

Exhibit No.:
Issues: Class Cost of Service Study
Witness: William M. Warwick
Sponsoring Party: Union Electric Company
Type of Exhibit: Direct Testimony
Case No.: ER-2007-0002
Date Testimony Prepared: July 3, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

DIRECT TESTIMONY

OF

WILLIAM M. WARWICK

ON

BEHALF OF

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

**St. Louis, Missouri
July 2006**

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DIRECT TESTIMONY

OF

WILLIAM M. WARWICK

CASE NO. ER-2007-0002

I. INTRODUCTION

Q. Please state your name and business address.

A. William M. Warwick, Ameren Services Company (“Ameren Services”), One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri.

Q. What is Ameren Services Company?

A. Ameren Services Company provides various corporate, administrative and technical support services for Ameren Corporation (“Ameren”) and its affiliates, including Union Electric Company d/b/a AmerenUE (referred to herein as "Company" or "AmerenUE").

Q. What is your position with Ameren Services?

A. I am Managing Supervisor of Rate Engineering.

Q. Please describe your educational background and employment experience.

A. I received a Bachelor of Science degree in Engineering Management from the University of Missouri-Rolla in December 1978.

I was employed at ACF Industries’ Amcar Division-St. Louis Plant from December, 1978 to December, 1981, as an engineer in the Industrial Engineering Department, responsible for project planning. I began working at Union Electric Company in the Rate Engineering Department in December, 1981.

1 My duties and responsibilities include assignments related to the Company's
2 gas and electric rates, including participation in regulatory proceedings, rate analysis, the
3 development and interpretation of the Company's gas and electric tariffs, including rules and
4 regulations, and other rate or regulatory projects as assigned.

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

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

7 A. I am responsible for:

- 8 (1) Developing a fully allocated embedded customer class cost of service
9 study for the Company's Missouri jurisdictional electric operations for
10 the test year period of the twelve months ending June 30, 2006; and
11 (2) Disaggregating, or unbundling, the various functional cost components
12 included in the Company's allocated class cost of service study.

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

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

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

18 A. Schedule WMW-E1 contains the results of my customer class cost of service
19 study for the Company's Missouri jurisdictional operations for the test year ending June 30,
20 2006. This study is based upon the Company's present rate levels and uses weather
21 normalized sales during the test year. A Missouri jurisdictional cost of service study
22 prepared by Company witness Gary S. Weiss and discussed in his direct testimony provided

1 the total rate base and expense items that formed the starting point for this class cost of
2 service study.

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

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

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

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

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

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

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

19 A. I conducted a detailed analysis of all elements of investment and expense
20 associated with the Company’s Missouri electric operation for the purpose of allocating such
21 costs to the non-lighting customer classes served by the Company. As a part of this analysis,
22 total expenses and investment in property and plant were classified into their
23 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 utilized 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% of
12 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 why the
19 4 NCP Average and Excess methodology 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
14 methodology described in the National Association of Regulatory Utility Commissioners
15 (NARUC) Electric Utility Cost Allocation Manual. This approach to cost assignment is
16 predicated on the fact that there is a zero or no load component in even the smallest available
17 unit of utility distribution equipment. The zero intercept method identifies the portion of
18 plant related to a hypothetical no-load or zero-intercept condition, i.e., the cost of simply
19 making service available to a customer. The remaining, or demand-related, portion of the
20 Company's Distribution Plant accounts was split between the primary and secondary voltage
21 levels on the basis of a review of the functional utilization of various equipment and
22 hardware in such accounts. For all distribution accounts, with the exception of Account 369,
23 Services, the demand-related investment in each account was allocated to each customer

