

Exhibit No.:  
Issues: Cash Working Capital  
Administration and General  
Expenses  
Witness: Paul R. Harrison  
Sponsoring Party: MoPSC Staff  
Type of Exhibit: Direct Testimony  
Case No.: GR-2000-512

**MISSOURI PUBLIC SERVICE COMMISSION**  
**UTILITY SERVICES DIVISION**

**DIRECT TESTIMONY**  
**OF**  
**PAUL R. HARRISON**

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

**CASE NO. GR-2000-512**

Exhibit No. 14  
Date 10-4-00 Case No. GR-2000-512  
Reporter KF

Jefferson City, Missouri  
August 2000

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**d/b/a AmerenUE**  
**CASE NO. GR-2000-512**

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**DIRECT TESTIMONY**

**OF**

**PAUL R. HARRISON**

**UNION ELECTRIC COMPANY**

**d/b/a AmerenUE**

**CASE NO. GR-2000-512**

Q. Please state your name and business address.

A. My name is Paul R. Harrison, P.O. Box 360, Jefferson City, Missouri 65102.

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

A. I am a Regulatory Auditor with the Missouri Public Service Commission  
(Commission).

Q. Please describe your educational background.

A. I graduated from Park College, Kansas City, Missouri and received  
Bachelor of Science (BS) degrees in Accounting and Management in July 1995.

Q. Have you previously testified before this Commission?

A. No, I have not.

Q. With reference to Case No. GR-2000-512, have you made an examination  
of the books and records of AmerenUE (UE or Company)?

A. Yes, in conjunction with other members of the Commission Staff (Staff).

Q. Please describe your principal areas of responsibility in this case.

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1           A.     My principal areas of responsibility include the determination of the  
2     Company's Cash Working Capital (CWC) requirement and analysis of the Company's  
3     administrative and general expenses.

4           Q.     What Accounting Schedule are you sponsoring?

5           A.     I am sponsoring Accounting Schedule 8, Cash Working Capital.

6           Q.     What adjustments are you sponsoring?

7           A.     I am sponsoring the following income statement adjustments appearing on  
8     Accounting Schedule 10, Adjustments to Income Statement: S-10.1, S-12.1, S-12.2,  
9     S-12.3, S-12.4, S-12.5, S-12.6, S-12.17, S-12.18, S-12.19, S-12.20, S-12.21 and S-12.27.

10    **CASH WORKING CAPITAL**

11          Q.     Please explain Accounting Schedule 8.

12          A.     Accounting Schedule 8 is Staff's calculation of CWC. The Company's  
13     CWC requirement was calculated through the use of a lead/lag study.

14          Q.     What is the purpose of a lead/lag study?

15          A.     A lead/lag study determines the amount of cash that is necessary on a  
16     day-to-day basis in order for the Company to provide service to the ratepayers. A  
17     lead/lag study also determines who supplies the cash.

18          Q.     What are the sources of CWC?

19          A.     The shareholder and the ratepayer are the sources of CWC.

20          Q.     How does the shareholder supply CWC?

21          A.     When the Company spends cash to pay for an expense before the cash is  
22     provided by the ratepayer, then that cash must be provided by the shareholder. This cash  
23     represents a portion of the shareholder's total investment in the Company. The

1 shareholder is compensated for the CWC funds provided by the inclusion of these funds  
2 in rate base, thereby providing a return on the shareholder's investment.

3 Q. How does the ratepayer provide CWC?

4 A. Ratepayers supply CWC when they pay for service provided by the  
5 Company before the Company must pay for expenses incurred to provide that service.  
6 The ratepayer is compensated for the CWC funds by a rate base reduction of the amount  
7 of cash they provided. This allows the general body of ratepayers to be credited with the  
8 same rate of return that the Company is earning on its investment.

9 Q. How are the results from a lead/lag study interpreted?

10 A. A negative CWC requirement indicates that the ratepayer provided the  
11 CWC in the aggregate during the test year. A positive requirement indicates that the  
12 shareholder provided the CWC in the aggregate during the test year.

