MEMORANDUM

TO: Missouri Public Service Commission Official Case File
GR-2017-0126, Summit Natural Gas of Missouri, Inc.

FROM: David M. Sommerer, Regulatory Manager – Procurement Analysis
Kwang Y. Choe, Ph.D., Regulatory Economist – Procurement Analysis
Jacob R. Robinett, Utility Engineering Specialist III – Procurement Analysis

/s/ David M. Sommerer 12/11/17
Project Coordinator / Date

/s/ Jeffrey A. Keevil 12/11/17
Staff Counsel's Office / Date

/s/ Derick A. Miles P.E. 12/11/17
Utility Regulatory Engineer II / Date

SUBJECT: Staff Recommendation in Case No. GR-2017-0126, Summit Natural Gas of Missouri, Inc. 2015-2016 Actual Cost Adjustment Filing

DATE: December 11, 2017

EXECUTIVE SUMMARY

On April 27, 2011 Southern Missouri Gas Company (SMNG) and Missouri Gas Utility (MGU) filed an application for Commission authority to merge, with MGU as the surviving entity (Case No. GM-2011-0354). The parties filed a Unanimous Stipulation and Agreement on September 15, 2011, which the Commission approved on September 28, 2011.

On February 3, 2012, MGU filed to change its name to Summit Natural Gas of Missouri, Inc. ("SNG", "Summit" or "Company") and for Summit to adopt MGU's tariffs. On February 23, 2012, Summit filed tariff sheets to adopt SMNG's tariffs.

On October 26, 2016, Summit (successor in interest to MGU) filed Case No. GR-2017-0126 concerning its Actual Cost Adjustment (ACA) for the 2015-2016 annual period for rates to become effective November 9, 2016. The Procurement Analysis Unit ("Staff") of the Missouri Public Service Commission has reviewed the Company's ACA filing for the **former Southern Missouri Natural Gas (SMNG) service area** (Rogersville and Branson Divisions), **Northern service area** (Gallatin Division), and **Southern service area** (Warsaw and Lake of the Ozarks Divisions). A comparison of billed revenue recovery with actual gas costs will yield either an over-recovery or under-recovery of the ACA balance. An over-recovery by the Company is shown as a negative ACA balance that must be returned to customers; an under-recovery is shown as a positive ACA balance that must be collected from customers.

Staff conducted the following analyses:

- a review of billed revenue compared with actual gas costs;
- a reliability analysis including a review of estimated peak-day requirements and the capacity levels needed to meet these requirements and a review of supply plans for various weather conditions;
- a review of the Company's gas purchasing practices to evaluate the prudence of the Company's purchasing decisions for this ACA period; and,
- a hedging review to evaluate the reasonableness of the Company's hedging practices for this ACA period.

Based on its review, Staff recommends no adjustments to the Company's **former SMNG service area** (Rogersville and Branson Divisions) filed 2015-2016 (over)/under-recovery ACA balances:

SMNG Service Area Description (+) Under-recovery (-) Over-recovery	Ending Balances Per Filing	Staff Adjustments for 2015-2016 ACA	Staff Recommended Ending Balances
Prior ACA Balance 8-31-15	$(373,606)	$0	$(373,606)
Cost of Gas/Storage	$2,727,014	$0	$2,727,014
Cost of Transportation	$2,503,639	$0	$2,503,639
Revenues - PGA billed	($5,095,761)	$0	($5,095,761)
ACA Approach for Interest Calculation	$(4,674)	$0	$(4,674)
Cash Outs	($42,837)	$0	($42,837)
Total ACA Balance 8-31-16	($286,225)	$0	($286,225)

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Based on its review, Staff recommends no adjustments to the Company's filed 2015-2016 (over)/under-recovery ACA balances for **Summit's Northern service area** (Gallatin Division):

