

## MEMORANDUM

TO: Missouri Public Service Commission Official Case File,  
File No. GR-2015-0201, Laclede Gas Company

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

/s/ David M. Sommerer 12/16/16      /s/ Jeffrey A. Keevil 12/16/16  
Project Coordinator / Date                      Staff Counsel / Date

/s/ Derick Miles, P.E. 12/16/16  
Utility Regulatory Engineer II/ Date

SUBJECT: Staff's Recommendation in File No. GR-2015-0201, Laclede Gas Company's  
2014-2015 Actual Cost Adjustment Filing

DATE: December 16, 2016

### I. EXECUTIVE SUMMARY

On October 28, 2015, Laclede Gas Company ("Company," "Laclede," or "LGC") filed its Actual Cost Adjustment (ACA) for the 2014-2015 ACA period. The filing contains the Company's ACA balances as of September 30, 2015.

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, 2014 through September 30, 2015. 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. The Staff also reviewed Laclede's gas purchasing practices to determine the prudence of the Company's purchasing and operating decisions. In this document, Laclede Gas Company's marketing affiliate Laclede Energy Resources is referred to as "LER."

Staff has no proposed adjustments at this time to the Company's ACA account balances filed October 28, 2015. However, Staff recommends the Commission hold this case open pending an investigation into Laclede's compliance with the Gas Supply and Transportation Standards of Conduct as discussed below beginning on page 4. The following Table of Contents provides a guide to Staff's comments and recommendations contained in sections I through IV of this Memorandum:

\*\* Denotes Highly Confidential Information \*\*

**NP**  
**Appendix A**

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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 at this time for the 2014/2015 ACA period related to Reliability Analysis and Gas Supply Planning. Staff's review of the Company's service areas produced the following comments and concerns:

#### **A. Peak Design Day and Regression Model**

The Staff Memorandum for the prior ACA period (2013/2014 ACA, GR-2014-0231) stated:

"Although Laclede provided a 2013/2014 Demand/Capacity Analysis, it uses the same regression data as the previous three analyses for 2012/2013, 2011/2012 and 2010/2011. Laclede conducted a regression of actual distribution data for 1/1/2010 – 2/28/2010. Each winter month of 2013/2014 was colder than normal and that data would have been available for planning for the 2014/2015 ACA period. Because of the availability of usage data for a cold winter, Staff expects to see Laclede's update for its regression analysis for its 2014/2015 winter peak day planning."

Laclede used the same regression model for many of the prior ACA periods leading up to and including the 2013-2014 ACA period. The model was based on a simulation of the 1935-1936 winter (known as the "3536 model"). The Company has used the 3536 model because supply in late winter presents challenges for Laclede's system and the 1935-1936 winter was one of the coldest winters experienced by Laclede Gas Company. However, for planning for this ACA period, the Company has changed its model to include the "Polar Vortex Winter" of 2013-2014 as it was one of the coldest winters in the past 30 years. The winter of 2013-2014 was 17% colder than a normal winter. The Company's usage of the 2013-2014 winter for its regression model will be used for future planning, as the model is

a predictor of correlation between the load of the system with recent experienced weather. The recent load data considers many factors such as modern metering and current customer habits.

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This equation excludes customer demand for basic transportation and interruptible customers since Laclede has no obligation to provide gas supply for these customer classes per their tariff.

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The Company's regression model did not consider the entire winter data for 2013-2014; however, it based the regression on the month of January 2014 only. Staff's regression model included December through March data and was able to increase the R-square value of the model from the Company's 0.92 to a 0.95. \*\* \_\_\_\_\_

\_\_\_\_\_ \* The Company's regression model also only considers heating degree day (weather) as a factor for determining peak load. Other factors, such as day of the week, month, or other factors can improve a peak day model. \*\* \_\_\_\_\_  
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\_\_\_\_\_ \*\* Staff did not analyze the day of week as a factor in its regression model but encourages the Company to consider using other factors in improving its sendout model.

