MEMORANDUM

TO: Missouri Public Service Commission Official Case File,
Case No. GR-2013-0422 Missouri Gas Energy

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

/s/ David M. Sommerer 10/14/14
Project Coordinator / Date

/s/ Jeff Keevil 10/14/14
Staff Counsel's Office / Date

/s/ Lesa Jenkins P.E., 10/14/14
Utility Regulatory Engineer II / Date

SUBJECT: Staff's Recommendation in Missouri Gas Energy's 2012-2013 Actual Cost Adjustment Filing

DATE: October 14, 2014

I. EXECUTIVE SUMMARY

On October 17, 2013, Missouri Gas Energy ("MGE" or "Company") filed its Actual Cost Adjustment (ACA) for the 2012-2013 period in case GR-2013-0422. This filing contains the Company's ACA account balance calculation.

Effective July 31, 2013, the Missouri Public Service Commission ("Commission") authorized the sale of MGE to Laclede Gas Company. The closing date of the sale was September 1, 2013.

The Commission's Procurement Analysis Unit (Staff) reviewed and evaluated MGE's billed revenues and actual gas costs for the period of July 1, 2012, to June 30, 2013. 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.

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** Denotes Highly Confidential Information **

Staff proposes an adjustment in the amount of $9,738 to MGE's ACA account balance for the 2012-2013 ACA period. The adjustment relates to the school transportation program balancing fees collected by the Company that should have been included in the ACA account. In addition, as a result of its review, the Staff has provided its comments and recommendations regarding Reliability Analysis and Gas Supply Planning, and Hedging, within each of these sections of the memorandum.

Staff recommends the Commission establish the ACA account balance shown in the table below to reflect the under-recovery balance as of June 30, 2013. 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	Ending Balance per MGE Filing 6-30-13	Current ACA Period Staff Proposed Adjustment	Staff Recommended Ending Balance 6-30-13
ACA Balance	$ 3,415,466.65	$ (9,738)	$ 3,405,728.65

Additionally, Staff recommends the Commission order the Company to respond to this Staff Recommendation Memorandum within 60 days.

This ACA Memorandum is organized into the following sections:

Each section explains Staff's concerns and recommendations.

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

II. BACKGROUND

MGE served an average of 501,935 customers in the Kansas City, Joplin, and St. Joseph areas during the 2012-2013 ACA period. 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.

Staff has no proposed financial adjustments for the 2012/2013 ACA period related to Reliability Analysis and Gas Supply Planning.

MGE's primary service areas are: Kansas City, Joplin, and St. Joseph. For the 2012/2013 ACA, MGE reports an average of 439,931 residential customers, 61,707 commercial customers, 297 industrial customers, and 1,288 transport customers, for an average total of 501,935 customers, similar to its average of 501,574 customers in the 2011/2012 ACA.

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

For its short term and long-term monthly gas requirements and peak day requirements planning, the Company refers to two of its Demand/Capacity Analyses:

- Demand/Capacity Analysis dated December 2011 (December 2011 Analysis) received by Utility Services 1/6/2012, and provided by MGE in Case No. GR-2012-0262, Data Request (DR) 6.
- Demand/Capacity Analysis dated January 2013 (January 2013 Analysis) received by Utility Services 1/31/2013, and provided by MGE in Case No. GR-2013-0422, DR57.

The Demand/Capacity Analysis is developed by MGE to project natural gas demand and compare those projections to the Company's pipeline transportation capacity for the three areas of Kansas City, Joplin, and St. Joseph.

Staff's concerns with the MGE methodology in calculating peak day requirements (also referred to as design day requirements) are documented in prior ACA recommendations and in testimony in Case No. GR-2003-0330. Staff comments on the December 2011 Demand/Capacity Analysis are included in the 2011/2012 ACA recommendation, Case No. GR-2012-0262. Staff's concerns for MGE's January 2013 Demand/Capacity Analysis include the following:

1. MGE's Peak Day/ Design Day Estimates for the Three Service Areas

   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.

