Exhibit No.:	_____
Issue(s):	Class Cost of Service & Rate Design
Witness/Type of Exhibit:	Meisenheimer/Direct
Sponsoring Party:	Public Counsel
Case No.:	ER-2007-0002

DIRECT TESTIMONY

OF

BARBARA A. MEISENHEIMER

Submitted on Behalf of the Office of the Public Counsel

AMERENUE
(RATE DESIGN)

CASE NO. ER-2007-0002

December 29, 2006

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 Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	**Case No. ER-2007-0002**

AFFIDAVIT OF BARBARA A. MEISENHEIMER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

1. My name is Barbara A. Meisenheimer. I am Chief Utility Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Barbara A. Meisenheimer

Subscribed and sworn to me this 29th day of December 2006.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

JERENE A. BUCKMAN
My Commission Expires
August 10, 2009
Cole County
Commission #05754036

Jerene A. Buckman
Notary Public

My Commission expires August 10, 2009.

AmerenUE
Class Cost of Service and Rate Design

ER-2007-0002

Direct Testimony
of
Barbara Meisenheimer

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O. 2230, Jefferson City, Missouri 65102. I am also an adjunct instructor for William Woods University.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND.

A. I hold a Bachelor of Science degree in Mathematics from the University of Missouri-Columbia (UMC) and have completed the comprehensive exams for a Ph.D. in Economics from the same institution. My two fields of study are Quantitative Economics and Industrial Organization. My outside field of study is Statistics. I have taught economics courses for the University of Missouri-Columbia, William Woods University, and Lincoln University, mathematics for the University of Missouri-Columbia and statistics for William Woods University.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE COMMISSION?

A. Yes, I have testified on numerous issues before the Missouri Public Service Commission. (PSC or Commission).

Q. WHAT IS YOUR PREVIOUS EXPERIENCE IN THE PREPARATION OF CLASS COST OF SERVICE STUDIES?

A. I have prepared and supervised the preparation of cost of service studies on behalf of Public Counsel for over eight years. These include class cost of service studies related to natural gas, water and electric utilities, and services cost studies related to telecommunications carriers.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my direct testimony is to present Public Counsel's Class Cost of Service (CCOS) study results and preliminary inter-class rate design recommendations. I have prepared two CCOS studies. The first study uses a traditional method of allocating production costs. The second CCOS study illustrates the results of replacing the traditional allocator with a new production allocator based on Time of Use (TOU), similar to the TOU Demand allocator I filed in KCP&L Case No. ER-2006-0314.

The results of the traditional study are provided in Schedule DIR BAM 1. The TOU cost of service study results are provided in Schedule DIR BAM 2. The costs developed in these studies are one factor in setting rates. Other important considerations related to setting just and reasonable rates are discussed later in this testimony.

Q. HOW DO YOU RECOMMEND THAT THE COMMISSION ACCOMMODATE FACTORS SUCH AS AFFORDABILITY, RATE IMPACT, AND RATE CONTINUITY IN DETERMINING RATE DESIGN?

A. Generally, I recommend that the Commission adopt a rate design that balances movement toward cost of service with rate impact and affordability considerations. To reach this balance, I believe that in cases where the existing revenue structure departures greatly from the class cost of service, the Commission should impose, at a maximum, class revenue shifts equal to one half of the "revenue neutral shifts" indicated by Public Counsel's Class Cost of Service studies. Revenue neutral shifts are shifts that hold overall company revenue at the existing level but allow for the share attributed to each class to be adjusted to reflect the cost responsibility of the class. In addition to moving half way to the revenue neutral shifts, I recommend that if the Commission determines that an overall increase in revenue requirement is necessary in this case, then no customer class should receive a net decrease as the combined result of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total revenue increase that is applied to that class. Likewise, if the Commission determines that an overall decrease in revenue requirement is necessary, then no customer class should receive a net increase as the combined result of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total revenue decrease that is applied to that class.

