

Exhibit No.:
Issues: Class Cost of Service
Study
Witness: William M. Warwick
Sponsoring Party: Union Electric Company
Type of Exhibit: Direct Testimony
Case No.: GR-2010-_____
Date Testimony Prepared: June 11, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. GR-2010-_____

DIRECT TESTIMONY

OF

WILLIAM M. WARWICK

ON

BEHALF OF

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

**St. Louis, Missouri
June, 2010**

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DIRECT TESTIMONY
OF
WILLIAM M. WARWICK
CASE NO. GR-2010-_____

I. INTRODUCTION

Q. Please state your name and business address.

A. William M. Warwick, Union Electric Company d/b/a AmerenUE
("AmerenUE" or "Company"), One Ameren Plaza, 1901 Chouteau Avenue, St. Louis,
Missouri 63103.

Q. What is your position with AmerenUE?

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.

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

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

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

3 A. I will discuss:

4 (1) The development of a fully allocated embedded customer class
5 cost of service study for the Company's Missouri jurisdictional natural gas operations for
6 the test year period of the twelve months ending December 31, 2009;

7 (2) The sub-aggregation, or unbundling, of the various functional cost
8 components included in the Company's allocated class cost of service study; and

9 (3) The proposed split of the current general service class in the
10 embedded class cost of service study.

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

12 **Q. Please explain the information contained in Schedule WMW-G1.**

13 A. Schedule WMW-G1 contains the results of the Company's customer class
14 cost of service study for its Missouri jurisdictional natural gas operations for the test year
15 ended December 31, 2009. This study is based upon the Company's present rate levels
16 and weather normalized sales during the test year. The Missouri natural gas jurisdictional
17 cost of service study sponsored by Company witness Thomas G. Opich and discussed in
18 his direct testimony provided the total rate base and expense items that formed the
19 starting point for this study.

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

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

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

2 A. A class cost of service study allocates the various costs identified in the
3 cost of service study to each of the Company's rate classes, to determine as accurately as
4 possible the respective cost of serving each of the Company's rate classes.

5 **Q. What rate classes were included in the Company's class cost of service**
6 **study?**

7 A. The Company's class cost of service study included the existing
8 residential service, general service, interruptible service, and the standard and large
9 volume transportation service classes. Additionally, the Company's class cost of service
10 study includes a proposed split of the general service class into two classes, a small
11 general service and a large general service class. The aforementioned classes were
12 allocated their respective portions of the Company's operating costs in the class cost of
13 service study.

14 **Q. Why has the Company proposed a split to the current general service**
15 **class in its class cost of service study?**

16 A. The proposal to split the general service class was agreed to in the
17 Stipulation and Agreement, and ultimately ordered by the Commission, in the Company's
18 prior gas rate increase case, Case No. GR-2007-0003. Item No. 15 of the Stipulation and
19 Agreement reads:

20 "AmerenUE agrees to develop a recommendation for
21 splitting the General Service rate class into two separate
22 rate classes and to file that recommendation as part of its
23 next natural gas rate case."

24
25 **Q. What is the Company's proposal for splitting the general service**
26 **class?**

1 A. The Company is proposing to split the general service class based on the
2 customer's installed capacity of gas use. Customers having an installed capacity of less
3 than 650 cubic feet per hour (cfh) of gas use at low pressure of one quarter (1/4) pound
4 per square inch (psi) will be considered the small general service class and customers
5 having an installed capacity equal to or greater than 650 cfh of gas use at low pressure
6 will be considered the large general service class.

7 **Q. What were the deciding factors in the development of the Company's**
8 **proposal?**

9 A. Several determining factors were balanced to develop the proposed split.
10 Based on objective cost of service criteria (investment) these determining factors were
11 homogeneity of customers within the respective classes, rate impact, rate stability, and
12 limited customer migration or rate switching. The initial step in this analysis involved a
13 review of the usage and service characteristics of all customers within the general service
14 class to determine the appropriate criteria for the aforementioned split. The analysis
15 yielded a clear division of the costs of meter and regulator sets for typical customers
16 within the class. More specifically, a monthly revenue requirement of \$3.17 was
17 calculated for customers with meter and regulator sets with capacity less than 650 cfh,
18 while a similar calculation yielded a monthly revenue requirement of \$17.86 for
19 customers with meter and regulator sets with capacity equal to or greater than 650 cfh.
20 This significant differential, along with a material difference in the annual average usage
21 of customers within these groups provided sound support for the proposed split. In
22 addition, approximately 75% of the general service class would be included in the
23 proposed small general service class, suggesting a lesser concern of rate migration.
24 Furthermore, these customers having under 650 cfh meters have a limited maximum

1 usage day, which makes them more homogenous as far as the allocation of the
2 distribution system.

