Ameren Corporation, AmerenUE's parent
14 company, is publicly traded on the New York Stock Exchange under the ticker symbol of
15 "AEE." Therefore, I used Ameren as a surrogate for AmerenUE in the DCF model.

16 Q. Please explain how you determined for Ameren a value range for the
17 growth term of the DCF formula.

18 A. I reviewed Ameren's actual dividends per share (DPS), earnings per share
19 (EPS) and book values per share (BVPS), as well as projected growth rates for Ameren.
20 Schedule 10 lists annual compound growth rates calculated for DPS, EPS and BVPS for
21 the periods of 1991 through 2001 and 1996 through 2001. Schedule 11 presents the
22 historical DPS, EPS and BVPS growth rates and projected growth rates for Ameren. The
23 projected growth rates were obtained from two outside sources. I/B/E/S Inc.'s

1 *Institutional Brokers Estimate System*, August 16, 2001, projects a five-year growth in
2 EPS of 5.00 percent for Ameren. Standard & Poor's Corporation's *Earnings Guide*,
3 September 2001, projects a five-year EPS growth rate of 5.00 percent for Ameren. The
4 average of the two outside sources produces a projected EPS growth rate of 5.00 percent.
5 Combining the average of the historical DPS, EPS and BVPS of 1.50 percent with the
6 projected EPS growth rates produces a reasonable growth rate range of 2.75 to 3.75
7 percent. This range of growth (g) is the range that I used in the DCF model to calculate a
8 cost of common equity for Ameren. (see Schedule 13)

9 Q. Please explain how you determined for Ameren the yield term of the DCF
10 formula.

11 A. The expected yield term (D_1/P_0) of the DCF model is calculated by
12 dividing the amount of common dividends per share expected to be paid over the next 12
13 months (D_1) by the current market price per share of the firm's common stock (P_0). Even
14 though the model requires the use of a current or spot market price, I have chosen to use a
15 monthly high/low average market price of Ameren's common stock for the period of
16 April 1, 2001, through September 30, 2001 to represent the update period.

17 Schedule 12 presents the monthly high/low average stock market prices
18 from April 1, 2001, through September 30, 2001. Ameren's common stock price has
19 ranged from a low of \$36.530 per share to a high of \$45.480 per share for this time
20 period. This has produced a range for the monthly average high/low market price of
21 \$41.275 per share and reflects recent market conditions for the price term (P_0) in the DCF
22 model.

1 *The Value Line Investment Survey: Ratings & Reports*, January 4, 2002,
2 states that Ameren's common dividend declared per share is \$2.54 for 2001 and estimates
3 \$2.54 for 2002. This compares with the actual dividend Ameren paid in 2000 of \$2.54.
4 Therefore, I have chosen to use the value of \$2.54 for the amount of common dividends
5 per share (D_1) expected to be paid by Ameren for my analysis.

6 Combining the expected dividend of \$2.54 per share and an average
7 market price range of \$41.275 per share produces an expected dividend yield of 6.16
8 percent for September 30, 2001.

9 Q. Please summarize the results of your expected dividend yield and growth
10 rate analysis for the DCF return on common equity for Ameren.

11 A. The summarized DCF cost of equity estimate for the period April 1, 2001
12 through September 30, 2001 for Ameren is presented as follows:

13	<u>Yield (D_1/P_0)</u>	+	<u>Growth Rate (g)</u>	=	<u>Cost of Equity(k)</u>
14	6.16%	+	2.75%	=	8.91%
15	6.16%	+	3.75%	=	9.91%

16 As mentioned previously, the expected yield term (D_1/P_0) of the DCF
17 model is calculated by dividing the amount of common dividends per share expected to
18 be paid over the next 12 months (D_1) by the current market price per share of the firm's
19 common stock (P_0). Even though the model requires the use of a current or spot market
20 price, I have used an averaging technique in an attempt to minimize the effects on the
21 dividend yield, which can occur due to daily volatility in the stock market. Using the
22 spot price of \$42.29, as assumed by the model, for February 13, 2002, produces a

1 dividend yield of 6.00 percent, which is lower than the dividend yield used in my DCF
2 estimates and would decrease the recommended return on common equity.

3 **Reasonableness of DCF Returns for AmerenUE**

4 Q. What analysis was performed to determine the reasonableness of your
5 DCF model derived return on common equity for Ameren?

6 A. I performed a risk premium cost of equity analysis for Ameren. The risk
7 premium concept implies that the required return on common equity is found by adding
8 an explicit premium for risk to a current interest rate. Schedule 14 shows the average risk
9 premium above the yield of 30-Year Treasury Bonds for Ameren's expected return on
10 common equity. This analysis shows, on average, Ameren's expected return on equity as
11 reported by *The Value Line Investment Survey: Ratings & Reports* is 649 basis points
12 higher than the yield on 30-Year Treasury Bonds for the period of January 1992 to
13 December 2001 (see Schedule 14).

14 The average yield for 30-Year Treasury Bonds on January 6, 2002 was
15 5.38 percent. Adding 649 basis points to this yield produces an estimated cost of equity
16 of 11.87 percent. (See Schedule 15.)

17 Q. Did you perform any other checks on reasonableness of your DCF model
18 derived return on common equity for Ameren?

19 A. Yes. I performed a Capital Asset Pricing Model (CAPM) cost of equity
20 analysis for Ameren. The CAPM describes the relationship between a security's
21 investment risk and its market rate of return. This relationship identifies the rate of return
22 that investors expect a security to earn so that its market return is comparable with the

market returns earned by other securities that have similar risk. The mathematical expression of the CAPM is the following:

$$k = R_f + \beta (R_m - R_f)$$

where:

k = the expected return on equity for a specific security,

R_f = the risk free rate,

β = beta; and

$R_m - R_f$ = the market risk premium.

The first term of the CAPM is the risk free rate (R_f). The risk free rate reflects the level of return which can be achieved without accepting any risk. In reality, there is no such riskless asset, but it is generally represented by U.S. Treasury securities, because of the government's unlimited ability to tax and create money. For purposes of this analysis, the risk free rate was represented by the yield on 30-Year U.S. Treasury Bonds. The appropriate rate was determined to be 5.38 percent for the period January 6, 2002, as published on www.marketwatch.com.

The second term of the CAPM is beta (β). Beta is an indicator of a security's investment risk. It represents the relative movement and relative risk between a particular security and the market as a whole (where beta for the market equals 1.00). Securities with betas greater than 1.00 exhibit greater volatility than do securities with betas less than 1.00. Thus, a higher beta security is considered riskier and requires a higher return in order to attract investor capital away from a lower beta security. For purposes of this analysis, the appropriate beta was determined to be 0.55 as published in *The Value Line Investment Survey: Ratings & Reports*, January 4, 2002.

1 The final term of the CAPM is the market risk premium ($R_m - R_f$). The
2 market risk premium represents the expected return from holding the entire market
3 portfolio less the expected return from holding a risk-free investment. For purposes of
4 this analysis, the appropriate market risk premium was determined to be 7.30 percent for
5 the period 1926-2000 and 7.20 percent for the period 1991-2000, as calculated in
6 Ibbotson Associates, Inc.'s *Stocks, Bonds, Bills, and Inflation: 2000 Yearbook*.

7 Schedule 16 presents my CAPM analysis for Ameren. My CAPM
8 analysis produces an estimated cost of equity range of 9.34 to 9.40 percent for Ameren.

9 Q. Did you perform any cost of equity analysis on other utility companies?

10 A. Yes. I have selected a group of comparable electric utility companies to
11 analyze for determining the reasonableness of the company-specific DCF results for
12 Ameren. I searched the Value Line database for electric utility companies. Schedule
13 17-1 presents a list of 76 market-traded electric utility companies. This list was reviewed
14 for the following criteria:

- 15 1. Information printed in Value Line: This criterion eliminated no
16 companies;
- 17 2. Standard & Poor's Utility Credit Rating of AA- to BBB+: This
18 criterion eliminated thirty-three (33) companies;
- 19 3. Total capital greater than or equal to \$4 billion and less than or
20 equal to \$8 billion: This criterion eliminated thirty-three (33)
21 additional companies;
- 22 4. Positive Dividends Per Share Annual Compound Growth Rate for
23 the period of 1991 through 2001: This criterion eliminated six
24 additional companies; and
- 25 5. No Missouri Operations: This criterion eliminated Ameren.

26 On average, this final group of three publicly traded electric utility
27 companies (comparable electric utility companies) is comparable to Ameren because of
28
29
30
31

1 similar business operations and financial conditions. The three comparable electric utility
2 companies are listed on Schedule 18.

3 Q. Please explain how you approached the determination of the cost of equity
4 for the comparable electric utility companies.

5 A. I have calculated a DCF cost of equity for each of the three comparable
6 electric utility companies. The first step was to calculate a growth rate. Basically, I used
7 the same approach of obtaining a growth rate estimate for the three comparable electric
8 companies as I used in calculating a growth rate for Ameren (see Schedules 19 through
9 22). The comparable electric utility companies' average historical growth rates ranged
10 from 0.99 to 4.25 percent with an overall average of 2.35 percent for the group (Column
11 1 of Schedule 20). The projected growth rates ranged from 4.16 to 9.44 percent with an
12 average of 6.32 percent (Schedule 20). Taking into account the projected and historical
13 growth rates, a proposed growth of 4.33 percent (Column 6 of Schedule 20) was used in
14 the DCF calculation for the comparable companies.

15 The next step was to calculate an expected dividend yield for each of the
16 three comparable electric utility companies. Schedule 21 presents the average high/low
17 stock price for the period of June 1, 2001, through September 30, 2001, for each electric
18 utility company. Column 3 of Schedule 22 shows that the projected dividend yields
19 ranged from 3.91 to 6.76 percent for the three comparable electric utility companies with
20 the average at 5.42 percent. My proposed dividend yield of 6.16 percent for Ameren falls
21 within the average for the three comparable electric utility companies.

22 The projected growth rates and projected dividend yields were then added
23 together to reach an estimated DCF cost of equity for each of the three comparable

1 electric utility companies. These estimates produced a DCF cost of equity average of
2 9.76 percent (see Column 5 of Schedule 22).

3 Q. What analysis was performed to determine the reasonableness of your
4 DCF model derived return on common equity for the comparable company group?

5 A. I performed a CAPM cost of equity analysis for the comparable company
6 group. The betas for the three comparable electric utility companies averaged 0.57, very
7 close to Ameren's beta of 0.55. This suggests that Ameren is comparable in risk as
8 measured by beta and relative to the market and the comparable companies on average.
9 The CAPM analysis implies that, on average, the required return on equity for the three
10 comparable electric utility companies falls within the range of 9.46 to 9.52 percent (see
11 Schedule 23). This provides support for my DCF cost of equity analysis for the
12 comparable company group and the proposed required return on common equity range of
13 8.91 percent to 9.91 percent for AmerenUE.

