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September 6, 2001

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FILED³

SEP 6 2001

Missouri Public
Service Commission

Mr. Dale Hardy Roberts
Secretary/Chief Regulatory Law Judge
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102

RE: Case No. GO-2002-50

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
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DLF:ccl
Enclosure
cc: Counsel of Record

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

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 Part of its Safety Line Replacement)
Program.

Case No. GO-2002-50

STAFF RECOMMENDATION

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

1. On July 30, 2001, Missouri Gas Energy ("MGE"), a division of Southern Union Company, filed an 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 ("SLRP"), pursuant to 4 CSR 240-40.030(15)(C) and (D).

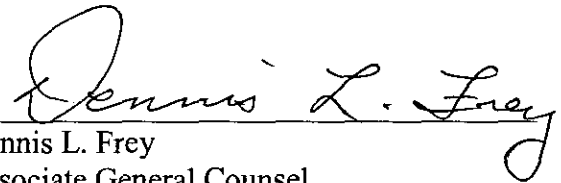
2. In the attached Memorandum (Appendix A), the Staff recommends approval of the Application, with two minor modifications to which MGE has agreed; namely, the deletion of the last sentence of subparagraph 11D of the Application and the addition of the following item to the list in paragraph 14: "Number of cast iron main leaks cleared by pipe diameter;". In addition, the Staff recommends: a) that the Commission approve MGE's requested modification of the waiver granted in Case No. GO-99-302, and direct that a copy of the Commission's order in the instant case be filed in Case No. GO-99-302; and b) in the event the Commission determines that the new SLRP costs to be incurred in connection with the instant Application may be deferred under the accounting authority order ("AAO") granted in Case No. GR-2001-

292, that the Commission state, in its order in the instant case, that the terms and conditions for SLRP deferral found in said AAO are fully applicable to said new SLRP costs.

WHEREFORE, the Staff requests that the Commission approve MGE's Application, as amended in the attached Memorandum, and adopt, as applicable, the additional recommendations set forth therein.

Respectfully submitted,

DANA K. JOYCE
General Counsel

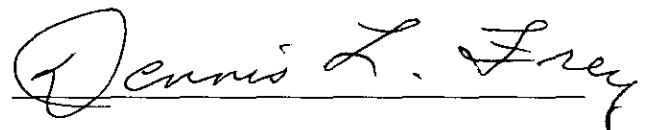


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Certificate of Service

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 6th day of September 2001.



MEMORANDUM

TO: Missouri Public Service Commission Official Case File
Case No. GO-2002-50, Missouri Gas Energy

FROM: ^{RM} Robert Leonberger and ^{JK} John Kottwitz, Energy Department – Safety/Engineering

Robert K. Leonberger / 9/4/2001
Project Coordinator / Date

Thomas R. Schwanz Jr. 9/5/01 ^{D.L.F.} 9-5-01
General Counsel's Office / Date

SUBJECT: Staff Recommendation for Approval of an Ongoing Replacement Program

DATE: September 4, 2001

Missouri Gas Energy Application

On July 30, 2001, Missouri Gas Energy (MGE) filed an APPLICATION requesting approval of certain matters pertaining to its ongoing cast iron main and service/yard line replacement programs, pursuant to 4 CSR 240-40.030 (15)(C) and (15)(D). MGE's replacement programs are also known as the Safety Line Replacement Program (SLRP). MGE's past and current replacement programs for service/yard lines have been approved in Case Nos. GO-91-239, GO-92-295 and GO-99-302, and have resulted in the replacement of more than 230,000 service/yard lines. MGE's cast iron main replacement program was approved in Case No. GO-91-277 and resulted in the replacement of nearly 300 miles of cast iron mains, but it ended in 2000. The Application includes a new long-term replacement program for cast iron mains, as required by 4 CSR 240-40.030(15)(D)2. In addition to cast iron main replacements, the Application proposes a more comprehensive program that covers the repair of cast iron joint leaks and the replacement of copper service lines, protected (cathodically-protected) bare steel mains, and unprotected (not cathodically-protected) steel service/yard lines. The Application requests that the program be scheduled and reported using MGE's fiscal year of July 1 to June 30.

The long-term cast iron main replacement program involves the minimum replacement of 5 miles per year. Past and future cast iron main fractures will be tracked and, under specific criteria, will trigger a required cast iron main replacement schedule for the main segment where fractures have occurred. A cast iron coupon (test sample) will be collected at each cast iron main fracture and will be analyzed to determine what percentage of the pipe wall exhibits graphitization (corrosion). If the percentage of graphitization exceeds the applicable criterion, this cast iron main segment will be replaced within 24 months. Special emphasis will be also given to the following cast iron mains: intermediate pressure (2 psig to 60 psig) beneath wall-to-wall pavement or near public concentrations; 3-inch diameter; in areas of disturbed soil support subject to the requirements of subsection (13)(Z); in areas of planned future developments; and in close proximity to extensive excavation, blasting, or construction activities. MGE will also place emphasis on segmenting its low-pressure (30" water column) system by extending intermediate pressure mains to areas with a history of fractures, so that replacements in those areas can be more efficient and cost-effective.

