

Exhibit No.:
Issues: Cash Working Capital
Witness: Michael J. Adams
Sponsoring Party: Union Electric Company
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2007-0002
Date Testimony Prepared: January 31, 2007

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

REBUTTAL TESTIMONY

OF

MICHAEL J. ADAMS

ON

BEHALF OF

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

**St. Louis, Missouri
January 31, 2007**

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1 **REBUTTAL TESTIMONY**
2 **OF**
3 **MICHAEL J. ADAMS**
4 **CASE NO. ER-2007-0002**

5
6 **I. INTRODUCTION AND WITNESS QUALIFICATIONS**

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

8 A. My name is Michael J. Adams. My business address is 77 South Bedford
9 Street, Suite 400, Burlington, Massachusetts 01803.

10 **Q. Are you the same Michael J. Adams that filed direct testimony in this**
11 **proceeding?**

12 A. Yes, I am.
13

14 **II. PURPOSE AND SCOPE**

15 **Q. What is the purpose of your rebuttal testimony?**

16 A. The purpose of my rebuttal testimony is to respond to the Cash Working
17 Capital ("CWC") calculation sponsored by Missouri Public Service Commission
18 ("MPSC" or the "Commission") Staff witness Began.

19 **Q. What level of CWC requirements did the Company file for in its**
20 **direct case?**

21 A. As shown on Ameren Schedule GSW-E24, the Company requested a
22 negative cash working capital requirement of \$4.2 million excluding income tax and
23 interest offsets.

24 **Q. What level of CWC requirements is the Staff recommending in its**
25 **direct case?**

1 A. Staff witness Began has recommended a cash working capital requirement
2 of a negative \$36.0 million, excluding income tax and interest offsets.

3 **Q. To what do you attribute the differences in the level of CWC**
4 **requirements requested by the Company and that proposed by Staff witness Began?**

5 A. The primary drivers of the differences between the Company's requested
6 level of CWC and that proposed by Staff are a result of the following errors in Staff's
7 analysis:

- 8 1. Incomplete calculation of the revenue lag;
- 9 2. Inclusion of non-cash items (i.e., vacation payroll) in the cash
10 working capital analysis;
- 11 3. Incorrect revenue lag days associated with Sales & Use Taxes and
12 Gross Receipts Taxes; and
- 13 4. Differences in the levels of test year expenses used in the
14 calculation of the Company's cash working capital requirements.

15 I will address the first three differences in my rebuttal testimony. To the extent
16 that the differences in Staff's expense levels are materially different than those presented
17 by the Company, various Company witnesses will address those differences.

18 **Q. In addition to your rebuttal testimony in this proceeding are you**
19 **sponsoring any other exhibits?**

20 A. Yes. In addition to my testimony, I am sponsoring Exhibits MJA-E2.1
21 through MJA-E2.6.

1 **Q. Have you prepared a side-by-side comparison of the results of your**
2 **cash working capital requirements calculation and the one prepared by Staff**
3 **witness Began?**

4 A. Yes. Exhibit MJA-E2.1 shows a side-to-side comparison of the two
5 calculations.
6

7 **III. INCOMPLETE CALCULATION OF REVENUE LAGS**

8 **Q. How does Staff witness Began define revenue lag?**

9 A. According to Staff witness Began's direct testimony, "The revenue lag is
10 the amount of time between when the Company provides service and when the Company
11 receives payment for that service from ratepayers.¹" In proposing that the Commission
12 adopt a total of 37.43 revenue lag days, Staff witness Began defines revenue lag as the
13 sum of the lags associated with usage, billing, and collections.

14 **Q. Do you agree with Staff's definition of revenue lag?**

15 A. No. I agree with Staff witness Began that the service or usage lag, the
16 billing lag, and the collections lag are three components of the revenue lag. I disagree,
17 however, with Staff's omission of two additional components that are integral parts of an
18 overall revenue lag - payment processing and bank float.

19 **Q. Explain why payment processing should be considered as part of the**
20 **revenue lag.**

21 A. It is important to recognize that once a customer's bill is due, that payment
22 does not immediately transform itself into cash for the Company's use. The Company
23 has to process the customer's payment and deposit it into its bank or financial institution.

¹ Direct Testimony of Edward F. Began CPA, Case No. ER-2007-002, p.8, lines 1-2

1 The additional time associated with processing customer payments therefore should be
2 included in a lead-lag analysis. By electing to exclude payment processing from the
3 revenue collection process, Staff witness Began has understated the overall revenue lag
4 time used in his derivation of the Company's cash working capital requirements. Thus, I
5 recommend that the Commission accept the Company's 1.13 day estimate of payment
6 processing lag.

7 **Q. Please explain how the payment processing lag of 1.13 days was**
8 **determined.**

9 A. The payment processing lag of 1.13 days was arrived at by analyzing the
10 source of funds received via the customer's various payment methods and determining
11 the amount of time, on a dollar-weighted basis, that it takes for the funds to be actually
12 received by the Company and transported to the bank for depositing.

13 **Q. Explain why bank float should be considered as part of the revenue**
14 **lag.**

15 A. Subsequent to payment processing, the Company has to deposit the
16 customer's payment instrument (e.g., check) into its bank or financial institution. The
17 Company's bank, on receipt of the check, does not make all the funds immediately
18 available to the Company for its use. A certain amount is immediately available, a
19 certain amount is available the next day, and the balance is available to the Company
20 after 2+ days. Again, by electing to ignore this link in the overall revenue lag chain, Staff
21 witness Began has understated the revenue lag time used in his derivation of the cash
22 working capital requirements of the Company. Thus, I recommend that Commission

1 adopt the Company's 1.02 day estimate of bank float for inclusion as part of the overall
2 revenue lag.