14 Q. Did you perform an analysis on AmerenUE's resulting pre-tax interest
15 coverage ratios?

16 A. Yes. A pro forma pre-tax interest coverage calculation was completed for
17 AmerenUE (see Schedule 24) utilizing the proposed range and midpoint ROE for
18 Ameren. It reveals that the return on common equity range of 8.91 to 9.91 percent would
19 yield a pre-tax interest coverage ratio in the range of 4.48 to 4.86. This interest coverage
20 range is compared with Standard & Poor's range for an "AA to BBB" rated electric
21 utility company, which is 4.17 to 2.33. AmerenUE's midpoint of 4.67 makes it
22 consistent with an "AA" rating.

Rate of Return for AmerenUE

Q. Please explain how the returns developed for each capital component are used in the ratemaking approach you have adopted to be applied to AmerenUE's electric utility operations.

A. The cost of service ratemaking method was adopted in this case. This approach develops the public utility's revenue requirement. The cost of service (revenue requirement) is based on the following components: revenues, prudent operation costs, rate base and a return allowed on the rate base (see Schedule 25).

It is my responsibility to calculate and recommend a rate of return that should be authorized on the rate base of AmerenUE. Under the cost of service ratemaking approach, a weighted cost of capital in the range of 8.01 to 8.61 percent was developed for AmerenUE's electric utility operations (see Schedule 26). This rate was calculated by applying an average embedded cost of long-term debt of 6.82 percent, an embedded cost of preferred stock of 5.72 percent and a return on common equity range of 8.91 to 9.91 percent to a capital structure consisting of 37.40 percent long-term debt, 3.52 percent preferred stock and 59.08 percent common equity. Therefore, as I suggested earlier, I am recommending that AmerenUE's electric utility operations be allowed to earn a return on its original cost rate base in the range of 8.01 to 8.61 percent.

Through this analysis, I believe I have developed a fair and reasonable rate of return. My rate of return is based on a return on common equity range of 8.91 to 9.91 percent. My return range is based on the historical and projected economic conditions. This range is sufficient to assure confidence in the financial soundness of the utility and will be adequate, under efficient and economical management, to maintain and support its

Direct Testimony of
Ronald L. Bible

1 financial standing, as well as allow AmerenUE the opportunity to earn the revenue
2 requirement developed in this rate case.

3 Q. Does this conclude your prepared direct testimony?

4 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

The Staff of the Missouri Public Service)
Commission,)

Case No. EC-2002-1

Complainant,)

vs.)

Union Electric Company, d/b/a AmerenUE,)

Respondent.)

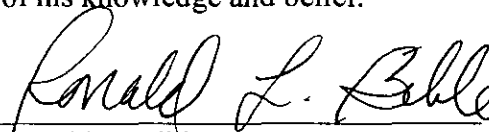
AFFIDAVIT OF RONALD L. BIBLE

STATE OF MISSOURI)

ss.)

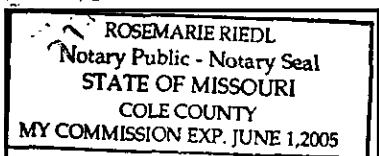
COUNTY OF COLE)


Ronald L. Bible, is, of lawful age, and on his oath states: that he has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 30 pages to be presented in the above case; that the answers in the foregoing Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.



Ronald L. Bible

Subscribed and sworn to before me this 27th day of February, 2001.





Notary Public

AN ANALYSIS OF THE COST OF CAPITAL

FOR

UNION ELECTRIC COMPANY

dba AmerenUE

CASE NO. EC-2002-1

BY

RONALD L. BIBLE

UTILITY SERVICES DIVISION

MISSOURI PUBLIC SERVICE COMMISSION

March 2002

UNION ELECTRIC COMPANY

d/b/a AmerenUE

CASE NO. EC-2002-1

List of Schedules

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2-2	Graph of Federal Reserve Discount Rates
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3-2	Graph of Average Prime Interest Rates
4-1	Rate of Inflation
4-2	Graph of Rate of Inflation
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UNION ELECTRIC COMPANY
dba AmerenUE
CASE NO. EC-2002-1

List of Schedules (continued)

Schedule Number	Description of Schedule
19	Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Three Comparable Electric Utility Companies
20	Historical and Projected Growth Rates for the Three Comparable Electric Utility Companies
21	Average High / Low Stock Price for June 2001 through September 2001 for the Three Comparable Electric Utility Companies
22	Discounted Cash Flow Estimated Costs of Common Equity for the Three Comparable Electric Utility Companies
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24	Pro Forma Pre-Tax Interest Coverage Ratios for Union Electric Company (Consolidated Basis)
25	Public Utility Revenue Requirement or Cost of Service
26	Pro Forma Adjusted Weighted Cost of Capital as of September 30, 2001 for Union Electric Company (Consolidated Basis)

UNION ELECTRIC COMPANY
EC-2002-1

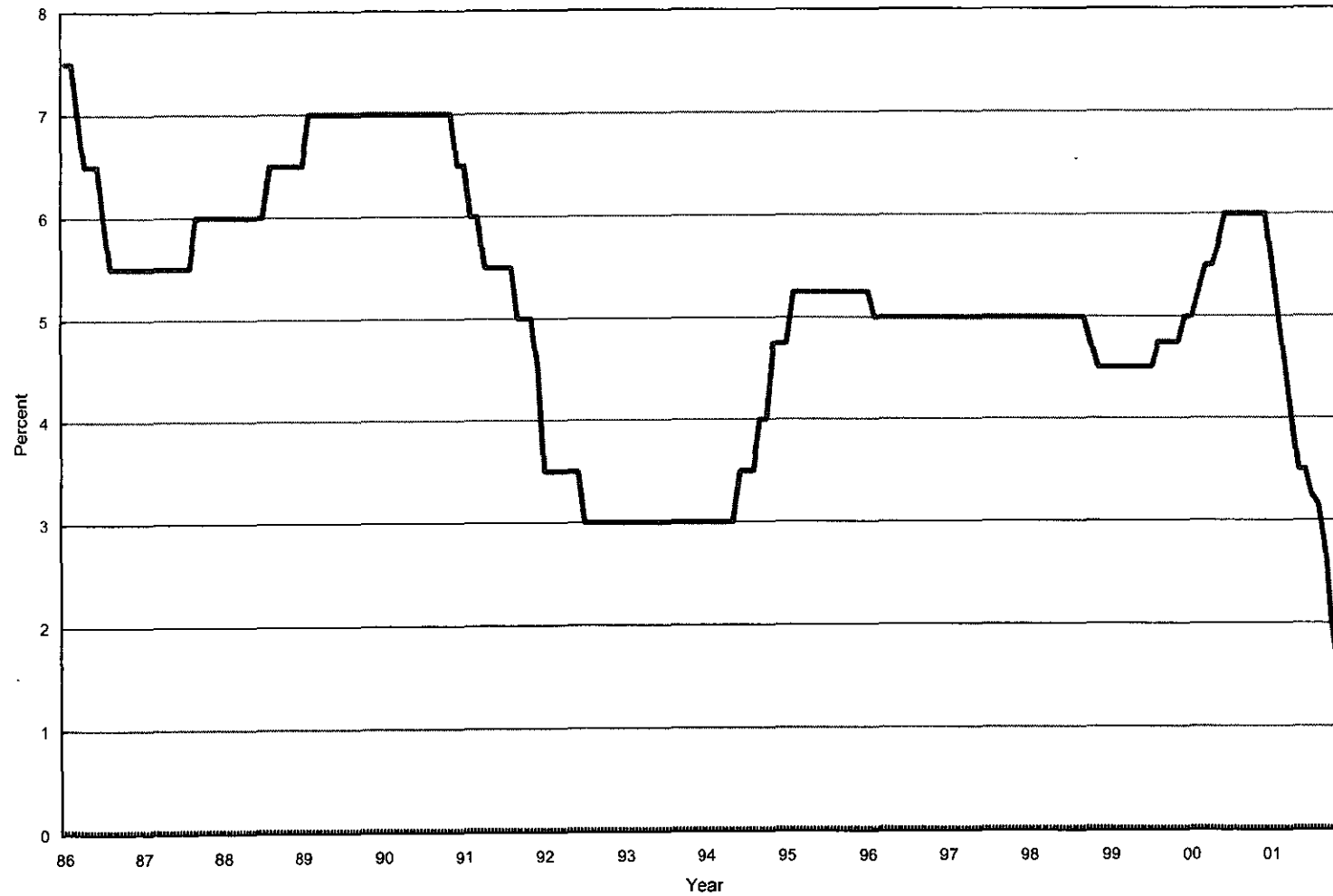
Federal Reserve Discount Rate Changes

Date	Discount Rate
05/20/85	7.50%
03/07/86	7.00%
04/21/86	6.50%
07/11/86	6.00%
08/21/86	5.50%
09/04/87	6.00%
08/09/88	6.50%
02/24/89	7.00%
12/19/90	6.50%
02/01/91	6.00%
04/30/91	5.50%
09/13/91	5.00%
11/06/91	4.50%
12/20/91	3.50%
07/02/92	3.00%
01/01/93	3.00%
12/31/93	3.00%
05/17/94	3.50%
08/16/94	4.00%
11/15/94	4.75%
02/01/95	5.25%
01/31/96	5.00%
12/12/97	5.00%
01/09/98	5.00%
03/06/98	5.00%
10/15/98	4.75%
11/17/98	4.50%
06/30/99	4.50%
08/24/99	4.75%
11/16/99	5.00%
02/02/00	5.25%
03/21/00	5.50%
05/16/00	5.50%
05/19/00	6.00%
01/03/01	5.75%
01/04/01	5.50%
01/05/01	5.50%
01/31/01	5.00%
03/20/01	4.50%
04/18/01	4.00%
05/15/01	3.50%
06/27/01	3.25%
08/21/01	3.00%
09/17/01	2.50%
10/02/01	2.00%
11/06/01	1.50%
12/11/01	1.25%

Sources: Federal Reserve Bulletin & The Wall Street Journal.

