Exhibit No.:_____ Issue: Revised Tariffs to Increase Annual Revenues for Natural Gas Service Witness: Louie R. Ervin Sr. Exhibit Type: Direct Sponsoring Party: Missouri School Boards Association Case No.: GR-2017-0215 Case No.: GR-2017-0216

Date: September 22, 2017

MISSOURI PUBLIC SERVICE COMMISSION

CASE Nos. GR-2017-0215 and GR-2017-0216

DIRECT TESTIMONY

OF

LOUIE R. ERVIN, SR.

ON BEHALF OF

MISSOURI SCHOOL BOARDS ASSOCIATION

Jefferson City, Missouri September 22, 2017

Q. Please state your name and business address.

- 2 A. Louie R. Ervin Sr., Suite 300, 150 First Avenue NE, Cedar Rapids, Iowa 52401.
- **3 Q. On whose behalf is your testimony presented?**
- 4 A. The Missouri School Boards' Association (hereinafter "MSBA").
- 5

Q. Will you briefly describe MSBA and its interest in this case?

A. MSBA is a 501(c)(6) not-for-profit corporation representing 387 elementary and 6 secondary school districts in the State of Missouri as a trade association with 7 approximately 2,000 individual school locations, several of which have multiple natural 8 9 gas meters. MSBA sponsors a statewide aggregate natural gas purchasing program and takes services under School Transportation Program (STP) tariffs of all Missouri gas 10 corporations in accordance with Section 393.310 RSMo (Appendix 1). MSBA's 11 purchasing cooperative is denominated as MOPURC (Missouri Purchasing Resource 12 Center), also known as the MSBA Natural Gas Consortium. MSBA is the authorized 13 purchasing agent for over 2,300 school accounts of which 850 STP accounts are in the 14 MGE (hereinafter "Spire West")¹ service area. The Consortium purchases natural gas on 15 the open market and arranges for gas supply, pipeline delivery, and local utility 16 transportation to Missouri school meters with annual consumption of approximately 17 30,000,000 therms. 18

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Q. Who benefits from the STP?

A. Public school students, administrators, and tax payers benefit from STP. MSBA's natural
 gas program ultimately supports class room needs. Absent these funds, many schools
 would have fewer teachers, computers and other classroom learning tools.

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

¹ I utilized the Company name Spire West for MGE and Spire East for Laclede in this testimony.

- A. I am Executive Vice President of Latham & Associates, which is based in Cedar Rapids,
 Iowa.
- 3

Q. Will you briefly describe Latham & Associates?

- A. Latham & Associates is an independent energy advisor and is not affiliated with any
 utility, energy marketer, broker or pipeline. Among our client base are education
 institutions, municipal utilities, rural electric cooperatives, and industrial and commercial
 enterprises. Our firm has advised statewide school natural gas programs in Missouri,
 Illinois, Wisconsin, Nebraska and Kansas for many years.
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Q. Please state your educational and relevant background business experience.

- A. A more detailed description of my education and industry experience is provided in
 (Appendix 2). I have B.S and M.S. engineering degrees from the University of Missouri Columbia, and an MBA from the University of Iowa. I have over forty years of
 experience in the natural gas and electric utilities industries with primary responsibilities
 for rates, regulations, contracts and operations. I was primarily responsible for the startup
 of several energy aggregation purchasing consortia, including MSBA's statutory STP
 program in Missouri initiated in 2002.
- 17 **O.** Have you testified before courts, legislatures, and regulatory bodies?

A. Yes. I testified before the Federal Energy Regulatory Commission, the Missouri Public Service Commission, the Illinois Commerce Commission, the Iowa Utilities Board, the Iowa legislature and various state and federal courts.

Q. Are you the same Louie R. Ervin, Sr. who testified before this Commission in the original multiple gas corporation cases held to implement Section 393.310 RSMo as it relates to the aggregate purchasing and transportation of natural gas by Missouri school districts?

1	А.	Yes. I drafted language which ultimately became Section 393.310 RSMo and I testified
2		before this Commission regarding its implementation. I have testified on behalf of MSBA
3		in numerous rate cases and negotiated multiple settlements with Missouri's investor
4		owned natural gas utilities.
5	Q.	What is the purpose of your testimony in this case?
6	А.	At this point in the proceeding, my testimony is limited to proposed changes in Spire
7		West's School Transportation Program (STP) rate schedule.
8	Q.	What is the fundamental difference between schools receiving natural gas under
9		STP and purchasing natural gas under utilities "sales service" rate schedules?
10	A.	For sales service, utilities purchase wholesale natural gas supply, arrange for delivery to
11		its distribution system from pipelines and deliver the supply to end user meters. For
12		service under STP, schools with annual use of 100,000 therms or less can purchase
13		natural gas supply in aggregate in the open market and arrange for delivery from the
14		pipeline to the utility distribution system for delivery, or transportation, to end user
15		meters. STP allows schools to transport on the utility delivery system in a similar manner
16		as do large commercial and industrial transportation customers.
17	Q.	What are MSBA's positions with regard to Spire West's STP rate schedule?

