BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's PGA/ACA	))	**Case No. GR-2011-0290**

STAFF RECOMMENDATION REGARDING MISSOURI GAS ENERGY'S 2010-2011 ACTUAL COST ADJUSTMENT

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and for its Recommendation, states as follows:

1. On October 18, 2011, Missouri Gas Energy (MGE or Company) filed its Actual Cost Adjustment (ACA) for the 2010-2011 annual period of July 1, 2010 to June 30, 2011.

2. The Procurement Analysis Unit (Staff) has reviewed the Company's ACA filing and submits its recommendations as explained in Staff's Memorandum attached hereto as Appendix A. Staff's review included a comparison of billed revenue recovery with actual gas costs to determine whether there exists an over-recovery or under-recovery of the ACA balance.

3. Staff's review identified an over-recovery by the Company in the amount of $239,162.11 as the result of a miscalculation in its adjustment of its ACA balance to comply with the terms of the pipeline discount condition in its Stipulation and Agreement in Case No. GM-2003-0238. See Staff's Memorandum, Section III., p. 3, for further discussion.

4. Staff's recommendations, including decreasing the ACA balance by $239,162.11 to correct the error discussed above, are discussed throughout its Memorandum and summarized in Section VII., p. 11.

5. Staff suggests the Commission direct MGE to respond with a written response to all of Staff's recommendations, including those on Hedging, Reliability Analysis, and Gas Supply Planning Improvement, within 45 days of this filing.

WHEREFORE, based on the reasons stated above and explained in Staff's Memorandum, the Staff recommends the Commission issue an order directing MGE to respond to all of Staff's recommendations contained in its Memorandum within 45 days.

Respectfully submitted,

/s/ Robert S. Berlin
Robert S. Berlin
Senior Counsel
Missouri Bar No. 51709

Attorney for the Staff of the
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102
(573) 526-7779 (Telephone)
(573) 751-9285 (Fax)
email: bob.berlin@psc.mo.gov

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, or transmitted by facsimile or electronic mail to all counsel of record this 3rd day of December, 2012.

/s/ Robert S. Berlin

MEMORANDUM

TO: Missouri Public Service Commission Official Case File, Case No. GR-2011-0290
Missouri Gas Energy, a Division of Southern Union Company

FROM: David M. Sommerer, Manager - Procurement Analysis
Anne Crowe, Regulatory Auditor - Procurement Analysis
Lesa A. Jenkins, PE, Regulatory Engineer - Procurement Analysis
Kwang Choe, PhD, Regulatory Economist

/s/ David M. Sommerer 11/30/2012	/s/ Bob Berlin 11/30/2012
Project Coordinator / Date	Staff Counsel's Office / Date

SUBJECT: Staff's Recommendation in Missouri Gas Energy's 2010-2011 Actual Cost Adjustment Filing

DATE: November 30, 2012

I. EXECUTIVE SUMMARY

On October 18, 2011, Missouri Gas Energy (MGE or Company) filed its Actual Costs Adjustment for the 2010-2011 period. The filing, in case GR-2011-0290, 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, 2010, to June 30, 2011. 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.

This ACA Memorandum is organized into the following sections:

Staff has identified an over-recovery by the Company in the amount of $239,162.11. Staff proposes an adjustment in that amount to the Company's filed June 30, 2011 ACA account balance and provides recommendations to the gas purchasing practices.

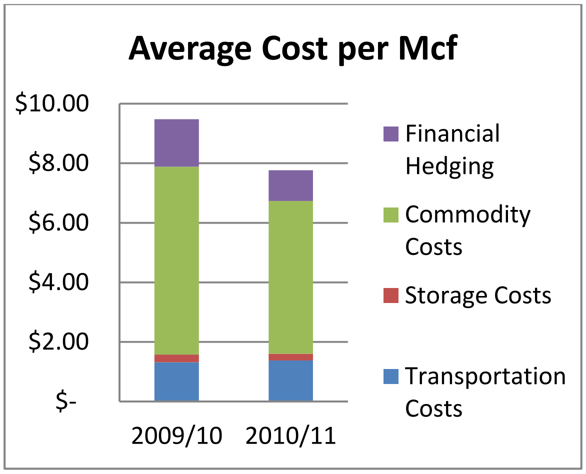
STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

