

MEMORANDUM

TO: Missouri Public Service Commission Official Case File
Case No. GR-2012-0124, Empire District Gas Company

FROM: David M. Sommerer, Manager – Procurement Analysis
Phil Lock, Regulatory Auditor – Procurement Analysis
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/s/ David M. Sommerer 12/12/12 /s/ Bob Berlin 12/12/12
Project Coordinator / Date Staff Counsel's Office / Date

SUBJECT: Staff Recommendation in Case No. GR-2012-0124, Empire District Gas
Company 2010-2011 Actual Cost Adjustment Filing

DATE: December 12, 2012

EXECUTIVE SUMMARY

On October 21, 2011, Empire District Gas Company (Empire or Company) filed its Actual Cost Adjustment (ACA) for the 2010-2011 annual period for rates to become effective November 4, 2011. This filing revises the ACA rates based upon the Company's calculations of the ACA balance for the 2010 – 2011 period.

The Procurement Analysis Unit (Staff) of the Missouri Public Service Commission has reviewed the Company's ACA filing. A comparison of billed revenue recovery with actual gas costs will yield either an over-recovery or under-recovery of the ACA balance.

Staff conducted the following analyses:

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

**** Denotes Highly Confidential Information ****

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Based on its review, Staff recommends the following accounting adjustments to the Company's filed ACA balances. Positive adjustments represent an increase in gas costs to consumers and negative or "(bracketed)" adjustments reduce their gas costs):

Description	South	North	North	NW	Total
	Firm	Firm	Interruptible	Firm	
Pipeline Imbalance	(\$2,662)				(\$2,662)
Cash-out	\$47,540	\$16,054		(\$481)	\$63,113
** _____ **	(\$29,483)	(\$10)		(\$3,931)	(\$33,424)
** _____ **		\$103,222	(\$103,222)		\$0
Total	\$15,395	\$119,266	(\$103,222)	(\$4,412)	\$27,027

Staff has no adjustments related to reliability analysis and gas supply and planning. However, Staff makes recommendations for this area which are discussed within the Reliability Analysis and Gas Supply and Planning section of the memorandum.

Staff has no adjustments related to hedging. However, Staff makes recommendations for this area which are discussed within the Hedging section of the memorandum.

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

Staff's discussion of its findings is organized into the following five sections:

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

Each section explains Staff's concerns and recommendations.

I. OVERVIEW

Empire separates its gas operations into a South System, a North System, and a Northwest System (formerly L&P).

The larger communities served on the South System include Sedalia, Marshall, Higginsville, Lexington, and Richmond in west-central Missouri and Platte City near Kansas City.

On the North System, the larger communities include Chillicothe, Marceline and Trenton in north-central Missouri.

The Northwest System includes Maryville, which is located in the northwestern part of the state.

Southern Star Central Gas Pipeline (SSCGP) serves customers on the South System. Panhandle Eastern Pipeline Company (PEPL) serves customers on the North System while ANR Pipeline (ANR) serves customers on the Northwest System. In addition, Cheyenne Plains Gas Pipeline Company (CPGP) delivers gas, from Cheyenne Hub just south of Cheyenne, Wyoming to Greensburg, Kansas, to all of the interstate pipelines systems (SSCGP, PEPL and ANR) that serve Empire's customers. During August 2011, there were approximately 28,000 firm sales customers on the South System, 9,000 on the North System, and 5,300 on the Northwest (NW) System.

II. BILLED REVENUE AND ACTUAL GAS COSTS

COMPLIANCE ADJUSTMENTS

SOUTHERN STAR CENTRAL GAS PIPELINE (SSCGP) IMBALANCES

During the months of December 2010 and March 2011 the SSCGP pipeline imbalance (production and market) carried forward from the prior month was improperly stated. To show the proper beginning pipeline imbalances, the December 2010 pipeline imbalance should reflect a \$3,397 [(\$134.32) - \$3,262.34 filed] decrease in the cost of gas. However, the March 2011 pipeline imbalance should reflect a \$735 [\$298.48 - (\$436.24) filed] increase in the cost of gas. Therefore, the net result of Staff's proposed adjustment is a \$2,662 (\$3,397 -\$735) decrease in the cost of gas for South system customers.