   - MGE's methodology for subtracting a differing 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 Weekday-Weekend, 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 (appliances, insulation, etc.) may have changed. The more recent data could still be limited, such as by including only data with temperatures below a specified temperature. 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]

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

The Adjusted R-Squared for the winter data is as follows:

Reliability Analysis and Gas Supply Planning, Table 1	
Adjusted R-Squared	Kansas City
January 2013 Demand/Capacity Analysis, DR59	0.961
MGE Workpapers, GR-2013-0422, DR59 Same data as above, but other Excel output	0.267
Staff Regression of Same Data, but not setting y-intercept = 0	0.552

2. Capacity and Reserve Margin for MGE's Three Service Areas

If changes are made to the demand or capacity reported in the MGE Demand/Capacity Analysis or the capacity available to each area (Kansas City, Joplin, and St. Joseph) is less than the contracted capacity, capacity being relied on for peak day should be clearly documented as part of MGE's process for justifying its transportation capacity decisions and the reserve for each area.

MGE is paying for firm market area capacity, but it is not all deliverable to each area for a peak day. MGE uses some of the pipeline capacity to transfer natural gas from one pipeline to another to get the natural gas to the appropriate delivery areas. For its analysis of required upstream capacity, MGE refers to its Southern Star Central (SSC) pipeline contracts for SSC Production Area and Market Area Requirements, and its analysis in Case No. GR-2013-0422, DR73.

There are concerns with MGE's analysis of capacity available for cold days:

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B. PIPELINE CAPACITY REPORTING

MGE has made decisions regarding capacity that expired in October 2013, but it has not provided the revised transportation contracts that will impact the 2013/2014 winter. The MGE decisions reduce the volume of capacity available for the 2013/2014 winter. MGE also has contract expirations in March 2015.

MGE has not provided the addendum to the Demand/Capacity Analysis required in Case No. GM-2013-0254 for the pipeline capacity changes that impact the 2013/2014 winter. The Order Approving Unanimous Stipulation and Agreement for the Laclede Group and Laclede Gas Company acquisition of MGE from Southern Union was issued 7/17/13 and effective 7/31/13. The Stipulation and Agreement (S&A) included provisions related to Interstate and Intrastate Transportation and Storage costs (pp 29 – 31 of S&A), a portion of which follows:

> If Laclede Gas revises the transportation capacity or storage capacity from that identified in the Demand/Capacity Analysis, Laclede Gas shall prepare an addendum to the Demand/Capacity Analysis within 6-months of making such changes, explaining the changes and the rationale for the changes, and provide the addendum to Staff and OPC. Laclede Gas shall file the Demand/Capacity Analyses and addendums, in EFIS, under case number GM-2013-0254.

There is an SSC notice dated 3/31/14 stating SSC awarded capacity to successful bidder, Laclede Gas Company- MGE Division. The SSC Open Season states capacity available beginning 4/1/14, but no details of the award quantity and term are provided by SSC or MGE. Any capacity would first impact the winter of 2014/2015. An update is expected based on the timing and other requirements in the Order Approving Stipulation and Agreement in Case No. GM-2013-0254.

C. GAS SUPPLY BID ANALYSIS & SUPPLY SELECTION

An LDC typically has natural gas supplies from various types of supply agreements including baseload/term, swing/call, or daily/spot agreements. An LDC may have storage contracts for injections and withdrawal of natural gas.

- Baseload (or term) supply agreements are for the same contracted quantity to flow each day of the month during the term of the agreement (one month or multiple months). Baseload/term supply agreements may be set up in the month prior to the date of flow or may be set up many months in advance of the flow month.
- Swing (or Call) supply agreements have a specified maximum daily quantity, but allow nominations of zero up to the maximum daily quantity. Swing supply agreements may be for one or multiple months and are generally set up prior to the beginning of the winter. Swing agreements provide the LDC with flexibility

to increase or decrease nominations, daily if needed, in response to changing weather and customer requirements and for flexibility in managing storage balances, but without the necessity to be in the daily market trying to find natural gas supplies.

- Daily (or spot) agreements can be contracted for a term of one day or multiple days. Daily/spot gas can be set up one day or many days prior to the date of flow.

MGE's DR44 response includes an Excel spreadsheet attachment summarizing the Winter 2012/2013 bids received. Although not labeled in the files, the "Call" bids appear to be in red font and the "Term" bids appear to be in black font. The MGE RFP response summary does not indicate which bids were awarded.

MGE should clearly indicate which bids are for calls and which are for term supply. MGE should clearly indicate which bids are awarded supply contracts and when the lowest cost bid is not awarded a supply agreement, MGE should clearly indicate the rationale for the award made.

