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

In the Matter of the Verified Application	)	
of Laclede Gas Company for an Order	)	
establishing Replacement Requirements	)	Case No. GO-2003-0506
for the Final Phase of its Unprotected	)	
Steel Mains Replacement Program	)	
established Pursuant to Rule 4 CSR 240-	)	
40.030(15)(E).	)	
In the Matter of the Adequacy of Laclede	)	
Gas Company's Service Line	)	Case No. GO-99-155
Replacement Program and Leak Survey	Ĵ	
Procedures.	)	

# **BRIEF OF THE STAFF**

**COMES NOW** the Staff of the Missouri Public Service Commission and submits its Briefs in these cases that have not been consolidated.

# **INTRODUCTION**

In this brief, that will address issues in both cases, Staff will summarize its reasons for supporting continuation of the copper service line replacement program as designed, and its reasons for agreeing that Laclede Gas Company's (Laclede or Company) application to replace unprotected steel mains at a rate of 10,000 feet per year, is consistent with public safety based on 1) Staff's over fourteen-year experience monitoring and the dramatic reduction in the level of leaks per 10,000 feet of remaining pipe over the 50 years that Laclede has been doing steel main replacements 2) the fact that the copper service line replacement program is successful in achieving its established goals.

The copper service line replacement program was designed to assure the public safety through a proven replacement schedule, coupled with an aggressive leak survey and detection program. In developing the Stipulation, high priority was given to leak survey methods, frequencies of leak surveys, and the timeliness of leak repairs. Through its review of three years of the copper line replacement program including leak survey procedures, Staff has determined that the crucial goal of public safety is being achieved. In other words, the program is working.

The steel main replacement program has also been successful in reducing the number of leaks on unprotected steel mains. To Staff's knowledge there has never been an incident involving corrosion on unprotected steel mains. Furthermore, Staff has a long history monitoring Laclede's unprotected steel main replacement program. The same Staff members involved in the review of Laclede application were involved in drafting the regulations that established the Commission's pipe replacement rules in 1989. The same Staff reviewed and recommended approval of Laclede's original unprotected steel main replacement program that was approved by the Commission in 1991, and also reviewed and recommended approval of revisions to Laclede's program that were adopted by the Commission in 1994.

Staff reviewed the information submitted by Laclede in its May 21, 2003 Verified Application and determined that Laclede's request was reasonable and could be approved with no diminution in public safety. Staff considered many aspects of the program when evaluating the Application including:

- (1) Staff's ultimate concern of public safety,
- (2) Laclede has been replacing unprotected steel mains for 50 years and over 3 million feet of line has been replaced, including previously replaced lines in areas known for corrosion,
- (3) the number of leaks per 10,000 feet of remaining pipe has dropped dramatically as shown in Exhibit 2,

- (4) any available resources may be shifted to other higher priority, proactive programs that advance public safety and sound financial management, and,
- (5) recognition of the fact that decreasing repair/leaks per 10,000 feet of remaining pipe, and not the age of lines, justifies a replacement rate of 10,000 feet per year.

# A. Procedural History

## 1. Steel Mains Replacement Program

On November 20, 2003, the Commission issued its Order scheduling an evidentiary hearing in the above captioned proceedings. The first proceeding – Case GO-99-155 – concerns Laclede's copper service line replacement program and Staff's three-year report with Staff's recommendation that the Commission continue the current replacement program. The second proceeding – Case No. GO-2003-0506 – involves an application that was filed by Laclede to implement a replacement schedule of 10,000 feet of unprotected steel main in the final phase of its steel main program. While there is currently no Commission ordered replacement schedule, Laclede has been replacing an average of 20,000 feet per year. On May 21, 2003, Laclede filed a Verified Application (Application) with the Commission. The Application requests a Commission Order establishing replacement requirements for the final phase of Laclede's unprotected steel main replacement program. The initial phase of the replacement program was previously approved pursuant to 4 CSR 240-40.030(15)(E). For unprotected steel mains that meet the criteria in paragraphs (15)(E)3. through (15)(E)6, now or in the future, Laclede specifically requests Commission approval to replace these mains at an average annual rate of 10,000 feet per year until all such lines have been replaced.

#### 2. Copper Service Line Replacement Program

On October 30, 1998, at the request of Staff, the Commission issued an Order

Establishing Case for the purpose of receiving information relevant to the adequacy of Laclede's copper service line replacement program and the effectiveness of the Company's leak surveys and investigations. On February 18, 2000, the Parties filed a Unanimous Stipulation and Agreement. Section 7(h) of that agreement states that "[a]fter the third year of this program, Laclede and the Gas Safety Staff will review the progress and results of the Company's Copper Service Safety Program to determine future relay/renewal plans, including the rate of such future actions, potential modifications to survey techniques and other related matters." Staff filed its Three Year Report in compliance with the Stipulation. Staff also filed interim update reports, the last dated October 2002, summarizing annual results and six-month updates, all of which have stated that Laclede has met or exceeded the Stipulation's requirements.