- A. MSBA supports the attached Joint Stipulation and Agreement (Appendix 3), with regard
 to Spire West's proposed STP rate schedule, in which it will make the following tariff
 changes:
- 21 (a) revise tariff language relating to the cash out of imbalances, as provided in
 22 Tariff Sheet No. 58, Paragraph 8d;
- (b) add language to Sheet No. 57 that provides consequences for failing to take
 steps to minimize estimated gas supply imbalances; and

(c) increase the balancing fee charged to schools in Sheet No. 55. 1 **IMBALANCE, CASH OUT AND CARRY-OVER** 2 **O.** What is "imbalance?" 3 A. The difference between supply delivered and actual metered use is an imbalance. Prior to 4 5 the beginning of each month, transportation customers schedule, or nominate, quantities of natural gas supply to be delivered from interstate pipelines to the gas corporation 6 7 distribution systems for redelivery, or transport, to individual end use meters. At the end of the month, the actual metered usage of the end user customers is compared to the 8 9 supply nominated and delivered to the distribution system, with the difference being an imbalance. 10 **Q.** What industry practices do Missouri gas corporations use for reconciling monthly 11 school supplied deliveries under STP to actual school metered use? 12 A. There are two industry practices used for reconciling or "balancing" utility receipts from 13 pipelines to end user metered use. These practices are: (a) "cash out" and (b) "carry-14 15 over." The latter is sometimes referred to as "banking", and is simply an accounting of positive or negative imbalances, which are carried over to the following months. 16

18 imbalances.

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- Q. What industry practices do Spire West and Laclede (hereinafter "Spire East") use for reconciling deliveries to usage for STP school supplied gas?
- A. Since the statutory inception of STP in 2002, both Spire West and Spire East, which represent over 80% of STP statewide volumes, have used carry-over to reconcile gas supplied to STP accounts.

Nominations for subsequent months are made net of previous imbalances to work off

Q. What is the history of Spire West's STP rate schedule?

2 A. Spire West's STP rate schedule was initiated in 2002 as an experimental tariff approved in accordance with the Statute, which required all Missouri gas corporations to file 3 4 experimental STP tariffs with the Commission by August 1, 2002. In order to meet the statute's deadline that tariffs may be suspended for a period ending no later than 5 November 1, 2002, the Commission held expedited consolidated hearings for all 6 7 Missouri gas corporations. Spire West and MSBA agree that the Commission approved experimental tariffs were intended to provide flexibility to determine how the STP would 8 9 work best for each specific Missouri gas corporation's experimental STP tariff.

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Q. Has Spire West's STP rate schedule contained language referencing "cash out?"

A. Yes, although Spire West has always used carry-over for STP account imbalances, in 11 2003, Spire West revised its STP tariff and Paragraph 8 of Sheet No. 58 was added to 12 apply several provisions from its general transportation tariff to the STP. One of the 13 provisions of the general transportation tariff to be applied to the STP was Section 9 on 14 15 Sheet No. 61.2, providing for cash out of imbalances. As explained below, it was an error or oversight to include cash out Section 9 because it was neither economically feasible 16 nor practical to cash out the schools' imbalances on a calendar month basis due to the 17 type of meters used by the schools. 18

Q. What does Section 9 of Spire West's STP rate schedule state with regard to balancing deliveries from the pipeline to metered usage volumes?

A. Section 9 states that "Monthly volumes of gas delivered to a transportation service customer should, *to the extent practicable*, match Company's receipts…" (emphasis added). As discussed below, Spire West believes that MSBA has made a reasonable

1 effort to keep its deliveries in balance. It has not been practicable for Spire West to 2 determine how closely calendar month deliveries from pipelines match calendar month metered uses, because Spire does not read all it STP meters on the last day of each 3 calendar month. Instead, Spire West reads 850 STP meters on a meter reading cycle basis 4 throughout the month. Absent Spire West installing expensive special telemetry meters 5 which record and transmit daily use, it is isn't practical for Spire West to record all STP 6 7 metered use on a calendar month basis. The controlling Missouri statute states that the schools are not required to have special metering, such as electronic gas measuring 8 9 (EGM) equipment to transmit daily usage. For STP accounts, Spire West continues to 10 utilize the same conventional school meter as schools use for sales service and continues to read these meters on regular monthly meter reading cycles. As a result, Spire West 11 does not receive daily meter reads from STP meters, but instead receives one monthly 12 reading for each of the 850 STP schools, which are spread throughout the month across 13 104 manual reading routes in 31 Missouri counties. 14

Q. Would installing \$2.3 million of telemetry capabilities to enable for Spire West to
 synchronize monthly supply and usage on a calendar month basis benefit Spire
 West system customers?

A. No. I agree with Spire West witness Noack that it is neither commercially sensible nor economically feasible for Spire West to install \$2.3 million of costly electronic metering equipment for only STP accounts just to synchronize use and supply on a calendar month basis.

Q. Without electronic metering, how has Spire West reconciled pipeline deliveries to
 metered usage since the statute was adopted in 2002?

