

**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-2008-0123

STAFF RECOMMENDATION

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and for its recommendation in the PGA filing of Empire District Gas Co., states:

1. On October 24, 2007, The Empire District Gas Company – Northern, Southern, and Northwest (L&P) (Empire or Company) of Joplin, Missouri filed tariff sheets proposed to become effective November 3, 2007.

2. On October 31, 2007, Empire filed a substitute tariff sheet to correct a typographical error.

3. The tariff sheets were filed to reflect a change in Empire's Purchased Gas Adjustment (PGA) factors for all of its territories, as the result of an estimated change in the cost of natural gas for the winter season, 2007-2008. The winter season includes the months of November through March.

4. Attached is Staff's Recommendation on The Empire District Gas (EDG) Company's Northern, Southern, and Northwest (L&P) Scheduled districts.

5. The Procurement Analysis Staff has reviewed EDG's ACA filing, analyzing the billed revenues, and actual gas costs for this PGA period. Staff performed a prudence review of EDG's gas purchasing decisions.

6. As a result of its audit Staff recommends EDG be required to comply with all Staff recommendations and that EDG be required to adjust its balances in its 2006/2007 ACA filing to reflect the balances shown in the chart on page 7 of Staff's Memorandum.

7. WHEREFORE Staff recommends the Commission order EDG to comply with Staff's recommendations and to adjust its ACA balances in accord with Staff's table on page 7 of its Memorandum.

Respectfully submitted,

/s/ Lera L. Shemwell

Lera L. Shemwell
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Missouri Bar No. 43792

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Certificate of Service

I hereby certify that copies of the foregoing have been mailed, emailed, sent by facsimile or hand-delivered to all counsel of record this 31st day of December 2008.

/s/ Lera L. Shemwell

MEMORANDUM

TO: Missouri Public Service Commission Official Case File
Case No. GR-2008-0123, The Empire District Gas Company

FROM: David M. Sommerer, Manager - Procurement Analysis Department
Phil Lock, Regulatory Auditor - Procurement Analysis Department
Lesa Jenkins, P.E., Regulatory Engineer - Procurement Analysis Department
Derick Miles, Utility Engineering Specialist - Procurement Analysis Department
Kwang Choe, Ph.D., Regulatory Economist - Procurement Analysis Department

/s/ David M. Sommerer 12/30/2008
Project Coordinator, Date

/s/ Lera Shemwell 12/30/2008
General Counsel's Office, Date

SUBJECT: Staff Recommendation in Empire's 2006/2007 Actual Cost Adjustment Filing.

DATE: December 30, 2008

In 2006, The Empire District Gas Company (EDG, Empire or Company) purchased Aquila, Inc.'s gas operations. On April 18, 2006, the Commission issued an Order in Case No. GO-2006-0205, with an effective date of May 1, 2006, in which EDG was granted a certificate of convenience and necessity to provide natural gas service as a gas corporation and public utility, subject to the jurisdiction of the Commission, in the service areas then served by Aquila, Inc. On June 1, 2006, EDG announced it had completed its purchase of the Missouri natural gas operations of Aquila, Inc. Thus, this is the first full ACA period that EDG has operated this system.

The Procurement Analysis Department (Staff) has reviewed the 2006/2007 Actual Cost Adjustment (ACA) filing of EDG. The 2006/2007 ACA filing was made on November 3, 2007, and was docketed as Case No. GR-2008-0123. Staff's review consisted of an analysis of the billed revenues and actual gas costs for the period of September 2006 to August 2007. Staff performed an examination of the Company's gas purchasing practices to evaluate the prudence of the Company's purchasing decisions. The Company's recovery balances include the PGA, ACA, Take-or-Pay (TOP), Transition Cost (TC), and Refund balances. There was no activity involving TOP and TC costs. Staff conducted a reliability analysis to determine if the Company had reasonable plans to meet its customer's needs on the coldest days. Staff's analysis included a review of estimated peak day requirements and the capacity levels needed to meet those requirements. Staff also conducted a review of the Company's hedging policy for the 2006/2007 ACA.

