Exhibit No.:

Issue:

Depreciation Rates

Witness:

Jolie L. Mathis

Sponsoring Party: MoPSC Staff
Type of Exhibit: Surrebuttal Testimony
Case No.: GR-2004-0209

Date Testimony Prepared:

June 14, 2004

MISSOURI PUBLIC SERVICE COMMISSION UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

JOLIE L. MATHIS

FILED

JUL 13 2004

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MISSOURI GAS ENERGY CASE NO. GR-2004-0209

> Jefferson City, Missouri June 2004

> > Exhibit No. 824 Case No(s). 6R-2009-0209

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

| In the Matter of Missouri Gas Energy's Tariffs to Implement a General Rate Increase for Natural Gas Service |) Case No. GR-2004-0209 | | | | | |
|--|-------------------------|--|--|--|--|--|
| AFFIDAVIT OF JOLIE L. MATHIS | | | | | | |
| STATE OF MISSOURI) COUNTY OF COLE) | | | | | | |
| Jolie L. Mathis, being of lawful age, on her oath states: that she has participated in the preparation of the following surrebuttal testimony in question and answer form, consisting of | | | | | | |
| | Jolie J. Mathis | | | | | |
| Subscribed and sworn to before me this August June 2004. August CHAR | | | | | | |

TONI M. CHARLTON NOTARY PUBLIC STATE OF MISSOURI CQUNTY OF COLE My Commission Expires December 28, 2004

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| 1 | SURREBUTTAL TESTIMONY |
|----|---|
| 2 | OF |
| 3 | JOLIE L. MATHIS |
| 4 | MISSOURI GAS ENERGY |
| 5 | CASE NO. GR-2004-0209 |
| 6 | Q. Please state your name and business address. |
| 7 | A. Jolie L. Mathis, P.O. Box 360, Jefferson City, MO 65102. |
| 8 | Q. By whom are you employed and in what capacity? |
| 9 | A. I am employed by the Missouri Public Service Commission (Commission) |
| 10 | as a Utility Engineering Specialist III in the Engineering and Management Services |
| 11 | Department. |
| 12 | Q. Are you the same Jolie L. Mathis that has previously filed direct testimony |
| 13 | in Case No. GR-2004-0209? |
| 14 | A. Yes. |
| 15 | Q. What is the purpose of your testimony in this case? |
| 16 | A. The purpose of my testimony is to address the rebuttal testimony o |
| 17 | Missouri Gas Energy witness Thomas J. Sullivan on the issue of depreciation expense |
| 18 | Specifically, I will discuss: 1) MGE's depreciation rate for Account 380 - Services |
| 19 | 2) the accrued reserve for this account; 3) updating Schedule TJS-12 for more current |
| 20 | information; and 4) recommending a different depreciation rate for Account 394 - Tools. |
| 21 | <u>DEPRECIATION RATES</u> |
| 22 | Q. What is the basis for the current depreciation rate for Account 380 - |
| 23 | Services? |

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A. The current 2.27% depreciation rate for Account 380 - Services is based on a 44-year Average Service Life (ASL), comparable to the currently prescribed 44-year ASL for Laclede Gas Company.

- Q. Why is this the basis for the ASL of this account?
- A. As stated in my direct testimony for this case, the lack of retirement data files from MGE makes it difficult to determine average service lives account by account. In Case No. GR-2001-292, Staff witness Paul Adam prescribed an average service life of 44 years for MGE's Services account, relying on the data of Laclede Gas Company (Laclede) because of his depth of knowledge about Laclede's historical data and the similarity of plant between Laclede and MGE. He had visited Laclede several times in six years, analyzed the Laclede data to determine ASLs and depreciation rates account by account, and had spoken with Laclede's operations personnel and plant engineers specifically regarding Laclede's gas plant.
- Q. How does the Company's actuarial data effect an analysis for determining a depreciation rate?
- Α. MGE only has historical data from 1994 to present, or nine years of data. I believe at least 20 to 30 years of historical data is needed to perform an adequate actuarial analysis of a plant account. The lack of suitable data for MGE hindered the possibility of doing an actuarial analysis to determine the appropriate depreciation rate.
- Q. Are there comparable companies for assessing the appropriateness of Staff's recommended ASL of 44 years?
- A. Yes. The Missouri gas operations of Aquila, AmerenUE and Laclede can be considered comparable.

