MEMORANDUM

TO: Missouri Public Service Commission Official Case File Case No. GR-2009-0306, Missouri Gas Utility, Inc.

FROM: David M. Sommerer, Manager – Procurement Analysis Department

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/s/ David M. Sommerer 03/17/10
Project Coordinator, Date

/s/ Lera L. Shemwell 03/17/10
General Counsel's Office, Date

SUBJECT: Staff's Recommendation for the 2008-2009 Actual Cost Adjustment Filing of

Missouri Gas Utility, Inc.

DATE: March 17, 2010

The Procurement Analysis Department (Staff) has reviewed Missouri Gas Utility, Inc.'s (MGU or Company) 2008/2009 Actual Cost Adjustment (ACA) filing. This filing was made on October 29, 2009, for rates to become effective November 13, 2009, and was docketed as Case No. GR-2009-0306. Originally this filing was made in Case No. GR-2010-0129.

Missouri Gas Utility, Inc., a Colorado Corporation, is a subsidiary of Summit Utilities, Inc. Summit Utilities' principal office is located in Littleton, Colorado. MGU provides natural gas service to both residential and commercial customers in the Missouri communities of Coffey, Jameson, Gallatin, Hamilton, Jamesport, Ridgeway, and Pattonsburg in the counties of Harrison, Daviess, and Caldwell. ANR Pipeline Company serves MGU which, during the 2008/2009 ACA period, provided natural gas to an average of 1,400 gas sales customers and one transportation customer in the north-central portion of the state.

MGU is initiating service in its Southern System during the 2009-2010 ACA. This will ultimately serve the Missouri communities of Green Ridge, Cole Camp, Lincoln and Warsaw in west-central Missouri. These communities will be served as MGU's Southern System by the Southern Star Central Gas Pipeline (SSCGP).

Staff's review consisted of an analysis and evaluation of the billed revenues and actual gas costs for the period of September 1, 2008, through August 31, 2009, included in the Company's computation of the ACA rate. A comparison of billed revenue recovery with actual gas costs yields either an over-recovery or under-recovery of the ACA balance. In addition to this comparison, Staff conducted a hedging review to determine the reasonableness of the Company's hedging practices for this ACA period. Staff also conducted a reliability analysis, to determine the adequacy of the Company's plans to meet its customers' expected maximum usage requirements by reviewing MGU's estimated peak day requirements and the adequacy of its interstate pipeline capacity levels needed to meet these requirements. Finally, Staff reviewed

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MGU's gas purchasing practices to determine the prudence of the Company's purchasing decisions.

HEDGING

MGU's winter hedging plan calls for the Company in April to set target prices and amounts of gas to be purchased for each month during the months of May through September. MGU then purchases gas and injects gas into storage according to this plan. Further, the plan is to fill storage by October 1. MGU's maximum storage quantity (MSQ) represents 44% of normal winter weather requirements. For the 2008/2009 winter period (November 2008 – March 2009), storage injections resulted in about 96% of storage MSQ at the beginning of November 2008. In addition, MGU purchased fixed price volumes at the beginning of August 2008, though the Company fixed only a basis (i.e., a discount off of NYMEX) in the middle of April, for delivery during December 2008, January 2009 and February 2009. These fixed price volumes, combined with filling storage at the beginning of the winter season, represents 83% of customers' normal winter weather requirements. November deliveries were made from flowing gas purchased for that month. The Company appears to have taken advantage of the falling market during the time period. The December and January deliveries were made from: flowing gas purchased for the delivery months, storage withdrawals, and fixed price purchases. February delivery was made from both storage withdrawals and fixed price purchases. March gas delivery to customers was made solely from storage withdrawals.

Although MGU's overall hedging practice for this winter's ACA period (2008-2009) utilizing storage and fixed price purchases was adequate to moderate price fluctuations, Staff has the following comments about the Company's hedging practice for this winter's ACA period:

- 1. Staff believes it is important for the Company to evaluate the expected level of customers' natural gas requirements that are reasonably protected (hedged) under warmer than normal, normal, and colder than normal weather scenarios. In prior ACA periods, MGU's storage injection has been the primary means of hedging. While that has been reasonable for a small system, as the number of customers is expected to grow, thus increasing normal winter requirements, the Company must look for other ways to hedge given its storage capacity constraints. For example, if storage is not sufficient to maintain reasonable price protection for each winter month, the Company should consider fixed priced gas supply contracts or other reasonable hedging methods for the months that are not adequately protected by storage withdrawals.
- 2. MGU's hedging practice essentially calls for purchasing gas whenever it is less expensive, and injecting the gas into storage. However, this market-timing approach in filling storage can lead to a situation where MGU waits indefinitely for natural gas prices to go down, though Staff recognizes MGU's past efforts in reducing gas costs by utilizing this method.

