

# Exhibit No. 103

*Exhibit No.:*  
*Issue(s):* *Report on Class  
Cost of Service,  
Overview of  
Staff's Filing*  
*Witness:* *Michael L. Stahlman*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Direct Testimony*  
*Case No.:* *GR-2021-0108*  
*Date Testimony Prepared:* *May 25, 2021*

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**TARIFF/RATE DESIGN DEPARTMENT**

**DIRECT TESTIMONY**

**OF**

**MICHAEL L. STAHLMAN**

**SPIRE MISSOURI, INC., d/b/a SPIRE**

**SPIRE EAST and SPIRE WEST  
GENERAL RATE CASE**

**CASE NO. GR-2021-0108**

*Jefferson City, Missouri  
May 2021*

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DIRECT TESTIMONY  
OF  
MICHAEL L. STAHLMAN  
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SPIRE EAST and SPIRE WEST  
GENERAL RATE CASE  
CASE NO. GR-2021-0108**

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**DIRECT TESTIMONY**

**OF**

**MICHAEL L. STAHLMAN**

**SPIRE MISSOURI, INC. d/b/a SPIRE**

**SPIRE EAST and SPIRE WEST  
GENERAL RATE CASE**

**CASE NO. GR-2021-0108**

Q. Please state you name and business address.

A. My name is Michael L. Stahlman. My business address is 200 Madison Street, Jefferson City, MO 65101.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission (“Commission”) as an Economist in the Tariff and Rate Design Department of the Industry Analysis Division.

Q. Have you provided your credentials in this file?

A. Yes. They were provided in this case in Appendix 1 of Staff’s Direct Cost of Service Report filed May 12, 2021.

**EXECUTIVE SUMMARY**

Q. What is the purpose of this direct testimony?

A. The purpose of this testimony is to sponsor Staff’s Class Cost-of-Service/Rate Design Report (“CCOS Report”), which is filed concurrently with this direct testimony.

**CLASS COST-OF-SERVICE STUDY**

Q. Did Staff perform a Study in this case?

1           A.     Yes. Staff performed a separate CCOS Study for Spire Missouri's East and West  
2 rate districts. Staff's CCOS Studies are designed to determine what rate of return is produced  
3 by each customer class on that class's currently tariffed rates, for recovery of any newly  
4 determined revenue requirement amount. Staff's recommended interclass revenue  
5 responsibility shifts are designed to reasonably bring each class closer to producing the  
6 system-average rate of return used in determining Staff's recommended revenue requirement.  
7 Staff's recommended intra-class shifts in this case are primarily focused on rate schedule  
8 alignment and mitigation of substantial customer impacts.

9     **CCOS REPORT**

10           Q.     What are Staff's rate design recommendations in these cases?

11           A.     Staff's rate design recommendations in these cases are:

- 12           • Staff **does not** recommend consolidation of rate schedules across rate districts  
13           at this time, but will continue to review the appropriateness of doing so. Staff  
14           **does** recommend changes in rate structure at this time to facilitate the potential  
15           consolidation of rate districts.
- 16           • Staff does not oppose Spire's requested change to Ccf from Therms as the basis  
17           for Spire East's customer bills.
- 18           • Staff recommends promulgation of a Residential Retention rate option for both  
19           rate districts.
- 20           • Staff recommends the Commission order Spire to develop and retain demand  
21           determinants for all customers for potential future use in rate development.
- 22           • Staff recommends Spire investigate the reasonableness of its estimated usage  
23           associated with unmetered gas lighting service.
- 24           • Staff recommends elimination of the Spire East Interruptible rate schedule.

• Staff recommends changes to the rate structure of Spire West’s Small General Service, Large General Service, and Large Volume Service rate schedules, and creation of a Transportation rate schedule, and clarification of tariff language indicating eligibility for service on each rate schedule.

• Spire East interclass revenue responsibility recommendation:

Step 1a: Preserve the revenue responsibility of any class providing revenues in excess of its cost of service.

