MEMORANDUM

TO: Missouri Public Service Commission Official Case File

Case No. GR-2004-0193, Southern Missouri Gas Company

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

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/s/ Dave Sommerer 05/13/04 /s/ Thomas R. Schwarz, Jr. 05/13/04

Project Coordinator / Date General Counsel's Office / Date

SUBJECT: Staff Recommendation for Southern Missouri Gas Company's 2002/2003

Actual Cost Adjustment Filing

DATE: May 13, 2004

The Procurement Analysis Department (Staff) has reviewed Southern Missouri Gas Company's (SMGC or Company) 2002/2003 Actual Cost Adjustment (ACA) filing. This filing was made on October 17, 2003, for rates to become effective November 1, 2003, and was docketed as Case No. GR-2004-0193. The audit consisted of an analysis of the billed revenues and actual gas costs for the period of September 1, 2002, to August 31, 2003, included in the Company's computation of the ACA rate. SMGC provided natural gas to a maximum of 7,825 sales customers in the southern portion of the state including communities in Greene, Webster, Wright, Howell, Douglas and Texas counties.

In addition, Staff conducted a reliability analysis for SMGC including a review of information required to be submitted in response to the reliability recommendations in the 2001/2002 Staff ACA recommendation, Case No. GR-2002-440, estimated peak day requirements and the capacity levels to meet those requirements.

Staff also conducted a hedging review to determine the reasonableness of the Company's hedging plans for this ACA period.

REFUNDS

Case No. GR-2002-440 for ACA period 2001/2002 ended with an Order Requiring Adjustment of ACA Balance and Requiring Actions Related to the Company's Reliability Analysis. That Order, dated August 19, 2003, stated, "That Southern Missouri Gas Company shall adjust the refunds beginning balance at August 31, 2001, by \$61,764 to reimburse Southern Missouri Gas Company for a \$62,345 refund it received in January 2000, net of accrued interest..." However, the Company's ACA filing for 2002/2003 showed an ACA Audit Refund Adjustment for \$62,345, instead of the ordered \$61,764. The difference is interest accrued in prior years,

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totaling \$581. SMGC should reduce the over-refunded beginning balance in the refunds account at August 31, 2002, to account for \$581 of interest accrued in prior years.

TRANSPORTATION SERVICE – INTERNAL

For two industrial customers in 2002/2003 SMGC provided a service known as "Transportation Service – Internal," which was not specifically authorized in the tariff. SMGC sold these customers gas at the Williams pipeline interconnect to avoid charging them the full PGA-adjusted rate. From that point they were treated as transportation customers. Each month SMGC sent them two bills: one bill for transportation service at tariff-authorized rates and a separate bill for the gas commodity at a negotiated rate that included recovery of the ACA (but not PGA) and some, but not all of the fixed transportation costs.

"Transportation Service – Internal" was an issue in Case No. GR-2001-388 that went to hearing on March 11, 2003. It was also the subject of a Staff Complaint case, Case No. GC-2003-0314. Staff is noting that "Transportation Service – Internal" continued through the 2002/2003 ACA period, but is proposing no Staff adjustments as directed by the Commission in the Orders that closed those two prior cases.

RELIABILITY ANALYSIS

To assure that sufficient capacity, but not excess capacity, is available to meet firm customer peak day capacity and natural gas supply requirements, Staff conducts a reliability analysis. The objective is to assure that a company has adequate capacity to provide natural gas to its firm customers on even the coldest days, without maintaining excess capacity that would cost consumers money without any related benefit.

Staff has the following comments and concerns regarding the Company's reliability analysis and reserve margin:

- 1. The Company states that there is essentially no increase in customers; those leaving the system and switching to propane are offsetting any new customers. However, the Company shows a projected increase of 3% in residential customers in 2004/2005 (combined residential and optional) and an increase of 0.8% to 1.5% in commercial customers in 2003/2004 and 0.7% to 2.0% in 2004/2005. The 2004/2005 increase in total residential customers is not consistent with the actual historical data. The increase in commercial customers is not inconsistent with prior years growth. Company support for the optional and residential customer counts estimates for 2004/2005 and future years need to be more adequately explained and supporting data provided to Staff.
- 2. It could not be determined from the data provided whether the Company peak data estimates for the large general and large volume customers were reasonable. Details of actual usage are only shown for five of the large volume customers and only for January 2003. Unless the Company can show that this customer's use declines at higher heating

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degree days (HDD), the estimate for ** _____ ** is not reasonable since the Company's peak day estimate for this customer was lower than the usage on January 23, 2003, when only 59 HDD were experienced, which is much lower than the historic peak day of 72 HDD.