Empire separates its gas operations into a Southern System, a Northern System, and a Northwest System (formerly L&P). The larger communities served on the Southern System include Marshall, Higginsville, Lexington and Richmond in west-central Missouri and Platte City near Kansas City. On the Northern 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 Pipeline (SSCP), formerly Williams Gas Pipeline Central, serves customers on the Southern System. Panhandle Eastern Pipeline Company (PEPL) serves customers on the Northern System while ANR Pipeline (ANR) serves customers on the Northwest System. For the 2006/2007 ACA review period, there were an average of 30,613 sales customers on the Southern System, 9,908 on the Northern System, and 5,806 on the Northwest System.

HEDGING

During the heating season under review, weather was mild overall so actual delivered volumes to customers were less than expected in normal weather. The Company has individual gas supply portfolios for each of its three systems. Staff's comments are provided for each service area.

For the Southern System, EDG used storage to hedge 29% of the normal requirements. Additionally, EDG had financial hedges and fixed price hedges representing 17% and 39%, respectively, of normal volumes. The financial hedges included futures. Combined storage, fixed price hedges, and financial hedges covered 85% of normal volumes. For the Northern and Northwest Systems, EDG depended mostly on storage for its hedging strategies. For the Northern System, EDG hedged about 76% of the normal requirements by using storage, while about 68% of the Northwest System's normal requirements came from storage. Additionally, both the Northern and Northwest Systems utilized fixed price hedges representing 4% and 10%, respectively, of normal volumes. Combined storage and fixed price hedges represent 80% for the Northern System and 78% for the Northwest System.

EDG's overall hedging coverage was appropriate for the 2006/2007 ACA heating season. Nevertheless, Staff noted for the Southern System that EDG purchased certain volumes of natural gas for December 2006 and January 2007 after the winter season commenced. Although it may have been economically efficient for the Company to purchase those volumes for the winter months December 2006, and also January 2007 when the market prices were relatively low, Staff cautions EDG about counting winter purchases for what may have been intended for hedging since there is no guarantee that this same opportunity of relatively low prices will occur each winter. EDG should consider longer term horizons in its hedging strategy, given the increased impact of natural gas summer market price volatility. Staff recommends EDG continue to keep abreast of market developments to make the best gas procurement decisions, and that it broaden its hedging evaluation practice to examine hedging opportunities several years in the future. Consideration should be given to dollar cost averaging concepts when hedging. EDG should also give careful consideration to the amount of real price protection that is in place. In addition, Staff recommends that the Company analyze its hedging risk for each winter month under normal conditions and cold and warm weather conditions, including cold weather that may occur late in the winter season.

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. EDG 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 LDC's plans and decisions regarding estimated peak-day requirements and the LDC's pipeline capacity levels to meet those requirements, peak day reserve margin and the rationale for this reserve margin, and natural gas supply plans for various weather conditions.

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

Regression Analyses and System Load Estimates

Empire provided a Regression Analysis for this review, however, that regression was performed from data from the winters of 2005/2006 and 2006/2007. Because it would have been an after-the-fact analysis, this regression could not have been used for planning of the 2006/2007 ACA review period. Models obtained from Empire's analysis would be acceptable for use for planning of the 2007/2008 ACA review period, however they could not be applied for planning purposes in this review period. The Company had provided, in its 2005/2006 ACA, the regression that included the winters of 2004/2005 and 2005/2006. Staff used this Regression Analysis for the 2006/2007 ACA review. Empire's analysis included only peak day estimation and no analysis was used to estimate normal monthly loads and extreme (cold and warm) monthly loads. For the 2007/2008 and future ACA reviews, Staff recommends that the Company provide calculations of its normal and extreme monthly loads for each respective system.

