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Issues: Class Cost of Service Study
Witness: William M. Warwick
Sponsoring Party: Union Electric Company
Type of Exhibit: Direct Testimony
Case No.: ER-2008-0318
Date Testimony Prepared: April 1, 2008

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2008-0318

DIRECT TESTIMONY
OF
WILLIAM M. WARWICK
ON
BEHALF OF
UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
April, 2008

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~~0308~~ Exhibit No. 36
Case No(s). ER-2008-0318
Date 2-2-08 Rptr. <

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

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

3 A. I am responsible for:

4 (1) Developing a fully allocated embedded customer class cost of service
5 study for the Company's Missouri jurisdictional electric operations for
6 the test year period of the twelve months ending March 31, 2008 with
7 updates for known and measurable changes through June 30, 2008;
8 and

9 (2) Disaggregating, or unbundling, the various functional cost components
10 included in the Company's allocated class cost of service study.

11 An Executive Summary of my testimony is included in Attachment A of
12 Company witness Wilbon L. Cooper's direct testimony.

13 **III. CLASS COST OF SERVICE STUDY**

14 **Q. Please explain the information contained in Schedule WMW-E1 attached**
15 **to your testimony.**

16 A. Schedule WMW-E1 contains the results of my customer class cost of service
17 study for the Company's Missouri jurisdictional operations for the test year ending March 31,
18 2008 with updates through June 30, 2008. This study is based upon the Company's present
19 rate levels and uses weather normalized sales. A Missouri jurisdictional cost of service study
20 (revenue requirement) prepared by Company witness Gary S. Weiss and discussed in his
21 direct testimony provided the total rate base and expense items that formed the starting point
22 for this class cost of service study.

1 **Q. What is generally meant by the term “cost of service study”?**

2 A. A cost of service study determines a utility’s aggregate annual revenue
3 requirement necessary to recover its operating and maintenance expenses and taxes,
4 depreciation of its plant, and a fair return on the utility’s net investment in property and plant.

5 **Q. What information is provided by a class cost of service study?**

6 A. A class cost of service study allocates the various costs identified in the cost
7 of service study to each of the Company’s rate classes, to determine as accurately as possible
8 the cost of serving each of the Company’s rate classes.

9 **Q. What rate classes were included in the Company’s class cost of service**
10 **study?**

11 A. The Company’s existing residential, small general service, large general
12 service/small primary service, large primary service, large transmission service and street and
13 outdoor area lighting service classes were allocated their respective portions of the
14 Company’s operating costs in the class cost of service study.

15 **Q. What categories of cost did you examine in developing the customer class**
16 **cost of service study summary included in Schedule WMW-E1 of your testimony?**

17 A. I conducted a detailed analysis of all elements of investment and expense
18 associated with the Company's Missouri electric operation for the purpose of allocating such
19 costs to the non-lighting customer classes served by the Company. As a part of this analysis,
20 total expenses and investment in property and plant were classified into their
21 customer-related, energy-related, and demand-related components.

1 **Q. Were the rate base investment and expenses associated with the**
2 **Company's lighting customers considered in the class cost of service study you**
3 **performed?**

4 A. Yes, they were. However, in considering such lighting costs in my study, I
5 employed a cost of service approach similar to that historically used by the Commission
6 Staff. This approach consists of allocating the total of all Company investment and expense
7 to the non-lighting customer classes only, as if there were no lighting customers. This
8 allocation of such costs to the non-lighting classes is offset by also allocating, or crediting,
9 existing lighting revenues to the non-lighting customer classes. This allocation of lighting
10 costs and revenues was done based on each class' respective total net original cost rate base.
11 This process presumes that the Company's current lighting revenues, which are about 1.4%
12 of the Company's total revenues, currently provide a fair and reasonable recovery of the
13 Company's total costs of providing lighting service. Said another way, it is presumed that
14 allocated lighting revenues are equivalent to allocated lighting costs.