13 Q. What methodology was used to calculate Accounting Schedule 8, Cash  
14 Working Capital?

15 A. Calculation of CWC was based upon the lead/lag study developed in the  
16 Company's previous rate case, Case No. GR-97-393, updated for material changes in  
17 specific expense lags.

18 Q. Please identify the lags which the Staff updated from Case  
19 No. GR-97-393.

20 A. The Staff updated the following expense lags to the current test  
21 year: purchased gas expense lag, interest expense offset factor, state and federal income  
22 tax offset factors, payroll lag, FICA and federal income tax withholding lag, and Missouri

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1 income tax withholding lag. The remaining expense lags were adopted from Case  
2 No. GR-97-393.

3 Q. Why were these lags updated?

4 A. These are the major lags that are most likely to have changed since the last  
5 UE rate case.

6 Q. Is the method which you utilized to calculate the Company's CWC  
7 requirement consistent with that used in previous rate cases?

8 A. Yes, the method has been used by the Staff and adopted by the  
9 Commission in numerous rate cases.

10 Q. Please explain the components of the Staff's calculation of CWC, which  
11 appear, on Accounting Schedule 8.

12 A. The components of the Staff's calculation are as follows:

13 1) Column A (Account Description): lists the types of  
14 cash expenses, which the Company pays on a day-to-day  
15 basis.

16  
17 2) Column B (Test Year Expenses): the amount of  
18 annualized expense included in the cost of service. It  
19 shows the dollars associated with the items listed in  
20 Column A on an adjusted Missouri jurisdictional basis.

21  
22 3) Column C (Revenue Lag): the number of days  
23 between the midpoint of the provision of service by the  
24 Company and the payment for the service by the ratepayer.  
25 The revenue lag addressed in this case is explained further  
26 on pages 5 and 6 of this direct testimony.

27  
28 4) Column D (Expense Lag): the number of days  
29 between the receipt of and payment for the goods and  
30 services (i.e., cash expenditures) used to provide service to  
31 the ratepayer. The expense lags addressed in this case are  
32 explained further on pages 6 through 10 of this direct  
33 testimony.  
34

1           5)     Column E (Net Lag): results from the subtraction of  
2           the Expense Lag (Column D) from the Revenue Lag  
3           (Column C).

4  
5           6)     Column F (Factor): expresses the CWC lag in days  
6           as a fraction of the total days in the test year. This is  
7           accomplished by dividing the Net Lags in Column E by  
8           365.

9  
10          7)     Column G (CWC Requirement): the average  
11          amount of cash necessary to provide service to the  
12          ratepayer. This is computed by multiplying the Test Year  
13          Expenses (Column B) by the CWC Factor (Column F).

14  
15          Q.     Please describe the revenue lag.

16          A.     The revenue lag is defined as the amount of time between the provision of  
17          service by the Company, and the receipt of the payment for that service from ratepayers.  
18          The revenue lag for this case is the same revenue lag that was agreed to by the Staff and  
19          the Company from the last rate case, and is the sum of three subcomponent lags. They  
20          are defined as follows:

- 21           1) Usage Lag           The midpoint of average time elapsed from the beginning  
22                                   of the first day of a service period through the last day of  
23                                   that service period.  
24  
25           2) Billing Lag           The period of time between the end of the last day of a  
26                                   service period and the day the bill is placed in the mail by  
27                                   the Company.  
28  
29           3) Collection Lag       The period of time between the day the bill is placed in the  
30                                   mail by the Company and the day the Company receives  
31                                   payment from the ratepayer for services performed.  
32

33          Q.     Please define how you are using the term "service period" in this  
34          testimony.

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1           A.     In reference to the revenue lag, a service period is merely the amount of  
2 time, in days, in which a customer receives gas for billing purposes. In discussion of  
3 expense lags, this term denotes the period in which the Company receives materials or  
4 services from its suppliers.

5           Q.     Please explain the calculation of the usage lag.

6           A.     The usage lag was computed by dividing the number of days in the test  
7 year, (365), by the number of billing periods in a year, (12), and dividing that figure by  
8 two to derive the average service period. The usage lag of 15.21 days is derived from the  
9 above calculation.