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> 3. MGU utilized a basis differential to fix only the discount off of the NYMEX futures prices for portions of the hedged winter months December 2008, January 2009 and February 2009. A basis differential is the difference in natural gas price from one delivery location to another. In this case, it is the difference between the MGU's delivery location, the ANR pipeline and the Henry Hub in Louisiana which is the delivery point of the NYMEX natural gas futures. Although MGU fixed the natural gas price by triggering the discount at a more favorable price level before the winter season started, the Company should use caution in utilizing basis differential as a hedging method since the Company might indefinitely delay triggering the discount until the NYMEX futures prices become more favorable. There is no guarantee that the NYMEX futures prices always move in the Company's favor so Staff recommends the Company should not be overly reliant on a "price view" that may prove wrong and ultimately expose the customers to potentially catastrophic price increases. The Company should closely monitor its exposure to summer and winter price increases so that it is not significantly un-hedged in the months just prior to the winter that is being hedged.

Staff recommends, for the 2009-2010 ACA periods and beyond, that the Company:

- (a) Establish and maintain a current and consistent hedging policy based on month- specific normal weather requirements while also considering the impacts of warmer and colder than normal weather scenarios,
- (b) Continue to start placing hedges early enough to protect, for example, against potential hurricane-related price spikes during summer months,
- (c) Balance between storage withdrawals, other fixed price purchases and flowing gas supply for deliveries during the winter months,
- (d) Carefully evaluate use of other or additional hedging instruments (i.e., increase storage capacity / purchase fixed price contracts),
- (e) Document its reasoning for executing any hedging transactions or decisions, whether by means of storage, fixed price contracting or other financial hedging instruments, and
- (f) Make the hedging documents available to the Staff for its reviews of subsequent ACA periods.

RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

As a gas corporation providing natural gas service to Missouri customers, MGU is responsible for conducting reasonable long-range supply planning to meet its customers' needs. MGU must then make prudent decisions based on 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 reviewed the LDCs' plans and decisions regarding estimated peak-day requirements and the LDC's pipeline 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 has the following comments and concerns regarding the reliability analysis:

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Peak Day Model Development

The peak day model MGU provided to Staff, used for estimating customers' needs on a peak day, had an R-square value of 0.49. The closer the R-square value is to 1.0, the more accurate the model. The R-squared value is an indication of the interdependence between the factor(s) considered and the estimated result (requirements or usage in this case). A value of zero would indicate no relationship between the factor(s) and estimated usage. A value of one would indicate a perfect relationship between the factor(s) and estimated usage. Such a low R-squared indicates a need for the Company to review its data and its methodology in order to develop a better model for estimating peak day requirements.

In this model the Company used December 1977 to February 2008 weather data from the Conception, Missouri weather station. This is a change from prior ACA reviews, where the Company used St. Joseph's Rosecrans Airport weather data. When Staff considered St. Joseph heating degree data in the Company model, the R-square value improved to 0.67. Staff recommends the Company use the NOAA data that best geographically represents the Company's distribution system and that provides the greatest model accuracy. Staff has spoken with Company personnel about its peak day estimate. MGU has stated that beyond the 2008/2009 ACA, the Company has reverted back to using St. Joseph weather data.

In addition to the change in the weather station used to obtain the HDD, MGU made other modifications to its peak day estimate model development beginning with the 2009/2010 ACA. The current models used by the company gives R-square values of 0.985 (depending on customer class) and the models are much better at determining customers' monthly loads (natural gas usage). However, these increased R-square values are a result of actual monthly loads by customer classes (commercial, residential, etc.) regressed with monthly bill cycle HDD. The concern is that data for this type of regression has been smoothed because it uses monthly data instead of the daily data; and daily data has greater variation. Additionally, the Company should consider whether it is appropriate to include usage data for summer months when the data is being used to estimate peak day requirements, which naturally occur in the winter months. Thus the predicted peak day as a result of this type of regression could be skewed. Staff recommends the Company evaluate its methodology for peak day load estimations for future ACA periods by considering winter-only data. If monthly data is used, the Company should include an estimate of the peak day using the 95% confidence interval factors or some other method of considering the variability of usage from day to day.