Step 1b: For any class providing revenues within 5% of its cost of service, increase that class’s revenue responsibility by the amount indicated to exactly match its cost of service at an equal rate of return.

Step 2: For remaining classes, increase revenue responsibility proportionate to its contribution to revenues, except that it should not exceed the amount indicated to exactly match its cost of service at an equal rate of return.

Step 3: For remaining classes, increase revenue responsibility proportionate to its contribution to revenues.

Step 3: For remaining classes, increase revenue responsibility proportionate to its contribution to revenues.

The results of these adjustments as applied to Staff’s direct case are provide below:

<b>Spire East</b>	Residential	Small General Service	Large General Service	Large Volume	LV Transport
Total Cost of Service	\$ 279,441,210	\$ 42,640,661	\$ 29,481,158	\$ 823,305	\$ 7,801,461
Current Rate Revenue	\$ 275,083,737	\$ 29,185,361	\$ 26,954,134	\$ 1,005,525	\$ 14,890,501
\$ Change Recommended Step 1	\$ 4,357,473	\$ -	\$ -	\$ -	\$ -
\$ Change Recommended Step 2	\$ -	\$ 4,460,733	\$ 2,527,024	\$ -	\$ -
\$ Change Recommended Step 3	\$ -	\$ 1,592,008	\$ -	\$ -	\$ -
Recommended Class Revenue Responsibility	\$ 279,441,210	\$ 35,238,102	\$ 29,481,158	\$ 1,005,525	\$ 14,890,501
% Change Recommended	1.58%	20.74%	9.38%	0.00%	0.00%

<b>Spire East (continued)</b>	Interruptible Sales	General L.P. Gas	Unmetered Gas Light	Vehicular Fuel
Total Cost of Service	\$ 411,091	\$ 26,542	\$ 52,297	\$ 12,649
Current Rate Revenue	\$ 544,840	\$ 12,417	\$ 42,762	\$ 24,746
\$ Change Recommended Step 1	\$ -	\$ -	\$ -	\$ -
\$ Change Recommended Step 2	\$ -	\$ 1,898	\$ 6,536	\$ -
\$ Change Recommended Step 3	\$ -	\$ 677	\$ -	\$ -
Recommended Class Revenue Responsibility	\$ 544,840	\$ 14,992	\$ 49,298	\$ 24,746
% Change Recommended	0.00%	20.74%	15.28%	0.00%

- Spire West interclass revenue responsibility recommendation, after consolidation of the General Service classes and Large Volume class:

Step 1a: Consolidate the General Service classes and Large Volume class for study purposes to establish rate continuity.

Step 1b: Preserve the revenue responsibility of any class providing revenues in excess of its cost of service.

Step 2: For remaining classes, increase revenue responsibility proportionate to its contribution to revenues.

The results of these adjustments as applied to Staff's direct case are provide below:

<u>Spire West</u>	Residential	General Services & LV	Transportation	Unmetered Gas Light
Total Cost of Service	\$ 217,430,673	\$ 47,481,246	\$ 14,124,771	\$ 5,023
Current Rate Revenue	\$ 175,409,043	\$ 33,202,431	\$ 17,081,051	\$ 1,271
\$ Change Recommended Step 1	\$ -	\$ -	\$ -	\$ -
\$ Change Recommended Step 2	\$ 43,809,184	\$ 8,292,454	\$ -	\$ 317
Recommended Class Revenue Responsibility	\$ 219,218,227	\$ 41,494,885	\$ 17,081,051	\$ 1,588
% Change Recommended	24.98%	24.98%	0.00%	24.98%

Q. Does Staff have a residential rate recommendation for Spire West?

A. Yes. Staff recommends the approximate residential rates provided below, retaining the inclining block rate structure ordered by the Commission in Case Nos. GR-2017-0215 and GR-2017-0126.