**\*\* THIS TABLE HAS BEEN DEEMED**  
**CONFIDENTIAL IN ITS ENTIRETY \*\***

**B. Reserve Margins**

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**C. Gas Supply and Transportation Standards of Conduct**

Documentation requirements for solicitation and awards of contracts are included in Laclede's Gas Supply and Transportation Standards of Conduct.<sup>1</sup> Laclede agreed to implement all of the provisions of the Standards of Conduct within 10 days after the effective date of the Commission's order approving the Unanimous Partial Stipulation and Agreement in GC-2011-0098. The order approving the stipulation and agreement was

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<sup>1</sup> The Gas Supply and Transportation Standards of Conduct is Appendix 2 of the Unanimous Stipulation and Agreement for GC-2011-0098. Complaint case GC-2011-0098 was filed October 6, 2010 by Staff, asserting that Laclede had violated the Commission's affiliate transaction rules (4 CSR 240-10.015 and 4 CSR 240-40.016). The Gas Supply and Transportation Standards of Conduct were included as Appendix 2 to the Unanimous Partial Stipulation and Agreement to address Staff's and OPC's concerns regarding how the purchase and sale of gas and transportation capacity between Laclede and its affiliates should be conducted and priced.

effective 8/24/2013. Laclede's RFP for gas supplies for multi-month periods was sent 8/29/2014 which is after the effective date of the referenced Standards of Conduct. Among other things, the Gas Supply and Transportation Standards of Conduct include requirements for (1) Purchases of gas supplies for multi-month periods (purchases for longer than 1- month) and (2) Short term purchases of gas supply (one month or less)

The Company must comply with the documentation requirements for purchases of gas supplies as required by the Commission Order approving Unanimous Partial Stipulation and Agreement in GC-2011-0098.

Staff concerns with the Laclede documentation of supply bids, bid evaluation and natural gas supply award process for the 2014/2015 ACA are as follows:

**1. Limitations for Specific Supplier Awards for Purchases of Gas Supplies for Multi-month Periods (purchases for longer than 1- month)**

Part A.3 of the Gas Supply and Transportation Standards of Conduct requires the following: "In the event a gas supply contract for firm gas supply is awarded to an affiliate as a result of the RFP or other competitive bidding process, the affiliate shall be held to the same performance requirements as non-affiliated suppliers."

Part A.4 of the Gas Supply and Transportation Standards of Conduct requires that Laclede maintain contemporaneous documentation of (a) any diversity, credit, or reliability-related volume limitations placed on the maximum volumes Laclede will purchase from an individual supplier or from any one supplier on a specific pipeline (broken down by baseload, combo, and swing); (b) an explanation of the diversity, credit and/or reliability-related reasons for imposing such limitations.

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\_\_\_\_\_ \*\* Staff sent a follow-up email to Laclede pointing out that the information referenced in its DR response was not included in its attachment to the DR. **Staff recommends Laclede provide that information as a supplemental DR response no later than 1/17/2016.**

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<sup>2</sup> GR-2015-0201, DR54

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\_\_\_\_\_ \* Staff recommends Laclede immediately review and modify its policies, procedures, and internal controls to assure its treatment of its affiliate is in compliance with the Gas Supply and Transportation Standards of Conduct. **Staff recommends Laclede provide a summary to Staff no later than 2/14/2016 of the Laclede review and modifications to address these comments.**

**2. Inconsistent Application of RFP Requirements for Purchases of Gas Supplies for Multi-month Periods**

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<sup>3</sup> GR-2015-0201, DR86







**3. Short Term Supply Awards (purchases of gas supply for one month or less)**

Part B. of the Gas Supply and Transportation Standards of Conduct requires that the Company maintain contemporaneous documentation sufficient to establish that its short-term purchases of gas supply are acquired in accordance with a competitive bidding process. \*\* \_\_\_\_\_  
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\_\_\_\_\_ \*\* If the Company wishes to propose revisions to the Standards of Conduct, it can submit them for Staff and OPC review, after which a meeting can be scheduled to discuss whether such revisions will benefit customers, and if such revisions are appropriate they can be filed with the Commission for approval to modify the existing Standards of Conduct.

*a. Month-long Supply Awards*

Staff has the following concerns regarding Laclede's documentation of its month-long short term purchases of gas supply:

<sup>5</sup> GR-2014-0231, DR116, attachment "dr 116 response re short term purchases.docx", part B

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*b. Daily or Multiple Day Supply Awards*

Laclede did not provide documents for its daily or multiple day purchases.