10          Q.     Please explain the calculation of the billing lag.

11          A.     The billing lag is determined by analyzing the number of days between the  
12 end of the service period and the day that the bill was mailed. A billing lag of 2.8 days  
13 was agreed to in the last rate case by the Staff and Company and was used in this case.

14          Q.     How did Staff determine the collection lag in this case?

15          A.     The collection lag of 18.48 days was agreed to in the last rate case by Staff  
16 and Company and was used in this case.

17          Q.     Please explain the expense lags for each item listed on Accounting  
18 Schedule 8.

19          A.     The first expense item listed on Accounting Schedule 8 on line 1 is cash  
20 vouchers, and has the same lag that was agreed to in the last rate case of 23.20 days.

21          Q.     Please explain the payroll expense lag calculation.

22          A.     The expense items listed on Accounting Schedule 8, lines 2 through 6,  
23 relate to payroll. Payroll has been subdivided into the following five components:



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1 (1) base payroll; (2) vacation payroll; (3) federal income tax withheld; (4) state income  
2 tax withheld; (5) employee FICA (social security/medicare) taxes.

3 Q. Please explain the base payroll expense lag calculation on line 2 of  
4 Accounting Schedule 8.

5 A. The base payroll expense lag is the time lapse between the midpoint of the  
6 period in which employees earned wages, and the date wages were paid by the Company.  
7 The Staff used the pay dates from the test year payroll schedules received in the  
8 Company's response to Staff Data Request No. 151 to determine the lags for non-contract  
9 and contract employees. The base payroll expense lag was 10.61 days.

10 Q. Briefly describe the Company's vacation policy.

11 A. A Company employee earns vacation during the first year of employment.  
12 The employees cannot take this vacation time until the Company has employed him/her  
13 for at least one year. Then vacation time may be taken during the following year. An  
14 employee starting in 1998 can take one-week vacation during 1999 and cannot carry the  
15 vacation over to the next year. The exception to this policy is when the workload will not  
16 permit the employee to take the earned vacation prior to the end of the year. Employees  
17 with increased years of service earn additional vacation during the year. They may take it  
18 during the following year with the same policy exceptions.

19 Q. Please explain the computation of the expense lag days for vacation  
20 expense on line 3 of Accounting Schedule 8.

21 A. The expense lag day computation considers the time-lapse between the  
22 average date the respective vacation is earned (i.e., the midpoint of the year) and the date  
23 when the employee took the vacation (i.e., the midpoint of the following year). For

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1 purposes of this lag calculation, the Staff assumed that all vacation was taken evenly  
2 throughout the year. Staff and Company used the vacation expense lag of 365 days  
3 agreed to in the last rate case.

4 Q. What is the basis for the expense lag days assigned to payroll withholdings  
5 for federal withholding taxes, state withholding taxes and employee FICA tax on lines 4  
6 through 6 of Accounting Schedule 8?

7 A. The withholding lag days were based upon the same periods used for base  
8 payroll. The respective expense lag day computations considered the time-lapse between  
9 the average date the respective payroll was earned and the tax due dates. The federal  
10 withholding, state withholding, and FICA taxes were 12.9737, 16.4170 and 12.9737 days  
11 respectively.

12 Q. Please explain the uncollectible expense treatment on Accounting  
13 Schedule 8.

14 A. The uncollectible accounts are an expense in name only. It is actually a  
15 lack of revenue collection, and therefore, does not represent a cash flow for payment of  
16 an expense. An expense and revenue lag of zero has been assigned to this item so that a  
17 zero CWC effect is produced.

18 Q. Please explain the employer's portion of FICA tax expense lag on line 9 of  
19 Accounting Schedule 8.

20 A. The employer's portion of FICA taxes is the amount of taxes paid by the  
21 employer on payroll paid to the employees. The expense lag is calculated using the same  
22 method as the lag used for the employees' portion of FICA taxes. This calculation has  
23 been discussed earlier in my direct testimony.

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1           Q.     Please explain the federal and state unemployment tax expense lags on  
2 line 10 and 11 on Accounting Schedule 8.