CASH-OUTS - AGGREGATION AND LARGE VOLUME

During the month of July 2011 the cash-out imbalances for Aggregation and Large Volume customers (including South, North and NW systems) were filed incorrectly as negative amounts when they should have been filed as positive amounts. A negative entry indicates that an imbalance is due Empire from the Aggregation/LV customers (reduction of gas costs) whereby a positive entry indicates that an imbalance is due the Aggregation/ LV customer (increase in gas costs).

During August 2011 the cash-out imbalance for Aggregation and Large Volume customers on the NW system were filed incorrectly as positive amounts when they should have been filed as negative amounts. In summary, the net effect of the July 2011 and August 2011 cash-out activity results in a \$47,540 (\$29,493.30 + \$18,046.32) increase in gas costs for the South system, a \$16,054 (\$15,725.28 + \$329.02) increase in gas costs for the North system, and a \$481 (\$2,759.16 + \$496.48 - \$3,419.22 -\$317.40) decrease in gas costs for the NW system.

RFP (Request for Proposal)

An RFP is issued to a potential list of suppliers by the LDC in order to solicit competitive prices for the purchase of natural gas under the terms (pricing structure and volume requirements) established by the LDC. Empire traditionally uses the RFP process to purchase long-term gas packages (> 1 year) of fixed price natural gas.

Because gas contracts in excess of one year are not the primary means of procuring gas in this ACA period, documentation for formal RFPs was limited during this ACA. The only RFP documentation received by Staff during this ACA included winter options solicited by Empire for winter peaking supply. Empire uses a less formalized process for procurement of much of its gas supply. This includes requests for bid quotes and bilateral negotiations. The Company states that long term packages of gas are generally documented by email. Monthly and daily index purchases are accomplished through phone calls, IM (instant messaging) and emails to several suppliers for price and volume quotes.

The Staff recommends that for supplies that are acquired outside of a formal RFP process (generally supplies of a term of less than one year), the Company should document the procedure they are using to ensure a robust bidding and evaluation process. The specific methods for seeking the bids and evaluating the best offers should be documented in addition to the methods used to establish a transparent and competitive negotiation process.

For formal structured RFPs, the Staff recommends the Company provide to Staff: (1) a mailing list of RFP's issued; (2) RFP letter issued to supplier with Empire's requirements; (3) copies of written responses received by Empire and (4) the Company's evaluation of responses. Staff proposes no adjustment on this issue.

** _____ **

Empire entered into a contract with ** _____ ** during March 2009 for the purchase of gas delivered from November 2010 to March 2011. The invoiced price of gas includes a fixed price based on the average 2010-2011 winter strip price executed on March 17, 2009 (contract 1) and March 23, 2009 (contract 2). ** _____

_____ **

Empire elected not to trigger ** _____ ** to the pipelines as needed by Empire (SSCGP, PEPL or ANR). The originally billed invoice did not take into account ** _____ ** When the ** _____ **, the original ** _____ ** invoice should be reduced by \$33,424. This reduction was agreed to by ** _____ ** in November 2012 and a check of \$33,424 was issued by ** _____ ** to Empire. This reduction should be allocated (\$29,483) to the South system, (\$10) to the North system and (\$3,931) to the NW system based on deliveries to each system.

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Appendix A

** _____ **

** _____ ** were the only customers on Empire's North System Large Volume Interruptible (LVI) sales customer class from the 2008-09 ACA until December 2011. During this period, ** _____ ** was an LVI sales customer from April 2008 through March 2009. ** _____ ** was an LVI sales customer during the entire period (2008-09 ACA until December 2011). In April 2009, ** _____ ** switched to transportation service. ** _____ ** had a \$53,508 under-recovery ACA balance when it opted for transportation service. According to the Company's tariffs, ** _____ ** should be charged the appropriate ACA charges for a period of one year after it changed service to transportation service. Empire did not take action at first, and after 4-5 months, it elected to collect the \$53,508 ACA balance from ** _____ ** during the period of September 2010 to August 2011 (2010-2011 ACA). The charges billed to ** _____ ** were based on ** _____ ** monthly usage and ACA rate(s) that were in effect from April 2009 - March 2010 (first 12 months after ** _____ ** became a transportation service customer). Empire collected \$103,222 (\$8,601.85 x 12) from ** _____ ** during September 2010 to August 2011. Empire over-collected the ACA charges from ** _____ ** by \$49,714 (\$103,222-\$53,508). These dollars should be refunded to ** _____ **. In addition, ** _____ ** -\$53,508 under-recovery balance was erroneously posted back to the Interruptible ACA account during the 2010-2011 ACA. Because ** _____ ** was the only LVI customer remaining in the interruptible sales class, it was the only customer left to pay the entire interruptible ACA balance. ** _____ ** therefore, should be reimbursed by Empire for its payment of the ** _____ **-related ACA balance of \$53,508.

