



**MISSOURI GAS ENERGY**

3420 Broadway • Kansas City, MO • 64111-2404 • (816) 360-5755

**ROBERT J. HACK**

Vice President, Pricing & Regulatory Affairs

July 27, 2001

**FILED**

JUL 30 2001

Mr. Dale Hardy Roberts  
Secretary/Chief Regulatory Law Judge  
Missouri Public Service Commission  
200 Madison Street, Suite 100  
P.O. Box 360  
Jefferson City, Missouri 65102-0360

Missouri Public  
Service Commission

**RE: Case No. G0-2002-50, Missouri Gas Energy**

Dear Mr. Roberts:

Enclosed for filing in the above-referenced matter, please find an original and eight (8) conformed copies of Missouri Gas Energy's **Application**.

A copy of this filing has been mailed or hand-delivered this date to counsel of record.

Thank you for bringing this matter to the attention of the Commission. Please call me if you have any questions regarding this matter.

Sincerely,

C: F. Jay Cummings  
Thomas R. Schwarz, Jr.  
Douglas E. Micheel  
Steve Holcomb  
Jim Gorman

Enclosures

JUL 30 2001

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

Missouri Public  
Service Commission

In the matter of Missouri Gas Energy's )  
Application for approval of certain matters )  
Pertaining to ongoing cast iron main and )  
Service/yard line Replacement as a part of its )  
Safety Line Replacement program. )

Case No. G0-2002- 50

APPLICATION

Comes now Missouri Gas Energy ("MGE"), a division of Southern Union Company, by and through counsel and for its application for approval of certain matters pertaining to ongoing cast iron main and service/yard line replacement as a part of MGE's Safety Line Replacement Program, pursuant to 4 CSR 240-40.030(15)(C) and (D), respectfully states as follows:

**I. General Matters**

1. The name and address of Applicant are: Missouri Gas Energy, 3420 Broadway, Kansas City, Missouri, 64111.

2. MGE is an operating division of Southern Union Company which is duly incorporated under the laws of the State of Delaware, and conducts business in Missouri under the name of Missouri Gas Energy. The articles of incorporation of Southern Union Company have previously been provided to the Commission in Case No. GM-94-40.

3. MGE is a gas corporation and a public utility engaged in the distribution of natural gas at retail to approximately 491,000 customers in Andrew, Barry, Barton, Bates, Buchanan, Carroll, Cass, Cedar, Christian, Clay, Clinton, Cooper, Dade, Dekalb, Greene, Henry, Howard, Jackson, Jasper, Johnson, Lafayette, Lawrence, McDonald,

Moniteau, Newton, Pettis, Platte, Ray, Saline, Stone and Vernon counties in Missouri, subject to the jurisdiction of the Missouri Public Service Commission ("Commission").

4. Although uncertain precisely what information the Commission seeks by 4 CSR 240-2.060(1)(K), MGE provides the following in an attempt to comply therewith. MGE is unaware of any pending action or final unsatisfied judgments or decision against MGE from any state or federal agency or court which involve customer service or rates, which action, judgment or decision has occurred since June 6, 1998. Nevertheless, since that time MGE has been involved in a number of judicial review proceedings, filed against the Commission, involving MGE's rates. The Commission itself should be aware of all such cases.

5. No annual report or assessment fees pertaining to MGE are overdue.

6. All correspondence, communications, notices, orders and decisions of the Commission with respect to this matter should be sent to:

Steve Holcomb  
Director,  
Field Operations  
Missouri Gas Energy  
3420 Broadway  
Kansas City, MO 64111  
816/360-5605  
Fax: 816/360-5541

Robert J. Hack  
Vice President, Pricing  
& Regulatory Affairs  
Missouri Gas Energy  
3420 Broadway  
Kansas City, MO 64111  
816/360-5755

e-mail: [steve.holcomb@southernunionco.com](mailto:steve.holcomb@southernunionco.com)

FAX: 816/360-5536  
e-mail: [rob.hack@southernunionco.com](mailto:rob.hack@southernunionco.com)

## II. Purpose of Filing

7. Since 1990 MGE (and its predecessor in interest) has been engaged in a substantial infrastructure replacement project know as the Safety Line Replacement Program ("SLRP"). MGE's SLRP has been undertaken pursuant to Commission rule (4 CSR 240-40.030), many of the details of which have been administered through orders in

various Commission cases (e.g., Case Nos. GO-91-277, GO-91-239, GO-91-295 and GO-99-302). MGE's SLRP has so far entailed the replacement of more than 230,000 service lines and nearly 300 miles of cast iron main lines.

