

Exhibit No.:  
Issues: Class Cost-of-Service  
Rate Design  
ECRM Rate Design  
FAC Rate Design  
Witness: Michael S. Scheperle  
Sponsoring Party: MO PSC Staff  
Type of Exhibit: Direct Testimony  
Case No.: ER-2010-0036  
Date Testimony Prepared: January 6, 2010

**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY OPERATIONS DIVISION**

**DIRECT TESTIMONY**

**OF**

**MICHAEL S. SCHEPERLE**

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

**CASE NO. ER-2010-0036**

**Jefferson City, Missouri  
January 2010**

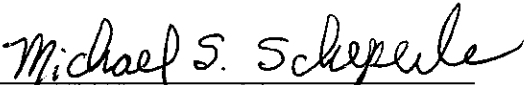
**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company )  
d/b/a AmerenUE's Tariffs to Increase its )                   Case No. ER-2010-0036  
Annual Revenues for Electric Service.        )

**AFFIDAVIT OF MICHAEL S. SCHEPERLE**

STATE OF MISSOURI    )  
                                  ) ss  
COUNTY OF COLE        )

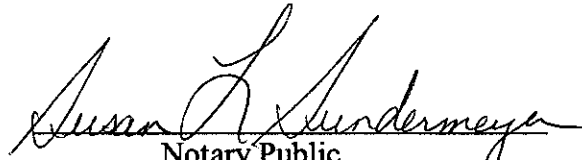
Michael S. Scheperle, of lawful age, on his oath states: that he has participated in the preparation of the following Direct Testimony in question and answer form, consisting of 7 pages of Direct Testimony to be presented in the above case, that the answers in the following Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

  
\_\_\_\_\_  
Michael S. Scheperle

Subscribed and sworn to before me this 6<sup>th</sup> day of January, 2010.



SUSAN L. SUNDERMEYER  
My Commission Expires  
September 21, 2010  
Callaway County  
Commission #06942086

  
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Notary Public

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**OF**  
**MICHAEL S. SCHEPERLE**  
**UNION ELECTRIC COMPANY**  
**d/b/a AmerenUE**

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**DIRECT TESTIMONY**

**OF**

**MICHAEL S. SCHEPERLE**

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

**CASE NO. ER-2010-0036**

14 Q. Please state your name and business address.

15 A. My name is Michael S. Scheperle and my business address is Missouri Public  
16 Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.

17 Q. Who is your employer and what is your present position?

18 A. I am employed by the Missouri Public Service Commission (Commission) and  
19 my title is Manager, Economic Analysis, Energy Department, Utility Operations Division.

20 Q. What is your educational background and work experience?

21 A. I completed a Bachelor of Science degree in Mathematics at Lincoln  
22 University in Jefferson City, Missouri. I have been employed by the Missouri Public Service  
23 Commission since June 2000. Prior to joining the Commission, I was employed at United  
24 Water Company as a Commercial Manager from 1983 to 2000, and at Missouri Power &  
25 Light Company from 1973 to 1983 as a Supervisor of Rates, Regulations and Budgeting. A  
26 list of the cases in which I have filed testimony before the Commission is shown on  
27 Schedule 1.

**EXECUTIVE SUMMARY**

28 Q. What is the purpose of your direct testimony?

1           A.      The purpose of this testimony is to sponsor the Staff's recommendation in its  
2 Class Cost-of-Service (CCOS), Rate Design, Environmental Cost Recovery Mechanism, and  
3 Fuel Adjustment Clause Report (CCOS Report) that is being filed concurrently with this  
4 direct testimony. I also provide in this direct testimony an overview of Staff's  
5 recommendations detailed in its CCOS Report. The CCOS Report presents updated CCOS  
6 studies, provides a method to collect the Commission ordered overall increase in revenues,  
7 proposes Staff's Environmental Cost Recovery Mechanism (ECRM) rate design  
8 recommendations should the Commission approve an ECRM for AmerenUE and Fuel and  
9 Purchased Power Adjustment Clause (FAC) tariff sheet recommendations.