Beyond the replacement considerations in the previous paragraph, MGE proposes to repair no less than 400 leaking cast iron bell joints annually on cast iron mains that are not targeted for replacement. This will continue until leaks of this category are eliminated. Significantly more than 800 joint leaks will be repaired in the first two fiscal years ending June 30, 2003. MGE will continue to annually leak survey all 4-inch diameter and smaller cast iron mains, and to semi-annually leak survey cast iron mains in business districts.

MGE also seeks approval for several other provisions related to protected bare steel mains, copper service lines, and unprotected steel service/yard lines, including modification of the waiver granted in Case No. GO-99-302. MGE proposes to replace a minimum of 5 miles of protected bare steel mains per year, which will be triggered by a 5-5-3 program (5 leaks within 500 feet within a 3-year period). MGE proposes to replace all copper-related service lines (approximately 2,700) by June 30, 2006, and all leaking unprotected steel service/yard lines (approximately 1,200) by June 30, 2003. Instead of replacing all unprotected steel service/yard lines by December 31, 2004, as approved in Case No. GO-99-302, MGE proposes to have them all replaced by June 30, 2020 (averaging approximately 2,310 annually). Any new leaks discovered on these unprotected steel service/yard lines will be classified no lower than Class 3 and will be replaced within 5 years.

The Application includes a paragraph requesting that the costs associated with these replacements and/or rehabilitations be eligible for deferral under any current Accounting Authority Order (AAO) for SLRP related costs that has been granted by the Missouri Public Service Commission (Commission). Approval of this provision shall not be construed as requiring the Commission to grant future AAOs for these costs or to mandate subsequent rate recovery of costs deferred through current or future AAOs.

If the Application is approved, MGE will submit an annual status report to the Commission's Energy Department – Safety/Engineering Section (Staff) and the Office of Public Counsel. The report will include status information on 13 items at the end of each fiscal year ending on June 30, and will be submitted by September 24 of each year.

Staff Response

The Application is the result of extensive discussions between MGE and the Staff. These discussions began last year when the Staff requested a long-term replacement program for cast iron mains from MGE, as required by 4 CSR 240-40.030(15)(D)2. MGE's short-term cast iron replacement program required by paragraph (15)(D)1., and approved in Case No. GO-91-277, ended on December 31, 2000. The Staff recognizes and commends MGE on the effort required to complete that program and replace nearly 300 miles of cast iron main from 1992 through 2000. As a result, a large portion of the cast iron mains covered by paragraph (15)(D)1. have been replaced.

As indicated in the Application, MGE had not considered the long-term cast iron program requirement when submitting an application in 1999 to shorten the replacement deadline for unprotected steel service/yard lines from December 31, 2009 to December 31, 2004. Due to this and other factors (including copper service lines, cast iron joint leaks, and protected bare steel main leaks), the Staff has agreed with MGE that the entire system (not just cast iron) should be evaluated with regard to current leak inventory and the risk potential. This evaluation includes the fact that the replacement of all customer-owned service lines (considered by the Staff to have been the most hazardous facility in MGE's system) was completed on October 30, 2000. The remaining unprotected steel service/yard lines are either company-owned service lines or customer-owned yard lines that have a much lower risk potential, and most of the leaking lines have already been replaced. A substantial leak inventory has accumulated on cast iron bell joints and on cathodically-protected bare steel mains, and both MGE and the Staff agree this leak inventory needs to be minimized. A potential risk with copper service lines has been identified in another part of Missouri, and MGE has agreed to the Staff's request to consider replacing them. The Staff believes that MGE's proposals contained in the Application are an acceptable approach for addressing MGE's entire system.

The Staff believes that the long-term cast iron main replacement program contained in the Application is acceptable under the requirements of 4 CSR 240-40.030(15)(D)2. Most importantly, it covers each of the high-priority types of cast iron mains listed under paragraph (15)(D)1., with the greatest priority given to cast iron mains with fracture history or substantial graphitization. The highest potential for risk with cast iron mains is a fracture, and substantial graphitization indicates the pipe is weakened and more likely to fracture. The replacement criteria and schedule for cast

iron fractures are based on similar provisions contained in an ongoing replacement program for Laclede Gas Company (Laclede) that was approved by the Commission in Case No. GO-91-275. The replacement criteria and schedule for graphitization found in coupons are more stringent than ones used previously by MGE, which were based on a Kansas Corporation Commission regulation. The Staff notes a program item where a semi-annual patrol and replacement/rehabilitation emphasis are proposed, instead of scheduled replacement, for 1.6 miles of large diameter cast iron mains beneath wall-to-wall pavement or near public concentrations. This proposal corresponds to a provision that was approved by the Commission for Laclede in Case No. GO-91-275, and the Staff believes this is also acceptable for MGE due to the very low risk of fracture associated with large diameter cast iron pipe. For cast iron mains that are not prone to fracture and are not targeted for replacement, the Staff agrees with MGE's proposal to repair the leaking bell joints and significantly reduce its leak inventory. Low-pressure bell joint leaks have a low potential for risk.