8. The cast iron main replacement component of MGE's SLRP, as approved by Commission order in Case No. GO-91-277, concluded on or about December 31, 2000. Commission rule, 4 CSR 240-40.030(15)(D)2, requires that operators who have cast iron mains (such as MGE) to develop a long-term, organized replacement program and schedule for cast iron pipelines not identified as being high priority.

### **III. Explanation and Specific Approvals Requested**

9. Since 1990, MGE's SLRP has been a significant undertaking. This lengthy construction project has required substantial capital resources, has commanded significant management attention and, on occasion, has also inconvenienced customers. These significant costs have resulted in significant safety improvements throughout the MGE system. MGE's objective through this filing is to make certain changes to the existing SLRP, including the implementation of an ongoing cast iron main replacement program, which will continue to achieve significant safety improvements while deploying capital in an efficient and cost-effective fashion.

10. Consistent with the provisions of 4 CSR 240-40.030(15)(D)2, MGE seeks approval of the following provisions for a long-term, organized cast iron replacement program and schedule:

A. MGE will replace a minimum of 5 miles of cast iron main per year, targeting for replacement those segments for which breakage history currently exists.

Replacement standards and criteria shall be as follows: i) MGE shall, on an ongoing

basis, keep a current record of cast iron breaks (excluding those caused by third party damage) and plot them on a mapping system; ii) MGE shall utilize all break records dating back to January 1, 1995, and in addition any older breakage history that is readily available such as that in the MGE mapping system for MGE's Kansas City Central division (which has been observed by the Commission's gas safety staff personnel); iii) any new break (excluding those caused by third party damage) after July 1, 2001, within 500 feet of a previously recorded break triggers a minimum replacement of 500 feet of main within five years of the discovery date of the new break; iv) any additional break on a segment of pipe targeted for replacement will accelerate the completion date to within 24 months of the discovery date of the additional break, or five years from the original trigger date, whichever causes the replacement to be completed sooner.

B. MGE shall collect a coupon<sup>1</sup> at every cast iron main break (excluding those caused by third party damage). Each coupon shall be analyzed for graphitization.<sup>2</sup> Cast iron mains exceeding the following percent of graphitization shall be scheduled for replacement: 3-, 4- and 6-inch diameter pipe at 50%; and 8-inch and greater diameter at 75%. (These revised criteria are more stringent than those currently in place: 60% for 3- and 4-inch diameter pipe; 75% for 6- and 8-inch diameter pipe; and 90% for 10-inch and greater diameter pipe.) Any coupon found which shows graphitization in excess of the above revised criteria shall trigger replacement of approximately 500 feet of cast iron main within 24 months.

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<sup>1</sup> A "coupon" is a small sample of pipe.

<sup>2</sup> "Graphitization" means the degree of corrosion on cast iron pipe.

- C. MGE will place emphasis on rehabilitating or replacing intermediate pressure cast iron mains (2# to 60#) where the main is below pavement in wall-to-wall pavement applications or near public concentrations (e.g., a school, church, hospital, day-care facility, etc.). MGE will continue to patrol such existing intermediate pressure cast iron main systems on a semi-annual basis. Current records indicate that MGE has approximately 1.6 miles of cast iron main 12 to 24 inches in diameter operating in this pressure range in such locations.
- D. MGE will place emphasis on replacing the existing 3-inch cast iron main system in Independence, Missouri.
- E. MGE will place emphasis on cast iron mains as required by 4 CSR 240-40.030(13)(Z).
- F. MGE will place emphasis on replacing or rehabilitating sections of cast iron main in areas of planned future development projects, such as city, county or state highway construction and relocations. Urban renewal and public improvement projects would be monitored as well.
- G. MGE will place emphasis on replacing segments of cast iron mains in close proximity to extensive excavation, blasting or construction activities.
- H. MGE will place emphasis on segmenting its current low-pressure, 30-inch water column system to extend intermediate-pressure lines into existing low-pressure neighborhoods where the lines have a history of breakage. This will allow for more cost-effective replacement of existing cast iron pipe by utilizing smaller diameter pipes. By deploying capital in this fashion, MGE would be able to provide a more customer friendly remedial action to problems on the cast iron main system in the