3           A.     The federal and state unemployment tax lags were calculated using federal  
4 and state unemployment tax liability payments for the twelve months ended June 30,  
5 1999. The lag represents the length of time between the average day services is rendered  
6 by the employee and the day the Company makes payment for that service. Staff and  
7 Company used the federal unemployment expense lag of 87.40 days agreed to in the last  
8 rate case. The Company was not required to pay unemployment taxes to the state of  
9 Missouri during the test year; therefore, no expense lag was calculated for state  
10 unemployment tax.

11          Q.     Please explain the corporation franchise tax expense lag on line 12 of  
12 Accounting Schedule 8.

13          A.     Corporation franchise taxes are paid annually. The lag between the  
14 midpoint of the taxable period and the date paid is calculated and multiplied by the  
15 associated amounts to compute a weighted amount. The corporate franchise tax expense  
16 of a negative lag of 77.50 days agreed to in the last rate case by Staff and Company was  
17 used in this case.

18          Q.     Will you please explain the expense lag for property taxes as shown on  
19 line 13 of Accounting Schedule 8?

20          A.     Yes. The calculation of the property tax lag days was calculated using the  
21 midpoint of the service period and the payment due date (December 31, 1998) for  
22 property taxes paid by the Company during calendar year 1998. These lags were  
23 multiplied by the amount of taxes paid to arrive at the weighted lag days. The property

1 tax expense lag of 183.64 days was agreed to in the last rate case by Staff and Company  
2 and was also used in this case.

3 Q. Please explain the sales tax expense lag on line 14 of Accounting  
4 Schedule 8.

5 A. The lags between the midpoint of the taxable month and the due dates  
6 were calculated and multiplied by the associated amounts to compute a weighted amount.  
7 The sales tax expense lag of 6.8 days was agreed to in the last rate case by Staff and  
8 Company and was also used in this case.

9 Q. Will you please explain the expense lag for gross receipt taxes as shown  
10 on line 15 of Accounting Schedule 8?

11 A. Gross receipts taxes are paid monthly, quarterly, or semi-annually based  
12 upon the individual requirements of the taxing entities. The lag for this item must include  
13 the appropriate time span between the average usage period (average collection period)  
14 and the time the company pays the gross receipts taxes to the proper authorities. The  
15 gross receipts expense lag of 53.35 days was agreed to in the last rate case by Staff and  
16 Company and was also used in this case.

17 Q. Why does revenue lag for sales and use taxes and gross receipts taxes  
18 differ from the revenue lag you discussed above?

19 A. The Company acts solely as an agent of the taxing authority in collecting  
20 sales and use taxes, and gross receipt taxes from the ratepayer, and paying the proper  
21 institution on a timely basis. The Company has not provided any service to the ratepayer  
22 associated with the gross receipts and sales and use taxes. Therefore, in order to match

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1 the same time frames for these components, the collection lag was adopted and used as  
2 the revenue lag.

3 Q. Are their components of CWC that do not directly appear in the Staff's  
4 Accounting Schedule 8?

5 A. Yes, purchased gas, the federal income tax offset, state income tax offset  
6 and interest expense offset do not appear in the Staff's Accounting Schedule 8. These  
7 items appear as separate line items in the Staff's Rate Base Schedule, Accounting  
8 Schedule 2.

9 Q. Why are the federal income tax offset, state income tax offset, and interest  
10 expense offset included in the Staff's Rate Base Accounting Schedule, rather than the  
11 Staff's CWC schedule, Accounting Schedule 8?

12 A. The normalized Missouri jurisdictional expense component used for these  
13 offsets is tied directly to the mechanical computation of the revenue requirement. The  
14 Staff's revenue requirement computer program has the capability to extract these  
15 amounts from the Accounting Schedule 11, Income Tax. The computer program applies  
16 the CWC factor to each component, and places the CWC requirement directly in  
17 Accounting Schedule 2, Rate Base.

18 Q. Please explain why natural gas purchases were included in the Staff's Rate  
19 Base Schedule, Accounting Schedule 2.