15 **Q. Please describe the development of the factors used to allocate costs to**
16 **each customer class, other than the lighting customers.**

17 A. The allocation factors for each customer class were determined by calculating
18 the proportionate share of total customer or property units of each class and the total energy
19 or demand related units of each class, including applicable losses. These calculations were
20 developed at the various voltage levels on the Company's generation, transmission and
21 distribution system that are associated with the facilities whose costs are being allocated.

1 **Q. After the allocation factors for each class were derived, what was the next**
2 **step in the study?**

3 A. The next step was to apply these allocation factors to the various functional
4 components of rate base and operating and maintenance expenses, as developed in total for
5 the Company's Missouri jurisdictional operations.

6 **Q. Please describe how those costs and expenses were allocated to the**
7 **customer classes.**

8 A. The original cost and depreciation reserves of the major functional
9 components of the Company's Missouri electric rate base were allocated to customer classes
10 as described below. The resulting dollar amounts (in thousands) allocated to each class are
11 provided in Schedule WMW-E1.

12 (1) Production Plant. Production plant was allocated to each customer
13 class on the basis of the Four Non-Coincident Peak (4 NCP) Average and Excess Demand
14 allocation factors for each customer class at the Company's generating stations. Non-
15 coincident peak demand is the customer class' maximum load at any time of the study period
16 regardless of the time of occurrence or magnitude of the Company's system peak. The four
17 non-coincident peak demands are the average of the customer class' four maximum monthly
18 loads. The direct testimony sponsored by Mr. Cooper in this docket establishes that the
19 4 NCP Average and Excess method is appropriate for the allocation of the Missouri
20 jurisdictional Production Plant to the various customer classes.

21 (2) Transmission Plant. Transmission line and substation investment was
22 allocated to each customer class on the basis of the twelve coincident peak (12 CP) demands
23 of each class at their point of input to the Company's transmission system. Coincident peak

1 demand is the customer class' peak load at the time of occurrence of the Company's system
2 peak. The twelve coincident peak demands are the customer class' twelve monthly loads at
3 the time of the Company's twelve monthly system peaks. Such 12 CP allocation is
4 consistent with the development of the Ameren system transmission revenue requirement,
5 under the Midwest Independent Transmission System Operator, Inc. ("MISO").

6 (3) Distribution Plant. The Company's Distribution Plant was allocated to
7 each customer class based upon the results of a detailed analysis of the functions performed
8 by the facilities in Distribution Plant Accounts 360-369. This analysis determined the
9 breakdown of each account based on its customer-related and primary and secondary voltage
10 demand-related functions. Primary distribution voltage is 600 volts and above, while
11 secondary distribution voltage is below 600 volts.

12 The portion of the Distribution Plant accounts assigned to the customer
13 component was derived using the generally accepted and widely used zero intercept method
14 described in the National Association of Regulatory Utility Commissioners ("NARUC")
15 Electric Utility Cost Allocation Manual. This approach to cost assignment is predicated on
16 the fact that there is a zero or no load component in even the smallest available unit of utility
17 distribution equipment. The zero intercept method identifies the portion of plant related to a
18 hypothetical no-load or zero-intercept condition, i.e., the cost of simply making service
19 available to a customer. The remaining, or demand-related, portion of the Company's
20 Distribution Plant accounts was split between the primary and secondary voltage levels on
21 the basis of a review of the functional utilization of various equipment and hardware in such
22 accounts. For all distribution accounts, with the exception of Account 369, Services, the
23 demand-related investment in each account was allocated to each customer class on the basis

1 of the non-coincident peak demand of each class at the appropriate primary and secondary
2 voltage levels.

3 The demand-related investment in Account 369, Services, was allocated to
4 each customer class on the basis of the sum of the maximum demand of all customers in the
5 class at the secondary level. The maximum individual customer demand was used to reflect
6 the fact that the maximum demand of individual customers dictates the sizing of their service
7 facilities.