A. In lieu of cashing out imbalances on a calendar month basis, since the inception of STP
fifteen years ago, Spire West has maintained a running total of the schools' usage on a
monthly billing cycle versus monthly supply deliveries and carries over those imbalances
to the subsequent month(s). In cases where it appears that the schools may have been
experiencing an imbalance, the schools have made their next monthly supply nomination
with the intent of eliminating that estimated imbalance.

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Q. Does Section 393.310 RSMo require deliveries and receipts of customer supplied gas to be reconciled on a calendar month basis?

A. No. The essence of the STP program as set forth in Section 393.310 RSMo is that
deliveries and receipts are not expected to be reconciled on a calendar month basis, which
is factually impossible to do without expensive special daily recording metering
equipment to synchronize daily use across two monthly billing cycles to a calendar
month basis. Special metering with capability of daily reads is expensive and also
requires monthly charges for telecommunication services from the metered school to the
Company, which is prohibited from being required by Section 393.310 RSMo.

Q. Does Section 393.310 RSMo specify how monthly metered school accounts are to reconcile deliveries and receipts of customer supplied gas?

A. No. Section 393.310 RSMo began with experimental tariffs in 2002 and does not specify how to reconcile gas deliveries and usage. Reconciliation of usage volumes can only be done on a monthly cycle basis because only monthly use data is available for monthly read meters.

Q. Do you agree with Spire West witness Noack that a correction to the tariff is
appropriate to match the past 15 plus years of practice of carry-over?

1	A. Yes. Correcting the tariff language to match the last 15 plus years of operating practice is
2	appropriate; it is also consistent with the operating practice of Spire West's sister
3	company, Spire East, which also has always used the carry-over balancing method for
4	STP accounts.

PROPOSED NEW ENFORCEMENT TARIFF LANGUAGE

Q. Do MSBA's nominations and carry-over of imbalances indicate a pattern of adverse effect other customers?

A. No. However to address any concern that the lack of ability to precisely match pipeline 8 9 calendar month nominations to calendar month usage may allow the schools an opportunity to take advantage of an imbalance, MSBA will accept a tariff change as 10 provided in paragraph 12c of the Joint Stipulation and Agreement (Appendix 3). This 11 12 tariff language change further motivates the schools to minimize estimated imbalances by subjecting the schools to suspension or termination of STP service if they fail to take 13 certain actions to promote balance. I believe this approach is a far more cost effective 14 15 way to control imbalances than Spire West investing \$2.3 million in electronic metering equipment. 16

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BALANCING FEE

Q. Can Spire West incur a benefit or cost associated with carrying over school imbalances?

A. Yes. When MSBA over delivers to a utility system during a month when the utility would otherwise need to withdraw volumes from storage or purchase higher price gas in the market, MSBA is providing a benefit to the system. The converse is also true and can be an added cost to the system.

1	Q. Does Section 393.310 RSMo recognize that utilities can incur a cost for "aggregating
2	and balancing" receipts and deliveries of customer supplied natural gas for multiple
3	monthly metered schools?
4	A. Yes. Section 393.310 RSMo specifies an initial "aggregation and balancing" charge of
5	\$0.004/therm be paid by school customers on all STP gas volumes – not just on the much
6	smaller imbalance volumes. The aggregation and balancing charge, per Section 393.310
7	RSMo, can be revised if approved by the Commission.
8	Q. Does Spire West propose to increase its aggregation and balancing charge in this
9	case?
10	A. Yes. Spire West's tariff actually splits the "aggregation" charge from its "balancing"
11	charge. Spire West's current aggregation charge is \$0.003/therm and is not proposed to
12	be changed. However, Spire West originally proposed to increase its balancing charge of
13	\$0.001/therm to \$0.003/therm.
14	Q. Has Spire West updated its analysis with regard to its balancing charge?
15	A. Yes. Spire West updated its balancing charge analysis, which now supports increasing the
16	balancing charge of \$0.001/therm to \$0.002/therm.
17	Q. Does MSBA accept the result of Spire West's latest analysis to increase its balancing
18	charge from \$0.001/therm to \$0.002/therm.
19	A. Yes.
20	Q. Does this conclude your direct testimony?
21	A. Yes.

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service)))	Case No. GR-2017-0216

AFFIDAVIT OF LOUIE R. ERVIN, SR.

STATE OF MISSOURI)	
COUNTY OF Linn)	SS.
COUNTY OF)	

Louie R. Ervin Sr., being first duly sworn on his oath, states:

My name is Louie R. Ervin Sr. I work in Cedar Rapids, Iowa and am employed 1. by Latham & Associates as the Executive Vice President.

Attached hereto and made a part of hereof for all purposes is my Direct Testimony 2. on behalf of Missouri School Boards' Association consisting of 10 pages, all of which have been prepared in written form for introduction into evidence in the above referenced cases.

I hereby swear and affirm that my answers contained in the questions therein 3. propounded are true and correct.

ouie R. Ervin Sr.

Subscribed and sworn to before me this 22nd day of September, 2017.

My commission expires: 1028/2019