## **B.** Background

#### 1. Steel Main Replacement Program

Laclede has been doing steel main replacement for almost fifty (50) years. Laclede began replacing unprotected steel mains in the mid-1950's, with no requirement to do so. Over three million three hundred thousand feet (3,300,000) have been replaced to date. While the history of the program is not an absolute guarantee, there has not been an incident involving unprotected steel mains.

To meet the Commission's 1989 replacement rules, Laclede initiated a formal replacement program that was approved by the Commission in Case No. GO-91-239, effective April 23, 1991. A revised replacement schedule dated October 13, 1994, was filed in Case No. GO-91-239, for unprotected steel main replacements beginning with fiscal year 1996. Since that schedule was implemented, Laclede has been replacing an average of 20,000 feet of unprotected steel mains per year through 2002, even though Laclede has not been under any Commission

order to do so for the past five years.

Laclede had 88,163 feet of main out of the 129,773 total footage that met the criteria in Commission rules paragraphs (15)(E)3. through (15)(E)6. at the end of fiscal year 2002, and these mains would be replaced by the end of fiscal year 2011 at an average rate of 10,000 feet per year (Schedule A in the Application). Some, if not all, of the remaining unprotected steel mains may experience leak repairs or other conditions causing them to meet the criteria in paragraphs (15)(E)3 through (15)(E)6 in the future, and these mains would also be replaced at an average rate of 10,000 feet per year. If all remaining mains were to meet the criteria, then replacement of all unprotected steel mains would be completed in fiscal year 2015 (Schedule B in the Application). If some of the remaining mains meet the criteria, then average annual replacements of 10,000 feet will begin in fiscal year 2012 and continue until all mains meeting the criteria are completed. Then, during subsequent fiscal years, all mains newly identified as meeting the criteria would be replaced each fiscal year (up to 10,000 feet).

Laclede's proposal covers the final phase of the replacement program for unprotected steel mains in that it provides for replacement of all unprotected steel mains meeting 4 CSR 240-40.030(15)(E). If the Application is approved, Laclede also commits to submit to the Gas Safety/Engineering Staff an annual summary of corrosion leaks on unprotected steel mains after each fiscal year until all replacements are completed.

#### 2. Copper Service Line Replacement Program

On February 18, 2000, Staff and Laclede submitted a Stipulation and Agreement that was approved by the Commission. The Company and Staff agreed that the Company would enter into a replacement program that included aggressive leak survey procedures designed to identify leaks so that replacement of lines could be targeted to areas where leaks had been found. This program was derived initially from previous unprotected steel service and yard line replacement programs that have been successful in protecting the public. Since inception of the program, Staff has evaluated the number of leaks found and has been able to determine that the program is operating effectively in protecting the public safety.

The requirements of this copper service line program are designed to meet the goals, listed in order of importance, of: (1) protecting the public, (2) achieving a substantial number of replacements annually, (3) using effective leak detection methods, (4) and making timely repairs, yet at the same time, (5) being mindful of overall costs paid by the ratepayer. Public safety is always the overriding goal of this and any replacement program.

## C. Staff's recommendations

#### 1. Steel Mains [classified under 4 CSR 240-40.030(15)(E) (3 through 6)]

Since the 1994 revisions to the replacement schedule, Laclede has experienced a continuing and significant decline in the corrosion leak rates per 10,000 feet of remaining pipe associated with unprotected steel mains as shown in Exhibit No.'s 1 and 2 from Laclede's Verified Application and Exhibit No. 2 from Laclede admitted at Hearing. Exhibits No. 1 and No. 2 from Laclede's Verified Application demonstrate respectively that both the number of clamps installed on unprotected steel mains and the number of clamps installed per 10,000 feet of 2 inch and 1 and one quarter inch bare steel mains have dropped precipitously from 1970 to 2002. Laclede Exhibit 2 shows that the average number of repair clamps installed in 2001 through 2003 is 32 as compared to 3,162 for the period of 1972 through 1980. In summary, the number of repair clamps installed has decreased by a factor of one hundred.

Staff's review indicates that the corrosion leak rate per 10,000 feet of remaining pipe has declined to a point where replacements can be done at a rate of 10,000 feet per year without any

increase in risk to the public safety. Staff bases this on a number of considerations including:

(1) Age of mains is <u>not</u> a factor driving the need for replacement of mains but rather corrosivity of the environment and the fact that "mains that are located in very active corrosion areas have already been replaced." (John Kottwitz, Tr. 128, lines 12-25).

(2) Experience has validated a similar review supporting the Commission approved replacement rate reduction from 30,000 feet per year of 1991 to 1995 to 20,000 feet per year for 1996 to 1998.

(3) Laclede has reduced its total footage of unprotected steel mains from over 441,000 feet at the beginning of fiscal year 1991 to 129,773 feet at the end of fiscal year 2002,

(4) Laclede will be replacing larger diameter mains that, due to their low rates of leak repairs, would not previously have been a priority for replacement,

(5) Laclede testified that replacement of the larger diameter mains creates much higher, up to 3 to 4 times the replacement costs, per foot than the smaller diameter lines. (Lauber, Tr. p. 146, lines 21-25; p. 147 lines 1-8; p.158 lines 16-25; p. 159 lines 1-6).