During the 2010-2011 ACA, Empire erroneously posted the \$103,222 collected from ** _____ ** to the North System firm ACA balance. Therefore, the North System firm ACA under-recovery balance of \$182,143 (August 31, 2011 balance) should be increased by \$103,222 (revenue decrease) to reflect the refunds due to ** _____ **. A corresponding revenue increase of \$103,222 should be posted to the North System interruptible ACA balance. Empire should refund the \$103,222 collected from ** _____ ** in the amount of (\$49,714) to ** _____ ** and (\$53,508) to ** _____ ** as described above.

III. RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

As a gas corporation providing natural gas service to Missouri customers, Empire is responsible for conducting reasonable long-range supply planning to meet its customer needs. Empire must 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 reviews the LDCs' plans and decisions regarding estimated peak-day requirements and the LDC's pipeline capacity levels to meet those requirements, the peak day reserve margin, and the rationale for this reserve margin, and the natural gas supply plans for various weather conditions.

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Staff has the following comments and concerns regarding the reliability analysis:

1. Reserve Margin

The Company's firm sales customer counts continue to decline for all three service areas. The peak day requirements are also declining for the South and North systems. Therefore, the reserve margins continue to increase for the South and North systems. The peak day estimate for the Northwest system has increased for the 2010/2011 ACA, but had previously been decreasing.

The reserve margin is high for the Northwest system. The Northwest system pays for only the capacity that is utilized, therefore Staff is not as concerned with the high reserve margins for that service area.

The North system reserve margin is 12% and the South system reserve margin is 31%. The capacity contracts did not change this ACA period and those contract terms continue through 2018 for both the South and North systems. Therefore, Staff recommends the Company continue to pursue capacity releases for the North and South systems, as appropriate.

The Staff encourages the Company to continue to evaluate and monitor the peak day estimations for all three systems. Doing so will assist the Company in making more accurate capacity decisions in future periods.

2. Cheyenne Plains Invoice Allocation

The Company did not fully utilize its Cheyenne Plains capacity as it has done in prior ACA periods, particularly during the winter months. The Company allocates the Cheyenne Plains invoice on a prorated basis. When Staff reviewed total ACA period costs of the invoices, 63% of the total dollars were paid by the South system which received only 56% of the annual volumes. The South system received 93% of the total winter volumes flowed on the contract and paid 90% of the total dollars. The Company's allocation methodology for this ACA period is not unreasonable. However, should Empire continue with the same allocation methodology in future ACA periods, Staff is concerned that Empire could shift the invoice dollars to one of the smaller systems if it is the sole recipient of supplies during one of the winter months or even if the usage in that month is minimal. Thus, under current practice, if the North and South systems did not have any receipts during the winter months, and the Northwest system received *any* gas at all, then the entire invoice burden would lie on the Northwest service area.

Because the Cheyenne Plains capacity utilization has changed, Staff recommends the Company evaluate its methodology for allocating the capacity in future ACA periods.

IV. HEDGING

The Company has individual gas supply portfolios for each of its three service areas. Staff's comments are provided for each.

EDG's hedging planned target was at 70 - 90% of normal winter requirements while actual coverage was 82% based on the 2010/2011 normal winter volumes. For the South System, EDG hedged about 76% of the normal winter requirements through a combination of storage (33%), fixed price (7%), and financial instruments (36%). EDG purchased the fixed price and financial hedges between spring 2009 and fall 2010. For the North and Northwest Systems, EDG depended on storage for its hedging strategies. For the North System, EDG hedged about 94% of its normal requirements by using storage, while about 84% of the Northwest System's normal requirements came from storage.

Staff reviews the prudence of a Company's decision-making based on what the Company knew at the time it made its hedging decisions. In this ACA period, Staff is concerned with the negative financial impacts from some of Empire's hedging. The Company's hedging planning should be flexible enough to incorporate changing market circumstances, though Staff is not suggesting that the Company should or could design its hedging strategy in order to beat the market. 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 the swaps and the volumes associated with them are appropriate under the current market where the market prices have become less volatile. Based on the response to Staff's data requests on hedging evaluation, EDG appears to trend toward the lower end of the hedging target range for the future winter period (given the reduced upward price volatility in the current market).