Q. DO YOU ANTICIPATE A NEED TO UPDATE YOUR COST STUDY?

A. Yes. I understand that the Staff and Company are discussing possible adjustments to the accounting data that may affect class allocations . If the Staff's data changes, I will likely file supplemental direct testimony

I. CLASS COST OF SERVICE STUDY

Q. WHAT IS THE MAIN PURPOSE OF PERFORMING A CCOS STUDY?

A. The primary purpose of a CCOS study is to determine the relative class cost responsibility for each customer class by allocating costs among the classes based on principles of cost causation. CCOS study results also provide guidance for determining how rates (e.g., customer charges) should be designed to collect revenues from customers within a class, depending on customer usage levels and patterns of use.

Q. WHAT IS THE RELATIVE IMPORTANCE OF CCOS STUDY RESULTS IN DEVELOPING RATE DESIGN?

A. CCOS study results provide the Commission with a general guide in setting the just and reasonable rate for the provision of service based on costs. In addition, other factors are also relevant considerations when setting rates including the value of a service, affordability, rate impact, rate continuity, etc. A determination as to the particular manner in which the results of a cost of service study and all the other factors are balanced in setting rates can only be determined on a case-by-case basis.

Q. PLEASE OUTLINE THE BASIC ELEMENTS OF PREPARING A CCOS STUDY.

A. A CCOS Study is designed to functionalize, classify, and allocate costs.

Functionalizing costs involves categorizing accounts by the type of electric utility function(s) with which each account is associated. The categories of accounts include Production, Transmission, Distribution, Customer Accounts, Administrative and General, etc.

The next step is to classify costs as customer related, demand related, commodity related, or "other" costs. Customer related costs vary in relation to the number of customers. Demand related costs vary with usage during different periods such as peak and average load periods. Commodity related costs vary with annual energy consumption. For example, the cost associated with meter plant, and meter reading expense are considered to be customer-related because they vary primarily based on the number of customers served and might occur whether or not the customer uses any electricity.

The final step in the CCOS is to develop and apply allocation factors that apportion a reasonable share of jurisdictional costs to each customer class. Allocation factors should be developed in a manner that is consistent with the functionalization and classification of costs described above. For example, unweighted customer related cost allocation factors are expressed as ratios that reflect the proportion of customers in a particular class to the total number of customers that contribute to the causation of the relevant cost. Likewise, demand related allocators should reflect each class's use during specific time periods and commodity related allocators should reflect each class's annual consumption. In simpler terms, if the cost for a particular activity were thought of as a pie, then allocators would represent the size of the slices of the "cost" pie that each class would be assigned.

Q. WHICH CUSTOMER CLASSES ARE USED IN YOUR CCOS STUDIES?

A. For both studies of the AMERENUE system, I used a Residential Class (RG), a Small General Service Class (SGS), a Medium General Service Class (MGS), a

Large General Service Class (LGS), a Large Power Service Class (LPS), a Special Contract Class (SC) and a Lighting Class (Lighting).

Q. ON WHAT DATA ARE YOUR CCOS STUDIES BASED?

A. My CCOS studies are based primarily on data provided by the Company and Staff including data related to investments, expenses and revenues, peak demand, customer counts and energy use.

Q. HOW IS INTANGIBLE PLANT ALLOCATED?

A. Intangible Plant (FERC Account No. 301) pertains to organization cost. It includes all fees paid to federal or state governments for the privilege of incorporation along with related expenditures. Generally, it should be allocated to each customer class according to the benefits each receives from the existence of this business, or according to the extent to which each class contributes to the overall cost of conducting the business. In this case, I have applied a Gross Plant Allocator to Intangible Plant.

Q. HOW IS PRODUCTION PLANT ALLOCATED?

A. Production Plant includes the cost of land, structures and equipment used in connection with power generation. Both demand and energy characteristics of a system's loads are important determinants of production plant costs. One of my production allocators assigns Production Plant according to a composite allocator that has (1) a demand related component and (2) an energy related component.