Empire did not provide a specific storage or supply plan for warmer/colder weather; Empire, however, stated in their gas supply plan:

“Adequate storage is available on the systems to provide the flexibility to adjust to most daily demand deviations from normal. In the event that an extreme weather forecast that would cause demand to deviate from committed physical deliveries by more than the storage injection/withdrawal available, natural gas would be bought or sold in the daily market sufficient to avoid an unacceptable imbalance.”

In the Company's response to Data Request No.16, the Company states: “If storage MDWQ and first of the month flowing gas does not cover the anticipated volume, then daily gas supply would be bought to supplement the anticipated volume.” This is a reliability concern for the Southern System because as much as an additional 31% (14,438 dth.) of natural gas would have to be procured on the daily market. EDG had no firm peaking or swing agreements to cover this shortfall for the 2006/2007 winter. For the 2007/2008 and future ACA reviews, Staff recommends that the Company evaluate and provide storage and supply plans that consider warmer, colder, and normal winters.

Reserve Margins

In the Company's response to Data Request No.5 for this ACA review; Empire stated that no analysis of reserve margin has been performed for this ACA. The Company further explains that comparison of the design day to pipeline capacity is submitted to Staff as part of the annual gas supply plan. Additional capacity was obtained for the Platte City, Tracy, and Weston market areas

on Southern Star for the Southern System. Empire provided regression analyses for these areas that indicate the additional 3,000 dth/day of market area capacity was needed. This additional capacity did not impact the winter of 2006/2007, but will impact the reserve margin for the 2007/2008 winter. Because EDG appears to have different capacity needs on different parts of its Southern System, EDG should evaluate whether its reserve margin estimate for the Southern System should be further subdivided based on the pipeline delivery restrictions (e.g. one or more reserve margin estimates for Platte City, Tracy, and Weston and another reserve margin estimate for the remainder of the Southern System.). For the 2007/2008 ACA, Staff recommends that the Company provide its reserve margin estimates for 2007/2008 and the next four or more winters for each area with pipeline contract/delivery restrictions, and provide the rationale for the contracted delivery quantities.

Cheyenne Plains

During the latter part of this ACA period, from June – August 2007, the Company obtained additional upstream capacity that allows it to source natural gas supply from the Rockies. The agreement allowed flexibility to flow the natural gas to all three of its service areas by way of a hub located near Greensburg, Kansas. The hub interconnects with ANR, Southern Star, and Panhandle Eastern pipelines. The Rockies gas, leading up to and through 2006/2007 ACA period, has been cheaper than the mid-continent priced natural gas; even when the transportation costs from the Rockies is factored in the price of gas. Empire's estimate of transportation to deliver gas from the Rockies to the Greensburg hub is ** _____ ** from June 2007 to August 2007. The costs of supply and transportation will vary over time. Staff recommends that EDG continue to monitor and evaluate the operational and economic reasons for its selection of natural gas supply and capacity on Cheyenne Plains. Such evaluations should be made available to Staff for future ACA reviews.

Cheyenne Plains – Accounting Adjustment

** _____

_____ ** This will be subject to Staff's review in a future ACA. During the month of June, natural gas was purchased from several suppliers by way of a daily indexed price, whereas July and August 2007 purchases were priced at a monthly indexed price. For the month of June, the weighted average cost of gas (wacog) was \$2.48 for deliveries to the Southern System, \$3.23 for deliveries to the Northern System and \$3.95 for deliveries to the Northwest System.

As filed, the cost of gas delivered on Cheyenne Plains was charged to each system based on actual daily flow using pipeline flow data for volumes and trade tickets for prices. Natural gas was purchased for delivery on Cheyenne Plains during June 2006 to benefit all three systems, and thus, all systems should share equally in the cost of gas delivered over Cheyenne Plains, rather than calculate separate wacogs for each system. The overall wacog for the three systems was \$2.96. Staff's allocation adjustment applies the \$2.96 rate to volumes delivered to the Northern, Southern and Northwest Systems. There is no net change to EDG for total gas costs, but instead is a shift of gas costs among the three systems. The difference between the actual method used (per filing) and the wacog method proposed by Staff results in the following: \$55,853 increase for Southern System

customers, \$43,226 decrease for Northern System customers and \$12,627 decrease for Northwest System customers. Staff will review purchasing practices on Cheyenne Plains and the resulting methodology employed by Empire in future ACA reviews.