1 class on the basis of the non-coincident peak demand of each class at the appropriate primary
2 and secondary 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,
5 power pool materials related to power plants and transmission facilities, and local materials
6 related mainly to distribution facilities. Fuel inventories and power pool materials are
7 directly related to generation and were therefore allocated on the basis of the energy
8 allocation factor. The local distribution materials were allocated on the basis of the
9 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 utilized 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: (1) fixed,
5 which includes standard operating crews, nuclear support staff and net interchange capacity
6 charges; and (2) 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) System Revenues. This item consists of revenues derived from system
12 capacity sales, transmission service charges and miscellaneous rentals. Reserve capacity and
13 transmission service charges primarily contribute to the reduction of fixed charges on
14 transmission facilities, while a significant portion of miscellaneous rental revenue is
15 associated with General Plant. Thus, these revenues were allocated to the customer classes
16 based on the application of the previously mentioned Transmission Plant allocators to the
17 reserve capacity and transmission service revenues, and "labor ratio" allocators to the
18 remaining miscellaneous rental revenue.

19 (3) Customer Accounts Expenses. An analysis of Account 903, Customer
20 Records & Collection Expenses, indicated that approximately 18 percent of such expenses
21 are devoted to credit and collection activities. Therefore, this portion of Account 903 and all
22 of Account 904, Uncollectible Accounts, were allocated to each customer class on the basis
23 of the annual level of collection activities applicable to each customer class. The remaining

1 82 percent of Account 903, and other direct Customer Accounts Expenses were allocated to
2 each customer class utilizing a weighted billing and customer accounts administration
3 allocation factor. Account 902, Meter Reading Expenses, was allocated to each class by
4 weighting the results of applying the monthly contract meter reading cost per meter to the
5 respective number of meters in each customer class. Account 901, Supervision, was
6 allocated to each class on the basis of the composite allocation of all other Customer
7 Accounts Expenses.

8 (4) Customer Service & Sales Expenses. These expenses were allocated
9 to each customer class using the composite allocation of Customer Accounts Expenses.

10 (5) Interest on Customer Surety Deposits. These expenses were allocated
11 to each customer class on the basis of the previously allocated Customer Advances and
12 Deposits, since advances and deposit accounts are typically representative of where surety
13 deposits are booked.

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

19 All remaining A&G expenses were allocated to the customer classes on the
20 basis of the class composite distribution of previously allocated labor expense. As indicated
21 earlier, this allocation of A&G expenses reflects the same methodology as that utilized by
22 Mr. Weiss in the Company's jurisdictional cost of service study.

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

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

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

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

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

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

16 **Q. Did you make any adjustments to Company witness James R. Pozzo's**
17 **weather normalized base rate revenues?**

18 A. Yes, despite Mr. Pozzo's effort to replicate Mr. Weiss' weather normalized
19 base rate revenues, there was a \$21,883 difference. The difference was allocated to the
20 classes based on the allocation of net original cost rate base. Such treatment is consistent
21 with the allocation of lighting revenues mentioned earlier in my testimony. This adjustment
22 can be found on my Schedule WMW-E1, line 5 titled Rate Revenue Variance.

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 methodology 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 8.869% 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. Why is a breakdown of such costs necessary?**

4 A. This breakdown was required by Mr. Cooper for use in the development of
5 proposed rates in this case, which are discussed in Mr. Cooper's direct testimony.

6 **Q. Please describe the general method utilized in your analyses for the**
7 **unbundling of the Company's revenue requirement.**

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

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

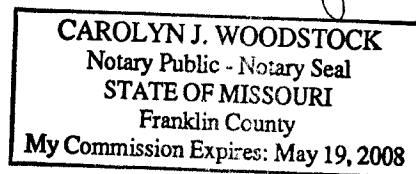
16 A. As the objective was to unbundle the costs associated with the Company's
17 base rate revenues, the Company's miscellaneous revenue sources associated with Other,
18 Lighting and System revenues were deducted from the unbundled functional cost categories
19 in a manner reflective of where the costs associated with such services appear in the
20 Company's accounts. Some examples of Other Company revenues are late payment charges,
21 returned check charges, meter rentals, substation rentals and disconnect/reconnect charges.
22 System revenues generally consist of transmission service charges and facility and land rental
23 receipts.