future. By segmenting the low-pressure, 30-inch water column system with smaller diameter intermediate-pressure systems (2# to 60#), MGE will be able to replace existing large diameter cast iron mains (low-pressure, 30-inch water column operating at approximately 1# of pressure) with much smaller diameter pipelines. Replacing main in this fashion causes significantly less damage to customers' property and the public right-of-way. Size-on-size replacement of cast iron main is significantly less-cost-effective than utilizing smaller diameter pipe. Moreover, using smaller diameter pipe should also reduce ancillary damage and associated customer complaints.

- I. MGE will make greater use of encapsulation<sup>3</sup> to rehabilitate cast iron mains not prone to breakage. Specifically, MGE will encapsulate no less than 400 leaking bell joints annually until leaks of this category are eliminated, on cast iron main that is not targeted for replacement. For the first two years of this program (i.e., until June 30, 2003), MGE will repair by encapsulation significantly more than the minimum pledged. This will significantly reduce MGE's leak inventory.
- J. MGE will continue its annual leak survey of all cast iron mains of 4-inch diameter and smaller (approximately 124 miles as of January 1, 2001).
- K. MGE will continue its semi-annual leak survey of cast iron mains in business districts.
- L. MGE does not have any cast iron service lines.

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<sup>3</sup> "Encapsulation" is a process whereby a mixture of chemicals within a sleeve sets up to a very hard consistency forming a permanent repair of a joint or fitting with a minimum life expectancy of 50 years.

M. To the extent so desired by the Commission or the Commission's Staff, MGE is willing to re-evaluate the effectiveness of the foregoing long-term cast replacement program after two years of implementation.

11. Consistent with the long-term cast iron replacement program as proposed in paragraph 10 herein as well as the objectives of achieving significant safety improvements while deploying capital in an efficient and cost-effective fashion, MGE seeks approval of the following provisions with respect to replacement of service lines and yard lines and modification of the waiver granted to MGE in Case No. GO-99-302<sup>4</sup>:

- A. MGE shall replace all copper-related service lines (approximately 2700) no later than June 30, 2006, with priority given to replace any leaking service lines first. MGE shall continue to leak survey such service lines on an annual basis as recommended by the Commission's Gas Safety Staff in a letter to all operators dated January 16, 2001.
- B. MGE shall replace all unprotected steel service lines and yard lines that currently have leakage on them (approximately 1200) no later than June 30, 2003.

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<sup>4</sup> In considering this Application, MGE wants to make sure the Commission is aware that the current deadline for replacement of unprotected steel service lines and yard lines is December 31, 2004. This was approved by Commission order in Case No. GO-99-302. MGE made that proposal to the Commission in good faith at a time when it was replacing 36 miles of cast iron main annually. When that proposal was made, MGE did not consider the implications of the development and implementation, after the year 2000, of a long-term cast iron main replacement program. The proposals made in this Application are comprehensive and believed by MGE to consider adequately future developments. This Application also offers a re-evaluation after two years if such is believed to be appropriate by the Commission or its Gas Safety Staff (See, paragraph 10.M. herein).



- C. MGE shall replace all unprotected steel service lines and yard lines no later than June 30, 2020. On average, therefore, MGE shall replace approximately 2310 unprotected steel service lines and yard lines annually .
- D. MGE shall continue its annual leak survey of unprotected steel service lines and yard lines as provided by Commission rule, 4 CSR 240-40.030(13)(M)2.B.(I). Any leak discovered on an unprotected steel service line or yard line shall be classified no lower than a class 3 leak and repaired within no longer than a 5-year time frame. In addition, in an effort to eliminate class 4 leaks over unprotected steel service lines and yard lines, MGE will re-classify all such existing leaks as class 3, as a minimum, and repair them accordingly.