D. MONTHLY SUPPLY/DEMAND SUMMARY

One of the documents used by MGE for its monthly supply planning is its monthly Supply/Demand Summary.

1. Source of Peak Day Estimate

For 2012/2013, MGE's Monthly Supply/Demand Summary takes its peak day for December 2012 and January 2013 from the MGE December 2011 Demand/Capacity Analysis, Table F-4, but it uses MGE's peak day estimate for 2010/2011 not the peak day for 2012/2013 that would be applicable for this ACA period.

For 2012/2013, MGE's Monthly Supply/Demand Summary takes its peak day for February and March 2013 from the MGE January 2013 Demand/Capacity Analysis, Table F-4, which are the MGE updated estimates available to it.

This is not a material issue for this ACA, but MGE should review its planning to assure it is using the correct estimates from its Demand/Capacity Analyses.

2. Supply Planning for Warm Weather

MGE's Monthly Supply/Demand Summaries also contain daily estimates for "Average Ultimate Warm". These estimates are different from the warm estimates in MGE's December 2011 and January 2013 Demand/Capacity Analysis reports. 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.

Staff previously had concerns that MGE had not updated the estimates that were based on the MGE October 2004 Demand/Capacity Analysis, which considered usage data from 1997/1998 to 2003/2004. MGE provided workpapers in this ACA indicating its estimates were based on updated data in the December 2011 Demand/Capacity Analyses that considered data from 2001/2002 through 2010/2011. However, MGE's Supply/Demand Summaries warm estimates are developed from data in its peak day estimate that only considered high usage days that were also in the top ten coldest days for each winter season and modifies those results to obtain its estimates for "Average Ultimate Warm". MGE reviews only cold weather data and makes no attempt to review warm weather usage in the winter months. The high usage analysis should not be used to estimate "Average Ultimate Warm". Additionally, MGE's estimates for "Average Ultimate Warm" are much different than actual warmest day usage for 15-years of MGE data.

MGE should review and update its methodology for estimating warm weather usage for its Supply/Demand Summaries.

3. Monthly Usage Estimates

MGE's December 2011 Demand/Capacity Analysis and January 2013 Demand/Capacity Analysis include estimates of monthly demand. In addition to a baseload factor and a heatload factor, MGE's estimates of monthly demand consider factors such as a daily constant factor (in addition to the baseload factor), a daily trend factor that adjusts based on the year of the data, and a day-of-month factor. However, MGE's monthly estimates in its Supply/Demand Summary only include a baseload factor and a heatload factor.

MGE should consider why it is developing estimates of monthly demand estimates in its Demand/Capacity Analysis but utilizing a different methodology for the estimates in its Monthly Supply/Demand Summary.

IV. SCHOOL TRANSPORTATION PROGRAM

In accordance with Section 393.310 RSMo, MGE's tariff permits schools to participate in a School Transportation Program ("STP"). This program allows the schools to aggregate purchasing of their gas supplies and pipeline transportation. Schools choosing to participate in this program are responsible for obtaining their own natural gas supplies and interstate pipeline capacity to transport their gas to MGE's system. MGE then transports the schools' gas to their premises.

"Balancing" by a transportation customer or a pool of transportation customers means the amount of gas put into MGE's system (receipts) is equal to the amount used or taken out of

MGE's system (deliveries). When a transportation customer puts more or less gas into MGE's system than they use, this is referred to as an "imbalance."

A. BALANCING FEES

MGE's tariff requires schools participating in the STP to pay a balancing fee and MGE to credit the balancing fee to MGE's PGA/ACA. Tariff Sheet No. 55 states:

> An eligible school entity enrolled in the STP shall be assessed a Balancing Fee of $.001 per Ccf for all gas delivered through any meter on which EGM equipment is not installed. This fee is intended to recover costs for such customers associated with any difference between actual daily deliveries and actual daily consumption. **This fee shall be credited to the Purchased Gas Adjustment Clause** and is subject to adjustment on an annual basis. (emphasis added)

Staff found that MGE did not credit the balancing fee paid by the schools to the Purchased Gas Adjustment Clause as its tariff requires. Therefore, Staff recommends MGE credit its ACA account in the amount of $9,738 to adjust for the school balancing fees for this ACA period.