3 **Q. Were the rate base investment and expenses associated with the**
4 **Company's special contract customers considered in the class cost of service study**
5 **you performed?**

6 A. Yes, they were. However, in considering such costs in my study, I
7 employed a cost of service approach utilized by the Company and the Commission Staff
8 in the Company's previous natural gas rate cases involving such studies. This approach
9 consists of allocating the total of all Company investment and expenses to the other
10 customer classes, as if there were no special contract customers. This allocation of such
11 costs to the non-special contract customers is offset by also allocating, or crediting,
12 existing special contract revenues to the other customer classes. This allocation of
13 special contract costs and revenues was done based on each class' respective total net
14 original cost rate base. This process presumes that the Company's current special
15 contract revenues, which comprise about 1.2% of the Company's total revenues,
16 currently provide a fair and reasonable recovery of the Company's total costs of
17 providing such service. Said another way, it is presumed that allocated special contract
18 revenues are equivalent to allocated special contract costs.

19 **Q. Did your class cost of service study include purchased gas costs?**

20 A. No, purchased gas costs, including the cost of the gas commodity,
21 demand, pipeline transportation and a portion of storage costs, are fully recovered
22 through the Purchased Gas Adjustment ("PGA") clause of the Company's tariffs and do
23 not affect the operating income or rate of return earned by the Company.

1 **Q. Please describe the first step you took in the preparation of your class**
2 **cost of service study.**

3 A. The first step I took was to functionalize costs according to major
4 functional areas, such as production, transmission and distribution plant, in order to
5 determine which customer classes are responsible for such costs.

6 **Q. What categories of cost did you examine in developing the customer**
7 **class cost of service study summary included in Schedule WMW-G1 of your**
8 **testimony?**

9 A. I conducted an analysis of all elements of the Company's investment and
10 expense associated with the Company's Missouri natural gas operation, for the purpose of
11 allocating such costs to the customer classes served by the Company. As a part of this
12 analysis, total expenses and investment in property and plant were classified into their
13 customer-related, demand-related, and variable or commodity-related components.

14 **Q. Please describe these categories of cost in greater detail.**

15 A. Customer-Related Costs are those fixed costs which are unrelated to
16 customer usage and result from the very existence of a customer, i.e., the costs of making
17 service available, including the costs of meter reading, billing, etc., as well as the fixed
18 costs associated with the customer's meter, service pipe, and some portion of the
19 Company's investment in distribution mains. These costs do not vary from
20 month-to-month and are unaffected by year-to-year fluctuations in the consumption level
21 of existing customers.

22 Demand-Related Costs are those fixed costs which the Company incurs in
23 order to meet the maximum daily gas demands imposed by its customers. These costs
24 include a significant portion of all fixed costs associated with the Company's investment

1 in plant and expenses to meet the customers' expected maximum loads on the Company's
2 system.

3 Commodity-Related Costs are those costs which are a function of the
4 actual volume of gas delivered or sold. Since purchased gas costs are excluded from the
5 class cost of service study, gas supply expenses not included in the Company's PGA and
6 the costs of gas stored underground are the only class cost of service study costs in this
7 category.

8 **Q. What was the next step in your class cost of service study?**

9 A. The next step in the class cost of service study was to develop the
10 appropriate factors to allocate the rate base components and associated operating and
11 maintenance expenses to the various rate classes.

12 **Q. Please describe the development of the factors used to allocate such**
13 **costs to each customer class.**

14 A. The allocation factors for each customer class were determined by
15 calculating the proportional share of total customer or property units of each class and the
16 total commodity or demand related units of each class.

17 Customer-Related allocation factors are generally proportionate to the
18 annual number of customer bills rendered to each rate class or to the weighted average of
19 the customer-related costs of certain items, based on Company studies.

20 Demand-Related allocation factors are proportionate to either the
21 coincident peak or non-coincident peak day delivered demand of the various rate classes
22 (including the interruptible class' peak demand). Coincident and non-coincident peak
23 day demands are explained further below.

