

**GMO-242**

Exhibit No.:  
Issues: Class Cost-of-Service  
Rate Design  
Witness: Michael S. Scheperle  
Sponsoring Party: MO PSC Staff  
Type of Exhibit: Direct Testimony  
Case No.: ER-2010-0356  
Date Testimony Prepared: December 1, 2010

**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY OPERATIONS DIVISION**

**DIRECT TESTIMONY**

**OF**

**MICHAEL S. SCHEPERLE**

**KCP&L GREATER MISSOURI OPERATIONS COMPANY**

**FILE NO. ER-2010-0356**

**Jefferson City, Missouri  
December 2010**

Staff          Exhibit No. GMO-242  
Date 1/18/11 Reporter LMB  
File No. ER-2010-0356

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

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 )

File No. ER-2010-0356

**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  
Michael S. Scheperle

Subscribed and sworn to before me this 15<sup>th</sup> day of December, 2010.

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| SUSAN L. SUNDERMEYER<br>Notary Public - Notary Seal<br>State of Missouri<br>Commissioned for Callaway County<br>My Commission Expires: October 03, 2014<br>Commission Number: 10942086 |
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Susan L. Sundermeyer  
Notary Public

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**TABLE OF CONTENTS**  
**DIRECT TESTIMONY**  
**OF**  
**MICHAEL S. SCHEPERLE**  
**KCP&L GREATER MISSOURI OPERATIONS COMPANY**  
**FILE NO. ER-2010-0356**

**EXECUTIVE SUMMARY..... 2**  
**STAFF CCOS AND RATE DESIGN REPORT ..... 5**  
**CLASS COST OF SERVICE STUDY ..... 6**

1 **DIRECT TESTIMONY**

2 **OF**

3 **MICHAEL S. SCHEPERLE**

4 **KCP&L GREATER MISSOURI OPERATIONS COMPANY**

5 **FILE NO. ER-2010-0356**

6 Q. Please state your name and business address.

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

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

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

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

14 A. I completed a Bachelor of Science degree in Mathematics at Lincoln  
15 University in Jefferson City, Missouri. I have been employed by the Missouri Public Service  
16 Commission since June 2000. Prior to joining the Commission, I was employed at United  
17 Water Company as a Commercial Manager from 1983 to 2000, and at Missouri Power &  
18 Light Company from 1973 to 1983 as a Supervisor of Rates, Regulations and Budgeting. A  
19 list of the cases in which I have filed testimony before the Commission is shown on  
20 Schedule 1. I moved to the Economic Analysis section of the Energy Department as a  
21 Regulatory Economist III in 2008 and began conducting Class Cost of Service (CCOS)  
22 studies. I assumed my current position in 2009.

EXECUTIVE SUMMARY

1  
2 Q. What is the purpose of your direct testimony?

3 A. The purpose of this testimony is to sponsor the Staff's recommendation in its  
4 Class Cost-of-Service and Rate Design Report (CCOS Report) that is being filed concurrently  
5 with this direct testimony. I also provide in this direct testimony an overview of Staff's  
6 recommendations detailed in its CCOS Report. The CCOS Report presents Staff's updated  
7 CCOS study for KCP&L Greater Missouri Operations Company (GMO) for territory formerly  
8 served by Aquila, Inc., d/b/a Aquila Networks – L&P (L&P) and territory formerly served by  
9 Aquila, Inc., d/b/a Aquila Networks – MPS (MPS); and provides methods to collect a  
10 Commission ordered overall increase in GMO's overall revenue requirement.