The traditional method creates a weighted 3CP and average demand allocator. The second allocation method is a time of use method which assigns demand related fixed plant investments and depreciation reserve to each hour. The method then sums each class' share of hourly investments based on only those hours when the class actually used the system.

Q. DO YOU BELIEVE THIS IS CONSISTENT WITH THE METHOD DESCRIBED BY NARUC IN ITS 1992 ELECTRIC COST MANUEL?

A. Yes it is. The following is a describtion method from the NARUC manuel which is consistent with the method I used to develop the time of use allocation.

> 4. Probability of Dispatch Method
>
> The probability of dispatch (POD) method is primarily a tool for analyzing cost of service by time periods. The method requires analyzing an actual or estimated hourly load curve for the utility and identifying the generating units that would normally be used to serve each hourly load. The annual revenue requirement of each generating unit is divided by the number of hours in the year that it operates, and that "per hour cost" is assigned to each hour that it runs. In allocating production plant costs to classes, the total cost for all units for each hour is allocated to the classes according to the KWH use in each hour. The total production plant cost allocated to each class is then obtained by summing the hourly cost over all hours of the year. These costs may then be recovered via an appropriate combination of demand and energy charges. It must be noted that this method has substantial input data and analysis requirements that may make it prohibitively expensive for utilities that do not develop and maintain the required data.

Q. HOW DID YOU ALLOCATE TRANSMISSION PLANT?

A. Transmission Plant includes the cost of land, structures and equipment used in connection with transmission operations. Transmission facilities are installed to provide reliable service throughout the year including periods of scheduled maintenance. It can also, at times, substitute for generation and can minimize the cost of generation facilities through the sales or purchases of power. Therefore,

Transmission Plant costs can be equitably allocated on the same basis as the Production Plant. Accordingly, I chose to use the same that I used for Production Plant to allocate Transmission Plant.

Q. HOW DID YOU ALLOCATE DISTRIBUTION PLANT?

A. Distribution Plant includes the cost of land, structures and equipment used in connection with distribution operations. Distribution plant equipment reduces high-voltage energy from the transmission system to lower voltages, delivers it to the customer and monitors the amounts of energy used by the customer. Many of the distribution costs associated with providing service to electric utility customers are not directly associated with or reasonable assignable to a particular class with precision. For example, with the exception of service drops and meters, most of the facilities between the utility customer's point-of-service and the distribution substation are shared facilities. Since no portion of such facilities are directly related to the number of customers, the associated costs are best classified as demand related, rather than customer related.

In the functionalization and allocation of Distribution Plant, my studies reflect that distribution facilities provide service at two voltage levels: primary and secondary, and that some large industrial customers may choose to take service at primary voltages because of their large electrical requirements. Different allocation factors were used for allocating costs at different levels of the distribution system. I am seeking additional information from the Company and

may revise the allocation weights used to apportion the primary and secondary plant costs for FERC Accounts 364-368.

Q. HOW DID YOU ALLOCATE METER RELATED FACILITIES?

A. Meter facilities costs are generally related to each individual customer. New investment occurs when a new customer is added to the system. Therefore, meter costs are usually classified as customer related. I allocated meter costs based on a version of the Company's meter allocator.

Q. HOW DID YOU ALLOCATE SERVICE RELATED FACILITIES?

Service facilities are classified as customer related. The Company conducted a study of service costs.

The functional categories and classifications for Distribution Plant are as follows:

360-362	Distribution Substations	Demand at Primary Station
364	Poles Towers and Fixtures	Demand at Primary and Customer and Demand at Secondary
365	Overhead Conductors & Devices	Demand at Primary and Customer and Demand at Secondary
366	Underground Conduit	Demand at Primary and Customer and Demand at Secondary
367	Underground Conductors & Devices	Demand at Primary and Customer and Demand at Secondary
368	Line Transformers	Transformer Demand
369	Services	Services Study Results
370	Meters	Meter Study Results

Q. HOW DID YOU ALLOCATE GENERAL PLANT?

A. General Plant includes land, structures and equipment used in support of Production, Transmission and Distribution Plant. Therefore, it was allocated using a composite allocator based on previously allocated gross non-general plant.