	West	East (Therms)	East (Ccf)
Customer Charge	\$ 20.00	\$ 22.00	\$ 22.00
Winter	\$ 0.27567	\$ 0.2422576	\$ 0.24710
Summer 1	\$ 0.24810	\$ 0.2423459	\$ 0.24719
Summer 2	\$ 0.30609	\$ 0.2641158	\$ 0.26940

Q. Does Staff have rate recommendations for the non-residential classes for Spire East?

A. Yes. As mentioned above, Staff recommends elimination of the Spire East Interruptible rate schedule. For the remaining classes, Staff recommends that charges for

1 remaining rate schedules (specifically, unmetered gas lighting, General L.P Gas, and  
2 Vehicular Fuel) be adjusted as a uniform percent adjustment to all rate elements.

3 Q. Does Staff have rate recommendations for the non-residential classes for  
4 Spire West?

5 A. Yes. As discussed further in the CCOS Report, Staff recommends realignment  
6 of the SGS, LGS, and LVS classes so that there is minimal financial advantage (or harm) to the  
7 customer (or utility) from a customer being placed on the “wrong,” rate. Staff also recommends  
8 Spire institute processes to annually place customers on the rate consistent with the tariff  
9 definition of that rate, and to ensure Spire’s compliance with its own tariff. At this time, pending  
10 availability of additional demand determinant data, Staff recommends that charges on these rate  
11 schedules **as reconfigured** be adjusted as a uniform percent adjustment to all rate elements.

12 Staff also recommends the creation of a Transportation Class in Spire West for  
13 customers who procure their own gas and receive only transportation service from Spire, as  
14 already exists for Spire East.

15 Staff currently recommends that charges for remaining rate schedules be adjusted as a  
16 uniform percent adjustment to all rate elements.

17 **ORGANIZATION OF CCOS REPORT**

18 Q. How is Staff’s CCOS Report organized?

19 A. The CCOS Report is organized by topic as follows:

20 I. Executive Summary

21 II. Class Cost-of-Service Study

22 III. Rate Structure and Rate Design



- 1 IV. Spire East Non-Residential Rate Structure and Design  
2 V. Spire West Non-Residential Rate Structure and Design  
3 VI. Complications to Accurate Cost of Service Modeling  
4 VII. Weather and Conservation Adjustment Rider (Staff alternative RNA)

5 **TARIFFS**

6 Q. Does Staff's CCOS Report address any issues other than Staff's Class Cost of  
7 Service Studies and Rate Design recommendations?

8 A. Yes, the CCOS Report also addresses Staff's recommendations regarding  
9 certain tariff issues for Spire East and Spire West.

10 Q. Does this conclude your direct testimony?

11 A. Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF MISSOURI**

In the Matter of Spire Missouri Inc.'s d/b/a )  
Spire Request for Authority to Implement a ) Case No. GR-2021-0108  
General Rate Increase for Natural Gas )  
Service Provided in the Company's Missouri )  
Service Areas )

**AFFIDAVIT OF MICHAEL L. STAHLMAN**

STATE OF MISSOURI )  
 ) ss.  
COUNTY OF COLE )

COMES NOW MICHAEL L. STAHLMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct Testimony of Michael L. Stahlman*; and that the same is true and correct according to his best knowledge and belief.


Further the Affiant sayeth not.

  
\_\_\_\_\_  
MICHAEL L. STAHLMAN

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 25<sup>th</sup> day of May 2021.

D. SUZIE MANKIN  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: April 04, 2025  
Commission Number: 12412070

  
\_\_\_\_\_  
Notary Public

## Michael L. Stahlman

### Education

- 2009 M. S., Agricultural Economics, University of Missouri, Columbia.  
2007 B.A., Economics, Summa Cum Laude, Westminster College, Fulton, MO.