10   **STAFF CCOS REPORT**

11           Q.      Please explain the organizational format of the Staff's CCOS Report.

12           A.      The CCOS Report has been organized by topic as follows:

13                   I.      Executive Summary

14                   II.     Class Cost-of-Service

15                           A. Results of Staff's CCOS studies

16                           B. Class Cost of Service Overview

17                                   1. Functionalization

18                                   2. Classification

19                                   3. Allocation

20                           C. Staff Class Cost-of-Service Studies

21                                   1. Data Sources

22                                   2. Classes

23                                   3. Functions

24                                   4. Allocation of Production and Transmission Costs

25                                   5. Allocation of Distribution Costs

26                                   6. Allocation of Customer Service Costs

27                                   7. Revenues

28                   III.     Rate Design Recommendations

29                   IV.     Environmental Cost Recovery Rate Design Recommendations

1 V. Fuel Adjustment Clause Rate Design

2 The CCOS Report has numerous sections and subsections. I am responsible for the  
3 CCOS, Rate Design and ECRM Rate Design. Staff witness John Rogers is responsible for the  
4 FAC Rate Design section. In Staff's Revenue Requirement Cost of Service Report filed  
5 December 18, 2009, Staff filed its accounting information which included Staff's estimate  
6 through the true-up cut-off date of January 31, 2010. Consistent with that filing, the CCOS  
7 Report of January 6, 2010, reflects Staff's accounting numbers from the Staff's Revenue  
8 Requirement Cost of Service Report filed on December 18, 2009.

9 **CLASS COST OF SERVICE STUDIES**

10 Q. What are Staff's recommendations on CCOS?

11 A. Staff's Accounting Schedules filed December 18, 2009, show that an increase  
12 in revenue requirement for AmerenUE in the range of \$218,207,027 to \$250,800,449 is  
13 warranted. In its CCOS Report Staff used the mid-range of the revenue requirement  
14 recommendation of \$234,503,738, which is an overall increase of 10.68%.

15 Staff recommends that the Large General Service (LGS) class, on a revenue neutral  
16 basis, receive a reduction of \$3.0 million of current revenue responsibility and that the  
17 Residential (RES) class receive a \$3.0 million revenue responsibility increase to offset the  
18 revenue responsibility reduction to the LGS class. Staff recommends that after its  
19 recommended revenue neutral shifts, the revenue responsibilities of each of the classes be  
20 increased by 10.68%.

21 Q. How did Staff come to these recommendations?

22 A. The CCOS Report outlines two CCOS studies of a 4CP Method and a Capacity  
23 Utilization Method. Both CCOS studies produce similar results. Staff is recommending the

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Michael S. Scheperle

1 4CP Method. Staff's 4CP Method CCOS study (Table 1 below) shows that an overall increase  
 2 of 10.68% is warranted. A positive percentage indicates revenue from that class is less than  
 3 the cost of providing service to that class and therefore, the revenues collected from that class  
 4 should be increased, i.e., the class has underpaid. A negative percentage indicates revenue  
 5 from the class exceeds the cost of providing service to that class and therefore, the revenues  
 6 collected from that class should be reduced, i.e., the class has overpaid. Based on Staff's  
 7 CCOS study results, Table 1 also shows that the RES, Small General Service (SGS), and  
 8 Large Transmission Service (LTS) should receive an increase larger than the overall 10.68%  
 9 increase, while the LGS and Large Primary Service (LPS) classes should receive a smaller  
 10 than 10.68% increase. Because a CCOS study is not precise it should only be used as a guide  
 11 for designing rates. Based on its study results and judgment, Staff recommends only revenue  
 12 neutral adjustments to the RES and LGS classes. Only Staff's CCOS study results for these  
 13 two classes show a greater than (5%) differential from AmerenUE's revenues and  
 14 AmerenUE's cost to serve them. Staff's CCOS study shows that AmerenUE's revenues from  
 15 the SGS, LPS, and LTS classes are each within 5% of AmerenUE's cost to serve each of  
 16 them; therefore, Staff is not recommending any revenue neutral adjustments for any of these  
 17 classes.

