Exhibit No.: Issues:

Witness: Sponsoring Party: Type of Exhibit: Case No.: Date Testimony Prepared: Rate Design Class Cost-of-Service FAC Michael S. Scheperle MO PSC Staff Direct Testimony ER-2012-0175 August 21, 2012

> Filed December 11, 2012 Data Center Missouri Public Service Commission

# MISSOURI PUBLIC SERVICE COMMISSION

# **REGULATORY REVIEW DIVISION**

# **DIRECT TESTIMONY**

# OF

# **MICHAEL S. SCHEPERLE**

# KCP&L GREATER MISSOURI OPERATIONS COMPANY

## **CASE NO. ER-2012-0175**

Jefferson City, Missouri August 2012

Staff Exhibit No 268 Date 10/17/ 12 Reporter MM File No ER-2012-0175

# **BEFORE THE PUBLIC SERVICE COMMISSION**

# **OF THE STATE OF MISSOURI**

In the Matter of KCP&L Greater Missouri ) Operations Company's Request for ) Authority to Implement General Rate ) Increase for Electric Service )

Case No. ER-2012-0175

## **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 b 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. Sche Michael S. Scheperle

Subscribed and sworn to before me this  $2l^{s+}$  day of August, 2012.

SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commission Expires: October 03, 2014 My Commission Expires: October 03, 2014 Commission Number: 10942086

Notary Public

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	1	DIRECT TESTIMONY
	2	OF
	3	MICHAEL S. SCHEPERLE
	4	<b>KCP&amp;L GREATER MISSOURI OPERATIONS COMPANY</b>
	5	CASE NO. ER-2012-0175
	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?
1	10	A. I am employed by the Missouri Public Service Commission ("Commission")
1	11	and my title is Manager, Economic Analysis Section, Energy Unit, Regulatory Review
1	12	Division.
1	13	Q. What is your educational background and work experience?
1	14	A. I completed a Bachelor of Science degree in Mathematics at Lincoln
1	15	University in Jefferson City, Missouri. I have been employed by the Missouri Public Service
1	16	Commission since June 2000. Prior to joining the Commission, I was employed at United
1	17	Water Company as a Commercial Manager from 1983 to 2000, and at Missouri Power &
1	18	Light Company from 1973 to 1983 as a Supervisor of Rates, Regulations and Budgeting. A
1	19	list of the cases in which I have filed testimony before the Commission is shown on
2	20	Schedule MSS-D1. I moved to the Economic Analysis section as a Regulatory Economist III
2	21	in 2008. I assumed my current position in 2009. My previous testimony and responsibilities
2	22	address topics including class cost of service, rate design, telecommunication issues, Missouri
2	23	Universal Service Fund, energy efficiency/demand-side management, a Staff member of the
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Missouri-Deaf Relay Committee, and a member of the Commission Staff's Electric Meter
 Variance Committee.

# EXECUTIVE SUMMARY

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Q. What is the purpose of your direct testimony?

The purpose of this testimony is to sponsor the Staff's recommendation in its 5 А. 6 Rate Design and Class Cost-of-Service Report ("CCOS Report") that is being filed 7 concurrently with this direct testimony. I also provide in this direct testimony an overview of 8 Staff's recommendations detailed in its CCOS Report. The CCOS Report presents Staff's 9 updated CCOS study for KCP&L Greater Missouri Operations Company ("GMO") for its 10 L&P rate district, and its MPS rate district; and provides methods to collect a Commission 11 ordered overall increase in GMO's overall revenue requirement. Furthermore, Staff updated the system losses for MPS and L&P which are the basis for calculating the FAC voltage 12 13 adjustment factors and recommends fuel adjustment clause tariff sheet changes with exemplar tariff sheet modifications. 14

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

A. As explained in its CCOS Report, Staff recommends that any overall change in
revenues ordered by the Commission should be applied on an equal percentage basis to all
classes.