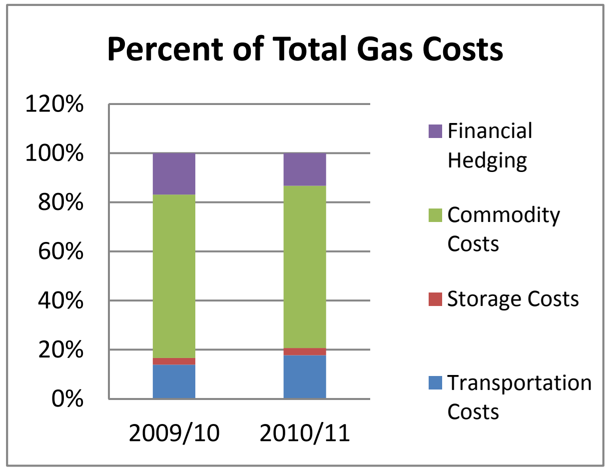
II. BACKGROUND

MGE served an average of 505,211 customers in the Kansas City, Joplin and St. Joseph areas during the 2010-2011 ACA period. MGE transports its gas supply over Panhandle Eastern Pipe Line (PEPL), Southern Star Central Gas Pipeline (SSC), Kinder Morgan Interstate Gas Transmission (KM), and Rockies Express Pipeline (REX).

During this ACA period Staff notes two long term gas supply agreements expired. These twenty year gas supply agreements were the result of a settlement of litigation with natural gas producers who were accused of conspiring to inflate the price of their gas supply.

The following charts show this ACA period's breakdown of gas costs as compared to the prior ACA period. The first chart shows the various components of the Company's gas costs on a per Mcf basis. The second chart shows each of these gas costs as a percentage of the Company's total gas costs.





III. CASE GM-2003-0238 STIPULATION

Southern Union d/b/a MGE filed an Application with the Commission to acquire Panhandle Eastern Pipe Line Company (PEPL) in Case No. GM-2003-0238. The Commission approved the Company's application and the Stipulation and Agreement (Stipulation) filed in that case. One condition in the Stipulation requires the Company to maintain at least the same percentage of PEPL discounts it was receiving prior to the acquisition of PEPL. In this ACA case the Company adjusted its ACA balance in order to meet the terms of the discount condition in the Stipulation. Staff identified a miscalculation in the amount of the Company's adjustment. Therefore the Staff recommends the Company decrease its ACA balance by $239,162.11 in order to correct the error.

IV. FEDERAL ENERGY REGULATORY COMMISSION (FERC) INVESTIGATION

In prior ACA cases, the Staff expressed concerns with MGE transactions that may have violated the Federal Energy Regulatory Commission (FERC) rules regarding capacity release. Once MGE became aware of the Staff's concerns, it contacted the FERC Office of Enforcement, conducted an internal review of its transactions, submitted a written self-report to FERC, and it implemented a compliance program to ensure it met the FERC requirements going forward. In the current ACA case, Staff did not find similar questionable transactions.

In 2008, the FERC Office of Enforcement Staff opened an investigation into MGE's possible capacity release violations. On May 29, 2012, FERC Office of Enforcement Staff issued a notice stating it, ". . . has preliminarily determined that Missouri Gas Energy (MGE) violated the Commission's capacity release regulations and requirements . . .". Subsequently on August 23, 2012, the FERC approved the Stipulation and Consent Agreement between the Office of Enforcement and MGE. The FERC Order states that, ". . . it resolves the investigation into certain violations by MGE of the Commission's capacity release regulations and policies . . .". In addition, MGE agreed to pay a civil penalty of $35,000 and to submit semi-annual compliance monitoring reports to the Enforcement staff. Based on the FERC Order Staff recommends no adjustment to MGE's ACA balance.

V. RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING IMPROVEMENT

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.

Staff has no proposed financial adjustments for the 2010/2011 ACA period related to Reliability Analysis and Gas Supply Planning section.