3 **Q. How was the 1.02 day bank float lag calculated?**

4 A. The bank float lag of 1.02 days was calculated based upon actual fund
5 availability data obtained from the Company's bank.

6 **Q. Does Staff witness Began address the issue of bank float in his**
7 **testimony?**

8 A. Yes. Staff witness Began states that "The Commission has consistently
9 excluded any bank float lag because it changes the definition of payment/collection lag
10 from the time the Company takes to pay a bill or waits to receive customer payments to
11 the time the bank takes to debit or credit the Company's bank account for the funds.²"
12 He uses this as the basis for ignoring the float on both payments received by the
13 Company from customers as well as payments made by the Company to its vendors.

14 **Q. Is Staff witness Began's proposed treatment of bank float**
15 **appropriate?**

16 A. No. I believe that the Company's inclusion of bank float in the analysis of
17 both revenue lags and expense leads is appropriate for two reasons. First, Staff witness
18 Began himself defines the CWC requirement as "the amount of cash necessary for a
19 utility to pay the day-to-day expenses it incurs in providing service to the ratepayer.³" If
20 the source of cash to pay such day to-day expenses is a check received from a customer,
21 that check is worthless to the Company to pay a vendor's bill unless the check has been

² Ibid, p. 17, lines 11-14.

³ Ibid, p. 5, lines 18-19.

1 deposited into the Company's account and the funds have been cleared. Staff witness
2 Began's analysis fails to reflect this simple fact.

3 Second, by reflecting the payment processing and bank float on both
4 payments received and payments made, the Company is presenting a more accurate and
5 complete picture of its sources and the ultimate disposition of cash. Thus, I recommend
6 that the Commission reject Staff witness Began's position on the issue of the payment
7 processing and bank float in favor of the Company's position.

8 **Q. In your opinion, is the change in the definition of the revenue lag that**
9 **seems to concern Staff witness Began warranted?**

10 A. Yes. The revenue lag which is actually experienced by the Company does
11 not end when a customer sends a payment. At that point, the Company still does not
12 have access to those funds. Therefore, it is appropriate to reflect the payment processing
13 lag and the bank float lag in the CWC analysis. The Commission should modify its
14 definition of the revenue lag to reflect this reality.

15 **Q. Are you aware of any other regulatory jurisdictions which exclude the**
16 **payment processing and bank float lags from the determination of the overall**
17 **revenue lag?**

18 A. No. I have provided testimony regarding the cash working capital
19 requirements on behalf of my clients in a number of different regulatory jurisdictions. In
20 each of those regulatory jurisdictions the payment processing and bank float lags were
21 included in the determination of the overall revenue lag.

22 **Q. What is the impact of excluding payment processing and bank float**
23 **from the overall revenue lag alone?**

1 A. As Exhibit MJA-E2.2 shows, using the expense levels as filed by the
2 Company and excluding payment processing and bank float from the overall revenue lag
3 results in a Company cash working capital requirement of negative \$17 million compared
4 with the negative \$4.2 million as filed by the Company, i.e., a difference of
5 approximately \$12.8 million.

6 **Q. What is the impact of excluding payment processing and bank float**
7 **on both revenue lags and expense leads?**

8 A. To determine the impact of excluding payment processing and bank float
9 on both revenue lags and expense leads, one has to first determine the expense items to
10 which payment processing and bank float are applicable. The expense items to which
11 payment processing and bank float are applicable include payments for fuel oil, cash
12 vouchers (or other operations and maintenance), property taxes, corporation franchise
13 taxes and gross receipts taxes. As shown on Exhibit MJA-E2.3, if payment processing
14 and bank float were to be excluded on both revenue lags and the major categories of
15 expense leads using the expense levels as filed by the Company, the resulting cash
16 working capital requirement of the Company is negative \$26.6 million compared with the
17 negative \$4.2 million as filed by the Company, a difference of \$22.4 million.

18 **Q. What is the impact of including payment processing and bank float on**
19 **both revenue lags and expense leads in Staff witness Began's presentation of the**
20 **Company's cash working capital requirements?**

21 A. Assuming that the expense levels used by Staff witness Began in the
22 calculation of the Company's cash working capital requirement are correct, including
23 payment processing and bank float on both revenue lags and expense leads of Staff

witness Began's results in a cash working capital requirement of negative \$36.6 million compared with the negative \$4.2 million as filed by the Company. The impact is shown on Exhibit MJA-E2.4.

IV. NON-CASH FACTORS IN THE LEAD-LAG ANALYSIS

Q. What non-cash factors are presented in Staff witness Began's presentation of cash working capital?

A. Staff witness Began has inappropriately included the Company's vacation accrual, a balance sheet item, in his cash working capital analysis.

Q. What does the vacation accrual represent?

A. The vacation accrual represents a liability on behalf of the Company associated with vacation time earned or banked by its employees. If the Company were to cease operations, the employees would theoretically be owed the amount of vacation pay that had been accrued.

Q. Is it appropriate to include the vacation accrual in a cash working capital analysis?

A. No. As I previously stated, the item represents an accrual to reflect potential liabilities. The vacation accrual included in Staff witness Began's cash working capital calculation does not represent an annual cash expense. Rather, the vacation accrual remains on the Company's balance sheet to reflect a potential liability.

Q. Is Staff witness Began's proposed treatment of the vacation payroll necessary to accurately reflect an annualized level of payroll-related expenses?

1 A. No. The Company’s proposed level of expenses already reflects twelve
2 months of payroll-related expenses. Including an additional amount of compensation
3 associated with the vacation accrual results in an artificially inflated level of expenses
4 included in Staff witness Began’s cash working capital analysis.

