

## MEMORANDUM

TO: Missouri Public Service Commission Official Case File,  
File No. GR-2016-0224, Laclede Gas Company

FROM: Anne M. Crowe, Regulatory Auditor - Procurement Analysis  
Derick A. Miles, P.E., Regulatory Engineer - Procurement Analysis  
Kwang Y. Choe, Ph.D., Regulatory Economist - Procurement Analysis

/s/ David M. Sommerer 12/18/17      /s/ Mark Johnson 12/18/17  
Project Coordinator / Date                      Staff Counsel / Date

SUBJECT: Staff's Recommendation in File No. GR-2016-0224, Laclede Gas Company's  
2015-2016 Actual Cost Adjustment Filing

DATE: December 18, 2017

### I. EXECUTIVE SUMMARY

On October 28, 2016, Laclede Gas Company ("Company," "Laclede," or "LGC") filed its Actual Cost Adjustment (ACA) for the 2015-2016 ACA period. On August 16, 2017, in Case No. GN-2018-0032, the Commission issued an order recognizing Laclede's name change to Spire Missouri Inc., d/b/a Spire. In order to distinguish the Laclede service area from the Missouri Gas Energy ("MGE") service area, Spire registered the fictitious names Spire Missouri East for the Laclede Division and Spire Missouri West for the MGE Division. The filing contains the Company's ACA balances as of September 30, 2016.

Laclede serves approximately 650,000 residential, commercial, and industrial customers in the St. Louis metropolitan area and surrounding counties.

The Commission's Procurement Analysis Unit ("Staff") has reviewed the Company's ACA filing. Staff's review included an analysis of billed revenues and actual gas costs for the period October 1, 2015, through September 30, 2016. Staff conducted a reliability analysis for Laclede, including a review of its estimate of customers' needs on a peak day (peak day requirements and the capacity levels to meet those requirements), peak day reserve margin and its rationale, and a review of gas supply plans for various weather conditions. Staff also reviewed Laclede's gas purchasing practices to determine the prudence of the Company's purchasing and operating decisions.

Staff has proposed a total adjustment in the amount of \$ 114,273 to Laclede's September 30, 2016, ACA account balances as shown in the table in the Recommendations section of this Memorandum. The following Table of Contents provides a guide to Staff's comments and recommendations contained in Sections I through V of this Memorandum:

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## **STAFF'S TECHNICAL DISCUSSION AND ANALYSIS**

### **II. RELIABILITY AND GAS SUPPLY ANALYSIS**

As a regulated gas corporation providing natural gas service to Missouri customers, the Local Distribution Company (LDC) is responsible for: 1) conducting reasonable long-range supply planning, and 2) the decisions resulting from that planning. One purpose of the ACA process is to review Laclede Gas Company's planning for gas supply, transportation, and storage to meet its customers' needs. For this analysis, Staff reviewed Laclede's plans and decisions regarding estimated peak day requirements and the capacity levels to meet those requirements, its peak day reserve margin, Laclede's rationale for this reserve margin, and its gas supply plans for various weather conditions.

Staff has no proposed financial adjustments for the 2015/2016 ACA period related to Reliability Analysis and Gas Supply Planning section. Staff's review of the Company's service areas produced the following comments and concerns:

#### **Planning Documentation**

Throughout the Company's responses to Staff's data requests, the Company continuously referenced the Resource Plan dated August 2016 as the planning document (provided in data request 76) for gas supply and transportation for this ACA period. It is impossible that this Resource Plan was used for the winter of 2015-2016 as the report was not created until August 2016 and actually contains 2015-2016 winter data within the report. Staff encourages the Company to use the appropriate planning documents for gas supply planning purposes.

### Peak Day Estimation

The Company used a \*\* \_\_\_ \*\* confidence interval for establishing peak day estimates. Although Staff recognizes that the Company is considering variability in its peak day estimate, a \*\* \_\_\_ \*\* is an extreme measure of consideration. (Most LDCs in Missouri consider the 95% confidence interval.) Staff encourages the Company to use a 95% confidence interval for variability in load data. Any data points outside the 95% confidence interval band should be evaluated for data accuracy. The cost considerations going from a 95% to a \*\* \_\_\_ \*\* confidence interval can be substantial, as pipeline capacity is scarce and thus costly. Staff encourages the Company to evaluate whether a \*\* \_\_\_ \*\* confidence interval is appropriate for establishing capacity resources, such as pipeline and storage capacity. A cost analysis of pipeline capacity based on both confidence intervals should be performed. More importantly, the outliers of the 95% confidence interval should be identified and analyzed for data accuracy.

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### III. ACTUAL GAS COSTS: OFF-SYSTEM SALES ERROR

An off-system sale is when Laclede sells natural gas to customers outside of its service area. A portion of the margin/profit from these off-systems sales flows through the PGA/ACA as a reduction to gas costs. In this period, Staff discovered an error in the amount of off-system sales margins recorded in the ACA filing. The off-system sales error had the effect of overstating gas costs this period. Therefore Staff proposes an adjustment to reduce gas costs, in total, by \$ 114,273.

### IV. HEDGING

One of the purposes of hedging is to reduce upward gas price volatility. The Staff reviewed the Company's Risk Management Strategy, Gas Supply Risk Management Policy and its financial hedging transactions for the 2015-2016 ACA period. The Company implemented its financial hedging transactions based on the risk management strategy. Staff also reviewed monthly hedged coverage for the winter period of November 2015 through March 2016. Laclede uses financial instruments and storage withdrawals for its hedge coverage.