The Staff believes that the request in the Application to modify the waiver granted in Case No. GO-99-302 should be approved. This will extend the replacement deadline for unprotected steel service/yard lines from 2004 to 2020 and reduce the average number of annual replacements to approximately 2,310. The Staff recognizes that this involves an abnormally long extension of the replacement deadline, but the Staff believes it is justified by the increased attention on facilities with a higher risk potential (copper-related service lines and protected bare steel mains, discussed further below) and the fact that Laclede has already been granted a deadline of 2020 for unprotected steel service/yard lines in Case No. GO-99-155. Also, MGE previously had a later deadline under its first waiver, which extended the replacement deadline from 1999 to 2009 and was granted by the Commission in Case No. GO-92-295. As discussed above (and in previous waivers for MGE, Laclede, and AmerenUE), the risk for these remaining lines is low because the yard lines operate at low-pressure and the service lines were installed using better materials and installation practices by the gas company (one of MGE's predecessors, in this case) instead of the customer. All existing leaks on these service/yard lines will be replaced by June 30, 2003, and any new leak will be classified no lower than Class 3, which requires replacement within 5 years. In addition, these unprotected steel service/yard lines will continue to be annually leak surveyed as required under subsections (13)(M) and (15)(C).

The Staff believes that the replacement program for copper-related service lines contained in the Application should be approved. In the wake of the copper service line problems experienced by Laclede that have resulted in an extensive leak survey and replacement program, the Staff has requested that other Missouri gas system operators with copper service lines consider a leak survey and replacement program for copper service lines. The Staff appreciates the fact that MGE has brought forward a copper service line replacement program in this Application.

The Staff believes that the replacement program for cathodically-protected bare steel mains contained in the Application should be approved. These bare steel mains were not cathodically protected for many years following installation and then from 1992 to 1997, cathodic protection was added to these mains under a program approved by the Commission in Case No. GO-91-277. A large number of leaks have accumulated on these mains and the Staff agrees that a replacement program is needed. The annual reporting of leaks and replacements of these protected bare steel mains will allow MGE and the Staff to monitor the appropriate level of replacements for these mains. The 5-5-3 criterion is one that was used by MGE's predecessors for many years and is a good initial criterion for this program.

MGE's request that the SLRP costs to be incurred as a result of Commission approval of this Application be allowed deferral treatment pursuant to the SLRP AAO granted by the Commission in its Order in Case No. GR-2001-292, dated July 5, 2001, is acceptable to the Staff, under the condition that the terms and conditions for a SLRP deferral found in the Order in Case No. GR-2001-292 are deemed to be fully applicable to new SLRP costs incurred if this Application is approved.

During the Staff's review of the Application as compared to Staff's discussions with MGE, two minor errors were noted. The Staff has discussed the two items with MGE, and MGE agrees that these two items should be corrected.

Since they are minor changes, MGE agreed that Staff should address them in this recommendation instead of amending the Application. First, in subparagraph 11D on page 8 of the Application, the last sentence "In addition, in an effort ..." should be deleted. This sentence incorrectly states that existing Class 4 leaks on unprotected steel service/yard lines will be re-classed to Class 3 and repaired within 5 years. Instead, all unprotected steel service/yard lines that have an existing leak (including all existing Class 4 leaks) will be repaired no later than June 30, 2003 in accordance with subparagraph 11B on page 7 of the Application. For new leaks discovered on unprotected steel service/yard lines in the future, MGE will no longer use the Class 4 leak classification that does not include a repair deadline. Second, an item was inadvertently left out of the Status Report list in paragraph 14 on page 9 of the Application. The item should have followed item J and should have stated "Number of cast iron main leaks cleared by pipe diameter;".

Staff Recommendations

The Staff recommends that the Commission approve the Application with the two following modifications that are agreeable to MGE. The first modification is to delete the last sentence of subparagraph 11D on page 8 of the Application. The second modification is to add the following item to the list in paragraph 14 on pages 9 and 10 of the Application: Number of cast iron main leaks cleared by pipe diameter.

The Staff recommends that the Commission approve a modification of the waiver granted in Case No. GO-99-302, as requested in the Application. If this modification of the waiver is granted by the Commission, the Staff further recommends that a copy of the Order in this case or a Notice to Case No. GO-99-302, or both, be filed in Case No. GO-99-302 to reflect the change.

If the Commission approves the Application and MGE's request in the Application that the SLRP costs to be incurred as a result be allowed deferral treatment pursuant to the SLRP AAO granted by the Commission in its Order in Case No. GR-2001-292, dated July 5, 2001, the Staff recommends that the Commission include a condition or finding that the terms and conditions for a SLRP deferral found in the Order in Case No. GR-2001-292 are fully applicable to new SLRP costs incurred if this Application is approved.

Service List for
Case No. GO-2002-50
Verified: September 5, 2001 (ccl)

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