5 **Q. Why is the vacation accrual a non-cash factor that should not be**
6 **included in an estimation of cash working capital?**

7 A. Staff witness Began’s treatment of the vacation accrual infers that an
8 employee of the Company has the opportunity to earn extra cash while on vacation. This
9 is simply not the case. An employee of the Company earns his/her regular paycheck
10 while on vacation. For Staff witness Began’s treatment to be accurate either the
11 Company would need to cease operations or, conversely, every employee would have to
12 quit after they had vested vacation time. Neither scenario is likely to occur. Thus,
13 vacation payroll is not a legitimate cash expense and has not been considered in the
14 Company’s study.

15 **Q. Does the Missouri PSC Staff have a position regarding the inclusion of**
16 **non-cash items in lead lag studies?**

17 A. Yes. Based upon my understanding of Staff’s Cash Working Capital
18 handbook, which was provided by MPSC Staff in response to a data request within Case
19 GR-2003-0517, Staff has opposed inclusion of non-cash items in lead lag studies. The
20 handbook correctly states, “the utility does not need to have cash on hand for these
21 expenses because there is no cash outlay associated with these items.”

1 **Q. Setting aside the question of whether the vacation payroll issue is an**
2 **accrual or not, do you agree with the expense lead that Staff witness Began applies**
3 **to vacation amounts?**

4 A. No. The expense lead used by Staff witness Began is unreasonably long.
5 The fact is that the Company's payment of vacation time is on the same timeframe as
6 regular payroll expenses. No separate fund of money is funded or maintained associated
7 with the accrued vacation. Those vacation payments are made from normal cash flows
8 the same as payroll expenses. Therefore, the payroll lead should also be applied to the
9 vacation payroll amounts.

10 **Q. What impact does the inappropriate inclusion of the vacation payroll**
11 **in Staff's analysis have on the Company's overall CWC requirements?**

12 A. By including the vacation payroll in his analysis, Staff witness Began has
13 understated the Company's CWC requirements by over \$13 million. The impact of
14 excluding vacation payroll from Staff witness Began's analysis is shown on Exhibit
15 MJA-E2.5. As seen within the exhibit, assuming the expense levels as filed by Staff
16 witness Began are correct, excluding vacation payroll from the analysis results in a cash
17 working capital requirement of a negative \$23 million compared with the negative \$36
18 million as filed by Staff.

19
20 **V. INCORRECT REVENUE LAG DAYS ASSOCIATED WITH SALES &**
21 **USE TAXES AND GROSS RECEIPTS TAXES**
22

23 **Q. Why does Staff witness Began elect to use alternate revenue lag days**
24 **for sales and use taxes?**

1 A. According to Staff witness Began, the Company's liability for forwarding
2 sales and use taxes to the respective taxing authorities does not begin until such taxes are
3 collected. Thus, a revenue lag time of zero has been assigned to sales and use taxes
4 associated with service lag and billing lag. Staff witness Began assigns only the
5 collections piece (i.e., 21.78 days) of the revenue lag to gross receipts taxes on the
6 grounds that the liability to pay such taxes occurs only after bills have been sent to
7 customers.

8 **Q. Do you agree with Staff witness Began with regard to his position on**
9 **sales and use taxes?**

10 A. No. As I discussed earlier, the revenue lag consists of a chain of events.
11 The customer receives a service from the Company; the Company reads the meter to
12 determine the amount of service received during a given period of time; the Company
13 bills the customer for that service; the customer pays the bill; the Company processes the
14 payment; and the funds become available to the Company at the bank.

15 Staff witness Began's approach selectively chooses to ignore links in the
16 revenue lag chain. Staff witness Began presumes that the Company's obligation to pay
17 the taxes coincides with the issuance of the bill in the case of gross receipts taxes.
18 Therefore, he erroneously reflects only the collections lag portion of the overall revenue
19 lag. He takes an even more unreasonable position with regards to sales and use taxes by
20 reflecting no revenue lag for these items. Such a position does not reflect the reality of
21 the revenue lag process.

22 The issuance of a bill to a customer reflecting an amount of gross receipts
23 taxes is simply an event. The printing of the bill did not generate the Company's

1 obligation related to the taxes - the Company's obligation related to the taxes occurred
2 when that customer used the Company's services.

3 Staff witness Began would have the Commission believe that the
4 Company incurs an obligation related to sales and use taxes without any consideration of
5 the revenue lag process. Clearly these taxes are legitimate business expenses which are
6 recovered from customers via the monthly billing process. Therefore, it is appropriate to
7 reflect the entire revenue lag amount when determining the cash working capital impact
8 associated with the sales and use taxes.

9 **Q. What impact does Staff witness Began's proposed treatment of the**
10 **revenue lag for sales and use taxes and gross receipts taxes have on the**
11 **determination of the Company's CWC requirements?**

12 A. Even if one were to apply Staff witness Began's revenue lag number
13 which, for reasons described earlier, is incomplete, the inappropriate treatment of the
14 revenue lag for sales and use taxes and gross receipts taxes results in an understatement
15 of the Company's CWC requirements of approximately \$9.6 million. The impact is
16 shown on Exhibit MJA-E2.6.

17
18 **VI. SUMMARY OF RECOMMENDATIONS**

19 **Q. Please summarize your recommendations to the Commission.**

20 A. I recommend that the Commission:

- 21 1. Adopt the Company's calculation of the revenue lag which
22 appropriately includes the lags associated with payment processing
23 and bank float.
- 24 2. Include bank float on cash outflows.