Surrebuttal Testimony of Jolie L. Mathis

| 1 | Q. | What characteristics may lend themselves as appropriate for comparison? | |
|----|---|--|--|
| 2 | A. | Characteristics such as size of the plant, and the age and location of the | |
| 3 | plant. | | |
| 4 | Q. | What are Staff's recommended ASLs for Account 380 for these | |
| 5 | companies? | | |
| 6 | A. | Aquila is 45 years, AmerenUE is 36 years, and Laclede is 44 years. | |
| 7 | Q. | Is the Company's determination of depreciation rates based on an analysis | |
| 8 | of actuarial data? | | |
| 9 | A. | No, it is not. It is based on a simulated depreciation study, or Simulated | |
| 10 | Plant Record (SPR) study. | | |
| 11 | Q. | What is a Simulated Plant Record (SPR) study? | |
| 12 | Α. | A SPR study uses a trial and error method to estimate the average service | |
| 13 | life of utility property. It simulates retirements and plant balances and compares it wit | | |
| 14 | historical data to obtain the survivor curves that best represent the life characteristics of | | |
| 15 | the property. | | |
| 16 | Q. | Does the Staff recommend use of an SPR study to set depreciation rates | |
| 17 | for MGE in this case? | | |
| 18 | Α. | No. The Staff continues to prefer the use of comparable company | |
| 19 | actuarial data | when there is a problem of lack of actuarial data for a utility, such as in this | |
| 20 | case for MGI | E. | |
| 21 | Q. | Does Staff have concerns with the Company's recommended ASL of 30 | |
| 22 | years for Acc | ount 380 - Services? | |
| | E . | | |

A. Yes. The 30-year proposed ASL is significantly shorter than that of other major gas companies in the state of Missouri such as AmerenUE, Aquila and Laclede.

- Q. What factors or circumstances does Mr. Sullivan identify as the causes of a shortened ASL for this account?
- A. Mr. Sullivan is vague when pointing to any circumstances causing this alleged shorter life other than his discussion on the Jackson County, MO housing stock, and how it may have an effect on ASL. Mr. Sullivan's argument is that the number of service lines being retired due to the vacancy or demolishment of inner-city homes in Jackson County that are 1970 vintage or older are significant enough to support a shorter ASL of 30 years for the account. Mr. Sullivan does not provided any quantitative analysis of this alleged factor. Other than housing demolishment, he does not list any drivers that may be causing a 30-year ASL for services.
- Q. Does the Company's current Safety Line Replacement Program affect retirements in this account?
- A. Yes, it does. More than 230,000 service lines have been replaced by MGE up through year-end 2000. That is approximately 50% of the total number of services in system at the end of the year in 2003.
 - Q. What is the current make up of Account 380 services?
- A. As of the end of year 2003, Account 380 consisted of: 2,113 copper lines, 58,110 steel lines (38,033 unprotected, 20,077 cathodically protected), and 413,735 plastic lines. As it stands, the number of service lines represent 87% of the total number of services in the system.
 - Q. How does that effect the average service life of the account?

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- Α. Since the technology in that account will be mostly plastic, and approximately one-half of the investment is practically brand new, it supports the longer ASL of 44 years recommended by the Staff for this account, as opposed to the shorter 30-4 year ASL proposed by Mr. Tom Sullivan. Plastic services will have longer lives than metallic services, and because this account is currently 87% plastic, it will eventually 6 demonstrate a longer ASL when enough supporting data can be plotted for survivor curve analysis. It is reasonable to assume that the current 44-year ASL is appropriate for this account.
 - Q, Is MGE recommending changes to other depreciation rates in this case besides Services?
 - A. Yes, though Mr. Sullivan does not discuss these changes to other rates in his rebuttal testimony. All of these changes are based on SPR analysis from the Company's 2000 depreciation study. The Staff believes the rates established for MGE in Case No. GR-2001-292 should be maintained for all accounts.