18 TABLE 1

Summary Results of the Staff's Revenue Neutral CCOS Study 4 CP Method						
	Residential	Small General Service	Large General Service (1)	Large Primary Service	Large Transmission Service	System Average
Revenue Deficiency	\$186,394,064	\$15,995,478	(\$4,666,440)	\$16,947,820	\$19,832,817	\$234,503,739
Required % Increase	19.35%	6.44%	-0.72%	10.14%	14.25%	10.68%
Less System Average	-10.68%	-10.68%	-10.68%	-10.68%	-10.68%	-10.68%
Revenue Neutral % Increase	8.67%	-4.24%	-11.40%	-0.55%	3.57%	0.00%

(1) Large General Service and Small Primary Service classes combined

1 The Staff proposes the following neutral revenue shifts (Table 2) among classes, so  
2 that the current revenue relationship brings the classes closer to AmerenUE's cost to serve  
3 each of them.

4 TABLE 2

**Staff Recommendation for Revenue Neutral Adjustments**

	Res	SGS	LGS (1)	LPS	LTS	System Average
Required % Increase	0.31%	0.00%	-0.46%	0.00%	0.00%	0.00%

(1) LGS = Large General Service and Small Primary Service classes combined

5  
6 In the CCOS Report, Tables 8 and 9 show the revenue neutral changes that have  
7 occurred from AmerenUE's last two rate cases (Case Nos. ER-2007-0002 and ER-2008-  
8 0318). These changes have narrowed the gap between the results of CCOS studies from  
9 various parties and class revenues, without substantial overall bill impacts to customers.  
10 Staff's revenue neutral proposal in this case attempts to further narrow the gap of the cost to  
11 serve each class, without a substantial overall bill impact to any particular customer.

12 **RATE DESIGN RECOMMENDATIONS**

13 Q. What are Staff's Rate Design recommendations detailed in the CCOS Report?

14 A. Staff recommends the following:

- 15 • To return non-residential rate schedules to interrelationship uniformity.
- 16
- 17 • To make revenue neutral adjustments based on Staff's CCOS study  
18 (Judgmental Energy 4 CP Weightings). Staff recommends revenue neutral  
19 adjustments to the Residential class of \$3.0 million (increase of 0.31%) and a  
20 revenue neutral adjustment to the Large General Service class of -\$3.0 million  
21 (decrease of 0.46%).
- 22
- 23 • To, after making the revenue neutral adjustments outlined above, implement  
24 any overall revenue increase as an equal percentage increase to each customer  
25 class, including the lighting class.
- 26
- 27 • To increase the residential customer charge to \$8.50.



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- To increase the small general service customer charges to \$9.28 for single phase service and \$18.56 for three phase service.

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**ENVIRONMENTAL COST RECOVERY RATE DESIGN**

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Q. What are Staff's ECRM Rate Design recommendations detailed in the CCOS Report?

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A. Staff recommends the following:

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- Schedule MSS-9 of CCOS Report is Staff's exemplar ECRM tariff sheets that outline ECRM requirements the Commission should include if the Commission approves an ECRM for AmerenUE. The exemplar tariff sheets outline definitions, requirements, procedures, formulas and calculations.
  - Staff's ECRM proposal includes an ECRM methodology that will be applied to all retail billings for electric service on a revenue factor basis.
  - Staff recommends that the wording on customer's bills be "ENVIRONMENTAL COST RECOVERY ADJUSTMENT." Also, Staff recommends the Commission require AmerenUE to put a brief explanation of the ECRM on the customers' bills three billing months starting with the first billing where an ECRM charge on a bill to help inform AmerenUE's customers regarding the ECRM.

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**FUEL ADJUSTMENT CLAUSE RATE DESIGN**

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Q. What are Staff's FAC Rate Design recommendations?

