

MEMORANDUM

TO: Missouri Public Service Commission Official Case File,
Case No. GR-2016-0225 - Missouri Gas Energy

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/ Jeffrey A. Keevil 12/18/17
Project Coordinator/ Date Staff Counsel's Office/ Date

SUBJECT: Staff's Recommendation in Missouri Gas Energy's 2015-2016 Actual Cost
Adjustment Filing

DATE: December 18, 2017

I. EXECUTIVE SUMMARY

On October 28, 2016, Missouri Gas Energy ("MGE" or "Company"), a division of Laclede Gas Company, filed its Actual Cost Adjustment for the 2015-2016 period in Case No. GR-2016-0225. On August 16, 2017, in Case No. GN-2018-0032, the Commission issued an order recognizing the name change of Laclede Gas Company and Laclede Gas Company d/b/a Missouri Gas Energy 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. This filing contains the Company's ACA account balance calculation.

The Commission's Procurement Analysis Unit ("Staff") reviewed and evaluated MGE's billed revenues and actual gas costs for the period of July 1, 2015, to June 30, 2016. The Staff examined MGE's gas purchasing practices to determine the prudence of the Company's purchasing and operating decisions, including:

- (1) A reliability analysis of estimated peak cold day requirements and the capacity levels needed to meet those requirements,
- (2) The Company's rationale for its reserve margin for a peak cold day,
- (3) A review of normal, warm and cold weather requirements and the gas supply plans for meeting these requirements, and
- (4) A review of MGE's hedging for the period to determine the reasonableness of the Company's hedging plans.

At this time, Staff has determined a total adjustment in the amount of \$(7,275,221.11) to MGE's June 30, 2016, ACA account balance as shown in the table below. Staff's recommended adjustments are explained in the Actual Gas Cost and Billed Revenue section of this recommendation.

An under-recovery is an amount that is owed to the Company by its customers and is shown in the table below as a positive number. An over-recovery reflects an amount that is owed to the customer by the Company and would be shown as a negative number. MGE has an under-recovery.

Account	6-30-16 Ending Balance per MGE Filing	Prior Period Staff Proposed Adjustment	Current Period Proposed Adjustment	6-30-16 Staff Recommended Ending Balance
ACA Balance	\$ 9,216,829.75	\$ (319,282.93)	\$ (7,275,221.11)	\$ 1,622,325.71

Additionally, Staff recommends the Commission order the Company to respond to this Staff Recommendation Memorandum within 45 days.

This ACA Memorandum is organized into the following sections:

Section No.	Topic	Page
I	Executive Summary	1
II	Background	3
III	Reliability Analysis and Gas Supply Planning	3
IV	Actual Gas Costs and Billed Revenue	4
V	Hedging	5
VI	Recommendations	6

Each section explains Staff's concerns and recommendations.

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

II. BACKGROUND

MGE's primary service areas are: Kansas City, St. Joseph and Joplin. For the 2015/2016 ACA, MGE reports an average of 453,151 residential customers, 60,437 commercial customers, 91 industrial customers, and 368 transport customers, for a total of 514,047 customers.

MGE transports its gas supply over Panhandle Eastern Pipe Line (PEPL), Southern Star Central Gas Pipeline ("SSC"), Tallgrass Energy Partners (previously Kinder Morgan Interstate Gas Transmission, KM), and Rockies Express Pipeline ("REX").

III. RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

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 the Company's planning for gas supply, transportation, and storage to meet its customers' needs. For this analysis, Staff reviewed the LDC's plans and decisions regarding estimated peak day requirements and the capacity levels to meet those requirements, peak day reserve margin and the rationale for this reserve margin, and natural gas supply plans for various weather conditions.

Although Staff has proposed no financial adjustments for the 2015/2016 ACA period related to Reliability Analysis and Gas Supply Planning, Staff has the following comments, concerns, and recommendations:

Peak Day

The Company's estimate of peak day for the 2015/2016 winter relied on a Demand/Capacity Analysis provided in the 2011-2012 ACA period (Data Request No. 06, GR-2012-0262). This analysis is based on data that is 4 - 5 years old. The Company has provided Staff with an updated Resource Plan Report dated August 2016. Staff encourages the Company to use, to the extent it is prudent, this Resource Plan for the 2016-2017 ACA period. This report details the projected monthly loads for the system based on normal and warmer than normal weather. The prudence of the plan will continue to be reviewed in the relevant ACA period.

Storage Operations

The Company's storage balances were nearly full going into the month of November 2015.

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** However, Staff encourages the Company to expand the Resource Plan to include a detailed plan for injections and withdrawals for all 12 months of its storage assets. Staff recommends that particular attention be paid to the shoulder months of November and March. It is important to have enough room in storage to inject gas in November, if it is warmer than normal, or have enough gas left in storage in March, for a late winter cold snap.