1 Commodity-Related allocation factors are proportionate to the volumes
2 sold or transported to each rate class.

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

5 A. The next step was to apply these allocation factors to the various
6 functional components of rate base and operating and maintenance expenses, as
7 developed in total for the Company's Missouri jurisdictional natural gas operations by
8 Company witness Mr. Opich.

9 **Q. Please describe how those costs and expenses were allocated to the**
10 **various customer classes.**

11 A. The original cost and depreciation reserves of the major functional
12 components of the Company's natural gas rate base for the test year were allocated to
13 customer classes as described below. The resulting dollar amounts allocated to each class
14 are provided in Schedule WMW-G1.

15 (1) Production Plant. The Company operates a propane peak shaving
16 plant which produces gas primarily during the Company's highest periods of demand to
17 supplement gas supply from the pipelines normally serving the Company's customers.
18 This production plant was allocated to each customer class on the basis of the weather
19 normalized class coincident peak demand allocation factor for each customer class.
20 Coincident peak demand is the customer class' peak load the day of the Company's
21 system peak. The weather normalized coincident peak day demands for the rate classes
22 were determined by Company witness Steven M. Wills and are discussed in his direct
23 testimony. The coincident demand assigned to the interruptible class was only its
24 assurance gas level, due to their ability to curtail service on the peak day. Customers who

1 only take transportation service on the Company's distribution system were not allocated
2 production plant since they purchase their gas supply from a third party.

3 (2) Transmission Plant. Transmission plant investment is demand
4 related and was allocated to each customer class based on each class' weather normalized
5 non-coincident peak demands. Non-coincident peak demand is the customer class' actual
6 peak day load regardless of the day of its occurrence. The class weather normalized
7 non-coincident peak day demands were calculated by Mr. Wills.

8 (3) Distribution Plant. The Company's distribution plant was allocated
9 to each customer class based upon an analysis of the functions performed by the facilities
10 in Distribution Plant Accounts 374-387. This analysis determined the breakdown of each
11 account into its customer-related and demand-related functions.

12 The customer-related portions of the distribution system include Services
13 (Account 380), Meters (Account 381), and House Regulators (Account 383).
14 Distribution Account 380, Services, was allocated to each of the customer classes by
15 allocation factors which weigh the results of multiplying the current cost of the typical
16 services arrangement, determined for each customer class, by the number of customers in
17 that class. Distribution Account 381, Meters, was allocated to each of the customer
18 classes by allocation factors which weigh the results of multiplying the current cost of the
19 typical metering arrangement, determined for each customer class, by the number of
20 meters used in serving that class. Distribution Account 383, House Regulators, was
21 allocated to each of the customer classes by allocation factors which weigh the results of
22 multiplying the current cost of a typical regulator, determined for each customer class, by
23 the number of regulators used in serving that class.

1 All distribution plant not located on the customer's property was classified
2 as demand-related and allocated on a demand basis. Land and Land Rights
3 (Account 374), Structures and Improvements (Account 375), Mains (Account 376), and
4 Measuring and Regulating Equipment – General City Gate, and Industrial (Accounts 378
5 and 379) were all allocated to each customer class based on each class' weather
6 normalized non-coincident peak demands.

7 Additionally, a review of Industrial Measuring & Regulating Station
8 Equipment (Account 385) determined that, with the exception of some relatively large
9 meters, investment was principally comprised of distribution main regulating station
10 equipment used to regulate pressures throughout the Company's distribution system.
11 Therefore, this account was allocated to each customer class based on each class' weather
12 normalized non-coincident peak demands. For consistent treatment of these costs, the
13 cost of the meters in this account were transferred to Account 381, Meters.

14 (4) General and Intangible Plant. The balances in these accounts were
15 allocated to each customer class on the basis of the proportion of labor expense allocated
16 to each class. This "labor ratio" method of allocation is the same as that employed by
17 Company witness Mr. Opich, in arriving at the Missouri portion of General Plant and
18 Administrative and General ("A&G") expenses in his jurisdictional cost of service study

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

22 (6) Materials and Supplies. This component consists of local materials
23 related to production, transmission and distribution facilities and was allocated on the
24 basis of allocated gross plant.