Q. PLEASE DISCUSS THE METHODS THAT YOU USED TO ALLOCATE EXPENSES.

A. For the expenses that could not be directly assigned, consistent with the principle that "expenses follow plant", the allocators that were applied to the expenses accounts were the same as those applied to the Production, Transmission, and Distribution Plant accounts to which the expenses are related.

Q. HOW DID YOU ALLOCATE POWER PRODUCTION EXPENSES?

A. Power Production Expenses were broken down into demand-related and energy-related production and purchased power costs. The demand-related expenses were allocated based on the demand related allocators in my studies. The energy-related expenses were allocated based on class kWhs at generation.

Q. HOW WERE TRANSMISSION EXPENSES ALLOCATED?

A. Transmission Expenses were allocated according to the "expenses follow plant" principle. The allocators applied to transmission expenses were the same as those I applied to transmission plant.

Q. HOW WERE DISTRIBUTION EXPENSES ALLOCATED?

A. Distribution Expenses were allocated according to the "expenses follow plant" principle. The allocators applied to distribution expenses were the same as those I

applied to the plant associated with those expenses. For expenses that are not associated with any particular category of distribution plant, such as supervision and engineering, I used an aggregate distribution expense allocator based on the sum of the primary portion of Accounts 364-367.

Q. HOW DID YOU ALLOCATE CUSTOMER ACCOUNTS EXPENSES?

A. I allocated some Account Expense Accounts to all customer classes based on unweighted customer numbers. I used weighted meter reading allocators for Meter Reading (Account 902). I used total cost of service to allocate Uncollectible Accounts (Account 904) consistent with uncollectibles being a normal cost of doing business which is discussed as one position recognized in the NARUC Electric Cost Allocation manual. The rest I allocated based on a composite customer account allocator.

Q. HOW DID YOU ALLOCATE CUSTOMER SERVICE EXPENSES AND SALES EXPENSES?

A. Customer Service and Sales Expenses including Accounts 907, 908, 909 and 910 were 911, 912, 913 and 916 were allocated based on customers, weighted customers or a composite allocator.

Q. HOW ARE ADMINISTRATIVE AND GENERAL (A & G) EXPENSES ALLOCATED?

A. Property Insurance expense (Account 924) was allocated on the basis of non general gross plant or cost of services. The remaining A & G accounts were allocated on payroll.

Q. HOW DID YOU ALLOCATE PROPERTY TAXES?

A. I allocated property taxes on the basis of allocated total gross plant.

Q. HOW DID YOU ALLOCATE STATE AND FEDERAL INCOME TAXES?

A. These taxes were allocated on the basis of rate base since a utility company's income taxes will be a function of the size of its rate base, and thus each class should contribute revenues for income taxes in proportion with the amount of rate base that is necessary to serve it.

Q. PLEASE DESCRIBE THE RESULTS OF PUBLIC COUNSEL'S CLASS COSS STUDY.

A. Schedule DIR BAM 1.1 and Schedule DIR BAM 1.1 show the results of Public Counsel's Class COS Studies. Since a CCOS study is designed to determine the relative cost responsibility of customer classes, the results are based on the assumption that total company revenues remain constant. Line 11 of each schedule shows the current revenue percentage by class. Line 36 of each schedule shows the change in class revenue percentage to achieve equalized rates of return. The study results show that the Residential class is from 1.7%-5.5% to a few percent above cost of service. The SGS and LGS are above costs, the SPS and LTS are near cost, LPS is significantly below cost. The SC, LP and Lighting classes, on the other hand, are below cost of service.

