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September 1, 2000

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FILED

SEP - 1 2000

Missouri Public
Service Commission

RE: Case No. GR-99-435

Dear Mr. Roberts:

Enclosed for filing in the above-captioned case are an original and eight (8) conformed copies of a **STAFF RECOMMENDATION**.

This filing has been mailed or hand-delivered this date to all counsel of record.

Thank you for your attention to this matter.

Sincerely yours,

Dennis L. Frey
Associate General Counsel
(573) 751-8700
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DLF/lb
Enclosure
cc: Counsel of Record

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

FILED

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Missouri Public
Service Commission

In the Matter of Missouri Public Service's)
Purchased Gas Adjustment Factors to be)
Reviewed in its 1998-1999 Actual Cost)
Adjustment.)

Case No. GR-99-435

STAFF RECOMMENDATION

COMES NOW the Staff ("Staff") of the Missouri Public Service Commission ("Commission") and for its Recommendation in the above-captioned case, respectfully states as follows:

1. On April 2, 1999, Missouri Public Service ("MPS" or "Company") filed with the Commission proposed tariff sheets for each of its three Missouri systems, carrying an effective date of April 16, 1999. The tariff sheet was filed to reflect scheduled changes in MPS's Purchased Gas Adjustment ("PGA") factors, as a result of changes in the cost of natural gas for the upcoming summer season. On April 14, 1999, the Staff filed a recommendation of approval of the rates on an interim basis, subject to refund, and the Commission so ordered on April 15, 1999.

2. On October 26, 1999, the Company filed with the Commission a tariff sheet with a proposed effective date of November 9, 1999. The tariff sheet was filed to reflect scheduled changes in MPS's PGA factors as a result of changes in the cost of natural gas for the winter season to follow. In addition, the tariff filing reflected changes in the Actual Cost Adjustment ("ACA"), Transition Cost ("TC"), and Refund factors for each of the Company's three systems. On November 8, 1999, the Staff filed a recommendation for approval of the tariff sheet on an

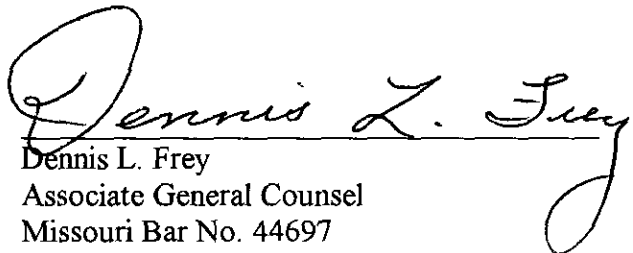
interim basis, subject to refund, and on that same date, the Commission so ordered. The Commission further ordered that Staff's Procurement Analysis Department be given the time necessary to conduct its audit of this ACA period and to submit its results and recommendations regarding this ACA filing on or before September 1, 2000.

3. Accordingly, in the attached Memorandum, which is labeled Appendix A, the Staff recommends that the Commission issue an Order requiring MPS: a) to adjust the ACA account balances for each of its three systems in the Company's 1998-1999 ACA filing; b) to comply with the reliability recommendations set forth in said Memorandum; and c) to respond to the recommendations included in the Memorandum within 30 days.

WHEREFORE, Staff respectfully requests that the Commission issue its Order in accordance with the Staff's Memorandum attached hereto.

Respectfully submitted,

DANA K. JOYCE
General Counsel


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Certificate of Service

I hereby certify that copies of the foregoing have been mailed or hand-delivered to all counsel of record as shown on the attached service list this 1st day of September 2000.

Dennis L. Frey

MEMORANDUM

TO: Missouri Public Service Commission Official Case File
Case No. GR-99-435, Missouri Public Service

FROM: *PL* Phil Lock, *LJ* Lesa Jenkins and *DS* Dave Sommerer - Procurement Analysis Department

DS Project Coordinator 9-1-00 *Thomas R. Schumacher Jr.* 9/1/00 *L.J.* 9-1-00
Project Coordinator/Date General Counsel's Office/Date

SUBJECT: Staff Recommendation in Missouri Public Service Company's 1998-99 Actual Cost Adjustment Filing

DATE: September 1, 2000

The Procurement Analysis Department (Staff) has reviewed the 1998-99 Actual Cost Adjustment (ACA) filing of Missouri Public Service (MPS or Company), a division of UtiliCorp United, Inc. This filing was made on October 26, 1999, and was docketed as Case No. GR-99-435. The audit consisted of an analysis of the billed revenues and actual gas costs, for the period of September 1998 to August 1999. An examination of MPS's gas purchasing practices was also performed to determine the prudence of the Company's purchasing decisions. The Company's balances include the ACA, Take-or-Pay (TOP), Transition Cost, Deferred Carrying Cost, and Refund recovery balances. A reliability analysis was also conducted.