- 1 3. Reject the inclusion of non-cash items, i.e., vacation payroll, in Staff
2 witness Began's analysis because it does not reflect the actual flow of
3 funds associated with payroll.
- 4 4. Reject Staff witness Began's utilization of alternate revenue lag times
5 for sales and use taxes and gross receipts taxes.
- 6 5. Require the Company to update its presentation of CWC once these
7 lead-lag studies and CWC issues, as well as other issues related to the
8 level of the Company's Operation and Maintenance Expenses, have
9 been resolved.
- 10 **Q. Does this conclude your rebuttal testimony?**
- 11 A. Yes, it does.

AmerenUE Electric
Comparison of the Company's and Staff's Cash Working Capital Positions

Line No.	Component (A)	Per Staff						Per Company					
		Test Year Expenses (B)	Revenue Lag (C)	Expense Lead (D)	Net Lag (E)	CWC Factor (F)	CWC Requirement (G)	Test Year Expenses (H)	Revenue Lag (I)	Expense Lead (J)	Net Lag (K)	CWC Factor (L)	CWC Requirement (M)
1	Pensions and Benefits	\$ -	\$ -	\$ -	-	-	\$ -	\$ 108,560,000	40.11	45.07	(4.96)	-1.36%	\$ (1,475,226)
2	Payroll and Withholdings							281,774,000	40.11	11.24	28.87	7.91%	22,287,165
3	Base Payroll	165,262,461	37.43	10.49	26.94	7.38%	12,197,728				-	0.00%	-
4	Vacation Payroll	16,118,900	37.43	300.70	(263.27)	-72.13%	(11,626,364)				-	0.00%	-
5	401-K	19,817,501	37.43	21.49	15.94	4.37%	865,455				-	0.00%	-
6	FWH Taxes	37,735,720	37.43	12.79	24.64	6.75%	2,547,420				-	0.00%	-
7	SWH Taxes	10,970,848	37.43	14.96	22.47	6.16%	675,383				-	0.00%	-
8	Employee FICA Taxes	17,651,317	37.43	12.79	24.64	6.75%	1,191,585				-	0.00%	-
9	Benefits (excluding Pensions)	70,550,324	37.43	59.37	(21.94)	-6.01%	(4,240,751)				-	0.00%	-
10	Fuel - Nuclear	41,651,189	37.43	18.88	18.55	5.08%	2,116,793	38,883,000	40.11	19.71	20.40	5.59%	2,173,187
11	Fuel - Coal	506,690,567	37.43	21.92	15.51	4.25%	21,530,879	494,227,000	40.11	21.92	18.19	4.98%	24,630,107
12	Fuel - Gas	22,260,036	37.43	39.73	(2.30)	-0.63%	(140,269)	60,151,000	40.11	39.73	0.38	0.10%	62,623
13	Fuel - Oil	2,007,093	37.43	30.11	7.32	2.01%	40,252	3,064,000	40.11	35.45	4.66	1.28%	39,118
14	Purchased Power	38,820,352	37.43	35.21	2.22	0.61%	236,113	112,852,000	40.11	35.21	4.90	1.34%	1,514,999
15	Uncollectible Expense	13,396,533	37.43	37.43	-	0.00%	-	14,481,000	40.11	40.11	-	0.00%	-
16	Pension Expense	38,023,999	37.43	73.54	(36.11)	-9.89%	(3,761,772)				-	0.00%	-
17	HeadWater and Relicensing	1,066,249	37.43	402.43	(365.00)	-100.00%	(1,066,249)				-	0.00%	-
18	Cash Vouchers	483,150,514	37.43	45.38	(7.95)	-2.18%	(10,523,415)	354,526,000	40.11	50.72	(10.61)	-2.91%	(10,305,537)
19	Sub Total	1,485,173,603						1,468,518,000	40.11				
20	FICA - Employer Portion	17,651,317	37.43	12.79	24.64	6.75%	1,191,585	19,295,000	40.11	12.89	27.22	7.46%	1,438,931
21	FUTA	169,657	37.43	76.38	(38.95)	-10.67%	(18,104)	169,000	40.11	60.63	(20.52)	-5.62%	(9,501)
22	SUTA						(71,000)		40.11	60.63	(20.52)	-5.62%	3,992
23	Corporation Franchise	1,430,671	37.43	(77.50)	114.93	31.49%	450,485	1,428,000	40.11	(72.16)	112.27	30.76%	439,237
24	Property Tax	94,899,947	37.43	182.23	(144.80)	-39.67%	(37,647,979)	97,866,000	40.11	187.84	(147.73)	-40.47%	(39,610,258)
25	St Louis Payroll Earnings Tax	124,058	37.43	76.38	(38.95)	-10.67%	(13,239)	139,000	40.11	(2.66)	42.77	11.72%	16,288
26	Gross Receipts Tax	99,735,953	21.27	53.48	(32.21)	-8.82%	(8,801,356)	98,315,000	40.11	58.82	(18.71)	-5.13%	(5,039,654)
27	Sales Tax							49,397,000	40.11	40.55	(0.44)	-0.12%	(59,547)
28	Use Tax							2,519,000	40.11	81.72	(41.61)	-11.40%	(287,166)
29	Sales and Use Tax	49,824,963	-	8.89	(8.89)	-2.44%	(1,213,545)						
30	TOTAL						<u>\$ (36,009,366)</u>						<u>\$ (4,181,241)</u>

AmerenUE Electric
Recalculation of Cash Working Capital Requirements Excluding Payment Processing and Bank Float