20 A. Natural gas purchases are included in the Rate Base Accounting Schedule  
21 to allow the shareholder a return on their investment in gas purchases. Currently, the  
22 Company pays for natural gas before they receive revenue from the ratepayers. Natural  
23 gas is included separately in rate base because the Staff has eliminated all natural gas

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1 costs from the Staff's cost of service. By including natural gas cost separately, the net  
2 income from the Staff's Income Statement matches the net income as it appears on  
3 Accounting Schedule 8. This procedure allows for the proper assignment of dollars to  
4 the cash voucher category on Accounting Schedule 8.

5 Q. Please explain the purchased gas lag.

6 A. The purchased gas expense lag represents the midpoint of time between  
7 the time in which gas was delivered to the Company and the date that the Company paid  
8 for the gas. The lag was weighted by the total dollar purchases during the test year to  
9 calculate the expense lag for purchased gas of 36.2169 days. The expense lag is then  
10 subtracted from the revenue lag and the resulting net lag is divided by 365 to determine a  
11 CWC factor of 0.0007482. This factor was then multiplied to the test year annual gas  
12 expense to determine the amount to be included in rate base.

13 Q. Please explain the federal and state income tax offsets.

14 A. The federal and state income tax expense lags represent the period of time  
15 between the midpoint of the tax/calendar year and the dates the income taxes must be  
16 paid to the federal and state taxing authority. Currently, 100% of the estimated federal  
17 tax must be paid during the year in four installments, which are due by the 15<sup>th</sup> day of  
18 April, June, September, and December. The state of Missouri requires that at least 90%  
19 of the Company's estimated tax liability must be paid during the year in four equal  
20 installments, which must be paid by the 15<sup>th</sup> day of April, June, September, and  
21 December. Unlike the estimated federal tax requirements, the remaining 10% tax  
22 liability is due by April 15<sup>th</sup> following the close of the tax year.

1           Each lag was calculated from each payment date to the midpoint of the tax  
2 year. The federal and state income tax lags were weighted by the total tax payments  
3 made during the year to obtain federal and state income tax expense lags of 37 and 62.15  
4 days, respectively. The CWC factors, .1397% and 7.0301% respectively, result from  
5 subtracting the expense lags from the revenue lag and then dividing by 365 days. The  
6 CWC factors are found in the Rate Base Accounting Schedule, and the Staff's computer  
7 program calculates the CWC requirements for federal and state income taxes.

8           Q.     Please explain the interest expense offset.

9           A.     The expense lag for interest was computed by determining the midpoint of  
10 the interest periods of the Company's long-term debt, weighted by the total interest  
11 payments made during the twelve months ending June 30, 1999. The expense lag  
12 computed for interest expense is 89.02 days. The CWC factor of 14.3915% was  
13 calculated in the same manner as previously described and is found in the Staff's Rate  
14 Base Accounting Schedule and the Staff's computer program calculates the CWC  
15 requirements for interest.

16          Q.     Please explain and describe the inclusion of taxes and interest in the Staff's  
17 analysis of CWC.

18          A.     Unlike the other cash expense line items in Accounting Schedule 8, taxes  
19 and interest are not considered to be operating and maintenance expenses. However, they  
20 are known and certain obligations of the Company with payment periods and payment  
21 dates established by statute, or by the terms of the bond. Amounts collected for taxes  
22 and interest represent a source of cash to the Company until passed on to the appropriate  
23 taxing authority or bondholder, and therefore should be included in a lead/lag analysis.

1 Q. What was the result of the Staff's lead/lag calculation?

2 A. The individual calculations, when totaled, result in total net ratepayer  
3 supplied funds and illustrate the excess of CWC supplied by the ratepayer over the  
4 amount supplied by the shareholder. The CWC component is deducted from rate base to  
5 compensate the ratepayer for the use of their funds. This is shown on Accounting  
6 Schedule 2.

7 **ADMINISTRATION AND GENERAL EXPENSES**

8 Q. What other areas will your testimony be covering?

9 A. I am sponsoring the Staff's position regarding the appropriateness of  
10 various UE-funded dues, donations, and advertising programs. In addition, I am  
11 sponsoring necessary adjustments to annualize the Commission's annual assessment and  
12 to normalize the allocation of expenses between electric and gas operations.