1 **Q. Following this process of netting the Company's miscellaneous revenues**
2 **against their supporting costs, were the remaining unbundled costs the amounts which**
3 **are, in the aggregate, recovered in the Company's base rate revenues?**

4 A. Yes, the steps I have described equated the Company's base rate revenues with
5 the costs associated with such revenues. The results of this analysis are contained in
6 Schedule WMW-E3 of my testimony. As I indicated earlier, this information was used by
7 Mr. Cooper in the development of the revised rates being proposed by the Company in this
8 case.

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

10 A. Yes, it does.



AmerenUE
MISSOURI ELECTRIC OPERATIONS
ELECTRIC COST OF SERVICE ALLOCATION STUDY
12 MONTHS ENDED JUNE 2006

TITLE: SUMMARY

		<u>MISSOURI</u>	<u>RESIDENTIAL</u>	<u>SMALL GEN SERV</u>	<u>LARGE GEN SERV</u>	<u>SMALL PRIMARY</u>	<u>LARGE PRIMARY</u>	<u>LARGE TRANS</u>
1	BASE REVENUE	\$ 1,970,790	\$ 850,213	\$ 226,710	\$ 418,267	\$ 182,440	\$ 155,952	\$ 137,209
2	OTHER REVENUE	\$ 62,831	\$ 32,743	\$ 6,417	\$ 10,700	\$ 4,656	\$ 4,991	\$ 3,324
3	LIGHTING REVENUE	\$ 27,111	\$ 13,515	\$ 3,093	\$ 5,129	\$ 2,117	\$ 2,024	\$ 1,231
4	SYSTEM REVENUE	\$ 305,352	\$ 141,552	\$ 34,164	\$ 60,213	\$ 26,163	\$ 25,343	\$ 17,917
5	RATE REVENUE VARIANCE	\$ (22)	\$ (11)	\$ (2)	\$ (4)	\$ (2)	\$ (2)	\$ (1)
6	TOTAL OPERATING REVENUE	\$ 2,366,061	\$ 1,038,013	\$ 270,381	\$ 494,305	\$ 215,374	\$ 188,307	\$ 159,680
7								
8	TOTAL PROD, T&D, CUST, AND A&G EXP	\$ 1,466,770	\$ 631,615	\$ 151,370	\$ 290,712	\$ 138,649	\$ 140,403	\$ 114,022
9	TOTAL DEPR AND AMMORT EXPENSES	\$ 386,941	\$ 197,618	\$ 44,796	\$ 72,330	\$ 28,930	\$ 27,432	\$ 15,834
10	REAL ESTATE AND PROPERTY TAXES	\$ 99,528	\$ 50,795	\$ 11,520	\$ 18,610	\$ 7,447	\$ 7,065	\$ 4,092
11	INCOME TAXES	\$ 233,191	\$ 116,251	\$ 26,604	\$ 44,120	\$ 18,212	\$ 17,410	\$ 10,592
12	PAYROLL TAXES	\$ 19,601	\$ 9,331	\$ 2,093	\$ 3,657	\$ 1,732	\$ 1,700	\$ 1,087
13	FEDERAL EXCISE TAX	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	REVENUE TAXES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15								
16	TOTAL OPERATING EXPENSES	\$ 2,206,031	\$ 1,005,611	\$ 236,384	\$ 429,429	\$ 194,970	\$ 194,009	\$ 145,627
17								
18	NET OPERATING INCOME	\$ 160,030	\$ 32,402	\$ 33,997	\$ 64,876	\$ 20,404	\$ (5,702)	\$ 14,053
19								
20	GROSS PLANT IN SERVICE	\$ 11,224,426	\$ 5,727,483	\$ 1,298,968	\$ 2,098,760	\$ 840,189	\$ 797,165	\$ 461,861
21	RESERVES FOR DEPRECIATION	\$ 4,500,562	\$ 2,336,943	\$ 524,193	\$ 834,584	\$ 324,668	\$ 306,876	\$ 173,298
22								
23	NET PLANT IN SERVICE	\$ 6,723,865	\$ 3,390,540	\$ 774,776	\$ 1,264,176	\$ 515,521	\$ 490,289	\$ 288,563
24								
25	MATERIALS & SUPPLIES - FUEL	\$ 227,226	\$ 83,227	\$ 22,416	\$ 49,074	\$ 24,304	\$ 25,033	\$ 23,172
26	MATERIALS & SUPPLIES -LOCAL	\$ 21,434	\$ 13,180	\$ 2,694	\$ 3,557	\$ 1,060	\$ 914	\$ 29
27	CASH WORKING CAPITAL	\$ (13,595)	\$ (5,854)	\$ (1,403)	\$ (2,695)	\$ (1,285)	\$ (1,301)	\$ (1,057)
28	CUSTOMER ADVANCES & DEPOSITS	\$ (14,677)	\$ (6,243)	\$ (4,406)	\$ (2,673)	\$ (845)	\$ (511)	\$ -
29	ACCUMULATED DEFERRED INCOME TAXES	\$ (1,095,577)	\$ (559,136)	\$ (126,813)	\$ (204,854)	\$ (81,970)	\$ (77,764)	\$ (45,040)
30								
31	TOTAL NET ORIGINAL COST RATE BASE	\$ 5,848,677	\$ 2,915,713	\$ 667,264	\$ 1,106,586	\$ 456,786	\$ 436,660	\$ 265,668
32								
33	RATE OF RETURN	2.736%	1.111%	5.095%	5.863%	4.467%	-1.306%	5.290%