Line No.	Component (A)	Per Staff						Per Company					
		Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement	Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement
		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
1	Pensions and Benefits							108,560,000	37.43	45.07	(7.64)	-2.09%	(2,272,324)
2	Payroll and Withholdings							281,774,000	37.43	11.24	26.19	7.18%	20,218,249
3	Base Payroll	165,262,461	37.43	10.49	26.94	7.38%	12,197,728				-	0.00%	-
4	Vacation Payroll	16,118,900	37.43	300.70	(263.27)	-72.13%	(11,626,364)				-	0.00%	-
5	401-K	19,817,501	37.43	21.49	15.94	4.37%	865,455				-	0.00%	-
6	FWH Taxes	37,735,720	37.43	12.79	24.64	6.75%	2,547,420				-	0.00%	-
7	SWH Taxes	10,970,848	37.43	14.96	22.47	6.16%	675,383				-	0.00%	-
8	Employee FICA Taxes	17,651,317	37.43	12.79	24.64	6.75%	1,191,585				-	0.00%	-
9	Benefits (excluding Pensions)	70,550,324	37.43	59.37	(21.94)	-6.01%	(4,240,751)				-	0.00%	-
10	Fuel - Nuclear	41,651,189	37.43	18.88	18.55	5.08%	2,116,793	38,883,000	37.43	19.71	17.72	4.85%	1,887,690
11	Fuel - Coal	506,690,567	37.43	21.92	15.51	4.25%	21,530,879	494,227,000	37.43	21.92	15.51	4.25%	21,001,262
12	Fuel - Gas	22,260,036	37.43	39.73	(2.30)	-0.63%	(140,269)	60,151,000	37.43	39.73	(2.30)	-0.63%	(379,034)
13	Fuel - Oil	2,007,093	37.43	30.11	7.32	2.01%	40,252	3,064,000	37.43	35.45	1.98	0.54%	16,621
14	Purchased Power	38,820,352	37.43	35.21	2.22	0.61%	236,113	112,852,000	37.43	35.21	2.22	0.61%	686,388
15	Uncollectible Expense	13,396,533	37.43	37.43	-	0.00%	-	14,481,000	37.43	40.11	(2.68)	-0.73%	(106,326)
16	Pension Expense	38,023,999	37.43	73.54	(36.11)	-9.89%	(3,761,772)				-	0.00%	-
17	HeadWater and Relicensing	1,066,249	37.43	402.43	(365.00)	-100.00%	(1,066,249)				-	0.00%	-
18	Cash Vouchers	483,150,514	37.43	45.38	(7.95)	-2.18%	(10,523,415)	354,526,000	37.43	50.72	(13.29)	-3.64%	(12,908,632)
19	Sub Total	1,485,173,603						1,468,518,000	37.43				
20	FICA - Employer Portion	17,651,317	37.43	12.79	24.64	6.75%	1,191,585	19,295,000	37.43	12.89	24.54	6.72%	1,297,258
21	FUTA	169,657	37.43	76.38	(38.95)	-10.67%	(18,104)	169,000	37.43	60.63	(23.20)	-6.36%	(10,742)
22	SUTA							(71,000)	37.43	60.63	(23.20)	-6.36%	4,513
23	Corporation Franchise	1,430,671	37.43	(77.50)	114.93	31.49%	450,485	1,428,000	37.43	(72.16)	109.59	30.02%	428,752
24	Property Tax	94,899,947	37.43	182.23	(144.80)	-39.67%	(37,647,979)	97,866,000	37.43	187.84	(150.41)	-41.21%	(40,328,836)
25	St Louis Payroll Earnings Tax	124,058	37.43	76.38	(38.95)	-10.67%	(13,239)	139,000	37.43	(2.66)	40.09	10.98%	15,267
26	Gross Receipts Tax	99,735,953	21.27	53.48	(32.21)	-8.82%	(8,801,356)	98,315,000	37.43	58.82	(21.39)	-5.86%	(5,761,528)
27	Sales Tax							49,397,000	37.43	40.55	(3.12)	-0.85%	(422,243)
28	Use Tax							2,519,000	37.43	81.72	(44.29)	-12.13%	(305,662)
29	Sales and Use Tax	49,824,963	-	8.89	(8.89)	-2.44%	(1,213,545)						
30	TOTAL						\$ (36,009,366)						\$ (16,939,326)

AmerenUE Electric
Recalculation of Cash Working Capital Requirements Excluding Payment Processing and Bank Float From the Revenue Lag and Expense Leads