Northern Service Area Description (+) Under-recovery (-) Over-recovery	Ending Balances Per Filing	Staff Adjustments for 2015-2016 ACA	Staff Recommended Ending Balances
Prior ACA Balance 8-31-15	$48,230	$0	$48,230
Cost of Gas/Storage	$397,083	$0	$397,083
Cost of Transportation	$118,323	$0	$118,323
Revenues - PGA billed	($582,476)	$0	($582,476)
ACA Approach for Interest Calculation	$4	$0	$4
Cash Outs	6,015	$0	$6,015
Total ACA Balance 8-31-16	$(12,821)	$0	$(12,821)

Based on its review, Staff recommends the following adjustments to the Company's filed 2015-2016 (over)/under-recovery ACA balances for **Summit's Southern service area** (Warsaw and Lake of the Ozarks Divisions):

Southern Service Area Description (+) Under-recovery (-) Over-recovery	Ending Balances Per Filing	Staff Adjustments for 2015-2016 ACA	Staff Recommended Ending Balances
Prior ACA Balance 8-31-15	$59,578	$(50)	$59,528
Cost of Gas/Storage	$1,074,187	$0	$1,074,187
Cost of Transportation	$671,147	$0	$671,147
Revenues – PGA billed	($1,945,494)	$0	($1,945,494)
ACA Approach for Interest Calculation	$(1,253)	$0	$(1,253)
Cash Outs	($28,292)	$0	($28,292)
Total ACA Balance 8-31-16	$(170,127)	$(50)	$(170,177)

Staff has no adjustments related to hedging; however Staff's concerns/comments are addressed in the Hedging section of the memorandum.

Staff recommends the Commission order the Company to respond to Staff's concerns and recommendations within 45 days.

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

Staff's discussion of its findings is organized into the following five sections, which include Staff's concerns and recommendations:

I. Overview
II. Billed Revenue and Actual Gas Cost
III. Reliability Analysis and Gas Supply Planning
IV. Hedging
V. Recommendations

I. OVERVIEW

During the 2015-2016 ACA, Summit provided natural gas service to customers in the south and west-central portion of the state including the counties of Benton, Camden, Greene, Miller, Morgan and Pettis, also known as the "Southern service area." Summit served an average of 4,621 sales customers in the Southern service area. Southern Star Central Gas Pipeline (SSCGP) serves all customers in Summit's Southern service area. Summit also provides natural gas service to customers in the Northwest Missouri counties of Caldwell, Daviess and Harrison, also known as the "Northern service area." Summit served an average of 1,588 sales customers in the Northern service area. ANR Pipeline Company (ANR) serves all customers in Summit's Northern service area.

During the 2015-2016 ACA, Summit also provided natural gas service to customers in the south and south-central portion of the state including communities in Greene, Webster, Wright, Howell, Texas, Douglas, Laclede, Stone and Taney counties, also known as the "SMNG service area." Summit served an average of 12,184 sales customers for the combined Branson and Rogersville systems. Southern Star Central Gas Pipeline (SSCGP) serves all customers in Summit's former SMNG service territory.

II. BILLED REVENUE AND ACTUAL GAS COST

Gas Procurement Practices

Staff reviewed Summit's purchasing practices during this period and recommends no adjustments based upon that review.

However, Staff observed in its review of the Company's filing that the final Commission-approved balance for the Warsaw and Lake of the Ozarks divisions for Case No. GR-2016-0091 was slightly misstated in Summit's filing. The Staff has adjusted this balance to conform to the final balance approved by the Commission. The adjustment decreases the Warsaw/Lake of the Ozarks under-collection by $50.00.

III. RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

As a gas corporation providing natural gas service to Missouri customers, the Company is responsible for conducting reasonable long-range supply planning and the decisions resulting from that planning. One purpose of the ACA process is to examine the reliability of the Local Distribution Company's (LDC) gas supply, transportation, and storage capabilities. For this analysis, Staff reviews the LDCs 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.