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MISSOURI ELECTRIC OPERATIONS
EQUALIZED CLASS RATES OF RETURN ANALYSIS
12 MONTHS ENDED JUNE 2006

TITLE: SUMMARY EQUAL ROR (\$000's)

	<u>MISSOURI</u>	<u>RESIDENTIAL</u>	<u>SMALL GEN SERV</u>	<u>LARGE GEN SERV</u>	<u>SMALL PRIMARY</u>	<u>LARGE PRIMARY</u>	<u>LARGE TRANS</u>
1 BASE REVENUE	\$ 2,331,499	\$ 1,078,160	\$ 251,997	\$ 451,572	\$ 202,566	\$ 200,486	\$ 146,718
2 OTHER REVENUE	\$ 62,831	\$ 32,743	\$ 6,417	\$ 10,700	\$ 4,656	\$ 4,991	\$ 3,324
3 LIGHTING REVENUE	\$ 27,111	\$ 13,515	\$ 3,093	\$ 5,129	\$ 2,117	\$ 2,024	\$ 1,231
4 SYSTEM REVENUE	\$ 305,352	\$ 141,552	\$ 34,164	\$ 60,213	\$ 26,163	\$ 25,343	\$ 17,917
5 RATE REVENUE VARIANCE	\$ (22)	\$ (11)	\$ (2)	\$ (4)	\$ (2)	\$ (2)	\$ (1)
6 TOTAL OPERATING REVENUE	\$ 2,726,770	\$ 1,265,960	\$ 295,668	\$ 527,610	\$ 235,500	\$ 232,842	\$ 169,189
7							
8 TOTAL PROD., T&D, CUSTOMER, AND A&G EXP.	\$ 1,468,790	\$ 633,370	\$ 151,474	\$ 290,750	\$ 138,667	\$ 140,508	\$ 114,022
9 TOTAL DEPR. AND AMMOR. EXPENSES	\$ 386,941	\$ 197,618	\$ 44,796	\$ 72,330	\$ 28,930	\$ 27,432	\$ 15,834
10 REAL ESTATE AND PROPERTY TAXES	\$ 99,528	\$ 50,795	\$ 11,520	\$ 18,610	\$ 7,447	\$ 7,065	\$ 4,092
11 INCOME TAXES	\$ 233,191	\$ 116,251	\$ 26,604	\$ 44,120	\$ 18,212	\$ 17,410	\$ 10,592
12 PAYROLL TAXES	\$ 19,601	\$ 9,331	\$ 2,093	\$ 3,657	\$ 1,732	\$ 1,700	\$ 1,087
13 FEDERAL EXCISE TAX	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14 REVENUE TAXES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15							
16 TOTAL OPERATING EXPENSES	\$ 2,208,051	\$ 1,007,366	\$ 236,489	\$ 429,467	\$ 194,988	\$ 194,114	\$ 145,627
17							
18 NET OPERATING INCOME	\$ 518,719	\$ 258,595	\$ 59,180	\$ 98,143	\$ 40,512	\$ 38,727	\$ 23,562
19							
20 GROSS PLANT IN SERVICE	\$ 11,224,426	\$ 5,727,483	\$ 1,298,968	\$ 2,098,760	\$ 840,189	\$ 797,165	\$ 461,861