Staff recommends the Company be aware of any fundamental shifts in the market dynamics while remaining cautious on the market views. Staff also recommends the Company continue to assess and document the effectiveness of its hedges for the 2011-2012 ACA and beyond. The analysis should include, but not be limited to, whether the hedging implementation was consistent with the hedging plan, 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.

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. EDG should also consider longer term horizons in its hedging strategy. Consideration should also be given to dollar cost averaging concepts when hedging.

Additionally Staff recommends the Company evaluate whether the hedging plan for each of the three systems has operational implications for warm and cold weather conditions.

V. RECOMMENDATIONS

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

1. Adjust the balances in its 2010/2011 ACA filing to reflect the ending (over)/under recovery balances for the ACA, TOP, TC, and Refund accounts per the following table:

TABLE 1

Description (+) Under-recovery (-) Over-recovery	8-31-11 Ending Balances Per Filing	Commission Approved Adjustments prior to 2010-2011 ACA (A)	Staff Adjustments For 2010-2011 ACA	8-31-11 Staff Recommended Ending Balances
South System: Firm ACA	(\$516,071)	\$0	(B) (\$2,662) (C) \$47,540 (D) (\$29,483)	(\$500,676)
Interruptible ACA	\$0	\$0	\$0	\$0
Take-or-Pay (TOP)	\$0	\$0	\$0	\$0
Transition Cost (TC)	\$0	\$0	\$0	\$0
Refund	\$0	\$0	\$0	\$0
North System: Firm ACA	\$182,143	\$0	(C) \$16,054 (D) (\$10) (E1) \$103,222	\$301,409
Interruptible ACA	\$32,109	\$0	(E2) (\$103,222)	(\$71,113)
Take-or-Pay (TOP)	\$0	\$0	\$0	\$0
Transition Cost (TC)	\$0	\$0	\$0	\$0
Refund	\$0	\$0	\$0	\$0
Northwest System: Firm ACA	\$325,947	\$0	(C) (\$481) (D) (\$3,931)	\$321,535
Interruptible ACA	\$0	\$0	\$0	\$0
Take-or-Pay (TOP)	\$0	\$0	\$0	\$0
Transition Cost (TC)	\$0	\$0	\$0	\$0
Refund	\$0	\$0	\$0	\$0

A) All prior period adjustments have been adopted by the Company

B) Pipeline imbalance

C) Cash-outs

D) ** _____ **

E1) ** _____ ** – Decrease revenue recovery by \$103,222 to reflect refunds to

** _____ ** (\$49,713) & ** _____ ** (\$53,509).

E2) Increase revenue recovery on the Interruptible ACA account.

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2. Respond to Staff's recommendations in the Hedging section.
3. Respond to Staff's recommendations in the Reliability Analysis and Gas Supply Planning sections.
4. Respond to recommendations included herein within 45 days.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Gas)
Company's Purchased Gas Adjustment Tariff)
Filing

Case No. GR-2012-0124

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 Department of the Utility Services Division, he has participated in the preparation of the foregoing report, consisting of 9 pages to be presented in the above case; that he has verified that the following 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,

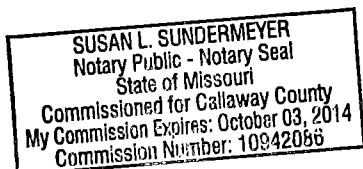
Phil Lock, Regulatory Auditor:	Billed Revenues and Actual Gas Costs
Kwang Choe, Ph.D., Regulatory Economist:	Hedging
Derick Miles, P.E., Regulatory Engineer:	Reliability Analysis and Gas Supply Planning
Lesa Jenkins, P.E., Regulatory Engineer:	Reliability Analysis and Gas Supply Planning

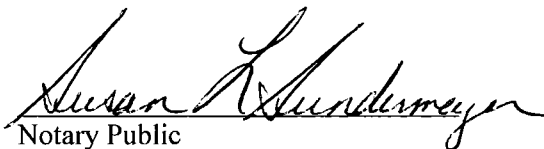
that he has knowledge of the matters set forth in such report and that such matters are true to the best of his knowledge and belief.



David M. Sommerer

Subscribed and sworn to before me this 12th day of December 2012.





Notary Public