11 Q. What are Staff's rate design recommendations to the Commission for GMO in  
12 this case?

13 A. Generally, the customer classes that Staff used for its CCOS study match  
14 GMO's rate schedule, i.e., generally each rate schedule is a customer class. The exceptions  
15 are that MPS primary and secondary general service customers were combined, L&P limited  
16 demand, short term and separate meter general service customers were combined, that MPS  
17 lighting rate schedules are treated as one customer class, as are L&P lighting rate schedules.  
18 As explained in its CCOS Report, Staff recommends that each MPS customer class with a  
19 negative revenue shift percentage (revenue from the class exceeds the cost to serve) over ten  
20 percent (-10%) receive no rate increase for any Commission ordered increase for MPS up to  
21 and including \$5 million; and that each MPS customer class with a positive revenue shift  
22 percentage (cost to serve exceeds revenue from the class) over ten percent (+10%) share the  
23 first \$5 million of any rate increase on an equal percentage basis; and for any increase above

Direct Testimony of  
Michael S. Scheperle

1 \$5 million, Staff recommends that the additional amount above \$5 million be allocated to all  
2 MPS customer classes on an equal percentage basis. The impact of the first \$5 million on the  
3 affected customer classes would be an additional increase of approximately 1%. Based on  
4 Staff's CCOS study results, Staff recommends that each L&P customer class with a positive  
5 revenue shift percentage (cost to serve exceeds revenue) share the first \$3 million of any  
6 Commission ordered rate increase for L&P on an equal percentage basis; and, for any increase  
7 above \$3 million, Staff recommends that the additional amount above \$3 million be allocated  
8 to all L&P customer classes on an equal percentage basis. The impact of the first \$3 million  
9 on the affected customer classes would be an additional increase of approximately 1%.

10 Stated differently, Staff recommends the following revenue adjustments for the MPS  
11 customer classes:

- 12 1. The following MPS customer classes receive the system average increase, as the  
13 revenue responsibilities of these customer classes are close to GMO's cost to serve  
14 them:

15 Residential – Regular  
16 Residential – Space Heating  
17 Small General Service – Secondary and Primary  
18 Large General Service – Primary  
19 Large General Service – Secondary  
20 Large Power Service – Primary  
21 Large Power Service – Secondary  
22 Special – Thermal Energy Storage

- 23 2. The following MPS customer classes receive no increase for the first \$5 million,  
24 because their current revenue responsibilities exceed GMO's cost of serving them.  
25 For any Commission ordered increase above \$5 million, that the additional amount  
26 above \$5 million be allocated on an equal percentage basis to the following MPS  
27 customer classes:

28 Residential – Other  
29 Small General Service – No Demand  
30 Small General Service – Short Term without Demand

- 31 3. The MPS Lighting customer class receives the system average percent increase plus  
32 an additional approximate 1% increase, because the current revenue responsibility of  
33 that customer class is less than GMO's cost to serve it.  
34

Direct Testimony of  
Michael S. Scheperle

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And, Staff recommends the following revenue adjustments for the L&P customer classes:

1. Allocate the first \$3 million of any Commission ordered increase as an equal percentage increase to the rate schedules for the following L&P customer classes, as their revenue responsibilities are less than GMO's cost to serve them:
  - Residential – Regular
  - Residential – Other
  - Residential – Space Heating
  - Large Power Service – Time of Use (TOU) for Primary, Secondary, Substation and Transmission (1 rate schedule)
2. Allocate any Commission ordered increase above \$3 million to all L&P rate schedules on an equal percentage basis.

Q. Does Staff have any additional rate design recommendations in this case?

A. Yes, as explained in its CCOS Report, Staff recommends the Commission order GMO to complete its evaluation of Light Emitting Diode (LED) Street and Area Lighting (SAL) systems and, no later than twelve (12) months of the effective date of the Commission's Report and Order in this case, file proposed LED lighting tariff sheet(s) for GMO. Staff is not recommending that GMO offer a LED SAL demand-side program unless GMO's analysis shows that a LED SAL demand-side program would be cost-effective. However, if a LED SAL demand-side program is not cost-effective, the Staff recommends that GMO update the Staff as to the finding's rationale and file a proposed tariff sheet(s) that would provide LED SAL services at cost to its customers.

Q. Does Staff also recommend other tariff changes?

A. Yes. Staff recommends the Commission order changes to the fuel adjustment clause (FAC) tariff sheets to correspond to recommendations Staff made in its Revenue Cost-of-Service Report (COS Report) filed on November 10, 2010, and other minor tariff changes as detailed in Staff's CCOS Report.