Q. What are Staff's rate design recommendations to the Commission for GMO's
L&P rate district in this case?

A. As explained in its CCOS Report, Staff recommends that any overall change in
 revenues ordered by the Commission should be applied on an equal percentage basis to all

Q.

1 classes. Additionally. Staff recommends certain intra-class rate element shifts. Staff 2 recommends an additional 6% increase for the residential service (with electric space heating) 3 two winter energy block rates (MO 920 rate schedule). Staff recommends an additional 6% 4 increase for the residential service (space heating / water heating - separate meter) winter 5 energy rate (MO 922 Frozen rate schedule). Staff recommends an additional 6% increase for the non-residential (space heating / water heating – separate meter) winter energy rate (MO 6 7 941 Frozen rate schedule). Staff recommends these adjustments to bring the winter season 8 rate closer to its class cost of service for the winter season.

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

A. Yes. As explained in its CCOS Report, Staff recommends 1) that the Commission order GMO to prepare and file in its next general rate increase a comprehensive study of the impacts on its retail customers of eliminating the MPS and L&P rate districts and implementing company-wide uniform rate classes, and rates and rate elements for each class; and 2) Staff recommends that the Commission order GMO to do a comprehensive class CCOS study to determine the differences in its cost of serving classes of MPS and L&P customers.

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### STAFF CCOS AND RATE DESIGN REPORT

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

- 19 A.
  - I. Executive Summary

II. Class Cost-of-Service Overview

It is organized by topic as follows:

III. Class Cost-of-Service

A. Data Sources

	Direct Testimony of Michael S. Scheperle
1	B. Classes and Rate Schedules
2	C. Functions
3	D. Allocation of Production Costs
4	E. Allocation of Transmission Costs
5	F. Allocation of Distribution Costs
6	G. Allocation of Customer Service Costs
7	H. Revenues
8	I. Allocation of Taxes
9	J. Allocation of Energy Efficiency Costs
10	IV. Rate Design
· 11	V. FAC Voltage Adjustment Factors
12	VI. Fuel Adjustment Clause Tariff Sheet Changes
13	Q. Which members of Staff are responsible for the Staff's CCOS Report?
14	A. I am responsible for the Class Cost-of-Service Overview and Staff Class Cost-
15	of-Service sections. Also, I am responsible for the recommended rate design schedules. David
16	Roos is responsible for the updated system losses for MPS and L&P which form the basis for
17	calculating the FAC voltage adjustment factors. Matthew J. Barnes is responsible for the
18	recommended fuel adjustment clause tariff sheet changes with exemplar tariff sheet
19	modifications.
20	Q. What relationship, if any, is there between the Staff's corrected Revenue
21	Requirement cost of service ("COS") report filed August 13, 2012, and the Staff's CCOS
22	Report?
	4

Q.

A. In its COS Report, Staff filed its accounting information for both MPS and L&P, which included Staff's estimates of the revenue requirements for MPS and L&P through the update period of March 31, 2012. Later, the Staff is updating its information to the true-up period of August 31, 2012. Consistent with that COS Report, this CCOS Report reflects the Staff's revenue requirement recommendation of \$11,892,564 for MPS and \$4,655,560 for L&P based on Staff's estimate through the update period of March 31, 2012 at the high point of its return on equity range.

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## CLASS COST OF SERVICE STUDY

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How did Staff reach its CCOS recommendations to the Commission?

A. Staff's Accounting Schedules filed with Staff's COS Report show an increase
 in MPS's revenue requirement in the range of \$370,510 to \$11,892,566 is warranted and an
 increase in L&P's revenue requirement in the range of \$707,740 to \$4,655,559 is warranted.

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Q. How did Staff conduct its CCOS study?