The Company considered both the 30 year historic peak day of 81 HDD and the 10 year historic peak of 67 HDD for the Conception area. A peak day will occur infrequently, but it is critical for the Company to have adequate pipeline capacity to deliver sufficient amounts of natural gas to customers when a peak cold day occurs. Consideration of an 81 HDD versus a 67 HDD changes the reserve from 22% to 2%. Although 81 HDD did not occur in the 2008/2009 ACA, planning for sufficient capacity for a peak cold day is critical. Additionally, the Company does not consider variability in usage when it considers the reserve margin estimate (consideration of the standard error of the regression analysis or consideration of the 95% confidence interval of the

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base load factor and heat load factor from the regression analysis). Staff did further analysis and when Staff considered the Company's model and the upper 95% confidence interval, the reserve margin becomes a negative 12%, which is a reliability concern. Due to system growth, the Company has obtained an additional 600 dth./day capacity for the 2009/2010 ACA. Staff's model, including the 95% confidence interval factors, estimates a peak day of 2,579 dth and a reserve margin of 1% for the 2009/2010 ACA period. The Company only provides the reserve margin estimate for the 2008/2009 ACA period, instead of providing a projection for the current and future years. Staff recommends the Company use the 30-year historical peak of 81 HDD for estimating peak day capacity requirements. In addition to calculating a reserve margin estimate for the current ACA plan year, Staff recommends the Company determine and provide to Staff its reserve margin estimate for 3-5 years beyond the current ACA plan year.

For the prior two ACA periods, MGU estimated the daily transportation volumes to match monthly load usage. These estimations were used in the prior regression analyses. Currently, MGU has telemetry on all (5) of its transportation customer meters. Thus, the regression analysis of daily loads versus heating degree days for the primary winter months of December through January should be much improved for data from the 2008/2009 winter and beyond. If the Company changes its peak day methodology to consider daily citygate volumes, instead of monthly billed data, Staff recommends it reduce the daily volumes using the daily telemetry data for the transportation customers instead of using daily estimates from monthly summaries.

Estimates of Monthly Requirements

In the 2007/2008 ACA review, GR-2009-0161, Staff recommended MGU expand its planning for future ACA periods to include normal, warmer, and cooler monthly and seasonal usage and estimated monthly storage withdrawals. However, the Staff ACA filing was dated May 5, 2009. Because of the inherent lag in the ACA reviews, MGU would not have received the Staff recommendation in advance of MGU's planning for the 2008/2009 ACA. Thus, Staff makes the same recommendation in the 2008/2009 ACA that the Company use its regression models to arrive at estimated monthly and seasonal loads and integrate these results into its storage supply plan.

Storage

In prior ACA Staff Recommendations, Staff had concerns that the Company allowed its storage balance to diminish to low levels during the winter months. For this ACA period, the Company retained storage levels that were reasonable. However, the Company did allow its storage to exceed the maximum storage quantity. To alleviate any penalties associated with the overinjection, the Company brought on a short-term contract which allowed MGU to have some additional, temporary storage until they could remove the excess gas in the subsequent month. The charges associated with this additional storage were immaterial.

Additional Capacity

MGU's recent growth on its systems is primarily a result of Commission approved CCNs (Certificates of Convenience and Necessity) for the Jamesport, Ridgeway, and Pattonsburg areas. As a result of this growth, MGU added additional capacity effective July 1, 2009. As additional

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interstate pipeline capacity impacts the reserve margin for the 2009/2010 winter, Staff will review MGU's decisions related to that capacity in the 2009/2010 ACA review.

CUSTOMER BILLINGS

Sales Customers

Currently all sales customer bills include a line item entitled "Amount for Actual Gas Usage." This amount consists of the customer's PGA charge and non-PGA gas commodity charge. Staff recommends, at a minimum, that all sales customer billings include the PGA rate and non-PGA commodity rate. This insures that all sales customers are kept informed of the rates charged for gas and non-gas costs so that any disputes or questions on the billing can be addressed on a more timely basis. According to 4 CSR 240-13.020(9) (I), every bill for residential utility service shall clearly state – Purchased gas adjustment cost in total or cents per unit basis. MGU indicated that they were not previously aware of this rule and would comply in future billings.