Line No.	Component (A)	Per Staff						Per Company					
		Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement	Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement
		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
1													
2	Pensions and Benefits							108,560,000	37.43	45.07	(7.64)	-2.09%	(2,272,324)
3	Payroll and Withholdings							281,774,000	37.43	11.24	26.19	7.18%	20,218,249
4	Base Payroll	165,262,461	37.43	10.49	26.94	7.38%	12,197,728				-	0.00%	-
5	Vacation Payroll	16,118,900	37.43	300.70	(263.27)	-72.13%	(11,626,364)				-	0.00%	-
6	401-K	19,817,501	37.43	21.49	15.94	4.37%	865,455				-	0.00%	-
7	FWH Taxes	37,735,720	37.43	12.79	24.64	6.75%	2,547,420				-	0.00%	-
8	SWH Taxes	10,970,848	37.43	14.96	22.47	6.16%	675,383				-	0.00%	-
9	Employee FICA Taxes	17,651,317	37.43	12.79	24.64	6.75%	1,191,585				-	0.00%	-
10	Benefits (excluding Pensions)	70,550,324	37.43	59.37	(21.94)	-6.01%	(4,240,751)				-	0.00%	-
11	Fuel - Nuclear	41,651,189	37.43	18.88	18.55	5.08%	2,116,793	38,883,000	37.43	19.71	17.72	4.85%	1,887,690
12	Fuel - Coal	506,690,567	37.43	21.92	15.51	4.25%	21,530,879	494,227,000	37.43	21.92	15.51	4.25%	21,001,262
13	Fuel - Gas	22,260,036	37.43	39.73	(2.30)	-0.63%	(140,269)	60,151,000	37.43	39.73	(2.30)	-0.63%	(379,034)
14	Fuel - Oil	2,007,093	37.43	30.11	7.32	2.01%	40,252	3,064,000	37.43	30.11	7.32	2.01%	61,448
15	Purchased Power	38,820,352	37.43	35.21	2.22	0.61%	236,113	112,852,000	37.43	35.21	2.22	0.61%	686,388
16	Uncollectible Expense	13,396,533	37.43	37.43	-	0.00%	-	14,481,000	37.43	37.43	-	0.00%	-
17	Pension Expense	38,023,999	37.43	73.54	(36.11)	-9.89%	(3,761,772)				-	0.00%	-
18	HeadWater and Relicensing	1,066,249	37.43	402.43	(365.00)	-100.00%	(1,066,249)				-	0.00%	-
19	Cash Vouchers	483,150,514	37.43	45.38	(7.95)	-2.18%	(10,523,415)	354,526,000	37.43	45.38	(7.95)	-2.18%	(7,721,868)
20	Sub Total	1,485,173,603						1,468,518,000	37.43				
21	FICA - Employer Portion	17,651,317	37.43	12.79	24.64	6.75%	1,191,585	19,295,000	37.43	12.89	24.54	6.72%	1,297,258
22	FUTA	169,657	37.43	76.38	(38.95)	-10.67%	(18,104)	169,000	37.43	60.63	(23.20)	-6.36%	(10,742)
23	SUTA							(71,000)	37.43	60.63	(23.20)	-6.36%	4,513
24	Corporation Franchise	1,430,671	37.43	(77.50)	114.93	31.49%	450,485	1,428,000	37.43	(77.50)	114.93	31.49%	449,644
25	Property Tax	94,899,947	37.43	182.23	(144.80)	-39.67%	(37,647,979)	97,866,000	37.43	182.23	(144.80)	-39.67%	(38,824,649)
26	St Louis Payroll Earnings Tax	124,058	37.43	76.38	(38.95)	-10.67%	(13,239)	139,000	37.43	(2.66)	40.09	10.98%	15,267
27	Gross Receipts Tax	99,735,953	21.27	53.48	(32.21)	-8.82%	(8,801,356)	98,315,000	37.43	53.48	(16.05)	-4.40%	(4,323,166)
28	Sales Tax							49,397,000	37.43	40.55	(3.12)	-0.85%	(422,243)
29	Use Tax							2,519,000	37.43	81.72	(44.29)	-12.13%	(305,662)
30	Sales and Use Tax	49,824,963	-	8.89	(8.89)	-2.44%	(1,213,545)						
31	TOTAL						<u>\$ (36,009,366)</u>						<u>\$ (26,583,893)</u>

AmerenUE Electric
Recalculation of Cash Working Capital Requirements Including Payment Processing and Bank Float For Both Revenues and Expenses

Line No.	Component	Per Staff						Per Company					
		Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement	Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement
		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
1	Pensions and Benefits							108,560,000	40.11	45.07	(4.96)	-1.36%	(1,475,226)
2	Payroll and Withholdings							281,774,000	40.11	11.24	28.87	7.91%	22,287,165
3	Base Payroll	165,262,461	39.58	10.49	29.09	7.97%	13,171,192				-	0.00%	-
4	Vacation Payroll	16,118,900	39.58	300.70	(261.12)	-71.54%	(11,531,417)				-	0.00%	-
5	401-K	19,817,501	39.58	21.49	18.09	4.96%	962,188				-	0.00%	-
6	FWH Taxes	37,735,720	39.58	12.79	26.79	7.34%	2,769,698				-	0.00%	-
7	SWH Taxes	10,970,848	39.58	14.96	24.62	6.75%	740,006				-	0.00%	-
8	Employee FICA Taxes	17,651,317	39.58	12.79	26.79	7.34%	1,295,558				-	0.00%	-
9	Benefits (excluding Pensions)	70,550,324	39.58	59.37	(19.79)	-5.42%	(3,825,181)				-	0.00%	-
10	Fuel - Nuclear	41,651,189	39.58	18.88	20.70	5.67%	2,362,136	38,883,000	40.11	19.71	20.40	5.59%	2,173,187
11	Fuel - Coal	506,690,567	39.58	21.92	17.66	4.84%	24,515,494	494,227,000	40.11	21.92	18.19	4.98%	24,630,107
12	Fuel - Gas	22,260,036	39.58	39.73	(0.15)	-0.04%	(9,148)	60,151,000	40.11	39.73	0.38	0.10%	62,623
13	Fuel - Oil	2,007,093	39.58	35.45	4.13	1.13%	22,710	3,064,000	40.11	35.45	4.66	1.28%	39,118
14	Purchased Power	38,820,352	39.58	35.21	4.37	1.20%	464,781	112,852,000	40.11	35.21	4.90	1.34%	1,514,999
15	Uncollectible Expense	13,396,533	39.58	37.43	2.15	0.59%	78,911	14,481,000	40.11	40.11	-	0.00%	-
16	Pension Expense	38,023,999	39.58	73.54	(33.96)	-9.30%	(3,537,795)				-	0.00%	-
17	HeadWater and Relicensing	1,066,249	39.58	402.43	(362.85)	-99.41%	(1,059,968)				-	0.00%	-
18	Cash Vouchers	483,150,514	39.58	50.72	(11.14)	-3.05%	(14,746,018)	354,526,000	40.11	50.72	(10.61)	-2.91%	(10,305,537)
19	Sub Total	1,485,173,603						1,468,518,000	40.11				
20	FICA - Employer Portion	17,651,317	39.58	12.79	26.79	7.34%	1,295,558	19,295,000	40.11	12.89	27.22	7.46%	1,438,931
21	FUTA	169,657	39.58	76.38	(36.80)	-10.08%	(17,105)	169,000	40.11	60.63	(20.52)	-5.62%	(9,501)
22	SUTA							(71,000)	40.11	60.63	(20.52)	-5.62%	3,992
23	Corporation Franchise	1,430,671	39.58	(72.16)	111.74	30.61%	437,981	1,428,000	40.11	(72.16)	112.27	30.76%	439,237
24	Property Tax	94,899,947	39.58	187.84	(148.26)	-40.62%	(38,547,578)	97,866,000	40.11	187.84	(147.73)	-40.47%	(39,610,258)
25	St Louis Payroll Earnings Tax	124,058	39.58	76.38	(36.80)	-10.08%	(12,508)	139,000	40.11	(2.66)	42.77	11.72%	16,288
26	Gross Receipts Tax	99,735,953	21.27	58.82	(37.55)	-10.29%	(10,260,507)	98,315,000	40.11	58.82	(18.71)	-5.13%	(5,039,654)
27	Sales Tax							49,397,000	40.11	40.55	(0.44)	-0.12%	(59,547)
28	Use Tax							2,519,000	40.11	81.72	(41.61)	-11.40%	(287,166)
29	Sales and Use Tax	49,824,963	-	8.89	(8.89)	-2.44%	(1,213,545)						
30	TOTAL						\$ (36,624,555)						\$ (4,181,241)