The CCOS Report outlines how Staff performed its CCOS study. The cost of 14 Α. 15 service procedure involves three steps (1) Functionalization – this procedure identifies the 16 different functional "levels" of the system; (2) Classification – this procedure determines for 17 each functional type, the primary cause or causes of that cost being incurred, and segregates 18 these costs of service components into a customer, demand or energy component; and (3) 19 Allocation – this procedure allocates the class proportional responsibilities for each type of 20 cost and spreads the cost among the various classes. The cost of service procedures of Functionalization, Classification, and Allocation are more fully explained in Schedule MSS-6 21 22 to Staff's Report.

In its CCOS study Staff used the Base, Intermediate, and Peaking ("BIP") method for 1 2 allocating production investment and costs to the customer classes. These costs consist of two 3 categories: (a) fixed costs, which include operating and maintenance expenses for labor and 4 materials; and (b) variable costs, which includes fuel, fuel handling, and interchange power 5 The fixed portion of production expenses was allocated on the same basis as costs. 6 production plant, while the variable portion was allocated using a variable allocator based on 7 the kilowatt-hours required at the generation level to provide service to each respective class. 8 This type of allocation employs the familiar and widely used "expenses follow plant" 9 principle of cost allocation. Staff used the twelve coincident peak method ("12 CP") to allocate transmission investment and costs to the customer classes. Staff used a combination 10 of non-coincident ("NCP"), individual customer maximum demands, and company specific 11 12 studies to allocate distribution investment and costs to customer classes. Customer costs are 13 allocated to customer classes based on the numbers of customers, company studies, and other internal allocators. Staff's CCOS study summary is attached to its CCOS Report (Schedule 14 15 MSS-1 for MPS and Schedule MSS-2 for L&P) and is based on the revenue requirement associated with the high end of Staff's return on equity ("ROE") recommendation for MPS's 16 17 jurisdictional retail operations of \$11,892,564 and L&P's Missouri jurisdictional retail operations of \$4,655,560. 18

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- Q. Does this conclude your direct testimony?
- 20
- A. Yes, it does.

## Michael S. Scheperle

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

## CASE NOS:

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

<u>TT-2000-527/513</u>, 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

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

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

<u>TT-2001-440</u>, In the Matter of the determination of Prices, Terms, and Conditions of Line-Splitting and Line-Sharing

<u>TO-2001-455</u>, 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

<u>TC-2002-57</u>, 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.

<u>TC-2002-190</u>, In the Matter Of Mid-Missouri Telephone Company vs. Southwestern Bell Telephone Company

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

<u>TO-2005-0144</u>, 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

Schedule MSS-D1-1

<u>TO-2006-0360</u>, 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

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

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

<u>TO-2009-0042</u>, In the Matter of the Review of the Deaf Relay Service and Equipment Distribution Fund Surcharge

<u>ER-2009-0090</u>, 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

<u>ER-2009-0089</u>, 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

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

<u>ER-2010-0130</u>, 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

<u>ER-2010-0355</u>, 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

<u>ER-2010-0356</u>, 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

<u>ER-2011-0028</u>, In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service

<u>ER-2011-0004</u>, 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

<u>EC-2011-0383</u>, Briarcliff Development Company, a Missouri Corporation, Complainant, v. Kansas City Power and Light Company, Respondent

Schedule MSS-D1-2

<u>EO-2012-0141</u>, In the Matter of the Application of The Cathedral Square Corporation, a Missouri Non-Profit Corporation, for a Variance from Kansas City Power & Light Company's General Rules and Regulations Requiring Individual Metering

<u>EO-2012-0009</u>, In the Matter of KCP&L Greater Missouri Operations Company's Application for Approval of Demand-Side Programs and for Authority to Establish a Demand-side Programs Investment Mechanism

EO-2012-0142, In the Matter of Union Electric Company d/b/a Ameren Missouri's Filing to Implement Regulatory changes in Furtherance of Energy Efficiency as Allowed by MEEIA

<u>ER-2012-0166</u>, In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service

<u>ER-2012-0174</u>, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service

Schedule MSS-D1-3