B. CASH OUTS

Transportation customers' imbalances may impact MGE's management of its gas supply which can have an effect on the gas costs of its firm sales customers. Transportation customers' imbalances could cause MGE to buy additional, higher-priced gas in the daily gas market for those imbalances; inject or withdraw natural gas in storage for those imbalances; and/or increase or decrease MGE's monthly gas supply purchases. All of these actions could cause the firm sales customers' gas costs to be higher than they otherwise would have been.

MGE's transportation tariffs contain a "Cash Out" provision which reconciles a transportation customer's imbalance by requiring MGE to either buy or sell gas to the transportation customer equal to the customer's monthly imbalance. At the end of each month, if the transporter used more gas than it put into MGE's system, then the transporter pays MGE for the additional gas supplies it used. If the transporter used less gas than it put into the system, MGE purchases this gas from the transportation customer through a credit on the customer's bill. The purchase or sale price of supply is tied to a monthly index and either increases or decreases depending upon the magnitude of a transporter's imbalance. The greater the imbalance, the higher price the transporter pays or the more discounted price it receives for its gas supply. The Cash Out provision is important because it provides an incentive for transportation customers to minimize their imbalances. The cost of the gas purchased or sold to transportation customers through the Cash Out process flows through the PGA/ACA account.

Because imbalances of transportation customers may impact the gas costs of firm sales customers and due to the volatility in gas prices this past winter, Staff's review for this ACA period included procedures focused on the STP. This included a detailed review of the STP tariff requirements, nominations, usage, imbalances, rates, and charges.

According to MGE's tariff, the STP customers are subject to the Cash Out of their monthly imbalances. Tariff Sheet No. 58 states:

8. General Transportation Provisions - The following Transportation Provisions (TRPR) also apply to service under this schedule STP:
   a. Responsibility for Transported Gas (Sheet No. 59);
   b. Daily Quantity (Sheet No. 60);
   c. Quality, Heat Content and Delivery Pressure for Transportation (Sheet Nos. 60a, 61 and 61.1);
   d. Cash Out (Sheet 61.2);
   e. Priority of Service (Sheet Nos. 61.4, 62, 62.1 and 63);
   f. Unauthorized Deliveries and Penalties (Sheet Nos. 64, 65 and 66). (emphasis added)

Staff found in this ACA period MGE's practice with regard to the imbalances of its STP customers is not consistent with its tariff. MGE is carrying over the STP customers' imbalances from month-to-month rather than Cashing Out the imbalances for these customers on a monthly basis.

At the time the STP[3] went into effect, MGE's tariff did not contain a Cash Out provision; all transportation customers' imbalances were either carried over to the next month or burner-tipped balanced[4] by the Southern Star Central Pipeline (SSC). MGE's response to DR 85.3 indicates, since the STP went into effect on October 28, 2002, MGE has not changed its practice of carrying over the STP customers' monthly imbalances.

The Cash Out provision was added to the transportation and STP portion of MGE's tariff on November 1, 2003, in Case No. GT-2004-0049. In that case, MGE filed transportation tariff changes in order to address changes proposed by SSC at FERC which would impact the MGE system, including the termination of burner-tip balancing, which shifted the administration of MGE's transportation customers' imbalances from SSC to MGE. Prior to that case, no Cash Out provision existed in MGE's tariff for transportation and STP customers.

[3] MGE's initial STP tariffs were approved by the Commission in Case No. GT-2003-0033.

[4] Burner-Tip Balancing was an agreement where SSC agreed to consider that the transportation customer's actual metered usage, adjusted for losses, was equal to the volumes delivered to MGE's system by SSC on behalf of the transport customer. This meant transportation customers' imbalances were administered by SSC and eliminated transportation customers' imbalances on MGE.

MGE states when it filed tariff sheets implementing the Cash Out provision of its transportation tariffs in Case No. GT-2004-0049, the request was for Large Volume Service (LV) customers only and that to the extent there would be schools taking service under the STP using the LV tariff rates, they would be subject to the Cash Out provision of the transportation tariffs. There are no large volume schools participating in the STP. Prior to the STP tariff, large volume schools could have transported gas as a large volume customer by meeting the volume threshold in the MGE LV tariff. Although Case No. GT-2004-0049 was established to address the daily balancing of natural gas for MGE's Large Volume Transport customers, Staff reviewed the testimony, Unanimous Stipulation and Agreement, and Staff's Suggestions in Support of the Unanimous Stipulation and Agreement in Case No. GT-2004-0049 but found no explanation for adding the Cash Out reference to the STP tariff in that case. There is no qualification in the STP tariff limiting the transportation Cash Out provision to only certain schools participating in the STP. If necessary, MGE should seek to change its tariff going forward. However the statute states that tariffs implementing the school aggregation program will not have any negative financial impact on the gas corporation, its other customers or local taxing authorities.[5]

MGE's tariff contains the rates and charges approved by the Commission that the Company must charge for its services. The STP tariff states that schools participating in the STP are subject to Cash Outs and the Company is required to follow its tariff.