Federal Reserve Discount Rates

1986 - 2001



UNION ELECTRIC COMPANY

EC-2002-1

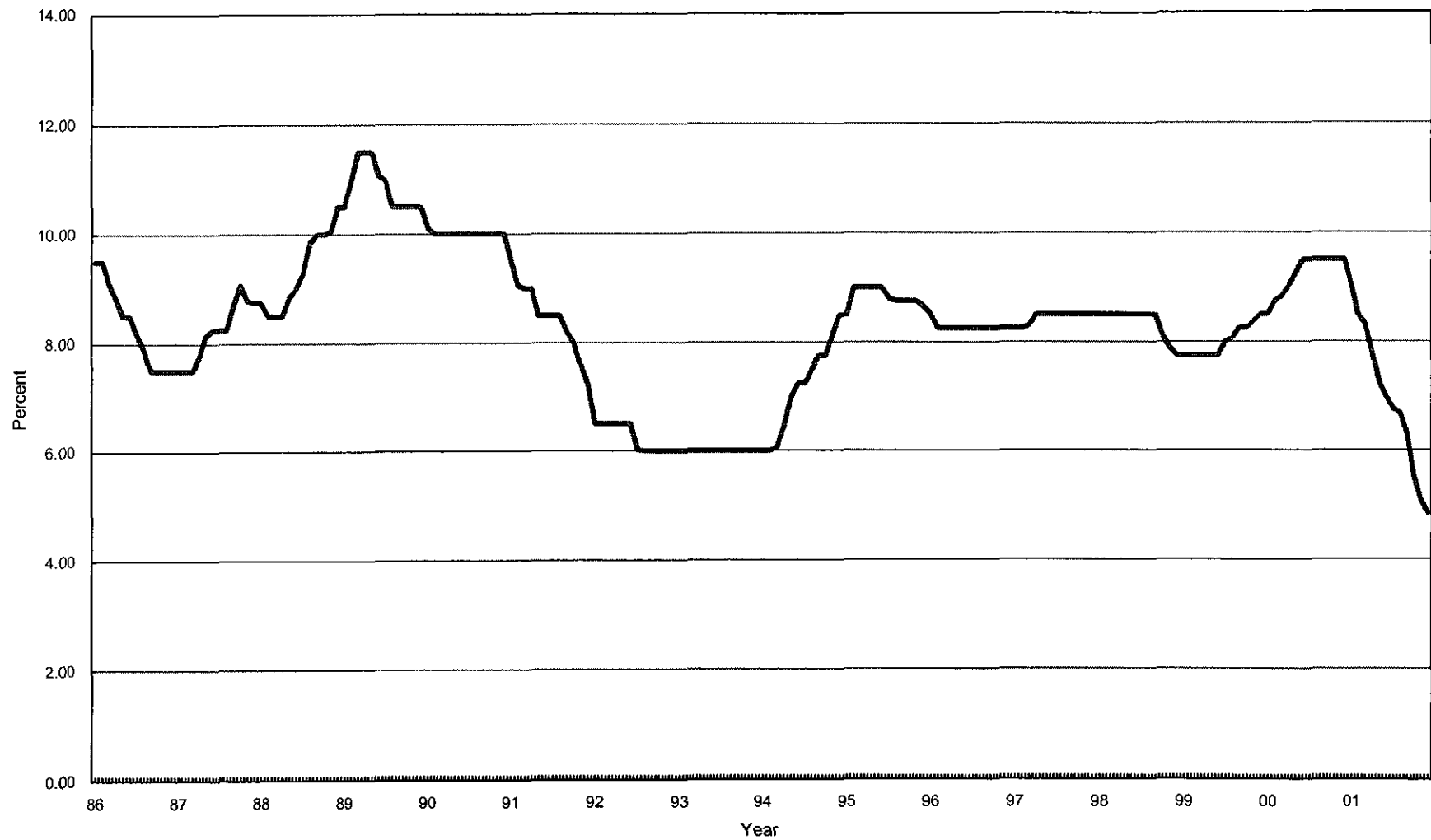
Average Prime Interest Rates

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1986	9.50	Jan 1990	10.11	Jan 1994	6.00	Jan 1998	8.50
Feb	9.50	Feb	10.00	Feb	6.00	Feb	8.50
Mar	9.10	Mar	10.00	Mar	6.06	Mar	8.50
Apr	8.83	Apr	10.00	Apr	6.45	Apr	8.50
May	8.50	May	10.00	May	6.99	May	8.50
Jun	8.50	Jun	10.00	Jun	7.25	Jun	8.50
Jul	8.16	Jul	10.00	Jul	7.25	Jul	8.50
Aug	7.90	Aug	10.00	Aug	7.51	Aug	8.50
Sep	7.50	Sep	10.00	Sep	7.75	Sep	8.49
Oct	7.50	Oct	10.00	Oct	7.75	Oct	8.12
Nov	7.50	Nov	10.00	Nov	8.15	Nov	7.89
Dec	7.50	Dec	10.00	Dec	8.50	Dec	7.75
Jan 1987	7.50	Jan 1991	9.52	Jan 1995	8.50	Jan 1999	7.75
Feb	7.50	Feb	9.05	Feb	9.00	Feb	7.75
Mar	7.50	Mar	9.00	Mar	9.00	Mar	7.75
Apr	7.75	Apr	9.00	Apr	9.00	Apr	7.75
May	8.14	May	8.50	May	9.00	May	7.75
Jun	8.25	Jun	8.50	Jun	9.00	Jun	7.75
Jul	8.25	Jul	8.50	Jul	8.80	Jul	8.00
Aug	8.25	Aug	8.50	Aug	8.75	Aug	8.06
Sep	8.70	Sep	8.20	Sep	8.75	Sep	8.25
Oct	9.07	Oct	8.00	Oct	8.75	Oct	8.25
Nov	8.78	Nov	7.58	Nov	8.75	Nov	8.37
Dec	8.75	Dec	7.21	Dec	8.65	Dec	8.50
Jan 1988	8.75	Jan 1992	6.50	Jan 1996	8.50	Jan 2000	8.50
Feb	8.51	Feb	6.50	Feb	8.25	Feb	8.73
Mar	8.50	Mar	6.50	Mar	8.25	Mar	8.83
Apr	8.50	Apr	6.50	Apr	8.25	Apr	9.00
May	8.84	May	6.50	May	8.25	May	9.24
Jun	9.00	Jun	6.50	Jun	8.25	Jun	9.50
Jul	9.29	Jul	6.02	Jul	8.25	Jul	9.50
Aug	9.84	Aug	6.00	Aug	8.25	Aug	9.50
Sep	10.00	Sep	6.00	Sep	8.25	Sep	9.50
Oct	10.00	Oct	6.00	Oct	8.25	Oct	9.50
Nov	10.05	Nov	6.00	Nov	8.25	Nov	9.50
Dec	10.50	Dec	6.00	Dec	8.25	Dec	9.50
Jan 1989	10.50	Jan 1993	6.00	Jan 1997	8.26	Jan 2001	9.05
Feb	10.93	Feb	6.00	Feb	8.25	Feb	8.50
Mar	11.50	Mar	6.00	Mar	8.30	Mar	8.32
Apr	11.50	Apr	6.00	Apr	8.50	Apr	7.80
May	11.50	May	6.00	May	8.50	May	7.24
Jun	11.07	Jun	6.00	Jun	8.50	Jun	6.98
Jul	10.98	Jul	6.00	Jul	8.50	Jul	6.75
Aug	10.50	Aug	6.00	Aug	8.50	Aug	6.67
Sep	10.50	Sep	6.00	Sep	8.50	Sep	6.28
Oct	10.50	Oct	6.00	Oct	8.50	Oct	5.53
Nov	10.50	Nov	6.00	Nov	8.50	Nov	5.10
Dec	10.50	Dec	6.00	Dec	8.50	Dec	4.84

Sources: Federal Reserve Bulletin & The Wall Street Journal.

Average Prime Interest Rate

1986 - 2001



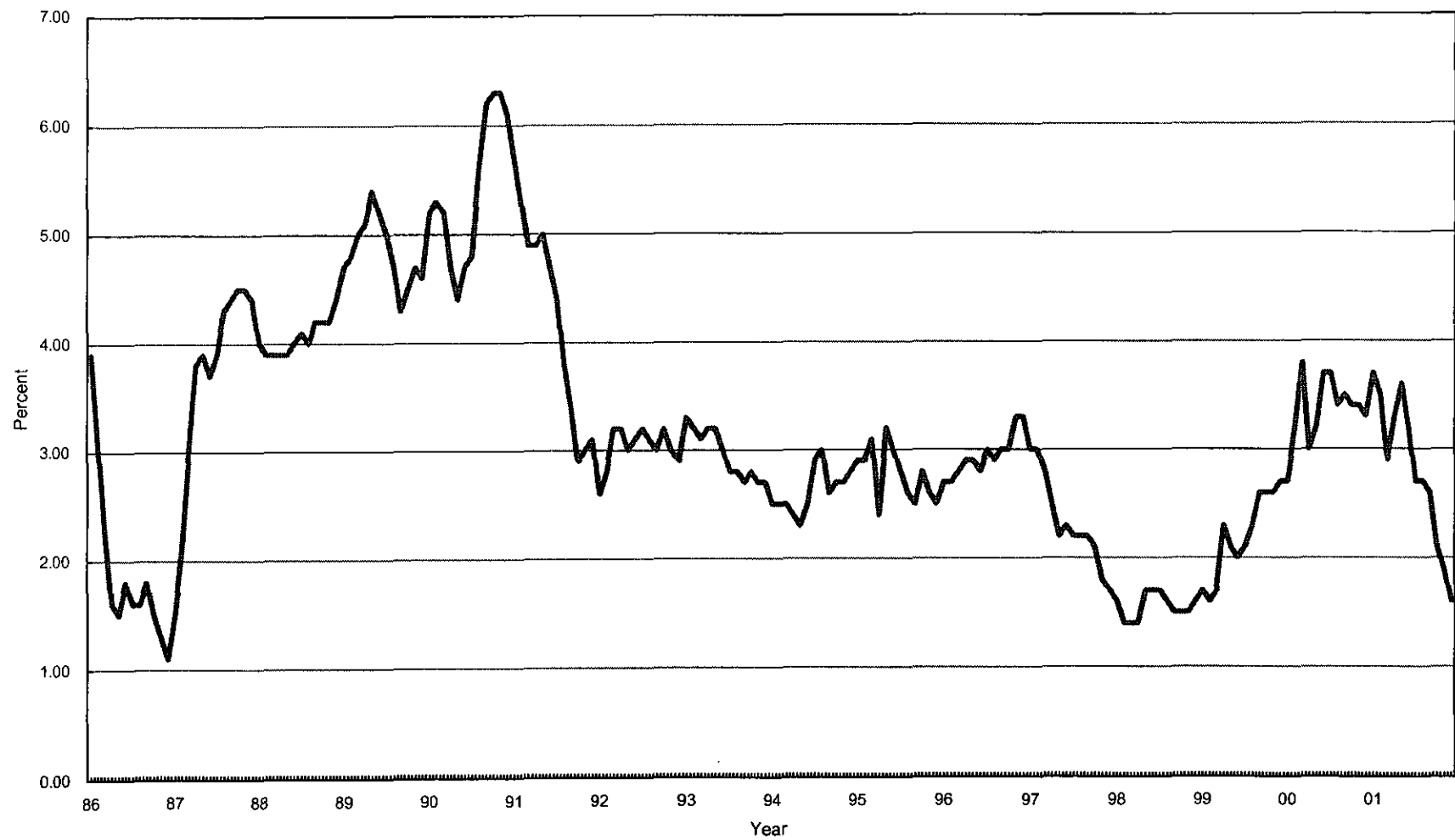
UNION ELECTRIC COMPANY
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Rate of Inflation