Q. DID YOU PERFORM ANY ANALYSIS OF THE CUSTOMER-RELATED COSTS THAT ARE ATTRIBUTABLE TO THE TYPICAL RESIDENTIAL CUSTOMER?

A. Yes, I did. I included costs that are related to services, meters, meter installations, and customer accounts expenses. The costs associated with services, meters, and meter installations include the return on rate base for the relevant plant accounts, distribution operation and maintenance expenses associated with services, meters,

and meter installations, plus the depreciation expense, payroll benefits, and property taxes associated with services, meters, and regulators. Generally, these costs are used to recommend customer charge changes. Since the Staff indicates the Company is over, I am not recommending changes to the customer charge in this testimony.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

OPC CCOS Study Summary

######		TOTAL	RES	SGS	LGS	SPS	LPS	LTS
1	O & M EXPENSES	1,485,173,603	643,404,203	158,505,474	294,534,985	140,956,254	137,328,766	110,443,921
2	DEPREC. & AMORT. EXPENSE	289,611,658	139,511,890	35,229,144	55,367,624	23,205,483	22,472,824	13,824,692
3	TAXES	382,136,516	177,751,530	43,489,839	74,925,292	32,639,336	31,718,633	21,611,886
4								
5	TOTAL EXPENSES AND TAXES	2,156,921,777	960,667,624	237,224,457	424,827,901	196,801,072	191,520,223	145,880,500
6								
7	CURRENT RATE REVENUE	2,040,378,586	883,572,678	239,245,364	437,788,646	185,248,100	158,871,485	135,652,313
8	OFFSETTING REVENUES:							
9	Reveue Credits	622,976,364	260,037,630	66,228,038	129,058,589	59,195,893	58,258,721	50,197,493
10								
11	Total Offsetting Revenues	622,976,364	260,037,630	66,228,038	129,058,589	59,195,893	58,258,721	50,197,493
12								
11	TOTAL CURRENT REVENUE	2,663,354,950	1,143,610,308	305,473,402	566,847,235	244,443,993	217,130,206	185,849,806
12	CLASS % OF CURRENT REVENUE	100.00%	42.94%	11.47%	21.28%	9.18%	8.15%	6.98%
13								
14	OPERATING INCOME	506,433,173	182,942,685	68,248,945	142,019,333	47,642,920	25,609,984	39,969,307
15								
16	TOTAL RATE BASE	5,129,974,972	2,345,951,382	576,804,329	1,018,990,870	441,759,025	436,439,372	310,029,995
17								
18	IMPLICIT RATE OF RETURN	9.87%	7.80%	11.83%	13.94%	10.78%	5.87%	12.89%
19								
20	EQUAL RATE OF RETURN	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%
21								
22	REQUIRED OPERATING INCOME							
23	Equalized (OPC) Rates of Return	506,433,173	231,593,255	56,942,353	100,595,185	43,610,627	43,085,469	30,606,285
24								
25	TOTAL COST OF SERVICE	2,663,354,950	1,192,260,879	294,166,810	525,423,086	240,411,699	234,605,691	176,486,784
26	CLASS % of COS	100.00%	44.77%	11.04%	19.73%	9.03%	8.81%	6.63%
27								
28	Allocation of difference between							
29	current revenue and recommended revenue	0	0	0	0	0	0	0
30	MARGIN REVENUE REQUIRED							
31	to Equalize Class ROR - Revenue Neutral	2,663,354,950	1,192,260,879	294,166,810	525,423,086	240,411,699	234,605,691	176,486,784
32								
33	COS LESS OFFSETTING REVENUES	2,040,378,586	932,223,249	227,938,772	396,364,497	181,215,806	176,346,970	126,289,291
34								
35	COS INDICATED REVENUE NEUTRAL SHIFT	(0)	48,650,571	(11,306,592)	(41,424,149)	(4,032,293)	17,475,485	(9,363,022)
36	% REVENUE NEUTRAL RATE INCREASE	0.00%	5.51%	-4.73%	-9.46%	-2.18%	11.00%	-6.90%
37	CLASS % OF REVENUE AFTER REVENUE SHIFT	100.00%	45.69%	11.17%	19.43%	8.88%	8.64%	6.19%