MGE's primary service areas are: Kansas City, St. Joseph and Joplin. MGE has approximately 400,400 firm customers in the Kansas City area, 28,200 in St. Joseph, and 79,400 in Joplin, for a total of 508,000 firm customers (MGE Demand/Capacity Analysis, November 2009). For the 2010/2011 ACA, MGE reports an average of 442,202 residential customers, 62,710 commercial customers, 299 industrial customers, and 1,174 transport customers, for an average total of 505,211 customers, which is down from its estimate of 510,032 customers in the 2009/2010 ACA. To assure that each area has sufficient transportation capacity, MGE must consider the capacity available for each area. In its Demand/Capacity Analysis dated November 30, 2009 (November 2009 Analysis), MGE plans its capacity by service area.

Although Staff has proposed no financial adjustments, Staff has the following comments, concerns, and recommendations regarding reliability analysis and gas supply planning:

A. CAPACITY PLANNING

1. Demand/Capacity Analysis for MGE's Three Service Areas

For its short term and long-term monthly gas requirements and peak day requirements planning, the Company refers to its November 2009 Analysis. MGE uses the same analysis for the 2010/2011 ACA as that used for the 2009/2010 ACA.

Staff's concerns with the MGE methodology in calculating peak day requirements are documented in prior ACA recommendations and in testimony in GR-2003-0330. Staff's concerns for the November 2009 Analysis include the following:

- MGE's methodology for subtracting a different baseload each winter based on average July/August usage is not reasonably supported. MGE does not support why it would expect usage in July and August to represent baseload usage in the winter months. Customer habits could change for winter months. MGE subtracts the average July/August baseload, a different value each year, and then determines whether it believes another baseload amount (y-intercept) is significant. It treats the y-intercept like a variable, but does not include the variable in the data set considered in its regression analysis. It considers other factors as variables, such as heating degree days (HDD), Trend, and Day-of-Week, and each of these variables has a value in the data considered in the regression analysis.

- MGE relies on a few data points over a 10 year period. MGE should consider additional data points for more recent years, excluding older data because customer habits and systems may have changed. The more recent data could still be limited, such as by including only data with temperatures below a specified temperature (data above a specific HDD). A chart of more recent data may assist MGE in determining a reasonable break point for the data to include in the analysis.

- In its regression analysis MGE sets the y-intercept to zero and reports a high R-square. Literature on regression analysis notes problems with the R-Square calculation when the intercept is set to zero, such as obtaining different outputs using different software and diminishing the model's fit to the data.[1]

- MGE's methodology considers usage for cold days during 1999/2000 through 2008/2009. It applies no growth (positive or negative growth) in 2009/2010, the first year of its estimate. It applies a growth factor to the 2009/2010 peak day estimate to obtain the estimate for 2010/2011. MGE should review why it is not adding any growth (positive or negative growth) in the first year of its estimate.

- MGE compares the peak day estimates in the November 2009 Analysis to those in its prior two Demand/Capacity Analysis reports. MGE's estimates in the prior MGE Demand/Capacity Analysis reports are specific to that year, not for the 2009/2010 winter or 2010/2011 winter. MGE has not factored in the growth or trend estimates to update the information for 2009/2010 or 2010/2011. MGE should review estimates for similar time periods before it draws conclusions on whether the estimates are consistent or are of concern.

[1] Eisenhauer, Joseph. (2003). Regression through the Origin. *Teaching Statistics*, Volume 25, Number 3

Staff recommends MGE continue to evaluate whether its peak day methodology is reasonable and revise its planning as necessary to adequately prepare for peak day requirements.

2. Other MGE Capacity Studies

In addition to the peak day studies and capacity available to meet those requirements for each of its three service areas, MGE conducts studies in other areas of its service area that are potentially constrained. MGE also evaluates requirements related to a specific pipeline.

a. Panhandle Eastern Pipe Line (PEPL) Capacity

MGE refers to the August 2009 Peak Day and Demand/Capacity Analysis for its area that is served by Panhandle Eastern Pipe Line, the same analysis it used for the 2009/2010 ACA. Staff concerns with the study methodology are similar to Staff's concerns for the overall MGE Demand/Capacity analyses (the November 2009 Analysis), as discussed in Section V.A.1.

b. Capacity for North Kansas City

MGE provided its 2009 North Kansas City study and provided work papers for the 2008 and 2009 North Kansas City studies in the 2007/2008 ACA, GR-2008-0367. Staff's concerns with the peak day estimates and the documentation of its capacity planning for North Kansas City are the same concerns Staff expressed in its recommendation in GR-2008-0367, filed 12/30/2009 (pages 6-7).