(6) Laclede testified that any resources freed from the reduction in the rate of replacement of steel mains is already being allocated to the copper service replacement program beyond what is required in the stipulation. When responding to any odor complaint, Laclede has directed their service representatives to conduct additional bar hole surveys of any copper service lines known to be in the area, thereby substantially increasing the number of bar hole surveys beyond the annual requirement. Also, Laclede advanced all Class 3 leaks identified as the result of an odor complaint for repair on the same frequency as leaks found by bar hole survey. Instead of repairing Class 3 leaks within the 5 year required limit, Laclede is now repairing Class 3 leaks on the average of 3 to 4 months in high pressure areas and 7 to 9 months in low pressure areas.

Also, Laclede is replacing copper service lines as opposed to repairing them. (Transcript pp.150 lines 15-25; 151, 152 lines 1-14.)

(7) Laclede's Operations Budget (attached hereto as Attachment 1 and incorporated
herein for all further references) from FY99 through FY'03 reflects substantially large increases
to the copper replacement program. Specifically, copper replacement increased by \$2.9 million
FY'02 over FY'01 and increased another \$500 thousand for FY'03 over FY'02 ** HC
HC ** In comparison, steel mains
dropped only \$136 thousand in FY'02 from FY'01 with another small drop of \$49 thousand in
FY'03 from FY'02. ** <u>HC</u>
HC ** In addition, Laclede added \$300
thousand in FY'02 and \$420 thousand in FY'03 for a new program to update low pressure
regulator stations. ** HC
HC ** Laclede's
commitment to increasing its safety-related replacement programs is more than amply
demonstrated by the overall net increase of its Operations Budget (See Attachment 1).

# 2. Copper Services

The Copper Service Line Replacement Program as developed and administered in Case No. GO-99-155 is working as expected to protect the public safety. Presently, Staff continues to monitor the success of this program. Should new developments change the situation, Staff will not hesitate to notify the Company and immediately bring any concerns before the Commission. Staff recommends that the Commission approve Staff's recommendations concerning the Company's Copper Service Line Replacement Program in Case No. GO-99-155.

#### SUMMARY AND CONCLUSION

Staff believes that a replacement rate of 10,000 feet per year for the final phase of the unprotected steel mains replacement program can be established without compromising public safety. This program has been monitored by Staff and Laclede over the past 14 years with a record of "incident-free" success and more than vindicates Staff's recommendation in Case No.GO-2003-0506.

A. <u>Public Safety is Not Served By Requiring Laclede to Make Unnecessary Steel</u> Main Replacements.

In FY'03, Laclede replaced an estimated 10,000 feet of steel mains, or only about half of the 20,000 replaced in FY 01, but the reduction in costs was only 20%. This indicates that costs per foot of replacement are increasing. Moreover, there is no public safety benefit to requiring Laclede to keep to an average of 20,000 feet per year schedule.

B. <u>Public Safety is Best Served by Laclede Shifting Resources to Higher Priority</u> <u>Replacement Programs</u>.

Laclede's budgets for its replacement programs (See Attachment 1) show substantial increases for copper replacement, updating low pressure regulator stations, and for conducting a new high pressure gas line integrity management program in FY'04. For copper services, Laclede is going beyond its stipulated requirement by conducting additional bar hole surveys and by speeding repairs of Class 3 leaks from 5 years to periods of 3 to 4 months and 7 to 9 months for high pressure and low pressure repairs, respectively. The steel lines currently being replaced have a higher cost of replacement, but to the extent that the costs are reduced by a reduction in the number required to be replaced, the resources may be shifted to higher priority programs. The increase in monies marked for higher priority, proactive programs that are shown in

Attachment 1 and discussed in testimony advance the causes of public safety and responsible financial management. Conversely, an order of the Commission requiring Laclede to stay at the previous average of 20,000 feet per year schedule would impose on Laclede the need to fund the higher cost of more complex, larger diameter steel main replacement, possibly at the cost of more productive voluntary safety programs. Certainly the costs of the safety program have been going up steadily as Mr. Craig Hoeferlin testified, the capital expenditures made by the Company on its major safety programs have more than doubled over the past six years, rising from approximately \$5.5 million in FY 1998 to \$12.3 million in FY 2003. (Hoeferlin Tr. 173-174). Ratepayers could bear the added costs, when resources may be better spent on higher priorities.

Therefore, for the reasons contained in this Brief and in Staff's Recommendation, Staff recommends that the Commission issue an order establishing the replacement requirements for the final phase of Laclede's unprotected steel main replacement program, specifically establishing an annual replacement requirement of 10,000 feet per year for all unprotected steel mains now or hereinafter identified as meeting the criteria in Paragraphs (15)(E) 3 through 6 of 4 CSR 240-40.030.

Respectfully submitted,

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# **Certificate of Service**

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 5<sup>th</sup> day of January 2004.

/s/ Lera L. Shemwell