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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1		DIRECT TESTIMONY
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3		MICHAEL L. STAHLMAN
4		SPIRE MISSOURI, INC. d/b/a SPIRE
5 6		SPIRE EAST and SPIRE WEST GENERAL RATE CASE
7		CASE NO. GR-2021-0108
8	Q.	Please state you name and business address.
9	A.	My name is Michael L. Stahlman. My business address is 200 Madison Street,
10	Jefferson City	y, MO 65101.
11	Q.	By whom are you employed and in what capacity?
12	A.	I am employed by the Missouri Public Service Commission ("Commission") as
13	an Economist	in the Tariff and Rate Design Department of the Industry Analysis Division.
14	Q.	Have you provided your credentials in this file?
15	A.	Yes. They were provided in this case in Appendix 1 of Staff's Direct Cost of
16	Service Repor	rt filed May 12, 2021.
17	EXECUTIV	E SUMMARY
18	Q.	What is the purpose of this direct testimony?
19	A.	The purpose of this testimony is to sponsor Staff's Class Cost-of-Service/Rate
20	Design Repor	t ("CCOS Report"), which is filed concurrently with this direct testimony.
21	CLASS COS	T-OF-SERVICE STUDY
22	Q.	Did Staff perform a Study in this case?

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	Michael L. Stahlman
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?

- A. Staff's rate design recommendations in these cases are:
 - Staff does not recommend consolidation of rate schedules across rate districts at this time, but will continue to review the appropriateness of doing so. Staff does recommend changes in rate structure at this time to facilitate the potential consolidation of rate districts.
 - Staff does not oppose Spire's requested change to Ccf from Therms as the basis for Spire East's customer bills.
 - Staff recommends promulgation of a Residential Retention rate option for both rate districts.
 - Staff recommends the Commission order Spire to develop and retain demand determinants for all customers for potential future use in rate development.
 - Staff recommends Spire investigate the reasonableness of its estimated usage associated with unmetered gas lighting service.
 - 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:

Spire East	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%		20.7	74%	9.38	3%	0.00)%	0.00	%

Spire East	Inte	erruptible	Ger	eral L.P.	Un	metered	V	ehicular
(continued)		Sales		Gas	G	as Light		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	%	20.7	74%	15.2	28%	0.00)%

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 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:

Spire West	Residential		Se	General rvices & LV	Tra	nsportation	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%		24.9	98%	0.00	%	24.98%	

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

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	Eas	st (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

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remaining rate schedules (specifically, unmetered gas lighting, General L.P Gas, and 1 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 Spire West? 4 5 Yes. As discussed further in the CCOS Report, Staff recommends realignment A. 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. Staff also recommends the creation of a Transportation Class in Spire West for 12 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 III. Rate Structure and Rate Design

Direct Testimony of Michael L. Stahlman

IV. Spire East Non-Residential Rate Structure and Design 1 2 Spire West Non-Residential Rate Structure and Design V. 3 VI. Complications to Accurate Cost of Service Modeling 4 VII. Weather and Conservation Adjustment Rider (Staff alternative RNA) 5 **TARIFFS** Q. 6 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. Does this conclude your direct testimony? 10 Q. 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 General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Areas Case No. GR-2021-0108 Case No. GR-2021-0108	
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 sour	nd mind
and lawful age; that he contributed to the foregoing Direct Testimony of Michael L. Stahlm	nan; 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, ir	and for
the County of Cole, State of Missouri, at my office in Jefferson City, on this 25th	_ day of
May 2021.	
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissione for Cole County My Commission Expires: April 04, 2025 Commission Number: 12412070	

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

EA-2013-0098

Operations Company, and Transource Missouri

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

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

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

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 Amorality 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 5th 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.