Staff recommends MGE continue to evaluate whether the methodologies of all of its capacity studies are reasonable and revise its planning as necessary to adequately prepare for peak day requirements.

B. SUPPLY PLANNING FOR WARM WEATHER AND COLD WEATHER

MGE's Monthly Supply/Demand Summaries contain daily estimates for "Average Ultimate Warm" and "Average Ultimate Cold." These estimates are different from the warm and cold estimates in MGE's November 2009 Demand/Capacity Analysis. Reviewing its daily supply plans for a warm day is appropriate because MGE could have much lower supply requirements for a warm day compared to that needed for a warm month.

It is reasonable for MGE to consider daily extremes for each month, but its estimates for "Average Ultimate Warm" and "Average Ultimate Cold," should be updated routinely and the MGE calculation methodology should be re-evaluated. MGE's "Average

Ultimate Warm" and "Average Ultimate Cold" estimates in its Monthly Supply/Demand Summaries are of concern because:

- MGE support , DR6.1, for the "Average Ultimate Warm" and "Average Ultimate Cold" estimates in its Monthly Supply/Demand Summaries references the MGE October 2004 Demand/Capacity Analysis, which considered usage data from 1997/1998 to 2003/2004. MGE should have updated its estimates using more recent data it had available from the three studies it conducted after 2004, the January 2006 Demand/Capacity Analysis, the November 2007 Demand/Capacity Analysis, and the November 2009 Demand/Capacity Analysis

- MGE considers factors other than baseload and heatload in its monthly estimates. Those factors are different for each month for each system. The MGE factors each month may include an additional constant (in addition to its baseload number), day of week, trend, and day of month. However, to develop a monthly estimate for its "Average Ultimate Warm" and "Average Ultimate Cold," MGE takes the peak day estimate, subtracts the baseload, and calculates an "Incl Factor", by simply dividing by the peak heating degree day for Kansas City and St. Joseph. It is not appropriate to bundle all the MGE factors (heating degree day, additional constant, day of week, trend, and day of month) to create a revised heating degree day (HDD) factor. The variables, (1) additional constant, (2) day of week, (3) trend, and (4) day of month, are different from the HDD variable. For monthly planning, MGE may determine that it is more efficient to develop an estimate that only considers baseload and HDD, but its calculations should be supported in its most recent Demand/Capacity analysis.

C. SCHOOL AGGREGATION CAPACITY RELEASE

The MGE tariff requirements for capacity release to schools that are LGS or SGS customers are not clear. **To address the Staff questions and concerns, Staff recommends MGE work with Staff to amend the following tariff sheets no later than the Company's next general rate case.**

- School Transportation Program (STP), Tariff Sheet Nos. 54 to 58.4
- Small General Gas Service (SGS), Tariff Sheet Nos. 27 to 29.1:
- Large General Gas Service (LGS), Tariff Sheet Nos. 30 to 35:

Staff's questions and concerns are addressed below.

1. Capacity Release Requirements are not clear for schools that are LGS customers.

   The LGS provision on tariff Sheet No. 30.1 references the School Transportation Program (STP) tariff schedule.

For LGS customers that are schools, should MGE release capacity based on the requirement is the STP Tariff Sheet No. 56 or the requirements in the LGS Tariff Sheet No. 30.1?

- Sheet No. 56 states: The Company shall determine the amount of capacity needed to be released based on the participating eligible school entities' total peak month with an assumed peak day requirement equal to 150% of the average daily consumption during such peak month.

- Sheet No. 30.1 states: Pool operator agrees to accept a pro-rata release of Company's pro-rata share of the applicable interstate pipeline's firm capacity excluding storage capacity. This pro-rata share shall be based on the customer's peak month demand volume in order to pay the pipeline for that released capacity.