Staff has the following comments and concerns about Laclede's hedging practice and documentation:

- A. \*\* \_\_\_\_\_  
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**B. Evaluation of Hedge Program**

Staff reviews the prudence of a Company’s decision-making based on what the Company knew or reasonably could have known at the time it made its hedging decisions. A Company’s hedging planning should be flexible enough to incorporate changing market circumstances. A Company should evaluate its hedging strategy in response to changing market dynamics as to how much the existing hedging strategy actually benefits its customers while balancing market price risk. For example, Laclede should continue to evaluate the current strategy of financially hedging summer storage injections with respect to the appropriate amount of storage injections to hedge. The Company should also routinely review and evaluate the adequacy of its hedge coverage regarding the appropriate volumes of financial instruments as well as the possible use of more cost-effective financial instruments to assess exposure to market prices under the current market where the market prices have become relatively less volatile.

Staff recommends the Company analyze the benefits/costs based on the outcomes from the hedging strategy, and evaluate any potential improvements on the future hedging plan and its implementation to achieve a cost effective hedging outcome. For example, the Company should continue to evaluate the performance of its hedge program in terms of the various types of financial instruments used, whether some level of over-the-counter instruments might help control margin calls, and whether the existing program should be modified under the current market.

Additionally, a summary of how the Company’s financial hedges have performed against market pricing, i.e., the impact of purchases without the hedges, is useful in its consideration of prospective changes to its Risk Management Strategy as the Company reviews its hedging program each spring. This hedge performance or mark-to-market summary over an extensive historical period shows the gains/losses from the hedges and is helpful in seeing the long term financial impact of the hedge program and may assist Laclede in hedge planning. Staff made a similar recommendation for the prior ACA cases

and Laclede agreed to develop this summary and provide the Staff with information in future ACA periods.

Finally, as Laclede incorporates the lower of FOM Index or Daily Index pricing for swing supply as a type of insurance against daily price spikes within a month into the Company's Risk Management Strategy, the Company should continue to evaluate the costs/benefits of these instruments in conjunction with other parts of the Company's hedge program.

## V. RECOMMENDATIONS

- Staff has determined the following adjustments and preliminary ACA account balances shown in the table below to reflect the under or (over)-recovery balances as of September 30, 2016. However, Staff recommends the Commission hold this case open (and continue to hold the 2014-2015 ACA case open) pending resolution of Staff's investigation of Laclede's compliance with the requirements of its CAM and Gas Supply and Transportation Standards of Conduct in Case No. GO-2017-0223.

An over-recovery is the amount owed to the customers by the Company and is shown in the table as a negative number. An under-recovery is an amount owed to the Company by the customers and is shown in the table as a positive number.

	Firm Sales non-LVTSS	Firm Sales LVTSS	Interruptible Sales	LP Sales	Firm Transportation	Basic Transportation	Vehicular Fuel
ACA Balance per Filing	\$ 32,393,843	\$83,815	\$ (9,406)	\$2,644	\$ 489,091	\$ 241	\$623,343
Staff Adjustments	\$ (110,470)	\$ (233)	\$0	\$0	\$ (2,986)	\$0	\$ (583)
<b>Staff Recommended ACA Balance</b>	<b>\$ 32,283,373</b>	<b>\$83,582</b>	<b>\$ (9,406)</b>	<b>\$2,644</b>	<b>\$ 486,105</b>	<b>\$ 241</b>	<b>\$ 622,760</b>

Staff recommends the Commission issue an order requiring Laclede to:

- Respond to the Staff recommendations in the Reliability and Gas Supply Analysis section.
- Respond to the Staff recommendations in the Hedging section.
- Respond to the recommendations herein within 45 days.

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

In the Matter of Laclede Gas Company's     )     File No. GR-2016-0224  
PGA Filing                                     )

**AFFIDAVIT OF KWANG Y. CHOE, PhD**

STATE OF MISSOURI     )  
                                   )     ss.  
COUNTY OF COLE     )

COMES NOW KWANG Y. CHOE, PhD and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Recommendation in Memorandum form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.



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KWANG Y. CHOE, PhD

**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 14<sup>th</sup> day of December, 2017.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070
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Notary Public

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

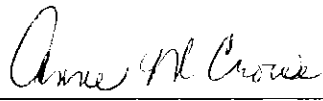
In the Matter of Laclede Gas Company's    )       File No. GR-2016-0224  
PGA Filing                                     )

**AFFIDAVIT OF ANNE M. CROWE**

STATE OF MISSOURI        )  
                                  )       ss.  
COUNTY OF COLE         )

**COMES NOW ANNE M. CROWE** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Recommendation in Memorandum form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

  
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**ANNE M. CROWE**

**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 14<sup>th</sup> day of December, 2017.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070
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In the Matter of Laclede Gas Company's    )       File No. GR-2016-0224  
PGA Filing    )

**AFFIDAVIT OF DERICK A. MILES, PE**

STATE OF MISSOURI    )  
  )       ss.  
COUNTY OF COLE     )

**COMES NOW DERICK A. MILES, PE** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Recommendation in Memorandum form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

  
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**DERICK A. MILES, PE**

**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 14<sup>th</sup> day of December, 2017.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070
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Notary Public