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<sup>6</sup> GR-2014-0231, DR116, attachment "dr 116 response re short term purchases.docx", part B

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Staff finds that the Company did not retain sufficient contemporaneous documentation, as required by the Commission approved Cost Allocation Manual (CAM) in GC-2011-0098 that includes the Standards of Conduct, for its purchases of short term supply awards for the 2014/2015 ACA for: (1) month-long supply awards and (2) daily or multiple day supply awards. The Affiliate Transactions Rule 4CSR 240-40.016 (3)(D) states, “The regulated gas corporation shall not participate in any affiliated transactions which are not in compliance with this rule, except as otherwise provided in section (11) of this rule.” Section 11 of the rule pertains to variances, and Laclede did not request a variance nor has Laclede claimed that it did not comply with the noncompliance because of the “best interests of its regulated customers” which is also part of section (11) of this rule.

The Company must comply with the documentation requirements for purchases of gas supplies as required by the Commission Order approving Unanimous Partial Stipulation and Agreement in GC-2011-0098.

Staff also has issues related to Laclede’s compliance with the gas supply documentation requirements of the CAM and Standards of Conduct in the Missouri Gas Energy (MGE) 2013/2014 ACA, GR-2014-0324 (MGE is an operating unit of Laclede Gas Company). In that case, Staff recommended the Commission open a docket for the purpose of investigating Laclede Gas Company’s compliance with the gas supply documentation requirements of the CAM and Standards of Conduct. **Staff recommends such an Order be expanded so that the recommended docket includes both the MGE GR-2014-0324 ACA case and the Laclede GR-2015-0201 ACA case.**

**Staff also recommends Laclede provide a summary to Staff no later than 2/14/2016 of the Laclede review and modifications to its procedures, process, and documentation to address these comments pertaining to short-term purchases of gas supply.**

**D. Affiliated Transactions**

The Gas Supply and Transportation Standards of Conduct documentation requirements, referenced previously in this recommendation, were "To assist in ensuring that energy-related transactions between Laclede Gas Company "Laclede" or "Company") and its affiliates are conducted in a manner fully consistent with the interests of the Company's utility customers, including their interest in having such transactions priced and accounted for in a reasonable and appropriate manner...." The documentation required by the Standards of Conduct provides Staff with a means to ensure that Laclede's gas supply transactions are conducted in a manner as not to provide preferential treatment to its affiliate over another party. \*\* \_\_\_\_\_

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**\*\* THIS TABLE HAS BEEN DEEMED  
CONFIDENTIAL IN ITS ENTIRETY \*\***

**E. Gas Supply per Laclede GSIP Report**

For its Gas Supply Incentive Plan (GSIP), Laclede provided its GSIP monitoring Report for the quarter ended September 15, 2016 as an HC attachment, "gsip2015\_benchmark\_4<sup>th</sup>\_qtr\_sewEXTRA.xlsx" (gsip Excel file), to an email dated 10/30/2015. The gsip excel file contains daily gas supply data for each month of the 2014/2015 ACA. The gsip excel file identifies the daily transactions by "CONTRACT ID", but does not identify the supplier by name. The gsip excel file does not differentiate between purchases for on-system versus off-system-sales (OSS). The contract numbers and the name of the suppliers are in a separate 1,011 page pdf. **Staff recommends Laclede modify its gsip excel files provided to Staff to include all the existing data it currently**

**provides plus the following data for each daily transaction (for each line/row in the Excel file) beginning with data provided for the 2015/2016 ACA:**

1. Either add column for Counterparty (supplier), or provide a tab in the workbook containing Contract No. and corresponding Counterparty.
2. Add a column with contract award date.
3. Add a column with nominated volume.
4. Add a column with cut volume.
5. Add a column listing the volume sold in OSS.

**Staff recommends Laclede update the gsp excel file to contain this data and provide the 2015/2016 data as requested by Staff in data requests for that case. On a moving forward basis, Staff recommends Laclede provide the requested data in each quarter gsp excel file provided to Staff.**

### **III. HEDGING**

One of the purposes of hedging is to reduce upward gas price volatility. The Staff reviewed the Company's Risk Management Strategy and its financial hedging transactions for the 2014-2015 ACA period. The Company implemented its financial hedging transactions based on the risk management strategy. The Staff also reviewed monthly hedged coverage for the winter period of November 2014 through March 2015. 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:

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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 expected 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 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. \*\*

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\*\* The Staff

will continue to monitor.

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. The 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 considers the lower of FOM Index or Daily Index pricing for swing supply as a type of insurance against daily price spikes within a month, this option should be included in the Company's Risk Management Strategy and the Company should evaluate the costs/benefits of these instruments in conjunction with other parts of the Company's hedge program. The Staff made a similar recommendation for the prior ACA cases and the Company agreed to incorporate the Staff recommendation in its risk management strategy. The Staff will continue to monitor the incorporation of this aspect of Laclede's hedging strategy.