For LGS school customers, does the MGE tariff allow MGE the flexibility to them to acquire capacity from sources other than MGE after a primary term of 12 months (and prior to 10/1/2013), as stated by MGE in Data Request No. 52.2? If the capacity is from sources other than MGE, MGE will not have knowledge or control of whether the school or its marketer is obtaining firm capacity or interruptible capacity, and if that capacity is obtained in the capacity release market, whether that capacity is recallable.

Tariff Sheet No.30.2 contains the following:

- Not less than forty-five (45) days prior to renewing the release of capacity for a customer for the next twelve-month period, MGE will provide notice to the customer and/or the customer's agent of the volumes to be released for such customer.

- After October 1, 2013, the sales customers that converted to transportation service prior to that date, or the customer's agent, will be responsible for acquiring transportation capacity for the customer and MGE will have no obligation to release pipeline capacity to those customers or pool operators.

In the 7/5/12 conference call, MGE referred to the statute provision regarding treating schools the same as large customers. The MGE tariff does not use the same terms as the statute (e.g. large industrial or commercial basic transportation customers). Are schools that are LGS transportation customers considered commercial basic transportation customers?

Section 5 of 393.310 RSMO, states:

> Except as may be mutually agreed by the gas corporation and eligible school entities and approved by the commission, such tariffs shall not require eligible school entities to be responsible for pipeline capacity charges for longer than is required by the gas corporation's tariff for large industrial or commercial basic transportation customers.

2. Capacity Release Requirements are not clear for schools that are SGS customers

This issue is similar to the capacity release for schools that are LGS customers. However, different MGE tariff sheets are referenced.

Per MGE Tariff Sheet No. 27, Transportation service under the SGS schedule is only available to schools receiving transportation service under the School Transportation Program (STP) tariff schedule.

For SGS customers that are schools, should MGE be required to release capacity based on the requirement in the STP Tariff Sheet No. 56 or can the schools obtain capacity from sources other than MGE after a primary term of 12 months, as stated by MGE in Data Request No. 52.2? If the capacity is from sources other than MGE, MGE will not have knowledge or control of whether the school or its marketer is obtaining firm capacity or interruptible capacity, and if the capacity is obtained in the capacity release market, whether that capacity is recallable.

- Sheet No. 56 states: The Company shall determine the amount of capacity needed to be released based on the participating eligible school entities' total peak month with an assumed peak day requirement equal to 150% of the average daily consumption during such peak month.

In the 7/5/12 conference call, MGE referred to the statute provision regarding treating schools the same as large customers. The MGE tariff does not use the same terms as the statute (e.g. large industrial or commercial basic transportation customers). Are schools that are SGS transportation customers considered commercial basic transportation customers?

VI. HEDGING

In its review of MGE’s purchasing practices, the Staff reviewed the Company’s financial hedging transactions. The Staff also reviewed the Company’s natural gas hedging policy, natural gas trading procedures, and 2010 – 2011 hedging strategy.

The Company executed the financial hedging transactions for the 2010-2011 ACA period based on the 24-month hedging plan. MGE combined storage and financial instruments to hedge portions of the volumes needed for the winter heating season, November 2010 through March 2011. MGE utilized swaps for its financial instruments and the Company started placing the financial hedges from winter 2008 and continued purchasing them through summer 2010. MGE hedged 65% of normal winter requirements with storage and swaps. Storage made up 40% of the normal winter requirements. The Company employed both time-based as well as discretionary approaches to execute its financial hedging transactions. Nevertheless, the discretionary purchases contained the larger portion of the financial hedging transactions.

Staff is concerned about the continued negative financial impacts from the hedging transactions in this ACA period. Although Staff is not suggesting that the Company should or could design its hedging strategy to beat the market, the Company's hedging plan should be flexible enough to incorporate changing market circumstances.

The Company should evaluate its hedging strategy in response to changing market dynamics to balance the cost of hedging against the goal of price stabilization, and thus to achieve a cost effective hedging outcome. For example, the Company should evaluate whether extensive reliance on swaps and the volumes associated with them are appropriate under the current market where the market prices have become less volatile. The Staff does note that recent MGE updates have referenced its use of call options as a supplement to the use of swap instruments. Call options allow participation in downward price movements albeit at the cost of a premium for the option.