8 Distribution Account 370, Meters, was allocated to each of the customer
9 classes by allocation factors which weigh the results of multiplying the current cost of the
10 typical metering arrangement for each customer class by the number of meters used in
11 serving that class. All metering cost is classified as customer related.

12 Account 371-1, Installation on Customer's Premises Substation equipment,
13 was allocated to the Primary class on the basis of such customers' historic use of these
14 facilities.

15 Account 373, Street Lighting & Signal Systems, was allocated to the customer
16 classes based on their net original cost rate base, as explained earlier.

17 (4) General Plant. The balance in this account was allocated to each
18 customer class on the basis of the proportion of labor expense allocated to each class. This
19 "labor ratio" method of allocation is the same as that employed by Mr. Weiss in arriving at
20 the Missouri portion of General Plant and Administrative and General expenses in his
21 jurisdictional cost of service study.

1 (5) Accumulated Reserves for Depreciation. As such reserves are
2 functionalized by type of plant, these reserves were allocated on the same basis as the
3 allocation of the various plant accounts, as described above.

4 (6) Materials & Supplies. This component consists of fuel inventories and
5 general materials and supplies related to power plants, transmission facilities and distribution
6 facilities. Fuel inventories and the power plants and transmission facilities materials are
7 directly related to the generation and transmission of energy and were therefore allocated on
8 the basis of the energy allocation factor. The local distribution materials were allocated on
9 the basis of the composite allocation of Distribution Plant, as previously described.

10 (7) Cash Working Capital. This item is related primarily to operating
11 expenses and was therefore allocated to each customer class in proportion to the total
12 operating expenses allocated to each class.

13 (8) Customer Advances for Construction and Deposits. This component
14 of rate base was assigned to each customer class on the basis of an analysis of the sources of
15 such deposits in Missouri.

16 (9) Total Accumulated Deferred Income Taxes. This component is related
17 primarily to investment in property and was therefore allocated to each customer class on the
18 basis of allocated gross plant.

19 **Q. How did you allocate the Missouri jurisdictional test year operating and**
20 **maintenance expenses to the customer classes?**

21 A. With very few exceptions, the operating and maintenance expenses were
22 allocated to the customer classes on the same basis as the related investment in plant was
23 allocated. This type of allocation employs the familiar and widely used "expenses follow

1 plant" principle of cost allocation. For example, the allocator for Transmission Lines was
2 used to allocate Transmission Line expenses. The only exceptions to this procedure are as
3 follows:

4 (1) Production Expenses. This item consists of two categories: (a) fixed,
5 which includes standard operating crews, nuclear support staff and net interchange capacity
6 charges; and (b) variable, which includes fuel, fuel handling, production plant maintenance
7 expenses and net interchange power energy costs. The fixed portion of production expenses
8 was allocated on the same basis as Production Plant, while the variable portion was allocated
9 using a variable allocator based on the megawatt-hours required at the generator to provide
10 service to each respective customer class.

11 (2) Customer Accounts Expenses. An analysis of Account 903, Customer
12 Records & Collection Expenses, indicated that approximately 24% of such expenses are
13 devoted to credit and collection activities. Therefore, this portion of Account 903 and all of
14 Account 904, Uncollectible Accounts, were allocated to each customer class on the basis of
15 the annual level of collection activities applicable to each customer class. The remaining
16 76% of Account 903, and other direct Customer Accounts Expenses were allocated to each
17 customer class utilizing a weighted billing and customer accounts administration allocation
18 factor. Account 902, Meter Reading Expenses, was allocated to each class by weighting the
19 results of applying the monthly contract meter reading cost per meter to the respective
20 number of meters in each customer class. Account 901, Supervision, was allocated to each
21 class on the basis of the composite allocation of all other Customer Accounts Expenses.

22 (3) Customer Service & Sales Expenses. These expenses were allocated
23 to each customer class using the composite allocation of Customer Accounts Expenses.

1 (4) Interest on Customer Surety Deposits. These expenses were allocated
2 to each customer class on the basis of the previously allocated Customer Advances and
3 Deposits, since advances and deposit accounts are typically representative of where surety
4 deposits are booked.