<u>Mo/Year</u>	<u>Rate (%)</u>	<u>Mo/Year</u>	<u>Rate (%)</u>	<u>Mo/Year</u>	<u>Rate (%)</u>	<u>Mo/Year</u>	<u>Rate (%)</u>
Jan 1986	3.90	Jan 1990	5.20	Jan 1994	2.50	Jan 1998	1.60
Feb	3.10	Feb	5.30	Feb	2.50	Feb	1.40
Mar	2.30	Mar	5.20	Mar	2.50	Mar	1.40
Apr	1.60	Apr	4.70	Apr	2.40	Apr	1.40
May	1.50	May	4.40	May	2.30	May	1.70
Jun	1.80	Jun	4.70	Jun	2.50	Jun	1.70
Jul	1.60	Jul	4.80	Jul	2.90	Jul	1.70
Aug	1.60	Aug	5.60	Aug	3.00	Aug	1.60
Sep	1.80	Sep	6.20	Sep	2.60	Sep	1.50
Oct	1.50	Oct	6.30	Oct	2.70	Oct	1.50
Nov	1.30	Nov	6.30	Nov	2.70	Nov	1.50
Dec	1.10	Dec	6.10	Dec	2.80	Dec	1.60
Jan 1987	1.50	Jan 1991	5.70	Jan 1995	2.90	Jan 1999	1.70
Feb	2.10	Feb	5.30	Feb	2.90	Feb	1.60
Mar	3.00	Mar	4.90	Mar	3.10	Mar	1.70
Apr	3.80	Apr	4.90	Apr	2.40	Apr	2.30
May	3.90	May	5.00	May	3.20	May	2.10
Jun	3.70	Jun	4.70	Jun	3.00	Jun	2.00
Jul	3.90	Jul	4.40	Jul	2.80	Jul	2.10
Aug	4.30	Aug	3.80	Aug	2.60	Aug	2.30
Sep	4.40	Sep	3.40	Sep	2.50	Sep	2.60
Oct	4.50	Oct	2.90	Oct	2.80	Oct	2.60
Nov	4.50	Nov	3.00	Nov	2.60	Nov	2.60
Dec	4.40	Dec	3.10	Dec	2.50	Dec	2.70
Jan 1988	4.00	Jan 1992	2.60	Jan 1996	2.70	Jan 2000	2.70
Feb	3.90	Feb	2.80	Feb	2.70	Feb	3.20
Mar	3.90	Mar	3.20	Mar	2.80	Mar	3.70
Apr	3.90	Apr	3.20	Apr	2.90	Apr	3.00
May	3.90	May	3.00	May	2.90	May	3.20
Jun	4.00	Jun	3.10	Jun	2.80	Jun	3.70
Jul	4.10	Jul	3.20	Jul	3.00	Jul	3.70
Aug	4.00	Aug	3.10	Aug	2.90	Aug	3.40
Sep	4.20	Sep	3.00	Sep	3.00	Sep	3.50
Oct	4.20	Oct	3.20	Oct	3.00	Oct	3.40
Nov	4.20	Nov	3.00	Nov	3.30	Nov	3.40
Dec	4.40	Dec	2.90	Dec	3.30	Dec	3.30
Jan 1989	4.70	Jan 1993	3.30	Jan 1997	3.00	Jan 2001	3.70
Feb	4.80	Feb	3.20	Feb	3.00	Feb	3.50
Mar	5.00	Mar	3.10	Mar	2.80	Mar	2.90
Apr	5.10	Apr	3.20	Apr	2.50	Apr	3.30
May	5.40	May	3.20	May	2.20	May	3.60
Jun	5.20	Jun	3.00	Jun	2.30	Jun	3.20
Jul	5.00	Jul	2.80	Jul	2.20	Jul	2.70
Aug	4.70	Aug	2.80	Aug	2.20	Aug	2.70
Sep	4.30	Sep	2.70	Sep	2.20	Sep	2.60
Oct	4.50	Oct	2.80	Oct	2.10	Oct	2.10
Nov	4.70	Nov	2.70	Nov	1.80	Nov	1.90
Dec	4.60	Dec	2.70	Dec	1.70	Dec	1.60

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, Change for 12-Month Period, Bureau of Labor Statistics Website and Wall Street Journal.

Rate of Inflation
1986 - 2001



UNION ELECTRIC COMPANY
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Average Yields on Mergent's Public Utility Bonds

<u>Mo/Year</u>	<u>Rate (%)</u>	<u>Mo/Year</u>	<u>Rate (%)</u>	<u>Mo/Year</u>	<u>Rate (%)</u>	<u>Mo/Year</u>	<u>Rate (%)</u>
Jan 1986	10.66	Jan 1990	9.44	Jan 1994	7.31	Jan 1998	7.03
Feb	10.16	Feb	9.66	Feb	7.44	Feb	7.09
Mar	9.33	Mar	9.75	Mar	7.83	Mar	7.13
Apr	9.02	Apr	9.87	Apr	8.20	Apr	7.12
May	9.52	May	9.89	May	8.32	May	7.11
Jun	9.51	Jun	9.69	Jun	8.31	Jun	6.99
Jul	9.19	Jul	9.66	Jul	8.47	Jul	6.99
Aug	9.15	Aug	9.84	Aug	8.41	Aug	6.96
Sep	9.42	Sep	10.01	Sep	8.65	Sep	6.88
Oct	9.39	Oct	9.94	Oct	8.88	Oct	6.88
Nov	9.15	Nov	9.76	Nov	9.00	Nov	6.96
Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84
Jan 1987	8.77	Jan 1991	9.56	Jan 1995	8.77	Jan 1999	6.87
Feb	8.81	Feb	9.31	Feb	8.56	Feb	7.00
Mar	8.75	Mar	9.39	Mar	8.41	Mar	7.18
Apr	9.30	Apr	9.30	Apr	8.30	Apr	7.16
May	9.82	May	9.29	May	7.93	May	7.42
Jun	9.87	Jun	9.44	Jun	7.62	Jun	7.70
Jul	10.01	Jul	9.40	Jul	7.73	Jul	7.66
Aug	10.33	Aug	9.16	Aug	7.86	Aug	7.86
Sep	11.00	Sep	9.03	Sep	7.62	Sep	7.87
Oct	11.32	Oct	8.99	Oct	7.46	Oct	8.02
Nov	10.82	Nov	8.93	Nov	7.40	Nov	7.86
Dec	10.99	Dec	8.76	Dec	7.21	Dec	8.04
Jan 1988	10.75	Jan 1992	8.67	Jan 1996	7.20	Jan 2000	8.22
Feb	10.11	Feb	8.77	Feb	7.37	Feb	8.10
Mar	10.11	Mar	8.84	Mar	7.72	Mar	8.14
Apr	10.53	Apr	8.79	Apr	7.88	Apr	8.14
May	10.75	May	8.72	May	7.99	May	8.56
Jun	10.71	Jun	8.64	Jun	8.07	Jun	8.22
Jul	10.96	Jul	8.46	Jul	8.02	Jul	8.17
Aug	11.09	Aug	8.34	Aug	7.84	Aug	8.06
Sep	10.56	Sep	8.32	Sep	8.01	Sep	8.15
Oct	9.92	Oct	8.44	Oct	7.76	Oct	8.08
Nov	9.89	Nov	8.53	Nov	7.48	Nov	8.03
Dec	10.02	Dec	8.36	Dec	7.58	Dec	7.79
Jan 1989	10.02	Jan 1993	8.23	Jan 1997	7.79	Jan 2001	7.76
Feb	10.02	Feb	8.00	Feb	7.68	Feb	7.69
Mar	10.16	Mar	7.85	Mar	7.92	Mar	7.59
Apr	10.14	Apr	7.76	Apr	8.08	Apr	7.81
May	9.92	May	7.78	May	7.94	May	7.88
Jun	9.49	Jun	7.68	Jun	7.77	Jun	7.75
Jul	9.34	Jul	7.53	Jul	7.52	Jul	7.71
Aug	9.37	Aug	7.21	Aug	7.57	Aug	7.57
Sep	9.43	Sep	7.01	Sep	7.50	Sep	7.73
Oct	9.37	Oct	6.99	Oct	7.37	Oct	7.64
Nov	9.33	Nov	7.30	Nov	7.24	Nov	7.61
Dec	9.31	Dec	7.33	Dec	7.16	Dec	7.86

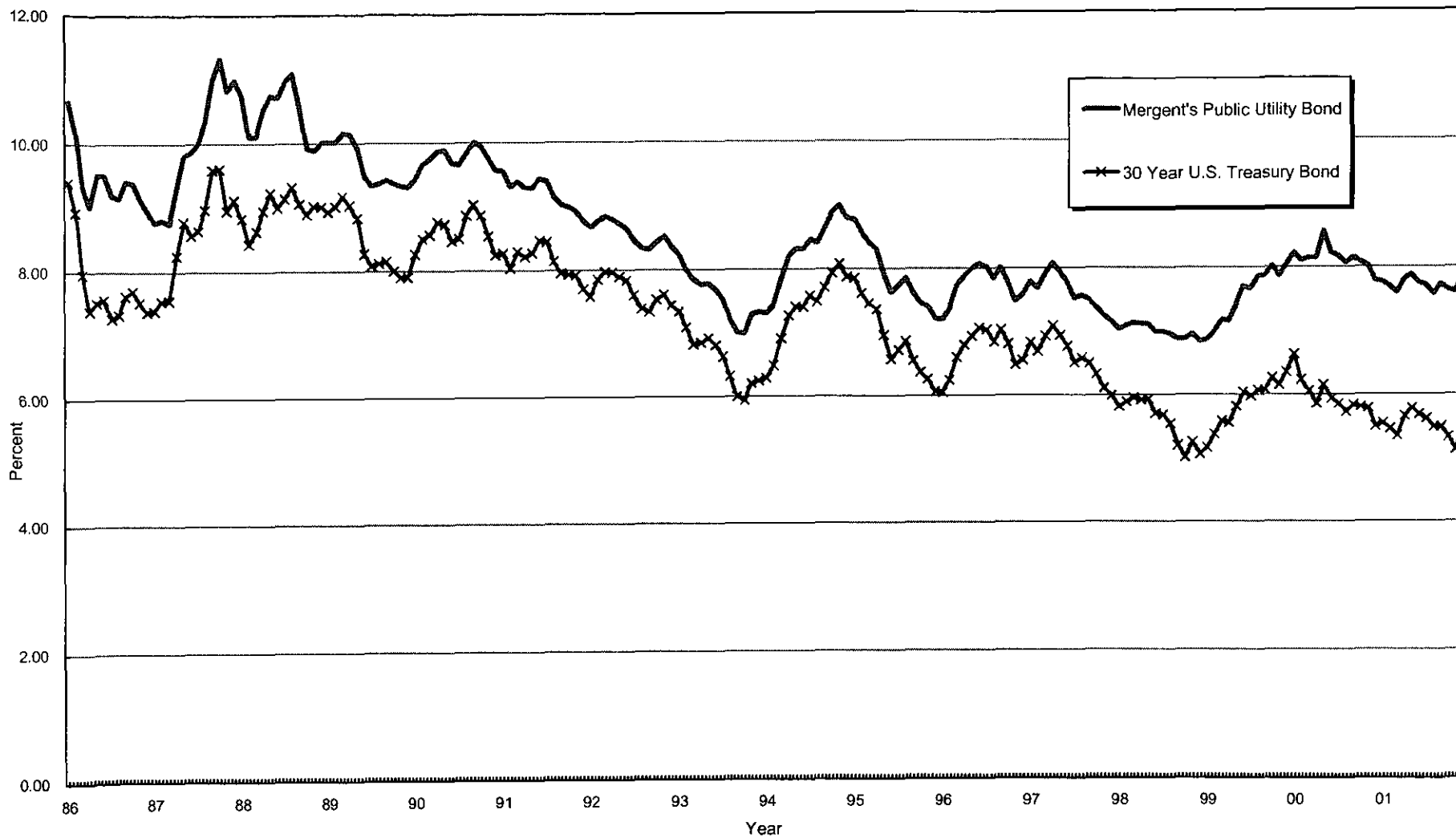
Source: Mergent Bond Record.