A part of the Company's hedging strategy was based on price view, that is, where the Company executed some of its hedging transactions when the Company viewed the prices were relatively low. Nevertheless, the Company should be aware of any fundamental shifts in the market dynamics, while being cautious on the market views.

The Staff also recommends the Company update its price risk management and procurement program (PRIMAP) in order to be able to make informed hedging decisions under the current market condition. For example, the Company should evaluate whether the price triggers prescribed in the PRIMAP are appropriate on a moving forward basis.

The Company should also regularly examine the balance between storage and other financial hedging instruments in the overall hedging portfolio for a warmer weather scenario as well as for normal load. The Staff further recommends the Company continue to document its hedging decisions and provide the documentation to the Staff during each ACA review. This documentation should include an overall hedging plan that addresses hedging goals, objectives, and strategies for each month of each ACA review and the circumstances under which certain hedging transactions occurred.

The hedging plan should be updated, documented and completed well in advance of each approaching winter season. The Company should also continue to carefully evaluate longer-term time horizons for placing hedges as it extends the forward purchasing window.

Finally, the Staff recommends the Company continue to assess and document the effectiveness of its hedges for the 2011-2012 ACA period and beyond. The analysis should be meaningful and include, but not be limited to, whether the hedging implementation was consistent with the hedging plan, testing for hedge effectiveness for any financial instruments that attempt to hedge the physical price risk exposure, identifying the benefits/costs based on the outcomes from the hedging strategy, and thus, evaluating any potential improvements on the future hedging plan and its implementation. If the Company plans to change hedging strategies, the Company should provide the Staff with copies of all analyses, including any and all documents regarding changes to the Company's hedging policy / plan.

VII. RECOMMENDATIONS

The Staff recommends that MGE:

1. Decrease its ACA balance by $239,162.11 in order to correct an error it made when adjusting its ACA balance to comply with the Stipulation in Case No. GM-2003-0238.

2. Establish the following ACA and Refund account balances shown in the table below to reflect the (over)/under-recovery balances as of June 30, 2011. An over-recovery reflects the amount that is owed to the customer by the Company and is shown in the table below as a negative number. An under-recovery is an amount that is owed to the Company by the customers and is shown in the table below as a positive number.

Account	6-30-11 Ending Balances per MGE Filing	2009/2010 Prior Period Staff Adjustment	Current ACA Period Staff Proposed Adjustment	6-30-11 Staff Recommended Ending Balances
ACA Balance	$ 1,424,872.80	$ 66,399.64	$ (239,162.11)	$ 1,252,110.33

3. Respond to the Staff comments, concerns, and recommendations in the Reliability Analysis and Gas Supply Planning Improvement section related to capacity planning, supply planning, and school aggregation capacity release.

4. Respond to the concerns / comments expressed by Staff in the Hedging Section.

5. File a written response to all recommendations included herein within 45 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's PGA/ACA	)	
	)	GR-2011-0290
	)	

AFFIDAVIT OF DAVID M. SOMMERER

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

David M. Sommerer, being of lawful age, on his oath states: that as a Utility Regulatory Manager in the Procurement Analysis Unit, Utility Services Department, Regulatory Review Division, he has participated in the preparation of the foregoing report, in memorandum form, consisting of 11 pages to be presented in the above case; that he has verified that the foregoing Staff Memorandum was prepared by himself and Staff of the Commission that have knowledge of the matters set forth as described below; that he has verified with each of the Staff members listed below that the matters set forth in the Staff Memorandum are true and correct to the best of his knowledge and belief,

Lesa A. Jenkins, P.E., Regulatory Engineer:	Reliability Analysis & Gas Supply Planning
Anne Crowe, Utility Regulatory Auditor IV:	Billed Revenues and Actual Gas Costs
Kwang Choe, PhD, Regulatory Economist II:	Hedging

that he has knowledge of the matters set forth in such report and that such matters are true to the best of his knowledge and belief.

David M. Sommerer
David M. Sommerer

Subscribed and sworn to before me this 30th day of November, 2012.

D. Suzie Mankin
Notary Public

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 08, 2012
Commission Number: 08412071