13 Q. Please discuss Income Statement Adjustment S-10.1.

14 A. This adjustment decreases advertising expenses by \$15,738. There was a  
15 large variation with a sharp decline in advertising between the various months for the test  
16 year plus the update period. The advertising expense leveled out the last ten months  
17 following the test year. As a result, the Staff decided to normalize the advertising  
18 expense and use the most current 12 months of data updated through April 30, 2000.

19 Q. Please explain Adjustment S-12.1.

20 A. This adjustment normalizes expenses for the most current Missouri PSC  
21 Assessment.

22 Q. Please explain Adjustment S-12.2.



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A. This adjustment decreases test year expenses relating to various dues and donations. The Staff recommends disallowing these expenses because they are not gas related, they are not necessary for safe and adequate service, and they provide no direct benefit to the ratepayers. Without these disallowances, ratepayers would be forced to become non-voluntary contributors to these organizations.

The disallowance was calculated based on the following amounts

Association of Edison Illuminating COS.	\$ 149
Edison Electric Institute.	\$17,924
Missouri Society of Professional Engineers.	\$ 28
Nuclear Energy Institute.	\$ 5,487
St. Louis Electric Board of Trade.	\$ 1,375
Taxpayers' Federation of Illinois.	\$ 160
<u>DR # 166</u>	
St. Louis Area Business Health Coalition.	\$ 220
Gateway Purchases for Health Dues.	\$ 193
Illinois Energy Association Dues.	\$ 398
Illinois Energy Association Co-generation.	\$ 30
River Bend Association.	\$ 69
<u>OPC-DR # 10</u>	
<u>Charitable Contributions</u>	<u>\$ 142</u>
<b>Total</b>	<b>\$26,175</b>

(Source: Company Responses to Staff Data Request No. 58 and 78.)

Q. Please explain Adjustment S-12.3.

A. This adjustment disallows certain miscellaneous expenses charged to Missouri Gas (i.e., AmerenUE Christmas party and Flowers). These activities are not necessary for safe and adequate service and provide no direct benefit to the ratepayer.

AmerenUE Christmas Party.	\$ 951
Flowers	\$ 11
<b>Total</b>	<b>\$ 962</b>

(Source: Company Responses to Staff Data Request No. 104.)

1           Q.     Please explain Adjustment S-12.20, pertaining to annualizing  
2 transportation costs associated with meter reading.

3           A.     This adjustment annualizes the transportation costs for meter reading from  
4 the test year to a more current level. At the end of the Staff's test year, UE had 27,671  
5 automated/electronic gas meters in service. As of the end of the update period,  
6 April 30, 2000, UE had 107,016 automated/electronic gas meters in service. This equates  
7 to 98 percent of the Company's total number of gas meters being upgraded with the new  
8 automated/electronic gas meters. Therefore, the transportation costs for meter reading  
9 needs to be adjusted accordingly to reflect the current costs associated with the  
10 automated/electronic gas meters. For the first four months of the year 2000, UE's gas  
11 operations total charge for transportation costs for meter reading were \$9,300. The Staff  
12 annualized these costs over the period of one year for a total of \$27,900.

13          Q.     Please explain Adjustment S-12.19.

14          A.     This adjustment eliminates electronic meter reading installation costs from  
15 the test year. During the test year, UE paid Cellnet Data Services \$116,669 to install the  
16 automated electronic gas meters. These costs were written-off after the Staff's test year.

17          Q.     Please explain Adjustment S-12.21, pertaining to annualizing service  
18 request costs associated with meter reading.

19          A.     This adjustment annualizes the service request costs associated with meter  
20 reading from the test year to a more current year. AmerenUE uses a service request  
21 allocation percentage factor to allocate costs to the other subsidiaries. This percentage  
22 varies according to amount of sales, number of customers, and number of employees  
23 assigned to the different subsidiaries. For the first four months of the year 2000, UE's

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1 gas operations total charge for service request costs for meter reading were \$64,163. The  
2 Staff annualized these costs over the period of one year for a total of \$192,489.