5 (5) Administrative & General ("A&G") Expenses. The Electric Power
6 Research Institute ("EPRJ") subscription included in the test year A&G expenses is based
7 upon a formula incorporating the Company's kilowatt-hour sales and revenues. Therefore,
8 this expense was allocated to each customer class on the basis of the application of this
9 formula to the sales and revenues of each customer class during the study period.

10 All remaining A&G expenses were allocated to the customer classes on the
11 basis of the class composite distribution of previously allocated labor expense. As indicated
12 earlier, this allocation of A&G expenses reflects the same method as that used by Mr. Weiss
13 in the Company's jurisdictional cost of service study.

14 **Q. How were System Revenues allocated?**

15 A. System Revenues consists of revenues derived from leased land rentals,
16 agriculture land rentals, off-system sales rentals and miscellaneous rentals. Leased land
17 rentals, agriculture land rentals and off-system sales rentals are primarily associated with
18 Transmission Plant facilities, while a significant portion of miscellaneous rental revenue is
19 associated with General Plant. Thus, these revenues were allocated to the customer classes
20 based on the application of the previously mentioned Transmission Plant allocators to the
21 transmission service revenues, and "labor ratio" allocators to the remaining miscellaneous
22 rental revenue.

1 **Q. How did you allocate off-system sales revenues?**

2 A. First, the fuel expense portion was isolated and then credited to each class'
3 production operations and maintenance expense by use of the Company's energy allocator.
4 The resulting net amount (i.e. revenue less fuel expense) was then allocated to each class
5 using each class' production capacity allocation factor that employed the Average and Excess
6 4 NCP method. This allocates margins from the use of production assets in the same manner
7 as costs for those same assets were allocated.

8 **Q. How did you allocate the test year depreciation expenses?**

9 A. Since depreciation expenses are functionalized and are directly related to the
10 Company's original cost investment in plant, depreciation expense within each function was
11 allocated to each customer class on the basis of the previously allocated original cost
12 production, transmission, distribution and general plant.

13 **Q. How did you allocate the test year real estate and property taxes?**

14 A. Real estate and property tax expenses are directly related to the Company's
15 original cost investment in plant, so these expenses were allocated to customer classes on the
16 basis of the sum of the previously allocated production, transmission, distribution and general
17 plant investment.

18 **Q. How did you allocate the test year income taxes?**

19 A. Income tax expense is directly related to the Company's net operating income
20 as a proportion of its net rate base investment, i.e. rate of return on its net original cost rate
21 base. As a result, income taxes were allocated to each class on the basis of the net original
22 cost rate base allocated to each customer class.

1 **Q. Please identify Schedule WMW-E2.**

2 A. Schedule WMW-E2 was derived from my class cost of service summary
3 Schedule WMW-E1. To develop Schedule WMW-E2, I modified the base revenues of each
4 class in Schedule WMW-E1 to reflect the class revenues necessary for the Company to
5 realize equalized rates of return from each customer class at the Company's current level of
6 total Missouri revenues.

7 **Q. Please describe the method used to equalize rates of return for each**
8 **customer class, as reflected in your Schedule WMW-E2.**

9 A. The total net original cost rate base of each customer class was multiplied by
10 the Missouri jurisdictional test year return of 8.311% to obtain the required total net
11 operating income for each class. This net operating income was then added to the operating
12 expenses for each class to obtain the total operating revenue for each class required for equal
13 class rates of return. The resulting cost of service of each customer class is set forth on line 6
14 of Schedule WMW-E2. However, the revenue requirement of each customer class is as
15 indicated in Mr. Cooper's Schedule WLC-E2.