UNION ELECTRIC COMPANY
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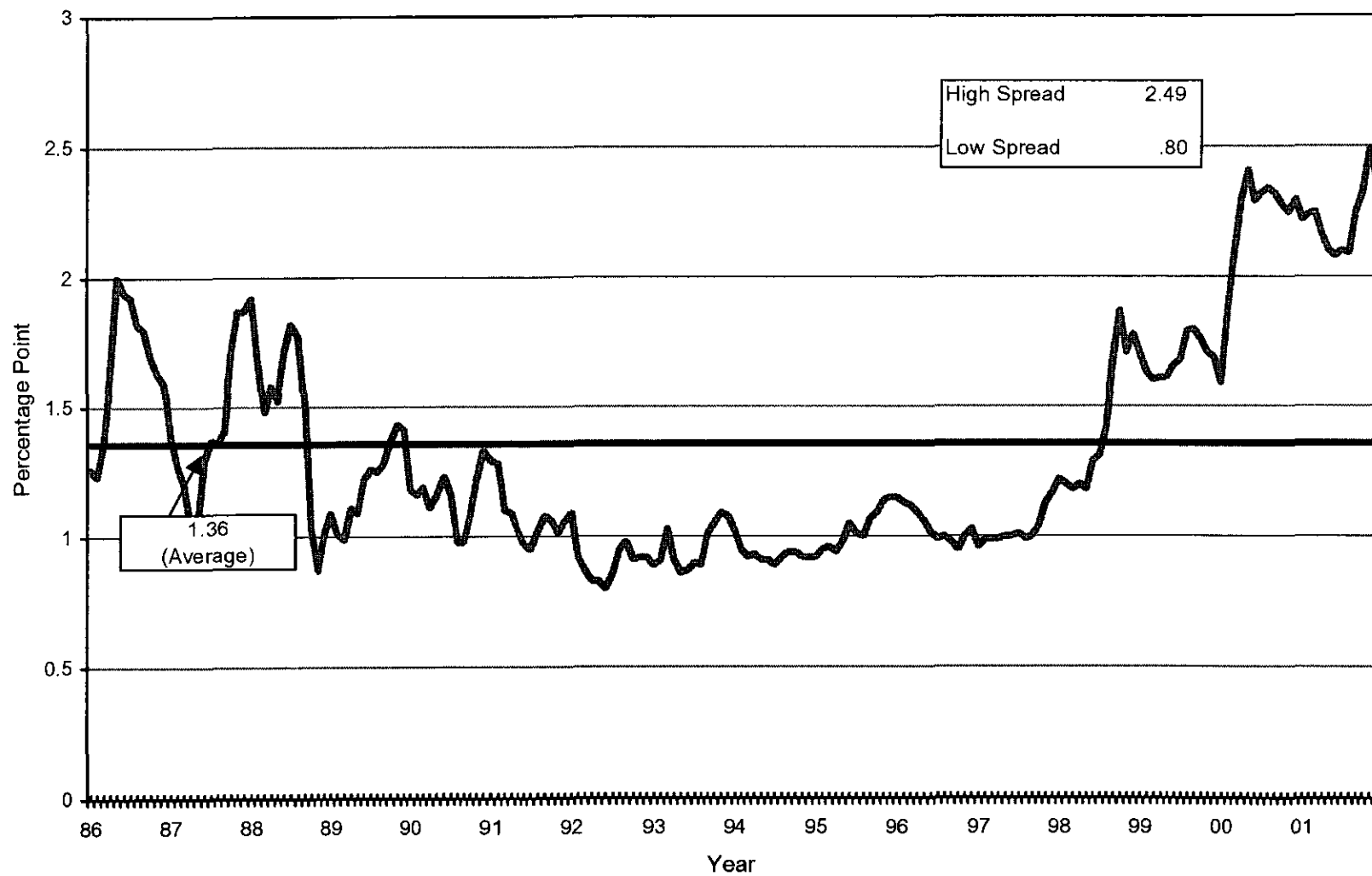
Average Yields on Thirty Year U.S. Treasury Bonds

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1986	9.40	Jan 1990	8.26	Jan 1994	6.29	Jan 1998	5.81
Feb	8.93	Feb	8.50	Feb	6.49	Feb	5.89
Mar	7.96	Mar	8.56	Mar	6.91	Mar	5.95
Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92
May	7.52	May	8.73	May	7.41	May	5.93
Jun	7.57	Jun	8.46	Jun	7.40	Jun	5.70
Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.68
Aug	7.33	Aug	8.86	Aug	7.49	Aug	5.54
Sep	7.62	Sep	9.03	Sep	7.71	Sep	5.20
Oct	7.70	Oct	8.86	Oct	7.94	Oct	5.01
Nov	7.52	Nov	8.54	Nov	8.08	Nov	5.25
Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.06
Jan 1987	7.39	Jan 1991	8.27	Jan 1995	7.85	Jan 1999	5.16
Feb	7.54	Feb	8.03	Feb	7.61	Feb	5.37
Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58
Apr	8.25	Apr	8.21	Apr	7.36	Apr	5.55
May	8.78	May	8.27	May	6.95	May	5.81
Jun	8.57	Jun	8.47	Jun	6.57	Jun	6.04
Jul	8.64	Jul	8.45	Jul	6.72	Jul	5.98
Aug	8.97	Aug	8.14	Aug	6.86	Aug	6.07
Sep	9.59	Sep	7.95	Sep	6.55	Sep	6.07
Oct	9.61	Oct	7.93	Oct	6.37	Oct	6.26
Nov	8.95	Nov	7.92	Nov	6.26	Nov	6.15
Dec	9.12	Dec	7.70	Dec	6.06	Dec	6.35
Jan 1988	8.83	Jan 1992	7.58	Jan 1996	6.05	Jan 2000	6.63
Feb	8.43	Feb	7.85	Feb	6.24	Feb	6.23
Mar	8.63	Mar	7.97	Mar	6.60	Mar	6.05
Apr	8.95	Apr	7.96	Apr	6.79	Apr	5.85
May	9.23	May	7.89	May	6.93	May	6.15
Jun	9.00	Jun	7.84	Jun	7.06	Jun	5.93
Jul	9.14	Jul	7.60	Jul	7.03	Jul	5.85
Aug	9.32	Aug	7.39	Aug	6.84	Aug	5.72
Sep	9.06	Sep	7.34	Sep	7.03	Sep	5.83
Oct	8.89	Oct	7.53	Oct	6.81	Oct	5.80
Nov	9.02	Nov	7.61	Nov	6.48	Nov	5.78
Dec	9.01	Dec	7.44	Dec	6.55	Dec	5.49
Jan 1989	8.93	Jan 1993	7.34	Jan 1997	6.83	Jan 2001	5.54
Feb	9.01	Feb	7.09	Feb	6.69	Feb	5.45
Mar	9.17	Mar	6.82	Mar	6.93	Mar	5.34
Apr	9.03	Apr	6.85	Apr	7.09	Apr	5.65
May	8.83	May	6.92	May	6.94	May	5.78
Jun	8.27	Jun	6.81	Jun	6.77	Jun	5.67
Jul	8.08	Jul	6.63	Jul	6.51	Jul	5.61
Aug	8.12	Aug	6.32	Aug	6.58	Aug	5.48
Sep	8.15	Sep	6.00	Sep	6.50	Sep	5.48
Oct	8.00	Oct	5.94	Oct	6.33	Oct	5.32
Nov	7.90	Nov	6.21	Nov	6.11	Nov	5.12
Dec	7.90	Dec	6.25	Dec	5.99	Dec	5.48

Average Yields on Mergent's Public Utility Bonds and
Thirty Year U.S. Treasury Bonds (1986 - 2001)



**Monthly Spreads Between Yields on Mergent's
Public Utility Bonds
and Thirty Year U.S. Treasury Bonds (1986 - 2001)**



UNION ELECTRIC COMPANY
d/b/a AmerenUE
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Economic Estimates and Projections, 2002-2004

Source	Inflation Rate			Real GDP			Unemployment			3-Mo. T-Bill Rate			30-Yr. T-Bond Rate		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
The Budget & Economic Outlook: FY2001-2011 (8/01)	2.60%	2.70%	2.50%	2.60%	3.30%	3.20%	5.20%	5.20%	5.20%	3.80%	4.80%	4.90%	N.A.	N.A.	N.A.
Value Line's "Investment Survey" (11/30/01)	2.10%	2.40%	2.60%	0.50%	3.50%	3.60%	6.30%	5.50%	5.30%	2.30%	4.00%	4.30%	5.20%	6.10%	6.20%
Current rate	2.80% *			1.70% *			5.60% **			1.72%			5.48%		

Notes: N.A. = Not Available.

* Reflects annual increase from 2000 to 2001 (CBO forecast for Real GDP)

** Rate reported by Bureau of Labor Statistics for the period ending January 2002

Sources of Current Rates:

Federal Reserve website, www.stls.frb.org, December 2001.