Staff's review for the Summit Natural Gas of Missouri service areas produced the following comments and concerns:

Storage Planning

The Company's storage plans do not allow for the flexibility of warmer weather in the fall. For example, the storage plans provided in DR95 for the Rogersville and Branson divisions (served by Southern Star Central Gas Pipeline) estimate storage at 100% at the end of September and October. Staff is concerned that if warmer weather is experienced in October and/or the first half of November that the Company may not have the flexibility it needs to put any excess gas into storage due to warmer weather. Staff recommends the Company review its ending September and October planned balances to accommodate a potential warmer fall or winter. The Staff notes that storage associated with the Rogersville and Branson divisions expired in April of 2016. The Company should review associated reliability changes from this expiration.

Reserve Margins

The reserve margin for the Gallatin division is a negative 5.49%, however, when the upper 95% confidence interval is not considered, the reserve margin becomes a positive 6.9%. The reserve margin for the Warsaw and Lake of the Ozarks divisions is relatively high with respect to past ACA periods. The reserve margin for the Branson division continues to be estimated at a relatively high level. The Rogersville division is estimated at an 8.5% reserve. Staff encourages the Company to continue to monitor its pipeline contracts and maintain an appropriate reserve margin for each service area. In addition, especially with respect to the newer divisions of Branson and Warsaw and Lake of the Ozarks divisions, Summit should evaluate its peak day and seasonal firm gas requirements.

Peak Day Estimation

The peak day estimation for the 2015-2016 winter (current ACA period reviewed) for the Warsaw and Lake of the Ozarks divisions was ** __ ** Dth/day, and the peak day estimation for the 2014-2015 winter (prior ACA period) for that service area was ** __ ** Dth/day. This decrease in peak day estimation was of concern to Staff since the customer count has shown slight growth over that same time period of 4,605 customers in January 2015 compared to 4,692 customers in January of 2016. However, after consulting with the company it was determined that the peak day estimates were calculated using a projected customer count for the upcoming winter. Since the company continues to be a growth utility, the projected customer counts can have a significant impact on the calculation.

The 2014-2015 peak day estimate was based on the 2013-2014 actual regression statistics applied to the estimated 2014-2015 winter customer count, which was 6,041 customers. The 2015-2016 peak day estimate was based on the 2014-2015 actual regression statistics applied to the projected 2015-2016 winter customer count of 4,636 customers. The projected customer counts were the cause of the estimated peak day decrease. Staff recommends the Company evaluate its regression models for peak day estimates.

IV. HEDGING

Summit's winter hedging plans are primarily designed to achieve a reliable natural gas supply and to protect its customers against price spikes. The hedging plan establishes known prices for ** __ ** of normal winter (November – March) weather requirements for each of the Company's three service areas. The Company's Northern service area calls for the Company to fill storage as close to its maximum capacity as possible by November 1, the beginning of the winter heating season. Additionally, fixed price purchases are a part of the hedging plan for the Northern service area.

For the Company's Southern service area, the hedging plan is to utilize fixed price purchases. There is no storage capacity contracted for the Southern service area.

For the Company's former SMNG service area, the hedging plan is to utilize storage as well as fixed price purchases. The Staff notes that Summit's storage associated with the SMNG service area expired April 2016.

Summit's maximum storage quantity (MSQ) for the Northern service area represents about ** __ ** of normal winter (November – March) weather requirements for the service area. Summit's actual storage injection by November 1, 2015 was about 99% of MSQ. Summit also purchased fixed price volumes in June 2015 for delivery during the period December 2015 - February 2016. These fixed price volumes, which represent about ** __ ** of normal winter weather requirements, combined with actual storage at the beginning of the winter season, represent about ** __ ** of normal winter weather requirements for the Northern service area.

For the Southern service area, Summit purchased fixed price volumes in December 2014 for delivery in the period December 2015 through February 2016. Summit purchased additional fixed price volumes in March, June and August 2015 for delivery in the same period, December 2015 through February 2016. The fixed price volumes represent about ** __ ** of normal winter weather requirements for the Southern service area.

For the former SMNG service area, Summit purchased fixed price volumes in December 2014 and also in March, June and August 2015 for delivery during the winter period December 2015 through February 2016, which represents about ** __ ** of normal winter weather requirements. These fixed price volumes, combined with storage at the beginning of the winter season for the service area, represent about ** __ ** of normal winter weather requirements for the former SMNG service area. In light of the April 2016 expiration of the SMNG area storage contract, the Company should review the effects on hedging from this expiration.