21 RESERVES FOR DEPRECIATION	\$ 4,500,562	\$ 2,336,943	\$ 524,193	\$ 834,584	\$ 324,668	\$ 306,876	\$ 173,298
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24							
25 MATERIALS & SUPPLIES - FUEL	\$ 227,226	\$ 83,227	\$ 22,416	\$ 49,074	\$ 24,304	\$ 25,033	\$ 23,172
26 MATERIALS & SUPPLIES -LOCAL	\$ 21,434	\$ 13,180	\$ 2,694	\$ 3,557	\$ 1,060	\$ 914	\$ 29
27 CASH WORKING CAPITAL	\$ (13,595)	\$ (5,854)	\$ (1,403)	\$ (2,695)	\$ (1,285)	\$ (1,301)	\$ (1,057)
28 CUSTOMER ADVANCES & DEPOSITS	\$ (14,677)	\$ (6,243)	\$ (4,406)	\$ (2,673)	\$ (845)	\$ (511)	\$ -
29 ACCUMULATED DEFERRED INCOME TAXES	\$ (1,095,577)	\$ (559,136)	\$ (126,813)	\$ (204,854)	\$ (81,970)	\$ (77,764)	\$ (45,040)
30							
31 TOTAL NET ORIGINAL COST RATE BASE	\$ 5,848,677	\$ 2,915,713	\$ 667,264	\$ 1,106,586	\$ 456,786	\$ 436,660	\$ 265,668
32							
33 RATE OF RETURN	8.869%	8.869%	8.869%	8.869%	8.869%	8.869%	8.869%

AmerenUE
MISSOURI GAS OPERATIONS
CLASS COST OF SERVICE ALLOCATION STUDY
12 MONTHS ENDED JUNE 2006

	<u>Total</u>		<u>Small</u>	<u>Large</u>	<u>Small</u>	<u>Large</u>	<u>Large</u>
	<u>Missouri</u>	<u>Residential</u>	<u>Gen Serv</u>	<u>Gen Serv</u>	<u>Primary</u>	<u>Primary</u>	<u>Lg Trans</u>
<u>Unbundled Class Cost of Service (\$000's)</u>							
Customer	\$ 139,183	\$ 115,416	\$ 16,672	\$ 5,030	\$ 1,050	\$ 1,014	\$ 1
Production -- Demand	\$ 879,465	\$ 410,165	\$ 97,518	\$ 171,846	\$ 75,656	\$ 73,386	\$ 50,892
Production -- Energy	\$ 917,295	\$ 336,242	\$ 90,202	\$ 197,488	\$ 98,370	\$ 101,420	\$ 93,573
Transmission -- Demand	\$ 22,365	\$ 10,041	\$ 2,259	\$ 4,138	\$ 2,136	\$ 2,181	\$ 1,609
Distribution -- Demand	<u>\$ 373,169</u>	<u>\$ 206,284</u>	<u>\$ 45,342</u>	<u>\$ 73,066</u>	<u>\$ 25,351</u>	<u>\$ 22,483</u>	<u>\$ 642</u>
	\$ 2,331,477	\$ 1,078,149	\$ 251,994	\$ 451,568	\$ 202,564	\$ 200,484	\$ 146,717