**IV. RECOMMENDATIONS**

1. The Staff has determined the following preliminary ACA account balances shown in the table below to reflect the under or (over)-recovery balances as of September 30, 2015. However, Staff recommends the Commission hold this case open so that Staff can investigate Laclede's compliance with the Gas Supply and Transportation Standards of Conduct and make further recommendations as necessary.

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.

	<b>Firm Sales non-LVTSS</b>	<b>Firm Sales LVTSS</b>	<b>Interruptible Sales</b>	<b>LP Sales</b>	<b>Firm Transportation</b>	<b>Basic Transportation</b>	<b>Vehicular Fuel</b>
ACA Balance per Filing	\$ 1,391,887	\$(301,082)	\$ (19,384)	\$(12,309)	\$ (310,986)	\$ 241	\$(239,667)
Staff Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Staff Recommended ACA Balance</b>	<b>\$ 1,391,887</b>	<b>\$(301,082)</b>	<b>\$ (19,384)</b>	<b>\$(12,309)</b>	<b>\$ (310,986)</b>	<b>\$ 241</b>	<b>\$(239,667)</b>

Based on the analysis discussed above, Staff recommends the Commission issue an order directing Laclede to:

2. Respond to the Staff recommendations in the Reliability and Gas Supply Analysis section.
3. Respond to the Staff recommendations in the Hedging section.
4. 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 PGA Filing                    )


Case No. GR-2015-0201

**AFFIDAVIT**

State of Missouri    )  
                                  ) ss.  
County of Cole        )

**COMES NOW** Kwang Y. Choe and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached Staff Memorandum; 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, Ph.D.

**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 15<sup>th</sup> day of December, 2016.

JESSICA LUEBBERT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: February 19, 2019 Commission Number: 15633434
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\_\_\_\_\_  
NOTARY PUBLIC



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

In the Matter of Laclede Gas                    )  
Company's PGA Filing                            )

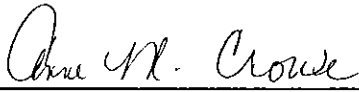
Case No. GR-2015-0201

**AFFIDAVIT**

State of Missouri    )  
                                  ) ss.  
County of Cole        )

**COMES NOW** Anne M. Crowe and on her oath declares that she is of sound mind and lawful age; that she contributed to the attached Staff Memorandum; and that the same is true and correct according to her best knowledge and belief.

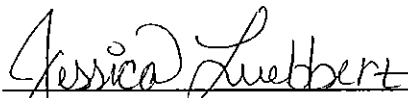
Further the Affiant sayeth not.

  
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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, 2016.

JESSICA LUEBBERT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: February 19, 2019 Commission Number: 15633434
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\_\_\_\_\_  
**NOTARY PUBLIC**

**BEFORE THE PUBLIC SERVICE COMMISSION  
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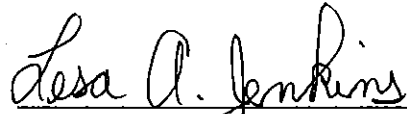
Case No. GR-2015-0201

**AFFIDAVIT**

State of Missouri    )  
                                  ) ss.  
County of Cole        )

**COMES NOW** Lesa A. Jenkins and on her oath declares that she is of sound mind and lawful age; that she contributed to the attached Staff Memorandum; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

  
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Lesa A. Jenkins, P.E.

**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 15<sup>th</sup> day of December, 2016.

  
\_\_\_\_\_  
NOTARY PUBLIC

JESSICA LUEBBERT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: February 19, 2019 Commission Number: 15633434
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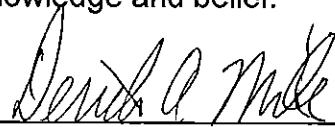
**Case No. GR-2015-0201**

**AFFIDAVIT**

State of Missouri    )  
                                  ) ss.  
County of Cole        )

**COMES NOW** Derick A. Miles and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached Staff Memorandum; and that the same is true and correct according to his best knowledge and belief.

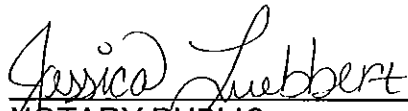
Further the Affiant sayeth not.

  
\_\_\_\_\_  
**Derick A. Miles, P.E.**

**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, 2016.

JESSICA LUEBBERT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: February 19, 2019 Commission Number: 15633434
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**NOTARY PUBLIC**