AD VALOREM REFUNDS

Staff believes that interest on Ad Valorem refunds should have been calculated through February 25, 2007 (date refunds became effective) rather than December 1, 2006. This increases the interest owed the customer and reduces the cost of gas by \$11,039 (\$1,335 + \$9,704). Staff proposes to reduce the cost of gas on the Southern System by \$11,039.

INTERRUPTIBLE ACA BALANCES

At the close of 2006, EDG reduced all Interruptible ACA balances to zero; because, for the past several years, there were no Interruptible customers on the Northern and Southern Systems. During March 2007 a customer on the Northern System became an Interruptible sales customer. During this ACA, the revenues and associated gas costs for this customer were included with the firm sales customer balances. According to the Company's PGA tariff provisions, the revenue and gas costs for this customer should be tracked separately and included in the Interruptible sales customer class. Given the materiality of this customer's revenues and gas costs from March 2007 to August 2007, Staff does not propose an adjustment during this ACA period. For all future activity, Staff recommends that revenues and gas costs for this customer and any other customer under the Interruptible gas service class should be tracked separately and included in the PGA/ACA calculation under the Large Volume Interruptible sales customer class.

CASH-OUT PROVISIONS

The Company's PGA tariffs (tariff sheets 51-53) include a monthly cash-out provision for its transportation customers. Imbalances are cashed-out (priced out) on a monthly basis thereby reconciling the imbalances on a monthly basis. Errors were made in the months of January 2007 and July 2007 because the monthly cash-out summaries used to close Empire's books did not reflect the finalized Metrotek meter reads (Data Request No. 101). Adjustments are proposed for those errors. Similar errors also occurred during the months of March 2007 to May 2007 but the net result of those errors was immaterial so no adjustment was necessary.

Staff made adjustments to the cash-out calculations of Large Volume and Aggregation customers. Staff believes an additional \$5,878 is due Empire on the Southern System; \$2,946 (\$1,663 + \$1,283) is due Empire on the Northern System; and \$1,396 (\$1,434 - \$38) is due the Large volume and Aggregation customers on the Northwest System (See adjustments in Table 1 below).

SUMMARY

The Staff has addressed the following concerns regarding Case No. GR-2008-0123 for Empire:

1. Details of EDG's hedging activity are described in the "Hedging" section of this recommendation. To reduce natural gas price upward volatility for its customers, Staff recommends that EDG should continue to pursue other hedging tools available to it and consider longer term horizons. In addition, Staff recommends that the Company analyze its hedging risk for each winter month under normal conditions and cold and warm weather conditions, including cold weather that may occur late in the winter season. Overall, EDG's hedging strategy appears to be appropriate for the 2006/2007 ACA period.
2. Regarding Reliability Analysis and Gas Supply Planning, Staff recommends that for the 2007/2008 and future ACA periods that Empire: 1) Provide calculations of its normal and extreme monthly loads for each of its three systems. 2) Evaluate and provide storage and supply plans that consider warmer, colder, and normal winters. 3) Provide its reserve margin estimates for the next four winters for each area with pipeline contract/delivery restrictions, with rationale for the contracted quantities, addressing Staff's concerns in the Reliability Analysis and Gas Supply Planning section related to pipeline delivery restrictions on different parts of the Southern System, and 4) Continue to monitor and evaluate the operational and economic reasons for its selection of natural gas supply and capacity and make such evaluations available to Staff for future ACA reviews.
3. All systems share the weighted average cost of gas delivered on Cheyenne Plains during the month of June 2007. This results in a \$55,853 increase in gas costs for Southern System customers, \$43,226 decrease in gas costs for Northern System customers and \$12,627 decrease in gas costs for Northwest System customers.
4. Staff calculated interest on AD Valorem refunds through February 25, 2007 thereby reducing the cost of gas for Southern System customers by \$11,039.
5. All revenue and associated gas costs for Interruptible sales customers should be tracked separately and included in the PGA/ACA calculation under the Large Volume Interruptible sales customer class.
6. Adjust the cash-out amounts for the following: Southern System \$5,878 decrease in gas costs; Northern System \$2,946 decrease in gas costs; and Northwest System \$1,396 increase in gas costs.