Staff noted in the prior ACA recommendation, Case No. GR-2002-440, the 2001/2002 ACA that the Company did not provide the requested detail and this is still a problem for the 2002/2003 ACA and thus, Staff again recommends that the Company provide more detailed data for the large general and large volume customers. This detailed data would include specific peak day heat load and base load estimates for large general and large volume customers. The Company does state in the Reliability Report that it plans to manually read the large general and large volume customer meters that do not have daily consumption information when significant HDD occur and thus, the Company will have more accurate data. It is recommended that the Company provide this updated information for the large general and large volume customers for the 2003/2004 review or as soon as available. It is also recommended that the Company review and provide to Staff the base load volumes of these customers so that the peak day estimate includes both the base load and heat load usage; provide this to Staff for the 2003/2004 ACA review if available, and provide for the 2004/2005 ACA review.

- 3. The Company states that it believes that its estimated heat load factors are conservative since the factors should decline, as the weather gets colder, particularly for HDD beyond 55. Support for this assertion must be provided to Staff.
- 4. Although the Company shows a negative reserve margin for 2002/2003, it states that two industrial customers drop off in 2003/2004, resulting in a minimal reserve margin in 2003/2004 and a negative 1.7% reserve margin in 2004/2005. The Company should routinely review its assumptions, data and calculations to assure that it has a reasonable estimate of its peak day usage requirements. It is recommended that the Company provide to Staff its procedures detailing the minimum frequency for reviewing the peak day estimate.

The Company reviews usage on recent cold days compared to the expected usage, but the recent cold days are not near the peak. This evaluation provides limited information about whether the Company's base load and heat load factors reasonably represent expected usage. Staff recommends that in its estimation of usage, the Company reconsider how it will evaluate the reasonableness of its estimates. With computer software, such as Excel, it would not take much effort for the Company to conduct a regression analysis of usage data and HDD data to obtain estimates of base load and heat load. Such an analysis would also provide an estimate of the coefficient of determination, R², which indicates whether the base load and heat load factors are good estimators for calculating usage. It would also be prudent for the Company to consider other factors such as whether weekday or weekends have an impact on expected usage, whether seasonal businesses have an impact on expected usage; whether base load is



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different in the summer months versus the winter months; etc. This should be based on the Company's knowledge of its customers and its observations about usage from a review of usage data.

- 5. The Company provided monthly and annual usage estimates for normal weather. However, the detail of how these were calculated was not provided. The Company must provide the assumptions and calculation details for the 2003/2004 ACA review.
- 6. The Company estimates of natural gas usage for coldest month weather for November through March are calculated as 10% greater than the estimated normal month usage. Staff's review of coldest month HDD over the past thirty years shows that the winter months have 35% to 51% colder HDD than normal weather. The Company must provide its calculations and assumptions explaining why its methodology is a reasonable estimate of coldest month usage.
- 7. The Company states that it tends not to buy 100% or more of forecasted load at the beginning of the month since it is unsure of the actual weather. Thus, it states it has little risk of having too much gas except in a prolonged warmer than normal period. For a colder than normal month the Company would buy daily gas and for a peak day, it would buy daily gas and possibly use line pack.

Although the Company has agreements in place for fixed price gas and ordered some first-of-month gas, Staff could find no agreements for this ACA committing suppliers to swing volumes as existed in the prior ACA. Staff is concerned that the Company had inadequate volumes available through firm supply contracts should an extremely cold day have occurred in the winter of 2002/2003. For example, Staff's review revealed that the firm base load contracts and the volumes locked up in firm first-of-month contracts represented only 66% of normal month requirements for February. For a historic peak cold day, these firm base load and first-of-month volumes represent only 34%, 37% and 31% of the peak day requirements for December, January and February, respectively. To state it another way, if a peak cold day had occurred in January 2003, over 60% of the needed gas would not have been under a firm contract but would have been sought from the daily spot market. For the entire month of February 2003 this percentage was about 34% that would have been sought from the spot market if the weather had been normal: if it had been cold the percentage would have been much higher. Although the Company may have found firm gas on the spot market, supplies can be extremely tight on a peak cold day, pipelines may be issuing Operational Flow Orders (OFOs) requiring local distribution companies (LDCs) to match nominations to deliveries and thus, more customers are looking for gas on the spot market which could further limit the availability of spot supplies, and thus, there is the risk that spot gas could not have been found at any cost. This is a major reliability concern.