CONCLUSION

Staff has the following comments about the Company's hedging practice for this ACA's winter period:

1) It is important for the Company to evaluate the expected level of the customers' natural gas requirements that are reasonably protected (hedged) under warmer than normal, normal, and colder than normal weather scenarios.

2) Additionally, the Company should evaluate its hedging strategy in response to the changing market dynamics as to how much the existing hedging strategy actually benefits its customers while achieving the goal of stable price level.

3) A part of Summit's hedging goals is to capture the lowest price. However, this market-timing approach can lead to a situation where Summit waits too long for natural gas prices to go down until it perceives them to be favorable while running the risk of higher prices.

4) Summit's hedging strategy utilizing storage is typically based on its plan of filling storage to its MSQ by November 1 and use of the entire MSQ by the end of March. However, when the Company does not fill storage to MSQ and finishes the last month of the winter heating season (March) with a portion of MSQ left in storage. Therefore, its hedging plan utilizing storage could potentially overestimate an actual hedging outcome.

HEDGING RECOMMENDATIONS

Staff recommends, for the 2016-2017 ACA period and beyond, that the Company:

(a) Establish and maintain a current and consistent hedging policy with stated objectives based on month-specific normal weather requirements while also considering the impacts of warmer and colder than normal weather scenarios.

(b) Consider a combination of various alternatives such as storage withdrawals, call options, and other fixed price purchases for effective hedging during the winter months.

(c) Establish what is a realistic amount of MSQ that the Company plans to inject into storage by November 1 and to withdraw by March 31. Thus, determine a realistic amount of storage that can be utilized toward hedging and calculate the hedging percent utilizing storage and the overall hedging percent accordingly.

(d) Continue to monitor the market movements diligently and with regard to timing of hedge placements employ disciplined (time-driven) as well as discretionary (price-driven) approaches in its hedging practices.

(e) Continue to document its reasoning for executing any hedging transactions or decisions, whether by means of storage, fixed price contracting or other financial hedging instruments.

V. RECOMMENDATIONS

The Staff recommends that the Commission issue an order requiring Summit to:

1) Adjust the balances in its next ACA filing to reflect the Staff recommended ending (over)/under recovery ACA balances per the following tables:

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(Warsaw-Lake Ozarks) Southern Service Area Description (+) Under-recovery (-) Over-recovery	Ending Balances Per Filing	Staff Adjustments for 2015-2016 ACA	Staff Recommended Ending Balances
Prior ACA Balance 8-31-15	$59,578	$(50) A	$59,528
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(A) Adjustment to Ending ACA Balance from GR-2016-0091

2) Respond to Staff's concerns/recommendations in Section II – Billed Revenue and Actual Gas Cost.

3) Respond to the concerns/recommendations expressed by Staff in the Reliability Analysis and Gas Supply Planning section (Section III).

4) Respond to Staff's recommendations in Section IV - Hedging.

5) Respond to the recommendations and concerns included herein within 45 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Summit Natural Gas of Missouri, Inc.'s Changes to Company's Purchase Gas Adjustment "PGA" Clause	)))	Case No. GR-2017-0126

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

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 8th 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

D. Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Summit Natural Gas of Missouri, Inc.'s Changes to Company's Purchase Gas Adjustment "PGA" Clause	)))	Case No. GR-2017-0126

AFFIDAVIT OF JACOB R. ROBINETT

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW JACOB R. ROBINETT 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.

Jacob R. Robinett

JACOB R. ROBINETT

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 8th 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

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Summit Natural Gas of Missouri, Inc.'s Changes to Company's Purchase Gas Adjustment "PGA" Clause	)))	Case No. GR-2017-0126

AFFIDAVIT OF DAVID M. SOMMERER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DAVID M. SOMMERER 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.

David M. Sommerer

DAVID M. SOMMERER

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 8th 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

D Suzie Mankin

Notary Public