Overall in this period, the STP customers used more gas than they delivered to MGE's system. Staff calculated what the Cash Out amount would have been if MGE had Cashed Out its STP customers' imbalances according to its tariff, and the Cash Out would have decreased gas costs to MGE's system. Staff recognizes that MGE and STP customers may have acted differently if schools had been Cashed Out monthly rather than carrying over imbalances. The STP customers began this period with a positive imbalance, meaning that in the past period they delivered more gas to MGE's system than they used. Staff calculated the value of the positive imbalance using a range of prices from the 2011/2012 ACA period and found an offsetting increase to gas costs. Staff proposes no overall adjustment to the ACA account for this ACA period related to STP Cash Outs. However, there may be adjustments for future periods.

Staff recommends MGE follow its tariff by Cashing Out the STP customers' imbalances on a monthly basis. It is not clear whether the schools realize their monthly imbalances are subject to Cash Out charges. Therefore, the Company may want to notify its STP customers that monthly imbalances are subject to Cash Out charges.

[5] Section 393.310.5 RSMo.

V. TRANSPORTATION CUSTOMER AGENT AGREEMENTS

MGE's tariff requires its class of large general service transportation customers to be a part of an aggregation group (pool). These transport customers designate an Agent which aggregates the individual transport customer's gas supply requirements into a pool and arranges for its delivery to its customers. In order to aggregate or pool its customers' usages for nominating and balancing transportation deliveries, companies acting as Agents must obtain authorization from MGE and do so by signing an ** [redacted] **.

Staff found portions of these Agreements were inconsistent with the MGE tariffs and also were not consistent for all companies acting as agents. During this ACA period, MGE had ** [redacted] **

The tariff applicable to transportation customers Sheet No. 61.2 states:

> *Monthly* volumes of gas delivered to a transportation service customer should, to the extent practicable, match the Company's receipts for the customer less any amount retained by Company according to Section A-6, Retainage.

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The tariff requirements for transportation service, Sheet No. 59.1, states:

> Company must receive changes to pools, in writing, *no later than four (4) business days prior to the end of each month*. (emphasis added)

While LER was not affiliated with MGE in this ACA period, it becomes an affiliate in the subsequent period. The differences in the ** _________ ** may be not be consistent with the Nondiscrimination Standards (2) of the Affiliate Transaction Rule (4 CSR 240-40-016). **Staff recommends MGE modify the ** ______________________________ ** so that it is consistent with MGE's tariff and is consistent for all Agents.**

VI. HEDGING

In its review of MGE's purchasing practices, the Staff reviewed the Company's hedging transactions. The Staff also reviewed the Company's natural gas hedging policy, natural gas trading procedures, and its 2012 – 2013 hedging strategy.

The Company executed the hedging transactions for the 2012-2013 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 2012 through March 2013. MGE utilized swaps for its financial instruments and the Company purchased most of the financial hedges related to the winter of 2012-2013 from late November 2010 through late October 2012. The Company purchased some of the swaps in late November 2012 for March 2013. 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. MGE hedged 61% of normal winter requirements with storage and swaps. The Company employed both time-based as well as discretionary approaches to execute its financial hedging transactions. "Time-based" approaches typically involve the periodic or systematic purchase of hedges on a pre-existing plan in a type of dollar cost averaging, regardless of the current price environment. "Discretionary" approaches entail a judgment regarding the attractiveness of the current price levels. Nevertheless, the discretionary purchases contained the larger portion of the financial hedging transactions.