MPS separates its gas operations into a Southern System, a Northern System, and Eastern System. Williams Natural Gas Company (WNG) serves customers on the Southern System, while Panhandle Eastern Pipeline Company (PEPL) serves customers on the Northern System and an Eastern System. In addition to PEPL, Missouri Pipeline Company (MPC) and Missouri Gas Company (MGC), affiliates of UtiliCorp, deliver gas to the Eastern System. As of August 1999, there were approximately 31,000 sales customers on the Southern System, 10,500 sales customers on the Northern System, and 3,800 sales customers on the Eastern System.

IMBALANCES

A change in the accounting methodology for pipeline imbalances occurred in April 1999. The volume imbalances are now recorded as monthly transactions on the Company's books (tracker) and are priced out monthly. This change affects the Northern, Southern, and Eastern Systems.

Staff does not agree with Company's approach to the calculation of the current month dollar imbalance. Under the Company's new methodology, the imbalance volumes and rates that appear on the trackers are the amounts used to obtain the ending volume and ending dollar imbalances. In other words, the Company is applying the current monthly index price to the ending volume imbalance to obtain the ending dollar imbalance. The current month dollar imbalance equals the ending dollar imbalance less the beginning dollar imbalance for that month. Staff recommends that the Company apply the current month approach to pricing imbalances as follows: the current monthly index price should be applied to the current month imbalance and

then added to the beginning dollar imbalance to obtain the ending dollar imbalance. This illustrates a weighted average method of pricing inventory. The difference in inventory pricing results in a \$11,611 gas cost increase on the Eastern System, a \$12,089 gas cost decrease on the Northern System, and a \$5,555 gas cost decrease on the Southern System.

PEPL TRANSPORTATION COST

When MPS allocates PEPL demand costs between Michigan Gas Utilities (MGU) and MPS, the current Commodity cost (that includes transmission charges in the market zone) is deducted from the PEPL Discount rate to determine the volumetric Demand Charge. During March 1999, the Company made an adjustment to include additional transmission charges to MGU for deliveries to Bourbon, Missouri in September 1998. The September 1998 PEPL invoice includes a separate transmission charge (600 mile increment) for deliveries to Bourbon. The transmission charge was a very small incremental charge of \$17.87 that received equal weight with other Commodity related charges in determining the volumetric Demand charge. The effect of allocating the transmission charge of \$17.87 to MGU increased the monthly demand charge to MPS by \$13,500. The Staff does not believe that \$13,500 should be allocated to MPS as a result of this small incremental charge to MGU. The Staff proposes that the cost of gas be decreased by \$13,500 on the Northern System.

RELIABILITY ANALYSIS

Staff conducted a reliability analysis for the Missouri Public Service, Southern, Northern, and Eastern distribution systems including a review of (a) estimated peak day requirements and the capacity levels to meet those requirements, (b) peak day reserve margin and the rationale for this reserve margin, and (c) comparison of actual demand to estimated demand.

- **Selection of Peak Heating Degree Day**

MPS reviews Sedalia Weather Station data for all three systems. For the Southern system, MPS selects the heating degree day (HDD) associated with 1 occurrence in 5-years, which is 76 HDD. For the Northern and Eastern systems, MPS selects the HDD associated with 3 occurrences in 5-years, which is 72 HDD.

Staff review of Sedalia Weather Station data shows the peak HDD of 81.5 occurred 12/23/89 and the second highest peak of 78.5 HDD occurred 12/25/83.

Staff recommends that MPS reevaluate its selection of HDD for peak day planning. MPS could use a lower HDD as a design day and select a more conservative estimate for the peak day. Staff recommends MPS use the historical peak HDD of 81.5 that occurred 12/23/89. Alternatively, MPS could review 30 years of weather data instead of 24.08 years and calculate

the HDD for 1-occurrence per 30 years or conduct a statistical analysis for 1-occurrence per 30 years. Justification should be provided if a period of time other than 30-years is used by MPS in the peak day selection.

- Regression Model

For each of the three systems, a regression analysis is used to estimate demand associated with a given HDD. For the 1998/1999 ACA period, the peak day occurred 1/4/99 and MPS reported both 61 and then 60 HDD for this date. Substitution of 60 HDD in the regression models for the 3 systems showed that the model underestimated demand by 3.9%, 7.9%, and 6.6% respectively for the Southern, Northern, and Eastern systems. Information was also submitted for 1/7/99 for the Northern system and for the 52 HDD on this date, the model underestimated demand by 10.5%.

Staff recommends MPS annually review and update the assumptions and calculations used to establish estimated demand for each of the three MPS systems.