1  
2 STAFF CCOS AND RATE DESIGN REPORT

3 Q. How is the Staff's CCOS Report organized?

4 A. It is organized by topic as follows:

5 I. Executive Summary

6 II. Class Cost-of-Service and Rate Design Overview

7 III. Staff's Class Cost-of-Service Study

8 IV. Rate Design

9 V. Miscellaneous Tariff Language

10 VI. High Efficiency Street and Area Lighting

11 VII. Fuel and Purchased Power Adjustment Clause (FAC)

12 Q. Which members of Staff are responsible for the Staff's CCOS Report?

13 A. I am responsible for the Class Cost-of-Service Overview and Staff Class Cost-  
14 of-Service sections. Also, I am responsible for the recommended rate design schedules. John  
15 Rogers and David Roos are responsible for changes to the FAC tariff sheets; William (Mack)  
16 McDuffey is responsible for the Recommended Tariff Language section; Hojong Kang is  
17 responsible for High Efficiency Street and Area Lighting recommendations.

18 Q. What relationship, if any, is there between the Staff's COS Report filed  
19 November 10, 2010, and the Staff's CCOS Report?

20 A. In its COS Report, Staff filed its accounting information for both MPS and  
21 L&P, which included Staff's estimates of the revenue requirements for MPS and L&P, and  
22 thus for GMO, through the true-up cut-off date of December 31, 2010. Consistent with that  
23 COS Report, this CCOS Report reflects the Staff's revenue requirement recommendation of  
24 \$5,459,454 (mid-point for MPS) and Staff's revenue requirement recommendation of



Direct Testimony of  
Michael S. Scheperle

1 \$30,667,129 (mid-point for L&P) based on Staff's estimates through the true-up cut-off date  
2 of December 31, 2010.

3 CLASS COST OF SERVICE STUDY

4 Q. How did Staff reach its CCOS recommendations to the Commission?

5 A. Staff's Accounting Schedules filed with Staff's COS Report show an increase  
6 in MPS's revenue requirement in the range of \$858,261 to \$10,060,648 is warranted. In its  
7 COS Report, Staff's mid-point of its return on equity range calculated MPS's revenue  
8 requirement to be \$5,459,454, an overall increase of 1.02%.

9 Staff's Accounting Schedules filed with Staff's COS Report show an increase in  
10 L&P's revenue requirement in the range of \$28,773,121 to \$32,561,137 is warranted. In its  
11 COS Report, Staff's mid-point of its ROE range calculated L&P's revenue requirement to be  
12 \$30,667,129, an overall increase of 21.86%.

13 Q. How did Staff conduct its CCOS study?

14 A. The CCOS Report outlines how Staff performed its CCOS study. In its CCOS  
15 study Staff used the Base, Intermediate, and Peaking (BIP) method for allocating production  
16 investment and costs to the customer classes. Staff used the 12 coincident (12 CP) method to  
17 allocate transmission investment and costs to the customer classes. Staff used a combination  
18 of non-coincident (NCP) demands, individual customer maximum demands, and company  
19 specific studies to allocate distribution investment and costs to customer classes. Customer  
20 costs are allocated to customer classes based on the numbers of customers, company studies,  
21 and other internal allocators. Staff's CCOS study summary is attached to its CCOS Report  
22 (Schedule MSS-1 for MPS and Schedule MSS-2 for L&P) and is based on Staff's midpoint

Direct Testimony of  
Michael S. Scheperle

1 ROE recommendation revenue requirement for MPS's Missouri jurisdictional retail  
2 operations of \$5,459,454 and L&P's Missouri jurisdictional retail operations of \$30,667,129.

3 Q. Does this conclude your direct testimony?

4 A. Yes, it does.

**Michael S. 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*

ER-2010-0036, *In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service*

ER-2010-0130, *In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company*

ER-2010-0355, *In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric service to Continue the Implementation of Its Regulatory Plan*