1 (7) Propane Costs. This component consists of fuel storage
2 inventories related to the propane production plant and was allocated on the basis of the
3 class coincident peak demand allocation factors, excluding transportation customers, for
4 each customer class.

5 (8) Gas Stored Underground. This component consists of natural gas
6 storage inventories and was allocated based on winter (November-March) sales volumes
7 to each respective customer class. This is typically the period when such underground
8 storage is utilized. Transportation customers were not allocated stored gas since they
9 purchase their gas supply from third parties.

10 (9) 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 such class.

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

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

19 **Q. How did you allocate the Missouri jurisdictional test year natural gas**
20 **operating and maintenance expenses, as developed by Mr. Opich, to the various**
21 **customer classes?**

22 A. In general, with very few exceptions, the Missouri natural gas operating
23 and maintenance expenses were allocated to the various customer classes on the same
24 basis as the related investment in plant was allocated. This type of allocation employs the

1 familiar and widely used "expenses follow plant" principle of cost allocation. For
2 example, the allocator for distribution mains was utilized to allocate distribution main
3 expenses. The only exceptions to this allocation procedure are as follows:

4 (1) Production Expenses. This item consists of two categories:
5 demand and commodity. The demand or fixed portion of production expenses was
6 allocated on the same basis as production plant, while the commodity or variable portion
7 was allocated based on volumes delivered to each customer class.

8 (2) Customer Accounts Expenses. Account 903, Customer Records
9 and Collection Expenses, was allocated to each class based on the number of annual bills
10 in each customer class. Account 904, Uncollectible Accounts, was allocated to each
11 customer class on the basis of the annual level of such activities applicable to each
12 customer class in the Company's Missouri natural gas business. Accounts 902 and 905,
13 Meter Reading and Miscellaneous Customer Accounts Expense, were allocated to each
14 class based on the number of customers in each customer class. Account 901,
15 Supervision, was allocated to each class on the basis of the composite allocation of all
16 other Customer Accounts Expenses.

17 (3) Customer Service and Sales Expense. These expenses were
18 allocated to each customer class using the composite allocation of Customer Accounts
19 Expenses.

20 (4) A&G Expense. A&G expenses were allocated to the various
21 customer classes on the basis of the class composite distribution of previously allocated
22 labor expenses. As indicated earlier, this allocation of A&G expenses reflects the same
23 method as that utilized by Mr. Opich in the Company's jurisdictional cost of service
24 study.

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

2 A. Since depreciation expenses are functionalized and are directly related to
3 the Company's original cost investment in plant, this 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. Thus, this expense was allocated to customer classes on
9 the basis of gross plant.

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

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

15 **Q. Please identify Schedule WMW-G2.**

16 A. Schedule WMW-G2 was derived from the class cost of service summary
17 on Schedule WMW-G1. To develop Schedule WMW-G2, I modified the base revenues
18 of each class in Schedule WMW-G1 to reflect the class revenues necessary for the
19 Company to realize equalized rates of return from each customer class at the Company's
20 current level of total Missouri natural gas revenues.

21 **Q. Please describe the method used to equalize rates of return for each**
22 **customer class, as reflected in your Schedule WMW-G2.**

23 A. The total net original cost rate base of each customer class was multiplied
24 by the Missouri jurisdictional test year return of 8.269%, as indicated in Mr. Opich's

1 testimony, to obtain the required total net operating income of each class. This net
2 operating income was then added to the operating expenses of each class to obtain the
3 total operating revenue of each class required for equal class rates of return. The
4 resulting cost of service of each customer class is set forth on line 5 of Schedule
5 WMW-G2. However, the revenue requirement of each customer class is as indicated in
6 Company witness Wilbon L. Cooper's Schedule WLC-G6.

7 **IV. UNBUNDLING FUNCTIONAL COST COMPONENTS**

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

9 A. My second area of responsibility was to disaggregate or unbundle the
10 Company's class revenue requirements in its allocated class cost of service study. These
11 costs were divided into the following Functionalized Cost Categories:

- 12 (1) Customer Related Costs;
13 (2) Distribution - Demand Related Costs;
14 (3) Transmission - Demand Related Costs;
15 (4) Production - Commodity Related Costs; and
16 (5) Production - Demand Related Costs.

17 **Q. Why is a breakdown of such costs necessary?**

18 A. This breakdown was required by Company witness Mr. Cooper for use in
19 the development of proposed rates in this case, which are discussed in Mr. Cooper's
20 direct testimony.