### Professional Experience

- 2010 - Regulatory Economist, Missouri Public Service Commission  
2007 – 2009 Graduate Research Assistant, University of Missouri  
2008 Graduate Teaching Assistant, University of Missouri  
2007 American Institute for Economic Research (AIER) Summer Fellowship Program  
2006 Price Analysis Intern, Food and Agricultural Policy Research Institute (FAPRI), Columbia, MO  
2006 Legislative Intern for State Representative Munzlinger  
2005 – 2006 Certified Tutor in Macroeconomics, Westminster College, Fulton, MO  
1998 – 2004 Engineering Watch Supervisor, United States Navy

### Expert Witness Testimony

- Union Electric Company d/b/a AmerenUE GR-2010-0363  
In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Natural Gas Service Provided to Customers in the Company's Missouri Service Area
- Union Electric Company d/b/a Ameren Missouri GT-2011-0410  
In the Matter of the Union Electric Company's (d/b/a Ameren Missouri) Gas Service Tariffs Removing Certain Provisions for Rebates from Its Missouri Energy Efficient Natural Gas Equipment and Building Shell Measure Rebate Program
- KCP&L Great Missouri Operations Company EO-2012-0009  
In the Matter of KCP&L Greater Missouri Operations Company's Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism
- Union Electric Company d/b/a Ameren Missouri EO-2012-0142  
In the Matter of Union Electric Company d/b/a Ameren Missouri's Filing to Implement Regulatory Changes Furtherance of Energy Efficiency as Allowed by MEEIA
- Kansas City Power & Light Company EO-2012-0323  
In the Matter of the Resource Plan of Kansas City Power & Light Company
- KCP&L Great Missouri Operations Company EO-2012-0324  
In the Matter of the Resource Plan of KCP&L Greater Missouri Operations Company
- Kansas City Power & Light Company, KCP&L Great Missouri Operations Company, and Transource Missouri EA-2013-0098  
EO-2012-0367  
In the Matter of the Application of Transource Missouri, LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Finance, Own, Operate, and Maintain the Iatan-Nashua and Sibley-Nebraska City Electric Transmission Projects

**cont'd Expert Witness Testimony**

**Michael L. Stahlman**

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Kansas City Power & Light Company	EO-2012-0135
KCP&L Great Missouri Operations Company	EO-2012-0136
In the Matter of the Application of Kansas City Power & Light Company [KCP&L Great Missouri Operations Company] for Authority to Extend the Transfer of Functional Control of Certain Transmission Assets to the Southwest Power Pool, Inc.	
Kansas City Power & Light Company	EU-2014-0077
KCP&L Great Missouri Operations Company	
In the Matter of the Application of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company for the Issuance of an Accounting Authority Order relating to their Electrical Operations and for a Contingent Waiver of the Notice Requirement of 4 CSR 240-4.020(2)	
Kansas City Power & Light Company	EO-2014-0095
In the Matter of Kansas City Power & Light Company's Notice of Intent to File an Application for Authority To Establish a Demand-Side Programs Investment Mechanism	
Veolia Energy Kansas City, Inc	HR-2014-0066
In the Matter of Veolia Energy Kansas City, Inc for Authority to File Tariffs to Increase Rates	
Grain Belt Express Clean Line, LLC	EA-2014-0207
In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing It to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood - Montgomery 345 kV Transmission Line	
Union Electric Company d/b/a Ameren Missouri	ER-2014-0258
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service	
Empire District Electric Company	ER-2014-0351
In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area	
Kansas City Power & Light Company	ER-2014-0370
In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	
Kansas City Power & Light Company	EO-2014-0240
In the Matter of Kansas City Power & Light Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism	
KCP&L Great Missouri Operations Company	EO-2014-0241
In the Matter of KCP&L Greater Missouri Operations Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism	