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A. Staff recommends the Commission approve Schedule JAR-1 to include:

- Refinement of the FAC true-up process to allow each true-up to occur after the completion of a full recovery period;
- Inclusion of the cost of quality adjustments related to the sulfur content of coal assessed by coal suppliers;
- Changes in the Taum Sauk factor to update the value of Taum Sauk;
- Changes to voltage level adjustments consistent with updated system loss factors;

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- Change the last sentence in the APPLICABILITY section of Sheet No. 98.1 to the following: “All FPA filings shall be accompanied by detailed workpapers supporting the filing in an electronic format with all formulas intact.”
- Rebased Summer Net Base Fuel Costs (NBFC) Rate of 1.449 cents per kWh and rebased Winter NBFC Rate of 1.275 cents per kWh; and
- Retention of the current FAC provisions for that part of the accumulation period before new base rates and the new FAC provisions become effective.

Q. Does this conclude your direct testimony?

A. Yes, it does.

## **Mike Scheperle**

### **Testimony/Reports Filed Before The Missouri Public Service Commission:**

#### **CASE NOS:**

TO-98-329, *In the Matter of an Investigation into Various Issues Related to the Missouri Universal Service Fund*

TT-2000-527/513, *Application of Allegiance Telecom of Missouri, Inc. ... for an Order Requiring Southwestern Bell Telephone Company to File a Collocation Tariff; Joint Petition of Birch Telecom of Missouri, Inc. for a Generic Proceeding to Establish a Southwestern Bell Telephone Company Collocation Tariff before the Missouri Public Service Commission*

TT-2001-139, *In the Matter of Mark Twain Rural Telephone Company's Proposed Tariff to Introduce its Wireless Termination Service*

TT-2001-298, *In the Matter of Southwestern Bell Telephone Company's Proposed Tariff PSC Mo. No. 42 Local Access Service Tariff, Regarding Physical and Virtual Collocation*

TT-2001-440, *In the Matter of the determination of Prices, Terms, and Conditions of Line-Splitting and Line-Sharing*

TO-2001-455, *In the Matter of the Application of AT&T Communications of the Southwest, Inc., TCG St. Louis, Inc., and TCG Kansas City, Inc., for Compulsory Arbitration of Unresolved Issues with Southwestern Bell Telephone Company Pursuant to Section 252(b) of the Telecommunications Act of 1996*

TC-2002-57, *In the Matter Of Northeast Missouri Rural Telephone Company's And Modern Telecommunications Company's Complaint Against Southwestern Bell Telephone Company Regarding Uncompensated Traffic Delivered by Southwestern Bell Telephone Company To Northeast Missouri Rural Telephone And Modern Telecommunications Company.*

TC-2002-190, *In the Matter Of Mid-Missouri Telephone Company vs. Southwestern Bell Telephone Company*

TC-2002-1077, *BPS Telephone Company, et al., vs. Voicestream Wireless Corporation, Western Wireless Corp., and Southwestern Bell Telephone Company*

TO-2005-0144, *In the Matter of a Request for the Modification of the Kansas City Metropolitan Calling Area Plan to Make the Greenwood Exchange Part of the Mandatory MCA Tier 2*

TO-2006-0360, *In the Matter of the Application of NuVox Communications of Missouri, Inc. for an Investigation into the Wire Centers that AT&T Missouri Asserts are Non-Impaired Under the TRRO*

IO-2007-0439, *In the Matter of Spectra Communications Group, LLC d/b/a CenturyTel's Request for Competitive Classification Pursuant to section 392.245.5 RSMo*

IO-2007-0440, *In the Matter of CenturyTel of Missouri, LLC's Request for Competitive Classification Pursuant to Section 392.245.5 RSMo*

TO-2009-0042, *In the Matter of the Review of the Deaf Relay Service and Equipment Distribution Fund Surcharge*

ER-2009-0090, *In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service*

ER-2009-0089, *In the Matter of the Application of Kansas City Power and Light Company for Approval to Make Certain Changes in its Charges for Electric Service To Continue the Implementation of Its Regulatory Plan*