Staff reviews the prudence of the Company's decision-making based on what the Company knew or reasonably could have known at the time it made its hedging decisions. The Company's hedging planning should be flexible enough to incorporate changing market circumstances. The Company should evaluate its hedging strategy in response to changing market dynamics in light of how much the existing hedging strategy actually benefits its customers while balancing market price risk. For example, the Company should evaluate the costs and benefits of its current strategy of financially hedging summer storage injections under the current market at a time when the market prices have become less volatile. Additionally, the Company should evaluate whether extensive reliance on swaps and the volumes associated with them are appropriate as opposed to call options. The Staff does note that MGE updated its price risk management and procurement program (PRIMAP) that in part reflected the market for this ACA period. The PRIMAP updated market purchase price criteria in incorporating call options in its hedging program to supplement the use of swap instruments. Call options put a ceiling on prices while allowing participation in downward price movements albeit at the cost of a premium for the option. For example, out-of-the-money call options may have a strike price that still affords significant protection near current market prices but at a reduced premium cost. A part of the Company's hedging strategy was based on price view (described as a discretionary approach above), 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.

Finally, the Staff recommends the Company continue to assess and document the effectiveness of its hedges for the 2013-2014 ACA period and beyond in a meaningful way. The analysis should include identifying the benefits/costs based on the outcomes from the hedging strategy, and evaluating any potential improvements on the future hedging plan and its implementation. For example, a summary of how the Company's hedges (swaps) have performed against market pricing, i.e., the impact of purchases without the hedges is useful. This hedge performance or mark-to-market summary over an extensive historical period is helpful in seeing the long term financial impact of the hedge program. The Staff recommends that MGE develop this summary in future ACA periods.

VII. RECOMMENDATIONS

The Staff recommends that MGE:

1. Establish the following ACA account balance shown in the table below to reflect the (over)/under-recovery balance as of June 30, 2013. An over-recovery reflects an amount that is owed to the customer by the Company and is shown as a negative number. 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. MGE has an under-recovery.

Account	Ending Balance per MGE Filing 6-30-13	Current ACA Period Staff Proposed Adjustment	Staff Recommended Ending Balance 6-30-13
ACA Balance	$ 3,415,466.65	$ (9,738)	$ 3,405,728.65

2. Respond to the Staff comments, concerns, and recommendations in the Reliability Analysis and Gas Supply Planning section related to capacity planning, pipeline capacity reporting, gas supply bid analysis and supply selection, and monthly Supply/Demand summary.

3. Respond to the concerns / comments 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 60 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Missouri)
Gas Energy for a PGA Tariff Revision) File No. GR-2013-0422

AFFIDAVIT OF KWANG Y. CHOE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Kwang Y. Choe, being of lawful age, on his oath states: that as a Regulatory Economist II in the Procurement Analysis Unit of the Utility Services Department in the Regulatory Review Division, he has participated in the preparation of the foregoing memorandum consisting of 19 pages to be presented in the above case; that he has knowledge of the matters set forth in the Memorandum pertaining to *Hedging*; and that such matters are true and correct to the best of his knowledge and belief.

Kwang Y. Choe

Kwang Y. Choe

Subscribed and sworn to before me this 14th day of October, 2014.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2016
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Missouri Gas Energy for a PGA Tariff Revision	))	File No. GR-2013-0422

AFFIDAVIT OF ANNE M. CROWE

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

Anne M. Crowe, being of lawful age, on her oath states: that as a Utility Regulatory Auditor IV in the Procurement Analysis Unit of the Utility Services Department in the Regulatory Review Division, she has participated in the preparation of the foregoing memorandum consisting of 19 pages to be presented in the above case; that she has knowledge of the matters set forth in the Memorandum pertaining to *School Transportation Program and Transportation Customer Agent Agreements;* and that such matters are true and correct to the best of her knowledge and belief.

Anne M. Crowe

Anne M. Crowe

Subscribed and sworn to before me this 10th day of October, 2014.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2016
Commission Number: 12412070

D. Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Missouri Gas Energy for a PGA Tariff Revision	))	File No. GR-2013-0422

AFFIDAVIT OF LESA JENKINS

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

Lesa Jenkins, being of lawful age, on her oath states: that as a Utility Regulatory Engineer II in the Procurement Analysis Unit of the Utility Services Department in the Regulatory Review Division, she has participated in the preparation of the foregoing memorandum consisting of 19 pages to be presented in the above case; that she has knowledge of the matters set forth in the Memorandum pertaining to *Reliability Analysis and Gas Supply Planning*; and that such matters are true and correct to the best of her knowledge and belief.

Lesa A. Jenkins

Lesa Jenkins

Subscribed and sworn to before me this 14th day of October, 2014.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2016
Commission Number: 12412070

D Suzie Mankin

Notary Public