3 Q. What do the letters CSS and EMPRV represent?

4 A. CSS and EMPRV are the "names" of the databases and are not acronyms.

5 Q. Please discuss the CSS computer software system.

6 A. CSS is the installation of Andersen Consultant's CUSTOMER/1  
7 Implementation Project. This product was purchased to replace the existing legacy  
8 customer information system (CIS) for Ameren Services. The first phase addressed large  
9 commercial and industrial customers. Subsequent phases addressed the balance of the  
10 commercial and industrial customers and included residential customers.

11 Q. Please discuss Adjustment S-12.5 computer system software.

12 A. This adjustment amortizes the computer system software CSS costs over a  
13 ten-year period. Due to the significance of the amounts, the enhanced capabilities of the  
14 system, and the fact that this system was intended to provide benefits over an extended  
15 period of time, Staff believes that the computer software costs related to CSS should be  
16 amortized over a ten-year period.

17 Q. How much expense is related to CSS?

18 A. Of the total project cost of \$9,161,052 for the twelve months ending  
19 June 30, 1999, \$132,164 was expensed to Union Electric Missouri gas operations.

20 Q. Please explain the adjustment pertaining to computer system software year  
21 2000 (Y2K) costs.

1           A.     The purpose of Income Statement Adjustment S-12.6 is to amortize the  
2 software upgrade costs identified by the Company's response to Staff Data Request No.  
3 97 associated with Y2K compliance over a ten-year period.

4           Q.     Please explain why the Staff is amortizing the costs associated with  
5 software upgrades services related to Y2K.

6           A.     Cost of service for ratemaking purposes should be based on a utility's  
7 normal operating costs. Abnormal and or nonrecurring costs should be eliminated or  
8 amortized in order to avoid overstating cost of service for an abnormal event.

9           Q.     How have abnormal costs been treated for ratemaking purposes in prior  
10 cases?

11          A.     Significant abnormal costs have often been deferred and amortized for  
12 ratemaking purposes over a period of years. Costs, which are abnormal and or  
13 nonrecurring, and which do not have significant financial statement impact, are normally  
14 eliminated for the purpose of setting rates on normal, ongoing operating costs.

15          Q.     Why is Staff recommending a ten-year amortization period?

16          A.     The Staff is recommending a ten-year amortization period based on  
17 Commission precedent in the Report and Order in Case No. GR-96-285, Missouri Gas  
18 Energy. In that order the Commission found as follows:

19                 MGE proposal that computer hardware and software be  
20 depreciated at a rate of 10 percent per year is appropriate  
21 because technology is advancing at such a rapid rate that an  
22 owner will frequently find computer hardware and software  
23 to be obsolete ten years or less after the date of acquisition.

24          Q.     Is there other precedence on which the Staff relied in determining an  
25 appropriate depreciation rate?

1           A.     Yes, there is. The Staff also relied on the Commission's April 16, 1998  
2 Order Denying Application For Rehearing, Granting in Part And Denying In Part  
3 Application For Reconsideration, Granting Motion For Clarification And Approving  
4 Tariff in Case Nos. ER-97-394, ET-98-103, and EC-98-126 relating to Missouri Public  
5 Service, a Division of UtiliCorp United Inc. This Order recognized a depreciation rate of  
6 11.11% for new computer equipment.

7           Q.     Please explain Adjustments S-12.4, pertaining to computer system  
8 software.

9           A.     The EMPRV system is a power plant maintenance management program.  
10 More specifically, EMPRV is a computer software package used to manage power plant  
11 facilities. EMPRV supports company procedures and practices for the maintenance of  
12 equipment in the power plants, as well as functions related to maintenance of that  
13 equipment. Of the total project cost of \$1,269,010 for the twelve months ending  
14 June 30, 1999, \$17,123 was expensed to UE Missouri gas operations. Since this is a  
15 power plant maintenance management software program, and is not directly related to  
16 Missouri gas operations, and provides no benefits to the Missouri gas ratepayer, this cost  
17 should not be included as an expense for the Missouri gas ratepayers.