Premium Standard Farms

MGU's transportation customer, Premium Standard Farms (PSF), is charged a service meter fee (customer charge) for each of its 5 meters. Staff believes that MGU is billing PSF an incorrect customer charge, \$125, for each of its 5 meters. Per the Company's tariffs, the customer charge was \$125 until April 15, 2008, at which time the customer charge per meter increased to \$204.42 per meter. MGU agreed that the wrong customer charge was billed and, effective January 2010, agreed to adjust its billings to PSF to reflect the \$204.42 charge. MGU does not seek to recover past charges from PSF. The inaccuracies will not have any effect on MGU's PGA revenue recovery.

During this ACA, PSF was served under a special contract it signed with the City of Gallatin. MGU indicated that they are waiting on expansions from PSF before signing a new contract with PSF. MGU informed PSF that if provisions in its existing contract are in conflict with MGU's tariff provisions, the tariff provisions would supersede the contract. Staff encourages MGU to establish a new transportation contract with PSF that is consistent with its existing tariff provisions.

ACA BALANCE

The ACA factor is changed each year at the same time the Company makes its required Winter PGA filing. In addition to its Winter PGA filing, MGU is permitted to make up to three (3) additional PGA filings each year. MGU's beginning 2008/2009 ACA balance was \$145,924 under-recovered. MGU's ending ACA balance was \$72,006 under-recovered, which resulted in an ACA rate of \$.0444 per hundred cubic feet (Ccf). In the 2007/2008 ACA there was concern about the ACA balance reaching an unreasonable level. The 2008/2009 ACA ending balance is significantly lower and is at a more reasonable level. Staff will continue to monitor the ACA balance activity in future ACA periods.

There are no Staff recommended financial adjustments for this ACA period.

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RECOMMENDATIONS

Staff recommends the Commission issue an order requiring MGU to:

1. Establish the following ACA account balance in its next ACA filing to reflect the August 31, 2009 (over)/under-recovered ACA balance shown in the "Staff Recommended" column of the following table. An over-recovery reflects an amount owed to the customer by the Company, while an under-recovery is an amount owed to the Company by the customers.

Description	Company's ACA Balance	Staff Adjustments	Staff Recommended ACA Balance
Beginning ACA Balance @ 9/1/2008 – (Over-recovered)/Under-recovered	\$145,924	\$0	\$145,924
Total Cost MGU Gas Delivered to City Gate	\$1,261,705	\$0	\$1,261,705
Total Revenue Recovery	(\$1,335,623)	\$0	(\$1,335,623)
Ending ACA Balance @ 8/31/2009- (Over-recovered)/Under-recovered	\$72,006	\$0	\$72,006

- 2. Respond to those recommendations beneath the Reliability Analysis and Gas Supply Planning Section and respond with any additional actions being taken by MGU to address Staff's recommendations related to Peak Day Model Development and Estimates of Monthly Requirements.
- 3. Respond to Staff's comments 1-3 and recommendations (a) (f) in the Hedging Section.
- 4. Respond to the recommendations herein within 30 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Misson Purchased Gas Adjustment Audited in its 2008-2009 Ad	t (PGA) Factors to be	,
А	FFIDAVIT OF DAVID) M. SOMMERER
STATE OF MISSOURI COUNTY OF COLE)) ss.)	
Manager in the Procureme participated in the prepara presented in the above case prepared by himself and Star described below; that he has	ent Analysis Department tion of the foregoing e; that he has verified ff of the Commission the verified with each of the	his oath states: that as a utility Regulatory nt of the Utility Services Division, he has report, consisting of
Phil Lock: Kwang Y. Choe: Derick Miles: Lesa A. Jenkins:	-	Actual Gas Costs nd Gas Supply Planning nd Gas Supply Planning
that he has knowledge of the best of his knowledge and be		ch report and that such matters are true to the
	David N	M. Sommerer
Subscribed and sworn to befo	ore me this/ 7 + b	day of March, 2010.
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 08, 2 Commission Number: 08412071	012 Notary I	Surjellankin