AmerenUE Electric
Impact on Cash Working Capital Requirements of Excluding Vacation Accrual

Line No.	Component (A)	Per Staff						Per Company					
		Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement	Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement
		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
1	Pensions and Benefits							108,560,000	40.11	45.07	(4.96)	-1.36%	(1,475,226)
2	Payroll and Withholdings							281,774,000	40.11	11.24	28.87	7.91%	22,287,165
3	Base Payroll	181,381,361	37.43	10.49	26.94	7.38%	13,387,435				-	0.00%	-
4	Vacation Payroll	-	37.43	300.70	(263.27)	-72.13%	-				-	0.00%	-
5	401-K	19,817,501	37.43	21.49	15.94	4.37%	865,455				-	0.00%	-
6	FWH Taxes	37,735,720	37.43	12.79	24.64	6.75%	2,547,420				-	0.00%	-
7	SWH Taxes	10,970,848	37.43	14.96	22.47	6.16%	675,383				-	0.00%	-
8	Employee FICA Taxes	17,651,317	37.43	12.79	24.64	6.75%	1,191,585				-	0.00%	-
9	Benefits (excluding Pensions)	70,550,324	37.43	59.37	(21.94)	-6.01%	(4,240,751)				-	0.00%	-
10	Fuel - Nuclear	41,651,189	37.43	18.88	18.55	5.08%	2,116,793	38,883,000	40.11	19.71	20.40	5.59%	2,173,187
11	Fuel - Coal	506,690,567	37.43	21.92	15.51	4.25%	21,530,879	494,227,000	40.11	21.92	18.19	4.98%	24,630,107
12	Fuel - Gas	22,260,036	37.43	39.73	(2.30)	-0.63%	(140,269)	60,151,000	40.11	39.73	0.38	0.10%	62,623
13	Fuel - Oil	2,007,093	37.43	30.11	7.32	2.01%	40,252	3,064,000	40.11	35.45	4.66	1.28%	39,118
14	Purchased Power	38,820,352	37.43	35.21	2.22	0.61%	236,113	112,852,000	40.11	35.21	4.90	1.34%	1,514,999
15	Uncollectible Expense	13,396,533	37.43	37.43	-	0.00%	-	14,481,000	40.11	40.11	-	0.00%	-
16	Pension Expense	38,023,999	37.43	73.54	(36.11)	-9.89%	(3,761,772)				-	0.00%	-
17	HeadWater and Relicensing	1,066,249	37.43	402.43	(365.00)	-100.00%	(1,066,249)				-	0.00%	-
18	Cash Vouchers	483,150,514	37.43	45.38	(7.95)	-2.18%	(10,523,415)	354,526,000	40.11	50.72	(10.61)	-2.91%	(10,305,537)
19	Sub Total	1,485,173,603						1,468,518,000	40.11				
20	FICA - Employer Portion	17,651,317	37.43	12.79	24.64	6.75%	1,191,585	19,295,000	40.11	12.89	27.22	7.46%	1,438,931
21	FUTA	169,657	37.43	76.38	(38.95)	-10.67%	(18,104)	169,000	40.11	60.63	(20.52)	-5.62%	(9,501)
22	SUTA							(71,000)	40.11	60.63	(20.52)	-5.62%	3,992
23	Corporation Franchise	1,430,671	37.43	(77.50)	114.93	31.49%	450,485	1,428,000	40.11	(72.16)	112.27	30.76%	439,237
24	Property Tax	94,899,947	37.43	182.23	(144.80)	-39.67%	(37,647,979)	97,866,000	40.11	187.84	(147.73)	-40.47%	(39,610,258)
25	St Louis Payroll Earnings Tax	124,058	37.43	76.38	(38.95)	-10.67%	(13,239)	139,000	40.11	(2.66)	42.77	11.72%	16,288
26	Gross Receipts Tax	99,735,953	21.27	53.48	(32.21)	-8.82%	(8,801,356)	98,315,000	40.11	58.82	(18.71)	-5.13%	(5,039,654)
27	Sales Tax							49,397,000	40.11	40.55	(0.44)	-0.12%	(59,547)
28	Use Tax							2,519,000	40.11	81.72	(41.61)	-11.40%	(287,166)
29	Sales and Use Tax	49,824,963	-	8.89	(8.89)	-2.44%	(1,213,545)						
30	TOTAL						<u>\$ (23,193,295)</u>						<u>\$ (4,181,241)</u>