- Reserve Margins

The MPS review of capacity and demand for a peak day shows reserve margins of -4.9%, +11.5%, and +27.4% respectively for the Southern, Northern, and Eastern distribution systems for the 1998/1999 ACA period. If a more conservative peak day is used in the analysis, such as the historic peak day of 81.5 HDD, the demand and capacity review shows reserve margins of -11.1%, -0.7%, and +17.9%, respectively for the Southern, Northern, and Eastern systems. MPS has reduced capacity on the Eastern system for the 1999/2000 ACA period and with this reduction, the reserve margin is +5.0% using 72 HDD and is -6.8% with a historic peak day of 81.5 HDD. These estimates do not account for any underestimation of the regression model.

Staff is concerned about the negative reserve margin for a Southern system peak day. The Company states that Williams Natural Gas Company is quick to use a Period of Daily Balancing (PODB), which requires shippers to balance receipts and deliveries on a daily basis. Staff is concerned that if MPS has an overage towards the end of the month and then Williams issues a PODB, time does not allow for adjustment and penalties would be incurred. With a negative reserve margin, MPS should consider the negative effects on pipeline operations should a historic peak day occur.

MPS states that the 11.5% reserve margin is reasonable given the aggressive design day requirement used (3 occurrences in 5 years) as well as natural imprecision inherent in design day studies. Staff does not understand why MPS selects an aggressive peak HDD and then states that an 11.5% reserve margin is reasonable.

If a historic peak day of 81.5 HDD were to recur, Staff is concerned about the Eastern system negative reserve margin associated with the reduced capacity for the 1999/2000 ACA period.

SUMMARY

The Staff has addressed the following concerns regarding MPS Case No. GR-99-435:

- Staff does not agree with Company's methodology of pricing imbalances. Staff recommends that MPS adopt a current month pricing methodology for pricing imbalances that would increase gas costs by \$11,611 on the Eastern System, reduce gas costs by \$12,089 on the Northern System, and reduce gas costs on the Southern System by \$5,555.
- A small transportation commodity charge was allocated to MGU during March 1999 and as a result the monthly demand charge increased by \$13,500 on MPS's Northern System. Staff does not believe that the demand cost should increase as a result of this incremental commodity charge. Staff proposes to reduce the cost of gas by \$13,500 on the Northern System.
- See comments in Staff's Reliability Analysis section.

Description	Beginning ACA Balance Per Filing	Staff Adjustments	Ending ACA Balance Per Filing
Southern System:			
Firm ACA	\$(216,359)	\$(5,555)	\$(221,914)
Interruptible ACA	\$(9,563)		\$(9,563)
Take-or-Pay	\$0		\$0
Transition Cost	\$0		\$0
DCCB	\$935		\$935
Refund	\$(590,822)		\$(590,822)
Northern System:			
Firm ACA	\$138,684	\$(25,589)	\$113,095
Interruptible ACA	\$104,100		\$104,100
Take-or-Pay	\$0		\$0
Transition Cost	\$0		\$0
DCCB	\$0		\$0
Refund	\$(7,644)		\$(7,644)
Eastern System:			
Firm ACA	\$663,578	\$11,611	\$675,189
DCCB	\$11,491		\$11,491

RECOMMENDATIONS

The Staff recommends that the Commission issue an order requiring:

1. Missouri Public Service to adjust the ACA account balances in its 1998-1999 ACA filing to reflect the ending (over)/under recovery balances for the ACA, TOP, Transition Cost, DCCB, and Refund accounts (per attached table);
2. Missouri Public Service to address the following reliability issues:
 - a. To assure sufficient capacity, but not excess capacity, is available to meet peak day requirements, a review of the assumptions and calculations used to establish estimated demand should be reviewed annually for each of the three MPS systems. Conduct a revised peak day and annual demand study for the three MPS systems. Review and update the peak heating degree day assumptions as noted in the Reliability Analysis section of this memorandum. Submit these with the 1999/2000 ACA filing.
 - b. For each of the three MPS systems, submit a comparison of actual sendout and heating degree days (HDD) for 2 or more recent peak days (within last 3 years) to the estimated demand for those conditions (HDD and number of customers). Provide an explanation when the model does not reasonably agree with the actual load encountered. Submit with the 1999/2000 ACA filing.
 - c. For each of the three MPS systems, estimate the reserve margin for the 1999/2000 ACA period and for three to five years beyond that. Explain the rationale for the reserve margin for each system for each of these years. Include an explanation of the cost considerations for the transportation capacity set by MPS for the 1999/2000 ACA period and beyond. Submit with the 1999/2000 ACA filing.
3. Missouri Public Service to file a written response to this recommendation within 30 days.

**Service List for
Case No. GR-99-396
September 1, 2000**

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