18          Q.     Please explain Adjustment S-12.27 pertaining to the Generation Strategy  
19 Project.

20          A.     The primary objective of the Generation Strategy Project was to evaluate  
21 potential strategic options related to Ameren's generation portfolio. The consultant hired  
22 for this project identified the relevant issues surrounding the generation business,  
23 assessed Ameren's internal capabilities, valued Ameren-owned generation, and

Direct Testimony of  
Paul R. Harrison

1 developed an appropriate generation strategy for the Company. In reply to Staff Data  
2 Request No. 150 the Staff asked the Company to provide a detailed analysis of the  
3 generation strategy project, the total amount charged to Missouri gas for the 12 months  
4 ending  
5 June 30, 1999, and explain what benefit the Missouri gas customer received from it. The  
6 Company's response was:

7           The Generation Strategy Project was a strategic growth  
8           initiative designed to enhance Ameren's overall competitive  
9           position in the Midwest energy market and, as such, there  
10          are no identified direct benefits of this initiative to  
11          AmerenUE's Missouri gas customers.

12          Of the total project cost of \$287,843 for the twelve months ending June 30, 1999,  
13          \$5,658 was expensed to Union Electric Missouri gas operations. Since this is a Power  
14          Generation Project, and is not directly related to Missouri gas operations, and provides no  
15          benefits to the Missouri gas ratepayer, it therefore, should not be included as an expense  
16          for the Missouri gas ratepayers.

17          Q.     Please explain Adjustment S-12.17 pertaining to consulting fees.

18          A.     This adjustment decreases test year expense by \$895 for the Company's  
19          consulting fees allocated to the Missouri gas operations. In reply to Staff Data Request  
20          No. 147, the Staff asked the Company to provide the number of hours and what amount  
21          was charged to Missouri gas for the 12 months ending June 30, 1999, for the Company's  
22          regulatory advisor's consulting fees. The Company's response was:

23                This compensation is calculated based on \$3,000 monthly  
24                retainer and not an hourly basis. To date, AmerenUE has  
25                not utilized this consultant on an hourly basis.

1           It is the Staff's opinion that these services are not necessary for the  
2 provision of safe and adequate gas service and provide no direct benefit to the ratepayer.

3           Q.     Please explain Adjustment S-12.18 pertaining to the Company's Board of  
4 Directors Advisor costs.

5           A.     This adjustment decreases test year expenses by \$520 for AmerenUE's  
6 Board of Director's Advisor fees. The Advisor's services are provided at the discretion  
7 of the Company's management. It is the Staff's opinion that the Advisor's services are  
8 not necessary for the provision of safe and adequate gas service and provide no direct  
9 benefit to the ratepayer. In reply to Staff Data Request No. 179, Staff asked the  
10 Company to explain what benefit the Missouri gas ratepayer received for the Board of  
11 Director's Advisor fees. The Company's response was:

12                     Due to illness, AmerenUE's Board of Directors Advisor  
13                     was not able to actively participate in matters before  
14                     AmerenUE's Board during the test year ending  
15                     June 30, 1999.

16           Q.     Does this conclude your direct testimony?

17           A.     Yes, it does.

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

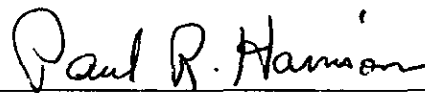
In The Matter of Union Electric                     )  
Company, d/b/a AmerenUE, For                     )  
Authority To File Tariffs Increasing Rates       )  
For Gas Service Provided To Customers           )  
In The Company's Missouri Service Area        )

Case No. GR-2000-512

**AFFIDAVIT OF PAUL R. HARRISON**

STATE OF MISSOURI     )  
                                  ) ss  
COUNTY OF COLE        )

Paul R. Harrison, of lawful age, on his oath states: that he has participated in the preparation of the foregoing written testimony in question and answer form, consisting of 21 pages of testimony to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

  
\_\_\_\_\_  
Paul R. Harrison

Subscribed and sworn to before me this 4<sup>th</sup> day of August, 2000.

  
\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

SHARON S WILES  
NOTARY PUBLIC STATE OF MISSOURI  
COLE COUNTY  
MY COMMISSION EXP. AUG. 23, 2002