U.S. Department of Commerce, Bureau of Economic Analysis, for the 12-month period ending December 31, 2001

The Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, February 4, 2002

www.bls.gov

Other Sources:

The Congressional Budget Office, Economic Forecasts and Projections for 2001 through 2011, August 2001

www.cbo.gov

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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Historical Consolidated Capital Structures for Union Electric Company

(Thousands of Dollars)

<u>Capital Components</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Common Equity	\$2,354,801.0	\$2,387,500.0	\$2,424,125.0	\$2,433,682.0	\$2,570,652.0
Preferred Stock	219,100.0	221,200.0	155,197.0	155,197.0	155,197.0
Long-Term Debt	1,798,671.0	1,780,500.0	1,674,311.0	1,882,601.0	1,760,439.0
Short-Term Debt	0.0	0.0	0.0	0.0	0.0
Total	<u>\$4,372,572.0</u>	<u>\$4,389,200.0</u>	<u>\$4,253,633.0</u>	<u>\$4,471,480.0</u>	<u>\$4,486,288.0</u>

<u>Capital Structure</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Common Equity	53.85%	54.39%	56.99%	54.43%	57.30%
Preferred Stock	5.01%	5.04%	3.65%	3.47%	3.46%
Long-Term Debt	41.14%	40.57%	39.36%	42.10%	39.24%
Short-Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%
Total	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

Note: The amount of Long-Term Debt includes Current Maturities.

Short-term Debt has not been noted on this schedule since CWIP usually exceeds outstanding short-term debt balances.

Source: Union Electric Company's Shareholder Annual Reports and Union Electric Company's response to Staff's Data Information Request No. 3801

Union Electric Company
d/b/a AmerenUE
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**Selected Financial Ratios for Union Electric Company
(Consolidated Basis)**

Financial Ratios	1996	1997	1998	1999	2000
Return on Year-End Common Equity	12.38%	13.98%	12.84%	13.99%	14.60%
Earnings Per Common Share	\$2.86	\$2.44	\$2.82	\$2.81	\$3.33
Common Dividend Payout Ratio	87.80%	88.58%	83.40%	96.55%	76.00%
Year-End Market Price Per Common Share	\$38.500	\$43.250	\$42.687	\$32.812	\$46.310
Year-End Book Value Per Common Share	\$23.06	\$22.00	\$22.27	\$22.52	\$23.30
Year-End Market to Book Ratio	1.67 x	1.97 x	1.92 x	1.46 x	1.99 x
Pre-Tax Interest Coverage Ratio	4.55 x	4.73 x	5.13 x	5.83 x	5.22 x

Notes:

Return on Year-End Common Equity = Net Income Available for Common Stock / Year-End Common Shareholders' Equity.

Common Dividend Payout Ratio = Common Dividends Paid / Net Income Available for Common Stock.

Year-End Market to Book Ratio = Year-End Market Price Per Common Share / Year-End Book Value Per Common Share.

Pre-Tax Interest Coverage Ratio = (Net Income + Income Taxes + Total Interest Expense) / Total Interest Expense.

Sources: Union Electric Company's Shareholder Annual Reports, Ameren Corporation Shareholder Annual Reports, Union Electric Company's response to Staff's Data Information Request No. 3801, Standard and Poor's Stock guide and Standard & Poor's Corporation's Utility Rating Service.

UNION ELECTRIC COMPANY
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Capital Structure as of September 30, 2001
for Union Electric Company d/b/a AmerenUE
(thousands of dollars)

Capital Component	Amount in Dollars	Percentage of Capital
Common Stock Equity	\$2,603,364.0	59.08%
Preferred Stock	155,197.0	3.52%
Long-Term Debt	1,648,373.0	37.40%
Short-Term Debt	0	0.00%
Total Capitalization	\$4,406,934.0	100.00%

Financial Ratio Benchmarks
Total Debt / Total Capital - Including Preferred Stock

Standard & Poor's Corporation's Utility Rating Service 7/7/2000	AA	A	BBB
Electric Companies (Average)	49.00%	58.50%	62.43%

Source: Union Electric Company's response to Staff's Data Information Request Nos. 3801 and 3802.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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**Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates
for Ameren Corporation**

<u>Year</u>	<u>Dividends Per Share</u>	<u>Earnings Per Share</u>	<u>Book Value Per Share</u>
1991	\$2.18	\$3.01	\$20.62
1992	\$2.26	\$2.65	\$21.19
1993	\$2.34	\$2.77	\$21.60
1994	\$2.40	\$3.01	\$22.22
1995	\$2.46	\$2.95	\$22.71
1996	\$2.51	\$2.86	\$23.06
1997	\$2.54	\$2.44	\$22.00
1998	\$2.54	\$2.82	\$22.27
1999	\$2.54	\$2.81	\$22.52
2000	\$2.54	\$3.33	\$23.30
2001	\$2.54	\$3.41	\$24.05

Annual Compound Growth Rates

	<u>DPS</u>	<u>EPS</u>	<u>BVPS</u>
1991 - 2001	1.54%	1.26%	1.55%
1996 - 2001	0.24%	3.58%	0.84%

2001 DPS and BVPS are Value Line estimates. 2001 EPS from Ameren news release, February 5, 2002

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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**Historical and Projected Growth Rates
for Ameren Corporation**

Historical Growth Rates

DPS Annual Compound Growth (1996 - 2001)	0.24%
DPS Annual Compound Growth (1991 - 2001)	1.54%
BVPS Annual Compound Growth (1996 - 2001)	0.84%
BVPS Annual Compound Growth (1991 - 2001)	1.55%
EPS Annual Compound Growth (1996 - 2001)	3.58%
EPS Annual Compound Growth (1991 - 2001)	1.26%
Average of Historical Growth Rates	1.50%

Projected Growth Rates from Outside Sources

5 Year Growth Forecast (Median) I/B/E/S Inc.'s Institutional Brokers Estimate System August 16, 2001	5.00%
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5-Year Projected EPS Growth Rate Standard & Poor's Corporation's Earnings Guide September 2001	5.00%
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Average of Projected Growth Rates	5.00%
Average of historical and projected growth	3.25%

Proposed Range of Growth for Union Electric Company:	2.75% - 3.75%
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Source: See Schedule 10 for Historical Growth Rate Information

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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**Monthly High / Low Average Dividend Yields
for Ameren Corporation**

	(1)	(2)	(3)	(4)	(5)
<u>Month / Year</u>	<u>High Stock Price</u>	<u>Low Stock Price</u>	<u>Average High / Low Price</u>	<u>Expected Dividend</u>	<u>Projected Dividend Yield</u>
April 2001	43.150	40.200	\$41.675	\$2.54	6.09%
May 2001	45.480	40.500	\$42.990	\$2.54	5.91%
June 2001	44.500	41.250	\$42.875	\$2.54	5.92%
July 2001	43.450	37.370	\$40.410	\$2.54	6.29%
August 2001	42.200	38.900	\$40.550	\$2.54	6.26%
September 2001	41.770	36.530	<u>\$39.150</u>	\$2.54	<u>6.49%</u>
Average			<u><u>\$41.275</u></u>		<u><u>6.16%</u></u>

**Proposed Dividend Yield
for Ameren Corporation:**

6.16%

Notes: Column 3 = [(Column 1 + Column 2) / 2].

Column 4 = Estimated Dividends Declared per share represents the average projected dividends for 2001 and 2002.

Column 5 = (Column 4 / Column 3).

Sources: Standard and Poor's Stock Guide
Value Line investment Survey, January 4, 2002
Wall Street City website

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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**Discounted Cash Flow (DCF) Costs of Common Equity Estimates
for Ameren Corporation**

UE's Cost of Common Equity	=	Dividend Yield	+	Expected Growth
8.91%	=	6.16%	+	2.75%
9.91%	=	6.16%	+	3.75%

Discounted Cash Flow (DCF) Model Derivation

$$\text{Present Price} = \frac{\text{Expected Dividends}}{\text{Discounted by } k} + \frac{\text{Present Price (1 + g)}}{\text{Discounted by } k}$$

where: g = estimated growth rate and k = cost of common equity.

Letting: P_0 = present price and D_1 = expected dividends, then

$$P_0 = \frac{D_1}{(1+k)} + \frac{P_0 (1 + g)}{(1+k)} \quad \text{or}$$

$$k = \frac{D_1}{P_0} + g$$

Thus:

$$\text{Cost of Common Equity} = \text{Dividend Yield} + \text{Expected Growth}$$

Notes: See Schedule 12 for calculation of proposed dividend yield for Ameren Corporation

See Schedule 11 for calculation of proposed range of growth for Ameren Corporation

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

Average Risk Premium above the Yields of 30 Year Treasury Bonds for
Ameren Corporation's Expected Return on Common Equity