OPC Rate Design Summary

OPC CCOS Study Summary

######	TOTAL	RES	SGS	LGS	SPS	LPS	LTS
1 O & M EXPENSES	1,485,173,603	621,001,910	155,959,250	299,666,041	145,888,561	144,338,758	118,319,083
2 DEPREC. & AMORT. EXPENSE	289,611,658	131,416,087	34,308,983	57,221,899	24,987,934	25,006,114	16,670,641
3 TAXES	382,136,516	165,434,140	42,089,856	77,746,486	35,351,252	35,572,918	25,941,865
4							
5 TOTAL EXPENSES AND TAXES	2,156,921,777	917,852,137	232,358,088	434,634,426	206,227,747	204,917,790	160,931,588
6							
7 CURRENT RATE REVENUE	2,040,378,586	883,572,678	239,245,364	437,788,646	185,248,100	158,871,485	135,652,313
8 OFFSETTING REVENUES:							
9 Reveue Credits	622,976,364	233,243,374	63,182,628	135,195,586	65,095,178	66,643,020	59,616,578
10							
11 Total Offsetting Revenues	622,976,364	233,243,374	63,182,628	135,195,586	65,095,178	66,643,020	59,616,578
12							
11 TOTAL CURRENT REVENUE	2,663,354,950	1,116,816,052	302,427,992	572,984,232	250,343,277	225,514,505	195,268,892
12 CLASS % OF CURRENT REVENUE	100.00%	41.93%	11.36%	21.51%	9.40%	8.47%	7.33%
13							
14 OPERATING INCOME	506,433,173	198,963,915	70,069,903	138,349,806	44,115,530	20,596,716	34,337,303
15							
16 TOTAL RATE BASE	5,129,974,972	2,169,570,856	556,757,080	1,059,389,337	480,592,680	491,631,315	372,033,704
17							
18 IMPLICIT RATE OF RETURN	9.87%	9.17%	12.59%	13.06%	9.18%	4.19%	9.23%
19							
20 EQUAL RATE OF RETURN	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%	9.87%
21							
22 REQUIRED OPERATING INCOME							
23 Equalized (OPC) Rates of Return	506,433,173	214,180,899	54,963,281	104,583,337	47,444,301	48,534,039	36,727,315
24							
25 TOTAL COST OF SERVICE	2,663,354,950	1,132,033,036	287,321,369	539,217,764	253,672,048	253,451,829	197,658,904
26 CLASS % of COS	100.00%	42.50%	10.79%	20.25%	9.52%	9.52%	7.42%
27							
28 Allocation of difference between							
29 current revenue and recommended revenue	0	0	0	0	0	0	0
30 MARGIN REVENUE REQUIRED							
31 to Equalize Class ROR - Revenue Neutral	2,663,354,950	1,132,033,036	287,321,369	539,217,764	253,672,048	253,451,829	197,658,904
32							
33 COS LESS OFFSETTING REVENUES	2,040,378,586	898,789,662	224,138,741	404,022,177	188,576,870	186,808,809	138,042,325
34							
35 COS INDICATED REVENUE NEUTRAL SHIFT	(0)	15,216,984	(15,106,622)	(33,766,468)	3,328,771	27,937,324	2,390,012
36 % REVENUE NEUTRAL RATE INCREASE	0.00%	1.72%	-6.31%	-7.71%	1.80%	17.58%	1.76%
37 CLASS % OF REVENUE AFTER REVENUE SHIFT	100.00%	44.05%	10.99%	19.80%	9.24%	9.16%	6.77%

OPC Rate Design Summary