AmerenUE Electric
Impact of Using Inappropriate Revenue Lag for Sales, Use and Gross Receipts Taxes

Line No.	Component (A)	Per Staff						Per Company					
		Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement	Test Year Expenses	Revenue Lag	Expense Lead	Net Lag	CWC Factor	CWC Requirement
		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
1	Pensions and Benefits							108,560,000	40.11	45.07	(4.96)	-1.36%	(1,475,226)
2	Payroll and Withholdings							281,774,000	40.11	11.24	28.87	7.91%	22,287,165
3	Base Payroll	165,262,461	37.43	10.49	26.94	7.38%	12,197,728				-	0.00%	-
4	Vacation Payroll	16,118,900	37.43	300.70	(263.27)	-72.13%	(11,626,364)				-	0.00%	-
5	401-K	19,817,501	37.43	21.49	15.94	4.37%	865,455				-	0.00%	-
6	FWH Taxes	37,735,720	37.43	12.79	24.64	6.75%	2,547,420				-	0.00%	-
7	SWH Taxes	10,970,848	37.43	14.96	22.47	6.16%	675,383				-	0.00%	-
8	Employee FICA Taxes	17,651,317	37.43	12.79	24.64	6.75%	1,191,585				-	0.00%	-
9	Benefits (excluding Pensions)	70,550,324	37.43	59.37	(21.94)	-6.01%	(4,240,751)				-	0.00%	-
10	Fuel - Nuclear	41,651,189	37.43	18.88	18.55	5.08%	2,116,793	38,883,000	40.11	19.71	20.40	5.59%	2,173,187
11	Fuel - Coal	506,690,567	37.43	21.92	15.51	4.25%	21,530,879	494,227,000	40.11	21.92	18.19	4.98%	24,630,107
12	Fuel - Gas	22,260,036	37.43	39.73	(2.30)	-0.63%	(140,269)	60,151,000	40.11	39.73	0.38	0.10%	62,623
13	Fuel - Oil	2,007,093	37.43	30.11	7.32	2.01%	40,252	3,064,000	40.11	35.45	4.66	1.28%	39,118
14	Purchased Power	38,820,352	37.43	35.21	2.22	0.61%	236,113	112,852,000	40.11	35.21	4.90	1.34%	1,514,999
15	Uncollectible Expense	13,396,533	37.43	37.43	-	0.00%	-	14,481,000	40.11	40.11	-	0.00%	-
16	Pension Expense	38,023,999	37.43	73.54	(36.11)	-9.89%	(3,761,772)				-	0.00%	-
17	HeadWater and Relicensing	1,066,249	37.43	402.43	(365.00)	-100.00%	(1,066,249)				-	0.00%	-
18	Cash Vouchers	483,150,514	37.43	45.38	(7.95)	-2.18%	(10,523,415)	354,526,000	40.11	50.72	(10.61)	-2.91%	(10,305,537)
19	Sub Total	1,485,173,603						1,468,518,000	40.11				
20	FICA - Employer Portion	17,651,317	37.43	12.79	24.64	6.75%	1,191,585	19,295,000	40.11	12.89	27.22	7.46%	1,438,931
21	FUTA	169,657	37.43	76.38	(38.95)	-10.67%	(18,104)	169,000	40.11	60.63	(20.52)	-5.62%	(9,501)
22	SUTA							(71,000)	40.11	60.63	(20.52)	-5.62%	3,992
23	Corporation Franchise	1,430,671	37.43	(77.50)	114.93	31.49%	450,485	1,428,000	40.11	(72.16)	112.27	30.76%	439,237
24	Property Tax	94,899,947	37.43	182.23	(144.80)	-39.67%	(37,647,979)	97,866,000	40.11	187.84	(147.73)	-40.47%	(39,610,258)
25	St Louis Payroll Earnings Tax	124,058	37.43	76.38	(38.95)	-10.67%	(13,239)	139,000	40.11	(2.66)	42.77	11.72%	16,288
26	Gross Receipts Tax	99,735,953	37.43	53.48	(16.05)	-4.40%	(4,385,649)	98,315,000	40.11	58.82	(18.71)	-5.13%	(5,039,654)
27	Sales Tax							49,397,000	40.11	40.55	(0.44)	-0.12%	(59,547)
28	Use Tax							2,519,000	40.11	81.72	(41.61)	-11.40%	(287,166)
29	Sales and Use Tax	49,824,963	37.43	8.89	28.54	7.82%	3,895,903						
30	TOTAL						<u>\$ (26,484,211)</u>						<u>\$ (4,181,241)</u>

**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 Natural Gas)
Service Provided to Customers in the)
Company's Missouri Service Area.)

Case No. ER-2007-0002

AFFIDAVIT OF MICHAEL J. ADAMS

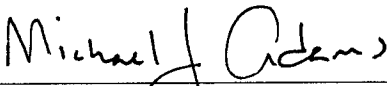
STATE OF MISSOURI)
) ss
CITY OF ST. LOUIS)

Michael J. Adams, being first duly sworn on his oath, states:

1. My name is Michael J. Adams. I work in Springfield, Illinois and I am a Director in the Energy Practice of Navigant Consulting, Inc.

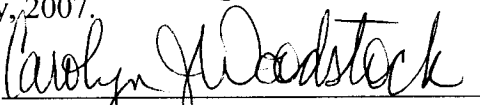
2. Attached hereto and made a part hereof for all purposes is my rebuttal Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 13 pages, together with Exhibit MJA-E2 (6 pages), which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.



Michael J. Adams

Subscribed and sworn to before me this 30th day of January, 2007.



Notary Public

My commission expires: May 19, 2008