Mo/Year	AEE's Expected ROE	30-Year U.S. Treasury Bond Yields	AEE's Risk Premium	Mo/Year	AEE's Expected ROE	30-Year U.S. Treasury Bond Yields	AEE's Risk Premium
Jan 1992	13.50%	7.58%	5.92%	Jan 1997	13.00%	6.83%	6.17%
Feb	13.50%	7.85%	5.65%	Feb	13.00%	6.69%	6.31%
Mar	13.50%	7.97%	5.53%	Mar	13.00%	6.93%	6.07%
Apr	13.00%	7.96%	5.04%	Apr	12.50%	7.09%	5.41%
May	13.00%	7.89%	5.11%	May	12.50%	6.94%	5.56%
Jun	13.00%	7.84%	5.16%	Jun	12.50%	6.77%	5.73%
Jul	13.00%	7.60%	5.40%	Jul	13.00%	6.51%	6.49%
Aug	13.00%	7.39%	5.61%	Aug	13.00%	6.58%	6.42%
Sep	13.00%	7.34%	5.66%	Sep	13.00%	6.50%	6.50%
Oct	12.50%	7.53%	4.97%	Oct	13.00%	6.33%	6.67%
Nov	12.50%	7.61%	4.89%	Nov	13.00%	6.11%	6.89%
Dec	12.50%	7.44%	5.06%	Dec	13.00%	5.99%	7.01%
Jan 1993	13.00%	7.34%	5.66%	Jan 1998	12.50%	5.81%	6.69%
Feb	13.00%	7.09%	5.91%	Feb	12.50%	5.89%	6.61%
Mar	13.00%	6.82%	6.18%	Mar	12.50%	5.95%	6.55%
Apr	12.50%	6.85%	5.65%	Apr	12.00%	5.92%	6.08%
May	12.50%	6.92%	5.58%	May	12.00%	5.93%	6.07%
Jun	12.50%	6.81%	5.69%	Jun	12.00%	5.70%	6.30%
Jul	12.50%	6.63%	5.87%	Jul	11.50%	5.68%	5.82%
Aug	12.50%	6.32%	6.18%	Aug	11.50%	5.54%	5.96%
Sep	12.50%	6.00%	6.50%	Sep	11.50%	5.20%	6.30%
Oct	13.50%	5.94%	7.56%	Oct	12.00%	5.01%	6.99%
Nov	13.50%	6.21%	7.29%	Nov	12.00%	5.25%	6.75%
Dec	13.50%	6.25%	7.25%	Dec	12.00%	5.06%	6.94%
Jan 1994	13.50%	6.29%	7.21%	Jan 1999	13.00%	5.16%	7.84%
Feb	13.50%	6.49%	7.01%	Feb	13.00%	5.37%	7.63%
Mar	13.50%	6.91%	6.59%	Mar	13.00%	5.58%	7.42%
Apr	13.50%	7.27%	6.23%	Apr	13.00%	5.55%	7.45%
May	13.50%	7.41%	6.09%	May	13.00%	5.81%	7.19%
Jun	13.50%	7.40%	6.10%	Jun	13.00%	6.04%	6.96%
Jul	13.00%	7.58%	5.42%	Jul	13.00%	5.98%	7.02%
Aug	13.00%	7.49%	5.51%	Aug	13.00%	6.07%	6.93%
Sep	13.00%	7.71%	5.29%	Sep	13.00%	6.07%	6.93%
Oct	13.50%	7.94%	5.66%	Oct	13.00%	6.26%	6.74%
Nov	13.50%	8.08%	5.42%	Nov	13.00%	6.15%	6.85%
Dec	13.50%	7.87%	5.63%	Dec	13.00%	6.35%	6.65%
Jan 1995	12.50%	7.85%	4.65%	Jan 2000	13.50%	6.63%	6.87%
Feb	12.50%	7.61%	4.89%	Feb	13.50%	6.23%	7.27%
Mar	12.50%	7.45%	5.05%	Mar	13.50%	6.05%	7.45%
Apr	12.50%	7.36%	5.14%	Apr	13.50%	5.85%	7.65%
May	12.50%	6.95%	5.55%	May	13.50%	6.15%	7.35%
Jun	12.50%	6.57%	5.93%	Jun	13.50%	5.93%	7.57%
Jul	12.00%	6.72%	5.28%	Jul	13.50%	5.85%	7.65%
Aug	12.00%	6.86%	5.14%	Aug	13.50%	5.72%	7.78%
Sep	12.00%	6.55%	5.45%	Sep	13.50%	5.83%	7.67%
Oct	12.00%	6.37%	5.63%	Oct	14.00%	5.80%	8.20%
Nov	12.00%	6.26%	5.74%	Nov	14.00%	5.78%	8.22%
Dec	12.00%	6.06%	5.94%	Dec	14.00%	5.49%	8.51%
Jan 1996	11.50%	6.05%	5.45%	Jan 2001	14.00%	5.54%	8.46%
Feb	11.50%	6.24%	5.26%	Feb	14.00%	5.45%	8.55%
Mar	11.50%	6.60%	4.90%	Mar	14.00%	5.34%	8.66%
Apr	13.00%	6.79%	6.21%	Apr	14.00%	5.65%	8.35%
May	13.00%	6.93%	6.07%	May	14.00%	5.78%	8.22%
Jun	13.00%	7.06%	5.94%	Jun	14.00%	5.67%	8.33%
Jul	13.00%	7.03%	5.97%	Jul	14.00%	5.61%	8.39%
Aug	13.00%	6.84%	6.16%	Aug	14.00%	5.48%	8.52%
Sep	13.00%	7.03%	5.97%	Sep	14.00%	5.48%	8.52%
Oct	13.00%	6.81%	6.19%	Oct	14.00%	5.32%	8.68%
Nov	13.00%	6.48%	6.52%	Nov	14.00%	5.13%	8.88%
Dec	13.00%	6.55%	6.45%	Dec	14.00%	5.48%	8.52%

Summary Information (Jan 1992 - Dec 2001)

Sources: The Value Line Investment Survey; Ratings & Reports
St. Louis Federal Reserve Website: <http://www.stls.frb.org/fred/data/irates/g30>

Average Risk Premium: 6.49%

High Risk Premium: 8.88%

Low Risk Premium: 4.65%

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

**Risk Premium Costs of Equity Estimates
for Ameren Corporation**

AEE's Cost of Common Equity		30-Year U.S. Treasury Bond (January 6, 2002)		Equity Risk Premium (1/92 - 12/01)
11.87%	=	5.38%	+	6.49%

Risk Premium Approach

The risk premium approach is based upon the proposition that common stocks are more risky than debt and, as a result, investors require a higher expected return on stocks than bonds. In this approach, the cost of common equity is computed by the following formula:

$$\text{Common Equity} = \text{Current Cost of Debt} + \text{Equity Risk Premium}$$

where:

The Current Cost of Debt is represented by the yield on 30-Year U.S. Treasury Bonds,
The appropriate rate was determined by using the yield on U.S. Treasury Bonds on January 6, 2002

The Equity Risk Premium represents the difference between AEE's expected return on common equity (ROE) as projected in the Value Line Investment Survey and the yield on U.S. Treasury Bonds on January 6, 2002. The appropriate Equity Risk Premium was determined to be the average risk premium for the period January 1992 through December 2001. See Schedule 14 for the calculation of the Equity Risk Premium of 6.49%.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

**Capital Asset Pricing Model (CAPM) Costs of Equity Estimates
Ameren Corporation**

AEE's Cost of Common Equity	=	Risk Free Rate	+	(AEE's (Beta	*	Market) Risk Premium))
9.40%	=	5.38%	+	(0.55	*	7.30%)
9.34%	=	5.38%	+	(0.55	*	7.20%)

Capital Asset Pricing Model

The capital asset pricing model (CAPM) describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the rate of return which investors expect a security to earn so that its market return is comparable with the market returns earned by other securities that have similar risk. The general form of the CAPM is as follows:

$$\text{Cost of Common Equity} = \text{Risk Free Rate} + [\text{Beta} * \text{Market Risk Premium}]$$

where:

The Risk Free Rate reflects the level of return which can be achieved without accepting any risk. The Risk Free Rate is represented by the yield on 30-Year U.S. Treasury Bonds. The appropriate rate was determined to be 5.38% on January 6, 2002 as published on WWW.MARKETWATCH.COM.

The Beta represents the relative movement and relative risk between a particular stock and the market. The appropriate Beta for AEE was determined to be 0.55 as published in The Value Line Investment Survey: Ratings & Reports, January 4, 2002.

The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium was determined to be 7.30% as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2001 Yearbook for the period 1926 - 2000 and 7.20% for the period 1991-2000.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

Criteria for Selecting Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Electric Utility Company	Electric Utility Publicly Traded	Information Printed In Value Line	S&P Utility Credit Rating "AA- to BBB+"	Total Capital >=\$4.0 B <=\$8.0 B	Positive DPS Annual Compound Growth Rate (1991 - 2001)	No Missouri Operations	Met All Criteria
ALLETE	Yes	Yes	Yes	No			
Allegheny Energy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Alliant Energy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Amer. Elec. Power	Yes	Yes	Yes	No			
Ameren Corp.	Yes	Yes	Yes	Yes	Yes	No	
Avista Corp.	Yes	Yes	No				
Bangor Hydro Elec.	Yes	Yes	No				
BayCorp Holdings LTD	Yes	Yes	No				
Black Hills	Yes	Yes	No				
CH Energy Group	Yes	Yes	No				
CMS Energy	Yes	Yes	No				
Cen. Vermont Pub. Serv.	Yes	Yes	No				
Cinergy Corp.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cleco	Yes	Yes	Yes	No			
Conectiv	Yes	Yes	Yes	No			
Consolidated Edison	Yes	Yes	Yes	No			
Constellation Energy	Yes	Yes	Yes	Yes	No		
DPL Inc.	Yes	Yes	Yes	No			
DQE	Yes	Yes	Yes	No			
DTE Energy	Yes	Yes	Yes	No			
Dominion Resources	Yes	Yes	Yes	No			
Duke Energy	Yes	Yes	Yes	No			
Edison Intl.	Yes	Yes	No				
El Paso Electric	Yes	Yes	No				

Criteria for Selecting Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Electric Utility Company	Electric Utility Publicly Traded	Information Printed In Value Line	S&P Utility Credit Rating "AA- to BBB+"	Total Capital >=\$4.0 B <=\$8.0 B	Positive DPS Annual Compound Growth Rate (1991 - 2001)	No Missouri Operations	Met All Criteria
Empire Dist. Elec.	Yes	Yes	Yes	No			
Energy East Corp.	Yes	Yes	Yes	Yes	No		
Entergy Corp.	Yes	Yes	No				
Evergreen Solar	Yes	Yes	No				
Exelon Corp.	Yes	Yes	Yes	No			
FPL Group	Yes	Yes	Yes	No			
FirstEnergy Corp.	Yes	Yes	No				
Florida Public Utilities	Yes	Yes	No				
Fortis Inc.	Yes	Yes	No				
G't Plains Energy	Yes	Yes	No				
GPU Inc.	Yes	Yes	No				
Green Mountain Power	Yes	Yes	No				
Hawaiian elec.	Yes	Yes	Yes	No			
IDACORP Inc.	Yes	Yes	Yes	No			
KFx Inc.	Yes	Yes	No				
MDU Resources	Yes	Yes	Yes	No			
Madison Gas & Elec.	Yes	Yes	Yes	No			
Maine Public Service	Yes	Yes	No				
Montana Power	Yes	Yes	Yes	No			
NSTAR	Yes	Yes	Yes	No			
NiSource Inc.	Yes	Yes	No				
Niagra Mohawk	Yes	Yes	No				
North Western Corp.	Yes	Yes	Yes	No			
Northeast Utilities	Yes	Yes	Yes	Yes	No		
OGE Energy	Yes	Yes	Yes	No			
Otter Tail Corp.	Yes	Yes	Yes	No			
PG&E Corp.	Yes	Yes	No				
PPL Corp.	Yes	Yes	Yes	Yes	No		
Pinnacle West Capital	Yes	Yes	Yes	No			
Potomac Electric Power	Yes	Yes	Yes	No			
Progress Energy	Yes	Yes	Yes	No			

Criteria for Selecting Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Electric Utility Company	Electric Utility Publicly Traded	Information Printed In Value Line	S&P Utility Credit Rating "AA- to BBB+"	Total Capital >=\$4.0 B <=\$8.0 B	Positive DPS Annual Compound Growth Rate (1991 - 2001)	No Missouri Operations	Met All Criteria
Public Serv. (N. Mex.)	Yes	Yes	No				
Public Service Enterprise	Yes	Yes	No				
Puget Energy Inc.	Yes	Yes	No				
RGS Energy Group	Yes	Yes	Yes	No			
Reliant Energy	Yes	Yes	Yes	No			
SCANA Corp.	Yes	Yes	Yes	Yes	No		
Sempra Energy	Yes	Yes	Yes	Yes	No		
Sierra Pacific Res.	Yes	Yes	No				
Southern Co.	Yes	Yes	Yes	No			
TECO Energy	Yes	Yes	Yes	No			
TXU Corp.	Yes	Yes	Yes	No			
U. S. Energy Sys. Inc.	Yes	Yes	No				
UIL Holdings	Yes	Yes	No				
UNITIL Corp.	Yes	Yes	No				
UniCorp Inc.	Yes	Yes	No				
UniSource Energy	Yes	Yes	No				
Utilicorp United	Yes	Yes	No				
Vectren Corp.	Yes	Yes	Yes	No			
WPS Resources	Yes	Yes	Yes	No			
Western Resources	Yes	Yes	No				
Wisconsin Energy	Yes	Yes	Yes	Yes	No		
Xcel Energy Inc.	Yes	Yes	Yes	No			

Sources: Columns 1, 2, 4 & 5 = The Value Line Investment Survey: Ratings and Reports, December 7, 2001, January 4, 2002.