Reserve Margins

Although the Company did not use the August 2016 Resource Plan for planning purposes for the 2015-2016 ACA period, Staff noticed that the reserve margin, when considering the Upper 95% confidence interval, **

_____ . ** Staff would request it be notified if there are changes to any pipeline contracts.

IV. ACTUAL GAS COSTS AND BILLED REVENUE

The ACA process compares actual gas costs to billed revenue for the twelve month ACA period.¹ In this ACA period, the Staff found documentation issues with both the company's actual gas cost amounts and billed revenue amounts. The Company's ACA filing included gas costs that were \$11,515,666 more than the invoices provided supporting the filing. In addition, the billed revenue recorded in the ACA filing was \$1,651,011 different than the underlying source documents provided. Staff also found the amount recorded in the filing for MGE's portion of its sharing of off-system sales and capacity release was \$2,589,434 different than Staff's calculated amount. Staff recommends a single adjustment of \$(7,275,221) which is the sum of the three adjustments discussed above. The sum of the adjustments is shown below. Staff's proposed adjustment has the effect of decreasing the Company's under-recovery for the period by \$7,275,221. Staff notes that due to Laclede Gas Company's acquisition of MGE, the Company has changed its accounting method for recording costs in the ACA filing. Staff would recommend a meeting, within 60 days from the filing date of Staff's ACA recommendation, between the Company and Staff in an attempt to resolve the discrepancies Staff has noted.

	Staff Adjustments
Decrease Gas Costs	\$ (11,515,666)
Billed Revenue	\$ 1,651,011
Off-System Sales Capacity Release	\$2,589,434
Total Proposed Adjustment	\$ (7,275,221)

¹ MGE Tariff Sheet No. 16, section III. CALCULATION OF THE ACTUAL COSTS ADJUSTMENT (ACA).

V. HEDGING

In its review of MGE’s purchasing practices, 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 executed the hedging transactions for the 2015-2016 ACA period based, in part, on a 24-month hedging plan. Additionally, the Company implemented its financial hedging transactions based on its risk management strategy. MGE combined storage and financial instruments to hedge portions of the volumes needed for the winter heating season, November 2015 through March 2016. Some of the financial instruments utilized include, but are not limited to, financial swaps. Financial swaps are a type of financial instrument that allow the conversion of a floating or variable gas price arrangement into a fixed price arrangement. Since many of MGE’s supply contracts are tied to a floating or variable index price, a swap allows MGE to set a known price for a particular quantity of gas ** _____

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Staff has the following comments and concerns about MGE’s hedging practice and documentation:

A. ** _____

² ** _____

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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, MGE 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 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 the Company in hedge planning. The Staff made a similar recommendation for the prior ACA cases.

VI. RECOMMENDATIONS

1. The Staff has determined the following preliminary ACA account balance as shown in the table below to reflect the under or (over)-recovery balance as of June 30, 2016. Staff notes due to Laclede Gas Company's acquisition of MGE, the Company has

changed its accounting method for recording costs in the ACA filing. Staff would recommend a meeting, within 60 days from the filing date of Staff's ACA recommendation, between the Company and Staff in an attempt to resolve the discrepancies Staff has noted.

Staff further recommends the Commission hold this 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 and resolution of all prior MGE ACA cases which remain open.

An under-recovery is an amount that is owed to the Company by its customers and is shown in the table below as a positive number. An over-recovery reflects an amount that is owed to the customer by the Company and would be shown as a negative number. MGE has an over-recovery.

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Staff recommends that the Commission issue an order requiring the Company to:

2. Respond to the Staff comments, concerns, and recommendations in the Reliability Analysis and Gas Supply Planning section.
3. Respond to the comments, concerns, and recommendations expressed by Staff in the Hedging Section.
4. File a written response to all comments, concerns and recommendations included in this Staff Recommendation Memorandum within 45 days.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's)
PGA Filing) Case No. GR-2016-0225

AFFIDAVIT OF ANNE M. CROWE

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 foregoing Staff Recommendation in Memorandum form; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

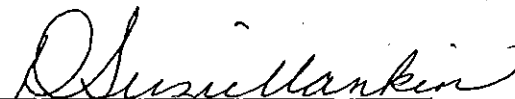


ANNE M. CROWE

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 15th 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 Missouri Gas Energy's)
PGA Filing) Case No. GR-2016-0225

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.

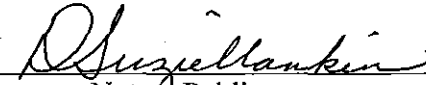


DERICK A. MILES, PE

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 15th 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 Missouri Gas Energy's)
PGA Filing) Case No. GR-2016-0225

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.

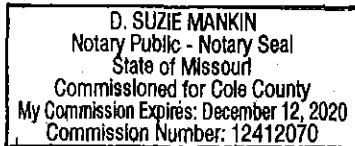
Further the Affiant sayeth not.

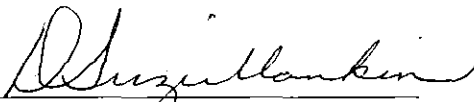


KWANG Y. CHOE, PhD

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 15th day of December 2017.





Notary Public