RESERVE

- Q. Did the Company's most current depreciation study, performed by Black & Veatch in 2000, analyze Account 380's accumulated depreciation reserve?
- A. Yes.
- Did this study indicate that the accumulated depreciation reserve for Q. Account 380 is over-accrued?
- A. Yes, In Mr. Sullivan's 2000 Black & Veatch depreciation study, Table 4-1 MGE Analysis of Accumulated Depreciation Reserve, he includes an over-accrual

Surrebuttal Testimony of Jolie L. Mathis

amount of \$22,037,944 for Account 380. It was his recommendation at the time to redistribute this over-accrual to several other accounts that were under-accrued.

- Q. Has Mr. Sullivan indicated the accumulated depreciation reserve for Account 380 is over-accrued in this case?
 - A. No, Mr. Sullivan has not.
 - Q. Has Staff performed a reserve analysis on this particular account?
- A. Yes. The current 44-year ASL with an R4 curve comparable to survivor curves used for other gas company services accounts, and 0% salvage, yields a theoretical reserve of \$64,944,088. The actual depreciation reserve as of December 31, 2003, for Account 380 Services is \$115,155,561. The difference results in an over-accrual of \$50,211,473.
- Q. Is it reasonable to assume that the services account depreciation reserve over-accrual may have grown from \$22 million to \$50 million from 2001 to 2003?
- A. Yes. It is reasonable to assume that the reserve grew from \$22 million in 1999 to \$50 million in 2003, when the life was shorter, and cost of removal was included in the calculation of the services depreciation rate (The services account depreciation rate in 2000 was 5.50%). When that rate is multiplied by plant balances that approximate in the \$200 million range, the resulting accruals will be over \$10 million each year, as opposed to approximately half of that amount using the lower current depreciation rate of 2.27%.
- Q. Given the amount of over-accrual in the depreciation reserve, will a substantially shortened ASL contribute to increasing the over-accrual?

Surrebuttal Testimony of Jolie L. Mathis

| 1 | A. | Yes, it will. A shorter ASL will result in a higher depreciation rate which |
|----|-----------------|---|
| 2 | will increase t | he accrual rate. |
| 3 | Q. | What should be done about the over-recovery of depreciation reserve for |
| 4 | this account? | |
| 5 | A. | The current ASL of 44 years and depreciation rate of 2.27% should |
| 6 | continue to be | booked for this account. The depreciation rate for Services should not be |
| 7 | increased at th | ais time, on account of the over-accrual. |
| 8 | Q. | Does Sullivan Schedule TJS-12, which purports to show current Service |
| 9 | depreciation ra | ates for Missouri gas utilities, reflect current information? |
| 10 | A. | No. A new depreciation rate and average service life has been ordered for |
| 11 | Aquila, Inc. | d/b/a Aquila Networks-MPS (Gas) Account 380. In Case |
| 12 | No. GR-2004- | -0072, a depreciation rate of 2.22% was prescribed with an ASL of 45 |
| 13 | years. | |
| 14 | Q. | What change would you like to make for Account 394 Tools? |
| 15 | Α. | After further analysis of Account 394, I am proposing a change to a 19- |
| 16 | year ASL, res | ulting in a 5.3% depreciation rate for the Tools account. |
| 17 | Q. | What is your final recommendation for depreciation expense for MGE? |
| 18 | A. | I still recommend no change to the currently authorized depreciation rates |
| 19 | determined in | Case No. GR-2001-291, as listed on Schedule 2 of my direct testimony, |
| 20 | except for the | case of Account 394, Tools. |
| 21 | Q. | Does this conclude your surrebuttal testimony? |
| 22 | A. | Yes, it does. |