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

23 A. This unbundling process entailed a detailed analysis of the various
24 components of the equalized customer class rates of return study presented in Schedule

1 WMW-G2 of my testimony. As the Company's various components of cost presented in
2 Schedule WMW-G1 were allocated to customer classes on either a customer, commodity
3 or demand related basis, the unbundling process consisted of extracting these various
4 components of cost and summarizing them into the functional cost categories indicated
5 earlier.

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

8 A. As the objective of the cost unbundling analysis was to unbundle the costs
9 associated with the Company's base rate revenues, the Company's miscellaneous revenue
10 sources associated with other revenues were deducted from the unbundled functional cost
11 categories in a manner reflective of where the costs associated with such services appear
12 in the Company's accounts. Some examples of other Company revenues are late pay
13 charges, dishonored check charges, meter rentals, and disconnect/reconnect charges.

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

18 A. Yes, the steps I have described will equate the Company's base rate
19 revenues with the costs associated with such revenues. The results of this analysis are
20 contained in Schedule WMW-G3 of my testimony. As I indicated earlier, this
21 information was used by Mr. Cooper in the development of the revised rates being
22 proposed by the Company in this case.

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

24 A. Yes, it does.

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

In the Matter of Union Electric Company)
d/b/a AmerenUE for Authority to File)
Tariffs Increasing Rates for Natural Gas) Case No. GR-2010-
Service Provided to Customers in the)
Company's Missouri Service Area.)

AFFIDAVIT OF WILLIAM M. WARWICK

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

William M. Warwick, being first duly sworn on his oath, states:

1. My name is William M. Warwick. I work in the City of St. Louis, Missouri, and I am employed by Union Electric Company d/b/a AmerenUE as Managing Supervisor of Rate Engineering.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of AmerenUE consisting of 15 pages, Schedules WMW-G1 through WMW-G3, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

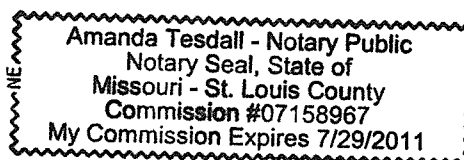
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.


William M. Warwick

Subscribed and sworn to before me this 11 day of June, 2010.


Notary Public

My commission expires:



AmerenUE
MISSOURI GAS OPERATIONS
CLASS COST OF SERVICE ALLOCATION STUDY
12 MONTHS ENDED DECEMBER 2009

TITLE: COST OF SERVICE SUMMARY (Current Rates)

<u>LINE #</u>	<u>ITEM</u>	<u>TOTAL</u> <u>MISSOURI</u>	<u>RESIDENTIAL</u>	<u>SMALL</u> <u>GENERAL</u>	<u>LARGE</u> <u>GENERAL</u>	<u>INTERRUPTIBLE</u>	<u>TRANSPORTATION SERVICE</u>	
							<u>STANDARD</u>	<u>LARGE VOLUME</u>
1								
2	<u>COST OF SERVICE SUMMARY</u>							
3								
4	GAS OPERATING REVENUE							
5	Sale of Gas	\$ 63,117,660	\$ 39,778,022	\$ 5,790,581	\$ 9,352,387	\$ 938,983	\$ 3,814,725	\$ 3,442,962
6	Special Contract Revenues	\$ 814,433	\$ 522,753	\$ 71,995	\$ 134,790	\$ 12,369	\$ 36,791	\$ 35,736
7	Other Operating Revenues	<u>\$ 2,201,663</u>	<u>\$ 1,755,244</u>	<u>\$ 175,644</u>	<u>\$ 173,901</u>	<u>\$ 11,684</u>	<u>\$ 44,843</u>	<u>\$ 40,347</u>
8								
9	TOTAL GAS OPERATING REVENUES	\$ 66,133,757	\$ 42,056,019	\$ 6,038,220	\$ 9,661,079	\$ 963,036	\$ 3,896,359	\$ 3,519,044
10								
11	EXPENSES:							
12	Total Gas O&M Expenses	\$ 33,565,959	\$ 24,564,855	\$ 2,736,443	\$ 3,863,442	\$ 298,695	\$ 1,084,049	\$ 1,018,476
13	Depreciation Expense	\$ 8,686,513	\$ 5,686,767	\$ 819,014	\$ 1,334,690	\$ 104,493	\$ 379,671	\$ 361,877
14	Taxes Other than Income Taxes	\$ 7,674,559	\$ 5,047,618	\$ 709,574	\$ 1,155,007	\$ 94,502	\$ 339,686	\$ 328,173
15								
16	INCOME TAXES	<u>\$ 7,833,849</u>	<u>\$ 5,101,822</u>	<u>\$ 733,452</u>	<u>\$ 1,202,732</u>	<u>\$ 98,744</u>	<u>\$ 354,260</u>	<u>\$ 342,839</u>
17								
18	NET UTILITY OPERATING INCOME	\$ 8,372,877	\$ 1,654,956	\$ 1,039,738	\$ 2,105,209	\$ 366,602	\$ 1,738,693	\$ 1,467,680
19								
20	RATE BASE	\$ 244,864,059	\$ 157,168,638	\$ 21,645,747	\$ 40,525,472	\$ 3,718,671	\$ 11,061,428	\$ 10,744,103
21								
22	RATE OF RETURN - REALIZED	3.42	1.05	4.80	5.19	9.86	15.72	13.66