**cont'd Expert Witness Testimony**  
**Michael L. Stahlman**

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- Ameren Transmission Company of Illinois EA-2015-0146  
In the Matter of the Application of Ameren Transmission Company of Illinois for Other Relief or, in the Alternative, a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345,000-volt Electric Transmission Line from Palmyra, Missouri to the Iowa Border and an Associated Substation Near Kirksville, Missouri
- Empire District Electric Company ER-2016-0023  
In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service
- KCP&L Great Missouri Operations Company ER-2016-0156  
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service
- Kansas City Power & Light Company ER-2016-0285  
In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service
- Union Electric Company d/b/a Ameren Missouri ER-2016-0179  
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service
- Grain Belt Express Clean Line, LLC EA-2016-0358  
In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Own, Operate, Control, Manage and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood-Montgomery 345kV transmission line.
- Spire Missouri, Inc. GR-2017-0215 and GR-2017-0216  
In the Matter of Spire Missouri, Inc.'s Request to Increase Its Revenues for Gas Service
- Liberty Utilities GR-2018-0013  
In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities' Tariff Revisions Designed to Implement a General Rate Increase for Natural Gas Service in the Missouri Service Areas of the Company
- Spire Missouri, Inc. GO-2019-0058 and GO-2019-0059  
In the Matter of Spire Missouri, Inc. d/b/a Spire's Request to Decrease [Increase] WNAR
- Grain Belt Express Clean Line LLC EM-2019-0150  
Invenergy Transmission LLC  
Invenergy Investment Company LLC  
In the Matter of the Joint Application of Invenergy Transmission LLC, Invenergy Investment Company LLC, Grain Belt Express Clean Line LLC and Grain Belt Express Holding LLC for an Order Approving the Acquisition by Invenergy Transmission LLC of Grain Belt Express Clean Line LLC

## **cont'd Expert Witness Testimony**

**Michael L. Stahlman**

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- Union Electric Company d/b/a Ameren Missouri GR-2019-0077  
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to  
Increase its Revenues for Natural Gas Service
- Union Electric Company d/b/a Ameren Missouri ER-2019-0335  
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to  
Decrease Its Revenues for Electric Service
- Empire District Electric Company ER-2019-0374  
In the Matter of The Empire District Electric Company's Request for Authority to  
File Tariffs Increasing Rates for Electric Service Provided to Customers in its  
Missouri Service Area
- Union Electric Company d/b/a Ameren Missouri EA-2020-0371  
In the Matter of the Application of Union Electric Company d/b/a Ameren  
Missouri for Permission and Approval and a Certificate of Public Convenience  
and Necessity Under 20 CSR 4240-3.105

### **Selected Manuscripts**

- Stahlman, Michael and Laura M.J. McCann. "Technology Characteristics, Choice  
Architecture and Farmer Knowledge: The Case of Phytase." *Agriculture and  
Human Values* (2012) 29: 371-379.
- Stahlman, Michael. "The Amoral of Signals." Awarded in top 50 authors for SEVEN  
Fund essay competition, "The Morality of Profit."

### **Selected Posters**

- Stahlman, Michael, Laura M.J. McCann, and Haluk Gedikoglou. "Adoption of Phytase  
by Livestock Farmers." Selected poster at the American Agricultural Economics  
Association Annual Meeting, Orlando, FL, July 27-29, 2008. Also presented at  
the USDA/CSREES Annual Meeting in St. Louis, MO in February 2009.
- McCann, Laura, Haluk Gedikoglu, Bob Broz, John Lory, Ray Massey, and Michael  
Stahlman. "Farm Size and Adoption of BMPs by AFOs." Selected poster at the 5<sup>th</sup>  
National Small Farm Conference in Springfield, IL in September 2009.

### **Non-Peer-Reviewed Works**

- Poole-King, Contessa, Henry Warren, and Michael Stahlman. "Forecasters Predicting  
Cold, Wet Winter For Most Of Midwest." *PSConnection* (Fall 2013) 3(7):3-4.
- Poole-King, Contessa, Henry Warren, and Michael Stahlman. "Low Income  
Weatherization Programs Provides Services To Help Consumers." *PSConnection*  
(Fall 2013) 3(7):5-6.