12. Consistent with the long-term cast iron replacement program as proposed in paragraph 10 herein, the service line replacement program as proposed in paragraph 11 herein, as well as the objectives of achieving significant safety improvements while deploying capital in an efficient and cost-effective fashion, MGE seeks approval of the following provisions with respect to replacement of bare steel mains:

- A. MGE shall replace a minimum of 5 miles of protected bare steel mains that will be triggered by use of what is known as a 5-5-3 program (that is, 5 leaks within 500 feet within a 3-year period of time triggers replacement).

13. The costs (e.g., depreciation expense, property taxes and carrying costs) associated with replacements and/or rehabilitations called for under the provisions of paragraphs 10, 11 and 12 herein shall be eligible for deferral under any Accounting Authority Order (“AAO”) granted by the Commission to MGE, including the AAO granted by the Commission in Case No. GR-2001-292 in its order dated July 5, 2001.

Commission approval of this paragraph 13 herein shall not be construed as requiring the Commission to grant an AAO with respect to MGE's SLRP in the future or as requiring the Commission to permit subsequent rate recovery of SLRP costs deferred through issuance of an AAO.

14. MGE requests that its SLRP reporting requirements be changed from the current calendar-year based reporting to reporting based on MGE's fiscal year (July through June). Therefore, following Commission approval of this application, MGE shall submit its SLRP Status Report to the Commission's Gas Safety Staff (as well as the Office of the Public Counsel) no later than September 24 of each year, which report shall cover MGE's fiscal year (the first such report shall cover the period of July 1, 2001 through June 30, 2002). Each Status Report shall include the following information:

- A. Miles of cast iron main eliminated by pipe diameter;
- B. Miles of protected bare steel main eliminated;
- C. Number of unprotected steel service lines and yard lines eliminated;
- D. Number of copper-related service lines eliminated;
- E. Number of cast iron bell joint leaks encapsulated by pipe diameter;
- F. Number of miles patrolled semi-annually over intermediate pressure cast iron pipe in public areas;
- G. Cast iron coupon analysis report on graphitization; and
- H. Number of cast iron main breaks by pipe diameter (excluding third party damage);
- I. Number of cast iron main leaks found by pipe diameter;
- J. Number of cast iron main leaks repaired by pipe diameter;
- K. Number of protected bare steel main leaks found;

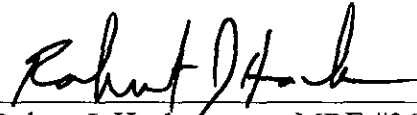
- L. Number of protected bare steel main leaks repaired; and
- M. Number of protected bare steel main leaks cleared.

**IV. Conclusion**

15. The above proposal is specifically targeted to reducing leakage on MGE’s piping system in a systematic and organized fashion. As a result, MGE believes that the above proposal will enhance gas safety. In addition, the above proposal has been designed to prioritize capital expenditures on the basis of need and therefore results in efficient and cost-effective capital deployment.

**Wherefore**, MGE respectfully request that the Commission issue its order approving the provisions of paragraphs 10, 11, 12, 13 and 14 of this Application.

Respectfully submitted,



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 Kansas City, MO 64111  
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 FAX: (816)360-5536  
 e-mail: rob.hack@southernunionco.com

ATTORNEY FOR MISSOURI  
 GAS ENERGY

**VERIFIED EXPLANATION OF STEVE HOLCOMB**

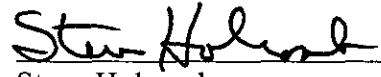
STATE OF MISSOURI     )  
   ) ss  
 COUNTY OF JACKSON    )

I, Steve Holcomb, having been duly sworn upon my oath, state that I am the Director of Field Operations for Missouri Gas Energy, that I am duly authorized to make this verification on behalf of Missouri Gas Energy (“MGE”) and that the matters set forth in the foregoing Application are true and correct to the best of my information, knowledge and belief. In addition, Steve Holcomb further states as follows:

1. I have been employed by MGE, or its predecessors in interest, for 25 years. As Director of Field Operations for Missouri Gas Energy, I am responsible for ensuring that MGE's operational activities are conducted in accordance with established company policies and procedures and are in conformance with applicable governmental rules and regulations, including pipeline safety regulations.
2. Pursuant to paragraph 10 of the foregoing Application, MGE proposes to implement a long-term, organized replacement program and schedule for cast iron pipeline that is not high priority for replacement. The replacement criteria proposed for cast iron mains are rigorous, and should result in the replacement of cast iron main at the appropriate time. The use of replacement criteria makes sense to MGE because the criteria will focus capital expenditures where they are needed. Because this is a new program for MGE, it is presently not know with precision how much cast iron main will be called for replacement under these criteria. Thus, MGE has proposed the possibility for re-evaluation of the program after two years of experience.
3. Pursuant to paragraph 11 of the foregoing Application, MGE proposes to replace all copper-related service lines no later than June 30, 2006; to replace all unprotected steel service lines and yard lines that currently have leakage no later than June 30, 2003; and to replace all unprotected steel service lines and yard lines no later than June 30, 2020. In the process, MGE will give priority to any leaking service lines first. Although MGE has not experienced increased leakage history with the relatively limited number of copper-related service lines on its system, I understand that the Commission's Gas Safety Staff has expressed concerns regarding copper-related service lines with respect to another Missouri operator. In light of those expressed concerns, MGE proposes to eliminate copper-related service lines from its system, where there is no current requirement to do so. With respect to unprotected steel service lines and yard lines, MGE's belief, based on experience, is that replacing all such lines by year-end 2004 will result in significant capital expenditures without a corresponding benefit in gas safety improvement. This is because the vast majority of such service lines are not leaking and will not leak prior to December 30, 2004. MGE will continue its annual leak survey of unprotected steel service lines and yard lines.
4. Pursuant to paragraph 12 of the foregoing Application, MGE proposes to replace a minimum of 5 miles of protected bare steel mains per year using a 5-5-3 program, whereby replacement will be triggered by the occurrence of 5 leaks within 500 feet within a 3-year period. These replacement

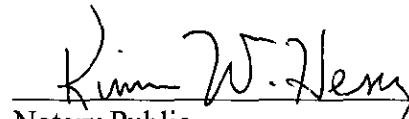
criteria are, in my opinion based on my experience, reasonable and will result in replacement of protected bare steel mains at the appropriate time.

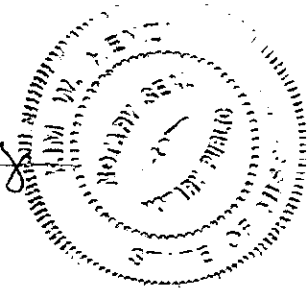
5. The reporting provisions of paragraph 14 are designed to provide the Commission with relevant information on a timely basis and to reconcile MGE's Commission-approved SLRP operating and reporting obligations with MGE's fiscal year (July to June).
6. In total, the foregoing Application improves MGE's current SLRP requirements from both the gas safety perspective and the perspective of efficient and cost-effective deployment of capital resources. MGE will continue to address safety concerns by utilizing flame ionization devices to leak survey the entire service on each service order that currently requires a minimum number of leak checks at the property line and where the pipe enters the building. This MGE practice exceeds the requirements of the current Commission rule on this topic, 4 CSR 240-40.030(14)(B).
7. I hereby swear and affirm that the information presented herein is true and correct to the best of my information, knowledge and belief.

  
Steve Holcomb

Subscribed and sworn before me this 27<sup>th</sup> day of JULY, 2001.



  
Notary Public



**CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been mailed or hand-delivered this 30th day of July, 2001, to:

Thomas R. Schwarz, Jr.  
Missouri Public Service Commission  
P.O. Box 360  
Jefferson City, MO 65102

Douglas E. Micheel  
Office of the Public Counsel  
P.O. Box 7800  
Jefferson City, MO 65102