AmerenUE
MISSOURI GAS OPERATIONS
CLASS COST OF SERVICE ALLOCATION STUDY
12 MONTHS ENDED DECEMBER 2009

TITLE: COST OF SERVICE SUMMARY (Equal Returns)

<u>LINE #</u>	<u>ITEM</u>	<u>TOTAL</u> <u>MISSOURI</u>	<u>RESIDENTIAL</u>	<u>SMALL</u> <u>GENERAL</u>	<u>LARGE</u> <u>GENERAL</u>	<u>INTERRUPTIBLE</u>	<u>TRANSPORTATION SERVICE</u>	
							<u>STANDARD</u>	<u>LARGE VOLUME</u>
1								
2	<u>COST OF SERVICE SUMMARY</u>							
3								
4	GAS OPERATING REVENUE							
5	Sale of Gas (Margin)	\$ 74,992,593	\$ 51,045,758	\$ 6,499,783	\$ 10,692,014	\$ 900,105	\$ 2,990,326	\$ 2,864,606
6	Special Contract Revenues	\$ 814,433	\$ 522,753	\$ 71,995	\$ 134,790	\$ 12,369	\$ 36,791	\$ 35,736
7	Other Operating Revenues	<u>\$ 2,201,663</u>	<u>\$ 1,755,244</u>	<u>\$ 175,644</u>	<u>\$ 173,901</u>	<u>\$ 11,684</u>	<u>\$ 44,843</u>	<u>\$ 40,347</u>
8								
9	TOTAL GAS OPERATING REVENUE	\$ 78,008,689	\$ 53,323,755	\$ 6,747,422	\$ 11,000,706	\$ 924,158	\$ 3,071,960	\$ 2,940,688
10								
11	EXPENSES:							
12	Total Gas O&M Expenses	\$ 33,565,959	\$ 24,564,855	\$ 2,736,443	\$ 3,863,442	\$ 298,695	\$ 1,084,049	\$ 1,018,476
13	Depreciation Expense	\$ 8,686,513	\$ 5,686,767	\$ 819,014	\$ 1,334,690	\$ 104,493	\$ 379,671	\$ 361,877
14	Taxes Other than Income Tax	\$ 7,674,559	\$ 5,047,618	\$ 709,574	\$ 1,155,007	\$ 94,502	\$ 339,686	\$ 328,173
15								
16	INCOME TAXES	<u>\$ 7,833,849</u>	<u>\$ 5,028,240</u>	<u>\$ 692,505</u>	<u>\$ 1,296,517</u>	<u>\$ 118,970</u>	<u>\$ 353,884</u>	<u>\$ 343,732</u>
17								
18	NET UTILITY OPERATING INCOME	\$ 20,247,809	\$ 12,996,275	\$ 1,789,887	\$ 3,351,051	\$ 307,497	\$ 914,669	\$ 888,430
19								
20	RATE BASE	\$ 244,864,059	\$ 157,168,638	\$ 21,645,747	\$ 40,525,472	\$ 3,718,671	\$ 11,061,428	\$ 10,744,103
21								
22	RATE OF RETURN - REALIZED	8.269	8.269	8.269	8.269	8.269	8.269	8.269