16 **IV. UNBUNDLING FUNCTIONAL COST COMPONENTS**

17 **Q. What is your second area of responsibility in this case?**

18 A. My second area of responsibility is to desegregate or unbundle the Company's
19 class revenue requirements in its allocated class cost of service study. These costs were
20 divided into the following Functionalized Cost Categories:

- 21 1) Customer Related Costs
22 2) Distribution - Demand Related Costs
23 3) Transmission - Demand Related Costs

1 4) Production - Energy Related Costs

2 5) Production - Demand Related Costs

3 **Q. Please describe the general method used in your analyses for the**
4 **unbundling of the Company's revenue requirement.**

5 A. This unbundling process entailed a detailed analysis of the various
6 components of the equalized customer class rates of return study presented in Schedule
7 WMW-E2 of my testimony. As the Company's various components of cost presented in
8 Schedule WMW-E1 were allocated to customer classes on a customer, energy or demand-
9 related basis, the unbundling process consisted of extracting these components of cost and
10 assigning them to the functional cost categories indicated earlier.

11 **Q. In this accounting of the Company's total costs, how did you reconcile**
12 **total costs with the Company's various sources of revenue?**

13 A. As the objective was to unbundle the costs associated with the Company's
14 base rate revenues, the Company's miscellaneous revenue sources associated with Other,
15 Lighting, System and Off-System revenues were deducted from the unbundled functional
16 cost categories in a manner reflective of where the costs associated with such services appear
17 in the Company's accounts. Some examples of Other Company revenues are late payment
18 charges, returned check charges, meter rentals, substation rentals and disconnect/reconnect
19 charges. System revenues generally consist of facility and land rental receipts. The results
20 of this analysis are contained in Schedule WMW-E3 of my testimony.

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

22 A. Yes, it does.

AmerenUE
 MISSOURI ELECTRIC OPERATIONS
 CLASS COST OF SERVICE ALLOCATION STUDY
 12 MONTHS ENDED MARCH 2008 WITH UPDATES FOR KNOWN AND MEASURABLE CHANGES THROUGH JUNE 30, 2008

TITLE: SUMMARY CCOS PRESENT ROR (\$000's)