Although the Company stated that its two suppliers provided assurances that they would be able to meet SMGC needs in "any set of circumstances" given two or three days MO PSC Case No. GR-2004-0193 Official Case File Memorandum May13, 2004 Page 5 of 6

notices, in the Company's notes in Data Request No. 27, it was evident that there were some days when only one supplier could provide gas, and on at least one occurrence it was difficult to find any gas. This is a concern because although there were a few cold days in January and February 2003, the coldest day in January was 59 HDD on January 23, 2003, per the Company records. The coldest day in February 2003 was 53 HDD on February 7, 2003. These temperatures are not near the historic peak cold day of 72 HDD that could be encountered in this service area. Although the Company had transportation pipeline capacity of 10,100 per day, the question is whether the Company would have found any gas to flow on that pipeline if a peak cold day of 72 HDD had occurred.

Staff recommends that the Company's Reliability Study reexamine the issue of supply availability for extremely cold days and detail how the Company plans to structure its supply contracts to assure that the gas will actually be available on a firm basis for extreme cold days. It is recommended that this be submitted beginning with the 2003/2004 ACA review.

SUMMARY

The Staff has addressed the following concerns regarding Case No. GR-2004-0193 for Southern Missouri Gas Company, and proposes the following:

- 1. That SMGC should reduce the over-refunded beginning balance in the refunds account at August 31, 2002, to account for \$581 of interest accrued in prior years, to comply with the Order Requiring Adjustment of ACA Balance and Requiring Actions Related to the Company's Reliability Analysis, from Case No. GR-2002-440.
- 2. That, even though Staff is proposing no dollar adjustments related to reliability, SMGC should address the Staff's concerns regarding the Company's reliability analysis, and should submit additional documentation regarding the reliability information by October 1, 2004.

RECOMMENDATIONS

The Staff recommends that the Commission issue an order requiring Southern Missouri Gas to:

1. Adjust the ACA account balances in its next ACA filing to reflect the Staff adjustment and to reflect the (over)/under-recovered ACA and Refund balances in the far-right column of the following table:

ACA Description	ACA Balance Due From Or (To) Customers Per	Staff Adjustments	Staff Recommended ACA Balance Due From Or (To)
	Filing		Customers
Prior ACA Balance 8/31/02	\$1,102,306		\$1,102,306
Cost of Gas	\$4,015,383		\$4,015,383
Cost of Transportation	\$1,114,244		\$1,114,244
Revenues	\$ (5,112,615)		\$ (5,112,615)
Internal Transport Revenues	\$ (450,309)		\$ (450,309)
DCCB	\$0		\$0
Total ACA Balance 8/31/03	\$669,009	\$0	\$669,009

Refunds Description	Refunds Balance Due From Or (To) Customers Per Filing	Staff Adjustments	Staff Recommended Refunds Balance Due From Or (To) Customers
Prior Refunds Balance 8/31/02	\$ (12,366)		\$ (12,366)
Adjustment per Order from Case GR-2002-440 Effective 8/29/03	\$62,345	\$ (581)	\$61,764
Adjusted Refunds Balance 8/31/02	\$49,979	\$ (581)	\$49,398
Refunds Received	\$ (8,442)		\$ (8,442)
Refunds to Customers	\$ 13,060		\$ 13,060`
Total Refunds Balance 8/31/03	\$ 54,597	\$ (581)	\$ 54,016
Total Total ACA + Refunds Ending Balance 8/31/03	\$723,606	\$ (581)	\$723,025

- 2. To assist the Staff review of whether sufficient supply and capacity, but not excess supply and capacity, is available to meet firm customer peak day capacity and natural gas supply requirements, Staff recommends that the Commission issue an order requiring the Company to submit information by October 1, 2004, to address Staff's comments and concerns listed in the reliability analysis summary section of this document.
- 3. File a written response to the above recommendations by June 11, 2004.