AmerenUE
MISSOURI GAS OPERATIONS
CLASS COST OF SERVICE ALLOCATION STUDY
12 MONTHS ENDED DECEMBER 2009

	<u>Total</u>	<u>Residential</u>	<u>Small General</u>	<u>Large General</u>	<u>Interruptible</u>	<u>Transportation Service</u>	
						<u>Standard</u>	<u>Large Volume</u>
<u>Revenue Requirement</u>							
Customer	\$ 37,132,552	\$ 29,829,230	\$ 3,563,701	\$ 3,069,119	\$ 69,449	\$ 425,648	\$ 175,404
Production -- Demand	\$ 2,212,857	\$ 1,500,756	\$ 206,019	\$ 505,667	\$ 415	\$ -	\$ -
Production -- Energy	\$ 2,330,458	\$ 1,504,240	\$ 197,483	\$ 556,253	\$ 72,482	\$ -	\$ -
Transmission -- Demand	\$ 718,712	\$ 405,386	\$ 55,678	\$ 135,696	\$ 15,388	\$ 52,138	\$ 54,426
Distribution -- Demand	<u>\$ 35,614,110</u>	<u>\$ 20,084,143</u>	<u>\$ 2,724,541</u>	<u>\$ 6,733,971</u>	<u>\$ 766,424</u>	<u>\$ 2,594,173</u>	<u>\$ 2,710,858</u>
	\$ 78,008,689	\$ 53,323,755	\$ 6,747,422	\$ 11,000,706	\$ 924,158	\$ 3,071,960	\$ 2,940,688
<u>Other Revenue</u>							
Customer	\$ 2,201,663	\$ 1,755,244	\$ 175,644	\$ 173,901	\$ 11,684	\$ 44,843	\$ 40,347
Production -- Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Production -- Energy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transmission -- Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution -- Demand	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
	\$ 2,201,663	\$ 1,755,244	\$ 175,644	\$ 173,901	\$ 11,684	\$ 44,843	\$ 40,347
<u>Special Contracts</u>							
Customer	\$ 814,433	\$ 522,753	\$ 71,995	\$ 134,790	\$ 12,369	\$ 36,791	\$ 35,736
Production -- Demand	\$ 281,711	\$ 216,239	\$ 31,149	\$ 30,241	\$ 324	\$ 3,185	\$ 573
Production -- Energy	\$ 6,120	\$ 4,093	\$ 559	\$ 1,466	\$ 1	\$ -	\$ -
Production -- Energy	\$ 67,589	\$ 43,626	\$ 5,727	\$ 16,133	\$ 2,102	\$ -	\$ -
Transmission -- Demand	\$ 10,649	\$ 6,006	\$ 825	\$ 2,011	\$ 228	\$ 773	\$ 806
Distribution -- Demand	<u>\$ 448,365</u>	<u>\$ 252,787</u>	<u>\$ 33,735</u>	<u>\$ 84,940</u>	<u>\$ 9,713</u>	<u>\$ 32,833</u>	<u>\$ 34,356</u>
	\$ 814,433	\$ 522,753	\$ 71,995	\$ 134,790	\$ 12,369	\$ 36,791	\$ 35,736
<u>Base Revenue</u>							
Customer	\$ 34,649,177	\$ 27,857,747	\$ 3,356,908	\$ 2,864,977	\$ 57,440	\$ 377,620	\$ 134,485
Production -- Demand	\$ 2,206,738	\$ 1,496,663	\$ 205,460	\$ 504,201	\$ 414	\$ -	\$ -
Production -- Energy	\$ 2,262,869	\$ 1,460,614	\$ 191,756	\$ 540,120	\$ 70,380	\$ -	\$ -
Transmission -- Demand	\$ 708,063	\$ 399,379	\$ 54,853	\$ 133,685	\$ 15,160	\$ 51,365	\$ 53,620
Distribution -- Demand	<u>\$ 35,165,745</u>	<u>\$ 19,831,355</u>	<u>\$ 2,690,806</u>	<u>\$ 6,649,032</u>	<u>\$ 756,711</u>	<u>\$ 2,561,340</u>	<u>\$ 2,676,501</u>
	\$ 74,992,593	\$ 51,045,758	\$ 6,499,783	\$ 10,692,014	\$ 900,105	\$ 2,990,326	\$ 2,864,606