Column 3 = Standard and Poor's Utilities and Perspectives, January 21, 2002.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

The Three Comparable Electric Utility Companies

Number	Ticker Symbol	Company Name
1	AYE	Allegheny Energy
2	CEG	Alliant Energy
3	CIN	Cinergy Corp.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

**Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates
for the Three Comparable Electric Utility Companies**

	Dividends Per Share		Earnings Per Share		Book Value Per Share	
Company Name	1991	2001	1991	2001	1991	2001
Allegheny Energy	\$1.59	\$1.72	\$1.81	\$4.05	\$15.54	\$22.10
Alliant Energy	\$1.80	\$2.00	\$2.43	\$2.40	\$17.09	\$26.40
Cinergy	\$1.65	\$1.80	\$2.21	\$2.75	\$18.70	\$18.50

Annual Compound Growth Rates

	DPS	EPS	BVPS	Average of 10 Year Annual Compound Growth Rates
Company Name	1991 - 2001	1991 - 2001	1991 - 2001	
Allegheny Energy	0.79%	8.39%	3.58%	4.25%
Alliant Energy	1.06%	-0.12%	4.44%	1.79%
Cinergy	0.87%	2.21%	-0.11%	0.99%
Average	0.91%	3.49%	2.64%	2.35%
Standard Deviation	0.11%	3.59%	1.97%	1.39%

Source: The Value Line Investment Survey: Ratings & Reports, December 7, 2001 and January 4, 2002.
EPS, DPS and BVPS for Allegheny, EPS and BVPS for Alliant and EPS and BVPS for Cinergy for 2001
are estimates. Remaining EPS, DPS and BVPS are actual.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

**Historical and Projected Growth Rates
for the Three Comparable Electric Utility Companies**

	(1)	(2)	(3)	(4)	(5)	(6)
Company Name	Average 10 Year Annual Compound Growth	Projected 5 Year Growth IBES (Median)	Projected 5 Year EPS Growth (S&P)	Projected 3-5 Year EPS Growth Value Line	Average Projected Growth	Average of Historical & Projected Growth
Allegheny Energy	4.25%	10.00%	9.00%	9.33%	9.44%	6.85%
Alliant Energy	1.79%	5.25%	4.00%	3.17%	4.14%	2.97%
Cinergy	0.99%	6.00%	6.00%	4.12%	5.37%	3.18%
Average	2.35%	7.08%	6.33%	5.54%	6.32%	4.33%

Notes: Column 5 = [(Column 2 + Column 3 + Column 4) / 3].

Column 6 = [(Column 1 + Column 5) / 2].

Sources: Column 1 = Average of 10 Year Annual Compound Growth Rates from Schedule 19.

Column 2 = I/B/E/S Inc.'s Institutional Brokers Estimate System, January 17, 2002.

Column 3 = Standard & Poor's Corporation's Earnings Guide, January 2002.

Column 4 = Value Line Investment Survey, Ratings & Reports, December 7, 2001 and January 4, 2002.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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**Average High / Low Stock Price for June 2001 through September 2001
for the Three Comparable Electric Utility Companies**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	June 2001		July 2001		August 2001		September 2001		Average
	High	Low	High	Low	High	Low	High	Low	High/Low
Company Name	Stock	Stock	Stock	Stock	Stock	Stock	Stock	Stock	Stock
	Price	Price	Price	Price	Price	Price	Price	Price	Price
									(Jun 01-Sep 01)
Allegheny Energy	\$54.200	\$45.500	\$49.250	\$40.150	\$45.150	\$42.390	\$44.450	\$35.200	\$44.536
Alliant Energy	30.600	28.200	30.000	27.900	30.820	28.290	31.490	29.500	29.600
Cinergy	35.300	32.200	35.000	29.700	33.200	30.780	32.870	28.000	32.131

Notes:

Column 9 = [(Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6 + Column 7 + Column 8) / 8].

Sources: Wall Street City website

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

**DCF Estimated Costs of Common Equity
for the Three Comparable Electric Utility Companies**

	(1)	(2)	(3)	(4)	(5)
Company Name	Expected Annual Dividend (Avg 2001-2002)	Average High/Low Stock Price	Projected Dividend Yield	Average of Historical & Projected Growth Rate	Estimated Cost of Common Equity
Allegheny Energy	\$1.740	\$44.536	3.91%	6.85%	10.76%
Alliant Energy	\$2.000	\$29.600	6.76%	2.97%	9.72%
Cinergy	\$1.800	\$32.131	5.60%	3.18%	8.78%
Average			<u>5.42%</u>	<u>4.33%</u>	<u>9.75%</u>

Notes: Column 1 = Estimated Dividends Declared per share represents the average actual and projected dividends for 2001 and 2002.

Column 3 = (Column 1 / Column 2).

Column 5 = (Column 3 + Column 4).

Sources: Column 1 = The Value Line Investment Survey: Ratings & Reports, December 7, 2001 and January 4, 2002.

Column 2 = Schedule 21.

Column 4 = Schedule 20.

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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**Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates
for the Three Comparable Electric Utility Companies**

	(1)	(2)	(3)	(4)	(5)	(6)
	Risk Free Rate	Company's Value Line Beta	Market Risk Premium	Market Risk Premium	CAPM Cost of Common Equity (Low)	CAPM Cost of Common Equity (High)
Company Name						
Allegheny Energy	5.38%	0.60	7.20%	7.30%	9.70%	9.76%
Alliant Energy	5.38%	0.55	7.20%	7.30%	9.34%	9.40%
Cinergy	5.38%	0.55	7.20%	7.30%	9.34%	9.40%
Average		<u>0.57</u>			<u>9.46%</u>	<u>9.52%</u>

Notes: Column 5 = [Column 1 + (Column 2 * Column 3)] .

Column 6 = [Column 1 + (Column 2 * Column 4)] .

Sources: Column 1 = The Risk Free Rate reflects the level of return which can be achieved without accepting any risk. The Risk Free Rate is represented by the yield on 30-Year U.S. Treasury Bonds. The appropriate rate was determined to be 5.38% for the period ending January 4, 2002 as published on the Marketwatch website (www.marketwatch.com).

Column 2 = The Beta represents the relative movement and relative risk between a particular stock and the market. The appropriate Betas were taken from The Value Line Investment Survey, Ratings and Reports, December 7, 2001 and January 4, 2002.

Column 3 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium was determined to be 7.20% as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2001 Yearbook for the period 1991 - 2000.

Column 4 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium was determined to be 7.30% as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2001 Yearbook for the period 1926 - 2000.

Union Electric Company
d/b/a AmerenUE
CASE NO. EC-2002-1

**Pro Forma Pre-Tax Interest Coverage Ratios
for Union Electric Company**

	<u>8.91%</u>	<u>9.41%</u>	<u>9.91%</u>
1. Common Equity (see Schedule 9)	\$2,603,364	\$2,603,364	\$2,603,364
2. Earnings Allowed (ROE * [1])	\$231,979	\$244,996	\$258,013
3. Preferred Dividends (DR 3801 response)	\$8,817	\$8,817	\$8,817
4. Net Income Available ([2] + [3])	\$240,796	\$253,813	\$266,830
5. Tax Multiplier (1 / { 1 - Tax Rate })	1.6231	1.6231	1.6231
6. Pre-Tax Earnings ([4] * [5])	\$390,830	\$411,958	\$433,085
7. Annual Interest Costs (DR 3801 response)	\$112,318	\$112,318	\$112,318
8. Avail. for Coverage ([6] + [7])	\$503,148	\$524,276	\$545,403
9. Pro Forma Pre-Tax Interest Coverage ([8] / [7])	4.48 x	4.67 x	4.86 x

Electric Utility Financial Ratio Benchmarks - Pretax Interest Coverage (x)

Standard & Poor's Corporation's Utility Rating Service 7/7/2000	<u>"AA"</u>	<u>"A"</u>	<u>"BBB"</u>
	4.17x	3.40x	2.33

UNION ELECTRIC COMPANY
d/b/a AmerenUE
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Public Utility Revenue Requirement

or

Cost of Service

The formula for the revenue requirement of a public utility may be stated as follows :

Equation 1 : **Revenue Requirement = Cost of Service**

or

Equation 2 : **$RR = O + (V - D)R$**

The symbols in the second equation are represented by the following factors :

RR = Revenue Requirement

O = Prudent Operating Costs, including Depreciation and Taxes

V = Gross Valuation of the Property Serving the Public

D = Accumulated Depreciation

$(V - D)$ = Rate Base (Net Valuation)

$(V - D)R$ = Return Amount (\$\$) or Earnings Allowed on Rate Base

R = $iL + dP + kE$ or Overall Rate of Return (%)

i = Embedded Cost of Debt

L = Proportion of Debt in the Capital Structure

d = Embedded Cost of Preferred Stock

P = Proportion of Preferred Stock in the Capital Structure

k = Required Return on Common Equity (ROE)

E = Proportion of Common Equity in the Capital Structure

UNION ELECTRIC COMPANY
d/b/a AmerenUE
CASE NO. EC-2002-1

**Weighted Cost of Capital as of September 30, 2001
for Union Electric Company d/b/a AmerenUE**

Capital Component	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of:		
			8.91%	9.41%	9.91%
Common Stock Equity	59.08%	-----	5.26%	5.56%	5.86%
Preferred Stock	3.52%	5.72%	0.20%	0.20%	0.20%
Long-Term Debt	37.40%	6.82%	2.55%	2.55%	2.55%
Short-Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%
Total	<u><u>100.00%</u></u>		<u><u>8.01%</u></u>	<u><u>8.31%</u></u>	<u><u>8.61%</u></u>