	MISSOURI	RESIDENTIAL	SMALL GEN SERV	LARGE G.S. / SMALL PRIMARY	LARGE PRIMARY	LARGE TRANS	
1	BASE REVENUE	\$ 2,046,127	\$ 890,574	\$ 240,911	\$ 625,173	\$ 161,268	\$ 128,201
2	OTHER REVENUE	\$ 77,380	\$ 39,333	\$ 8,339	\$ 20,124	\$ 5,550	\$ 4,034
3	LIGHTING REVENUE	\$ 28,441	\$ 14,007	\$ 3,355	\$ 7,824	\$ 2,022	\$ 1,233
4	SYSTEM, OFF-SYS SALES & DISP OF ALLOW	\$ 260,067	\$ 116,518	\$ 30,426	\$ 77,040	\$ 20,915	\$ 15,168
5							
6	TOTAL OPERATING REVENUE	\$ 2,412,014	\$ 1,060,431	\$ 283,031	\$ 730,161	\$ 189,755	\$ 148,636
7							
8	TOTAL PROD, T&D, CUST, AND A&G EXP	\$ 1,529,164	\$ 677,975	\$ 161,884	\$ 443,729	\$ 135,313	\$ 110,262
9	TOTAL DEPR AND AMMORT EXPENSES	\$ 328,502	\$ 170,323	\$ 39,568	\$ 86,502	\$ 20,955	\$ 11,153
10	REAL ESTATE AND PROPERTY TAXES	\$ 98,511	\$ 49,521	\$ 11,776	\$ 26,660	\$ 6,664	\$ 3,890
11	INCOME TAXES	\$ 196,111	\$ 96,583	\$ 23,133	\$ 53,950	\$ 13,943	\$ 8,502
12	PAYROLL TAXES	\$ 20,218	\$ 9,765	\$ 2,232	\$ 5,569	\$ 1,625	\$ 1,027
13	FEDERAL EXCISE TAX	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	REVENUE TAXES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15							
16	TOTAL OPERATING EXPENSES	\$ 2,172,506	\$ 1,004,168	\$ 238,593	\$ 616,410	\$ 178,501	\$ 134,834
17							
18	NET OPERATING INCOME	\$ 239,508	\$ 56,263	\$ 44,438	\$ 113,751	\$ 11,254	\$ 13,802
19							
20	GROSS PLANT IN SERVICE	\$ 12,131,480	\$ 6,097,120	\$ 1,449,569	\$ 3,283,426	\$ 821,590	\$ 479,775
21	RESERVES FOR DEPRECIATION	\$ 5,342,894	\$ 2,708,041	\$ 639,779	\$ 1,435,055	\$ 353,703	\$ 206,316
22							
23	NET PLANT IN SERVICE	\$ 6,788,586	\$ 3,389,078	\$ 809,790	\$ 1,848,371	\$ 467,887	\$ 273,459
24							
25	MATERIALS & SUPPLIES - FUEL	\$ 284,601	\$ 103,603	\$ 28,042	\$ 92,920	\$ 30,736	\$ 29,300
26	MATERIALS & SUPPLIES - LOCAL	\$ 35,258	\$ 21,503	\$ 4,478	\$ 7,817	\$ 1,416	\$ 43
27	CASH WORKING CAPITAL	\$ 358	\$ 159	\$ 38	\$ 104	\$ 32	\$ 26
28	CUSTOMER ADVANCES & DEPOSITS	\$ (17,461)	\$ (9,750)	\$ (3,982)	\$ (3,729)	\$ -	\$ -
29	ACCUMULATED DEFERRED INCOME TAXES	\$ (1,191,761)	\$ (599,096)	\$ (142,463)	\$ (322,522)	\$ (80,625)	\$ (47,056)
30							
31	TOTAL NET ORIGINAL COST RATE BASE	\$ 5,899,581	\$ 2,905,498	\$ 695,903	\$ 1,622,962	\$ 419,445	\$ 255,772
32							
33	RATE OF RETURN	4.060%	1.936%	6.386%	7.009%	2.683%	5.396%