RECOMMENDATIONS

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

1. Adjust the balances in its 2006/2007 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	8-31-07 Ending Balances Per Filing	Commission Approved Adjustments Prior to 2006-2007 ACA (1)	Staff Adjustments For 2006-2007 ACA	Staff Recommend ed 8-31-07 Ending Balances
Southern System: Firm ACA	\$653,401	\$0	\$55,853 (A) (\$11,039) (B) (\$5,878) (D)	\$692,337
Interruptible ACA	\$0	\$0		\$0
Take-or-Pay (TOP)	\$0	\$0		\$0
Transition Cost (TC)	\$0	\$0		\$0
Refund (C)	\$0	\$0		\$0
Northern System: Firm ACA	(\$137,944)	\$0	(\$43,226) (A) (\$2,946) (D)	(\$184,116)
Interruptible ACA	\$0	\$0		\$0
Take-or-Pay (TOP)	\$0	\$0		\$0
Transition Cost (TC)	\$0	\$0		\$0
Refund (C)	\$0	\$0		\$0
Northwest System: Firm ACA	(\$214,017)	\$0	(\$12,627) (A) \$1,396 (D)	(\$225,248)
Interruptible ACA	\$0	\$0		\$0
Take-or-Pay (TOP)	\$0	\$0		\$0
Transition Cost (TC)	(\$2,586)	\$0		(\$2,586)
Refund (C)	\$0	\$0		\$0

- 1) All Commission approved adjustments prior to 2006-2007 ACA were included in Schedule 4 of the 2007-2008 PGA/ACA filing (Case GR-2008-0368).
 - A) June 07 Cheyenne Plains accounting adjustment.
 - B) Ad Valorem Refund.
 - C) The refund balance on 8-31-07 was transferred to the ACA account.
 - D) Cash-out.

2. Address the Staff recommendations in the summary section related to hedging.
3. Address the Staff recommendations in the summary section related to reliability analysis and gas supply planning.
4. Respond to recommendations included herein within 30 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-2008-0123

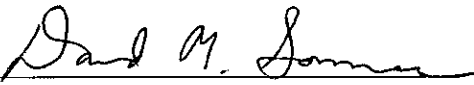
AFFIDAVIT OF DAVID M. SOMMERER

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

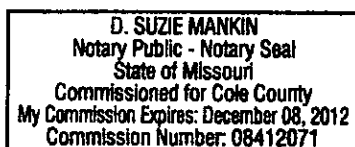
David M. Sommerer, being of lawful age, on his oath states: that as a utility Regulatory Manager in the Procurement Analysis Department of the Utility Services Division, he has participated in the preparation of the foregoing report, consisting of 8 pages to be presented in the above case; that he has 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,

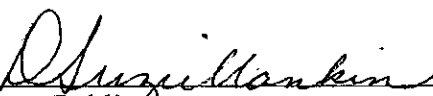
Kwang Y. Choe: Hedging
Lesa Jenkins: Reliability Analysis and Gas Supply Planning
Phil S. Lock: Billed Revenues and Actual Gas Costs
Derick Miles: Reliability Analysis and Gas Supply Planning

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 30th day of December 2008.




Notary Public