BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

| In the Matter of Laclede Gas Company |) | |
|--|---|-----------------------|
| Concerning a Natural Gas Incident at |) | Case No. GS-2016-0160 |
| 5730 Mango Drive in Oakville, Missouri |) | |

LACLEDE GAS COMPANY'S RESPONSE TO STAFF RECOMMENDATIONS IN STAFF'S GAS INCIDENT REPORT

COMES NOW Laclede Gas Company (hereinafter "Laclede" or "Company") and submits this Response to the Staff Recommendations in Staff's Gas Incident Report filed on October 21, 2016 (the "Staff Report"). In support thereof, Laclede states as follows:

- 1. As noted in the Staff Report, Staff and Laclede generally agree that the failure of a plastic fusion joint was the source of the leak, and that pressure from tree roots contributed to the incident.¹
- 2. Laclede also agrees that this type of threat should be included in its Gas Distribution Integrity Management Program ("DIMP"). Laclede already monitors tree roots as a DIMP sub-threat. As Staff pointed out, Laclede is adding pre-July 1981 plastic fusion joints as a sub-threat, and will be monitoring the risks of that sub-threat. Staff stated that it generally agreed with Laclede's planned actions in addressing these matters.²
- 3. Given the general agreement between Staff and Laclede on this incident and on the planned actions that Laclede will take, Laclede will proceed to address herein the Staff's specific recommendations, as set forth on pages 15-18 of the Staff Report.

_

¹ See Staff report at pages 1-2.

² See Staff report at pages 14-15.

- 4. Staff has developed three recommendations for identifying, monitoring and evaluating the threats identified with this incident. Laclede has met with the Safety Staff to discuss its recommendations and clarify the details. Laclede and the Safety Staff have reached an understanding: (a) that Laclede will take the actions suggested by Staff in its first recommendation; (b) that Laclede will remove, retain, examine and record plastic pipe segments where tree roots could have contributed to a leak as provided in Staff's second recommendation, with the clarification that these actions would be taken only on leaks that are exposed in the normal course of operations (the "exposed leaks"); and (c) that Laclede will add a sub-threat of PE heat-fusion joints to its DIMP and remove, retain, examine and record such joints, all as recommended by Staff in its third recommendation, again with the clarification that such actions will be taken on exposed leaks. The condition that the these actions would be taken on exposed leaks will allow Laclede to gather data that can be readily evaluated without having to dig a hole to examine every leak or destroy a tree each time a leak occurs in the vicinity of a tree.
- 5. The Staff's recommendations are replicated below, along with the clarification discussed above, which consists of inserting the term "exposed" in Recommendations 2A-2D, 3B, 3D and 3E:

Staff recommends that the following be done to include identification, monitoring and evaluation of these threats going forward in the Company's DIMP:

- 1. Staff recommends that Laclede gather and provide to Staff the following information that will serve as a baseline to assess these threats going forward:
 - A. Review its historical PE heat-fusion procedures to determine when the Company first required its PE joiners to be qualified to make heat-fusion joints in accordance with a procedure that produced joints stronger than the pipe. If this date cannot be determined, a default of July 1, 1981, should be used.

- B. Review its past leak history on the PE pipe installed using heat fusion joining methods **prior to and including** the date determined in part A above (or July 1, 1981 if date cannot be determined) for a period covering the past five years of data and determine:
 - i. Number of leaks attributed to joint failure per year;
 - ii. Number of leaks with contributing factors of roots indicated per year; and
 - iii. Number of leaks where the cause was not determined per year.
- C. Review its past leak history on the PE pipe installed using heat fusion joining methods installed **after** the date determined in part A above (or July 1, 1981 if date cannot be determined) for a period covering the past five years of data and determine:
 - i. Number of leaks attributed to joint failure per year;
 - ii. Number of leaks with contributing factors of roots indicated per year; and
 - iii. Number of leaks where the cause was not determined per year.
- 2. Staff recommends that going forward, the Company should:
 - A. Revise its applicable procedures to require field personnel to remove and retain each PE pipe segment where a leak was exposed in the normal course of operations (the "exposed leak"), and tree roots could have contributed to the leak;
 - B. Have knowledgeable personnel examine the exposed segments in the field to determine and document if the tree roots contributed to the leak by exertion of force or were simply present in the excavation and did not contribute to the leak;
 - C. For each instance where tree roots contributed to an exposed leak, record where the leak occurred (e.g. body of pipe, heat-fusion joint);
 - D. For each instance where tree roots contributed to an exposed leak, determine and record the installation date of the pipe; and
 - E. Compile the data on an on-going basis and evaluate annually to determine if there are any ascertainable trends in damages done by tree-roots.

Staff further recommends that this additional monitoring be incorporated into the Company's DIMP, and that the results be reviewed annually to evaluate the relative risk ranking and determine if additional corrective measures or accelerated actions are warranted.

- 3. Staff recommends that going forward, the Company should:
 - A. Add a sub-threat of PE heat-fusion joints installed on or before July 1, 1981 (or other date as determined in recommendation 1 by review of procedures), under the Material/Weld/Joint category of its DIMP plan;
 - B. Revise its applicable procedures to require field personnel to remove and retain each PE heat-fusion joint that appears to have failed resulting in an exposed leak;
 - C. Have knowledgeable personnel examine each retained PE heatfusion joint to determine and document whether the failure occurred in the joint or in the body of the pipe;
 - D. For each instance where a failure occurred in a heat-fusion joint with an exposed leak, record additional contributing factors (e.g., tree root, past excavation damage);
 - E. For each instance where a failure occurred in an heat-fusion joint with an exposed leak, determine and record the installation date of the pipe; and
 - F. Compile the data on an on-going basis and evaluate annually to determine if there are any ascertainable trends in PE heat-fusion joint failures.

Staff further recommends that this additional monitoring be incorporated into the Company's DIMP, and that the results be reviewed annually to evaluate the relative risk ranking and determine if additional corrective measures or accelerated actions are warranted.

6. Laclede requests that Staff respond to the accuracy of the clarification of the Staff recommendations set forth herein. If Staff concurs, Laclede requests that the Commission deem the incident investigation to be complete and close this case.

WHEREFORE, for the foregoing reasons, Laclede Gas Company respectfully requests that the Commission accept Laclede's response and close the case on the terms requested herein.

Respectfully submitted,

/s/ Rick Zucker

Rick Zucker, Mo. Bar #49211 Associate General Counsel Laclede Gas Company 700 Market Street, 6th Floor St. Louis, MO 63101

Telephone: (314) 342-0533 Fax: (314) 421-1979

Email: rick.zucker@spireenergy.com

CERTIFICATE OF SERVICE

Marcia Spangler hereby certifies that the foregoing response has been duly served upon the Staff and the Office of the Public Counsel by hand delivery, email, fax, or United States mail, postage prepaid, on this 27th day of January, 2017.

/s/ Marcia Spangler