Schedule WMW-E1

Schedule WMW-E1

AmerenUE
 MISSOURI ELECTRIC OPERATIONS
 EQUALIZED CLASS RATES OF RETURN ANALYSIS
 12 MONTHS ENDED MARCH 2008 WITH UPDATES FOR KNOWN AND MEASURABLE CHANGES THROUGH JUNE 30, 2008

TITLE: <u>SUMMARY CCOS EQUAL ROR (\$000's)</u>	MISSOURI	RESIDENTIAL	SMALL GEN SERV	LARGE G.S. / SMALL PRIMARY	LARGE PRIMARY	LARGE TRANS
1 BASE REVENUE	\$ 2,296,933	\$ 1,075,786	\$ 254,310	\$ 646,306	\$ 184,874	\$ 135,657
2 OTHER REVENUE	\$ 77,380	\$ 39,313	\$ 8,339	\$ 20,124	\$ 5,550	\$ 4,034
3 LIGHTING REVENUE	\$ 28,441	\$ 14,007	\$ 3,355	\$ 7,824	\$ 2,022	\$ 1,233
4 SYSTEM, OFF-SYS SALES & DISP OF ALLOW	\$ 260,067	\$ 116,518	\$ 30,426	\$ 77,040	\$ 20,915	\$ 15,168
5						
6 TOTAL OPERATING REVENUE	\$ 2,662,820	\$ 1,245,644	\$ 296,430	\$ 751,295	\$ 213,361	\$ 156,091
7						
8 TOTAL PROD., T&D, CUSTOMER, AND A&G EXP.	\$ 1,529,164	\$ 677,975	\$ 161,884	\$ 443,729	\$ 135,313	\$ 110,262
9 TOTAL DEPR. AND AMMOR. EXPENSES	\$ 328,502	\$ 170,323	\$ 39,568	\$ 86,502	\$ 20,955	\$ 11,153
10 REAL ESTATE AND PROPERTY TAXES	\$ 98,511	\$ 49,521	\$ 11,776	\$ 26,660	\$ 6,664	\$ 3,890
11 INCOME TAXES	\$ 196,111	\$ 96,583	\$ 23,133	\$ 53,950	\$ 13,943	\$ 8,502
12 PAYROLL TAXES	\$ 20,218	\$ 9,765	\$ 2,232	\$ 5,569	\$ 1,625	\$ 1,027
13 FEDERAL EXCISE TAX	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14 REVENUE TAXES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15						
16 TOTAL OPERATING EXPENSES	\$ 2,172,506	\$ 1,004,168	\$ 238,593	\$ 616,410	\$ 178,501	\$ 134,834
17						
18 NET OPERATING INCOME	\$ 490,314	\$ 241,476	\$ 57,837	\$ 134,884	\$ 34,860	\$ 21,257
19						
20 GROSS PLANT IN SERVICE	\$ 12,131,480	\$ 6,097,120	\$ 1,449,569	\$ 3,283,426	\$ 821,590	\$ 479,775
21 RESERVES FOR DEPRECIATION	\$ 5,342,894	\$ 2,708,041	\$ 639,779	\$ 1,435,055	\$ 353,703	\$ 206,316
22						
23 NET PLANT IN SERVICE	\$ 6,788,586	\$ 3,389,078	\$ 809,790	\$ 1,848,371	\$ 467,887	\$ 273,459
24						
25 MATERIALS & SUPPLIES - FUEL	\$ 284,601	\$ 103,603	\$ 28,042	\$ 92,920	\$ 30,736	\$ 29,300
26 MATERIALS & SUPPLIES - LOCAL	\$ 35,258	\$ 21,503	\$ 4,478	\$ 7,817	\$ 1,416	\$ 43
27 CASH WORKING CAPITAL	\$ 358	\$ 159	\$ 38	\$ 104	\$ 32	\$ 26
28 CUSTOMER ADVANCES & DEPOSITS	\$ (17,461)	\$ (9,750)	\$ (3,982)	\$ (3,729)	\$ -	\$ -
29 ACCUMULATED DEFERRED INCOME TAXES	\$ (1,191,761)	\$ (599,096)	\$ (142,463)	\$ (322,522)	\$ (80,625)	\$ (47,056)
30						
31 TOTAL NET ORIGINAL COST RATE BASE	\$ 5,899,581	\$ 2,905,498	\$ 695,903	\$ 1,622,962	\$ 419,445	\$ 255,772
32						
33 RATE OF RETURN	8.311%	8.311%	8.311%	8.311%	8.311%	8.311%

Schedule WW-E2

Schedule WW-E2

AmerenUE
 MISSOURI ELECTRIC OPERATIONS
 CLASS COST OF SERVICE ALLOCATION STUDY
 12 MONTHS ENDED MARCH 2008 WITH UPDATES FOR KNOWN AND MEASURABLE CHANGES THROUGH JUNE 30, 2008

Summary Unbundled Class Cost of Service Equal ROR (\$000's)

	Total Missouri	Residential	Small Gen Serv	Large G.S./ Sm Primary	Large Primary	Large Lg Trans
1 Customer	\$ 214,670	\$ 176,914	\$ 25,715	\$ 11,548	\$ 472	\$ 21
2 Production -- Demand	\$ 568,445	\$ 257,847	\$ 66,175	\$ 166,866	\$ 45,447	\$ 32,110
3 Production -- Energy	\$ 966,600	\$ 351,811	\$ 95,230	\$ 315,600	\$ 104,399	\$ 99,559
4 Transmission -- Demand	\$ 42,693	\$ 17,912	\$ 4,853	\$ 13,074	\$ 3,744	\$ 3,110
5 Distribution -- Demand	\$ 504,525	\$ 271,302	\$ 62,337	\$ 139,218	\$ 30,811	\$ 857
6 Total Base Revenue	\$2,296,933	\$1,075,786	\$ 254,310	\$ 646,306	\$ 184,874	\$ 135,657