

MEMORANDUM

TO: Missouri Public Service Commission
Official Case File No. GC-2024-0260
Spire Missouri, Inc.

FROM: Safety Engineering Department
Clinton Foster, Associate Engineer
Trevor Rucker, Associate Engineer
Kathleen A. McNelis, PE, Engineer Manager

/s/ Kathleen A. McNelis, PE 12/10/2024
Safety Engineering Department / Date

SUBJECT: Staff's Reply to Spire's *Answer* to Staff's *Complaint*

DATE: December 10, 2024

Staff filed its *Complaint* in this case on March 25, 2024. In its *Complaint*, Staff asserted four violations of Commission rules,¹ provided nine numbered recommendations to Spire Missouri, Inc. ("Spire"),² and a final recommendation that the Commission order Spire to file an action plan to address the nine numbered recommendations.³

Spire filed its *Answer* to the *Complaint* in this case on November 15, 2024. Spire affirmed Paragraphs 1-11 of the *Complaint*, admitted the allegations in Paragraphs 12-28, provided brief responses to Staff's nine numbered recommendations to Spire, and provided a further answer.

Staff's reply to each of Spire's responses to Staff's nine numbered recommendations to Spire and Spire's further answer is provided below. For recommendations that Staff and Spire agree upon, no additional discussion is necessary. For ease of review, Staff has included the wording of recommendations that require further discussion.

¹ Pages 8-12 of Staff's *Complaint*.

² Pages 13-17 of Staff's *Complaint*.

³ Pages 17-18 of Staff's *Complaint*.

Staff's Recommendations to Spire

1. Staff Recommendation 1. Staff and Spire are in agreement.

2. Staff Recommendation 2.

A. Recommendation

Spire shall develop and implement a written plan for removing and testing a statistically valid sample of the plastic pipe joints, which were installed by joiners during a time interval in which the joiner had not been requalified within 15 months. This sampling and testing plan shall include at a minimum:

- a. A statistical basis for selecting the number of joints to be tested, including the total number of joints, and number of each different type of joint installed using a different method;
- b. A method for testing the joints that will identify if the joint has been completed in accordance with the applicable requirements of 20 CSR 4240-40.030(6);
- c. A method to evaluate the results of the sampling and testing program to determine the relative probability of each joint type failure;
- d. Criteria for how the results of the sampling program will be used to evaluate the need for additional joint replacement; and,
- e. A schedule for implementation of the sampling and testing program.

B. Spire's Answer

Paragraph 30 of Spire's *Answer* reads "**Recommendation 2.** Respondent agrees with this recommendation and has been developing sampling program with Staff input to meet this recommendation."

C. Staff's Reply

Staff acknowledges that Spire has provided drafts of a sampling program to Staff for review and feedback. However, Staff notes that Spire and Staff have not yet reached agreement with respect to certain aspects of the sampling program. Staff will continue to work with Spire with respect to these aspects of the sampling program and will notify the Commission if Staff and Spire are unable to reach agreement.

3. Staff Recommendation 3. Staff and Spire are in agreement.

4. Staff Recommendation 4.

A. Recommendation

Spire shall track and monitor 1) the total number of leaks eliminated or repaired on plastic pipe joints that may have been completed by joiners when requalification had not been completed within 15 months and 2) the number of eliminated or repaired leaks caused by incorrect installation of plastic pipe joints that may have been completed by joiners when requalification had not been completed within 15 months. To implement this tracking and monitoring, Spire shall determine:

- a. The frequency for review of the number of eliminated or repaired leaks described above;
- b. A method to identify an increasing frequency of eliminated or repaired leaks that requires additional actions (above what is required by 20 CSR 4240-40.030) to mitigate the risk of further leaks on joints that may have been completed by joiners when requalification had not been completed within 15 months, such as earlier repair or replacement of similar non-leaking joints;
- c. A threshold frequency of eliminated or repaired leaks that requires additional actions (above what is required by 20 CSR 4240-40.030) to mitigate the risk of further leaks on joints that may have been completed by joiners when requalification had not been completed within 15 months, such as earlier repair or replacement of similar non-leaking joints; and,
- d. How additional actions will be developed and carried out (above what is required by 20 CSR 4240-40.030) to mitigate the risk of further leaks on joints that may have been completed by joiners when requalification had not been completed within 15 months, such as earlier repair or replacement of similar non-leaking joints.

In instances when Spire does not expose leaks on plastic pipe joints that may have been completed by joiners when requalification had not been completed within 15 months, that Spire shall attribute the cause of these leaks to be incorrect installation.

B. Spire's Answer

Paragraph 32 of Spire's *Answer* reads “**Recommendation 4.** Respondent agrees with this recommendation.”

Paragraph 33 of Spire's *Answer* reads “**Recommendation 5.** Respondent will implement the tracking and monitoring recommended by Staff and will include incorrect operation as a consideration in tracking and analysis of leaks that have the cause of “other” on these newly installed facilities that are replaced without exposing.”

C. Staff's Reply

The response in Paragraph 33 of Spire's *Answer* appears to Staff to be in response to Staff's Recommendation 4, even though it is labeled as the response to Recommendation 5. It is unclear to Staff if Paragraph 32 of Spire's *Answer* was also meant to be a response to Recommendation 4, or if it was intended to be a response for a different recommendation.

Staff notes that both responses suggest that Staff and Spire are in agreement on Recommendation 4.

5. Staff Recommendation 5.

A. Recommendation

Spire shall perform leakage surveys at intervals not exceeding fifteen (15) months but at least once each calendar year at locations where plastic pipe joints may have been completed by a joiner during a time interval in which the joiner had not been requalified within 15 months.

B. Spire's Answer

Paragraph 33 of Spire's *Answer* reads “**Recommendation 5.** Respondent will implement the tracking and monitoring recommended by Staff and will include incorrect operation as a consideration in tracking and analysis of leaks that have the cause of “other” on these newly installed facilities that are replaced without exposing.”

Paragraph 34 of Spire's *Answer* reads “**Recommendation 6.** Respondent understands Staff's rationale behind this recommendation and proposes to implement an accelerated leak surveying program if, through the sampling program, Respondent and Staff determine that the joints in question are leaking due to being completed by a joiner during a time interval in which the joiner had not been requalified within 15 months. If an accelerated leak surveying program

is implemented, Respondent proposes that the program continue until further risk of leaks from the joints in is negligible.”

C. Staff’s Reply

The response in Paragraph 34 of Spire’s *Answer* appears to Staff to be a response to Recommendation 5, even though it is labeled as a response to Recommendation 6. The response in Paragraph 33 of Spire’s *Answer* appears to Staff to be a response to Recommendation 4, even though it is labeled as a response to Recommendation 5. Therefore, Staff’s reply is to the response in Paragraph 34 of Spire’s *Answer*.

Staff and Spire have not yet agreed on certain aspects of a sampling program. Once a sampling program is developed, it will take time to implement the sampling program, and then more time is needed to receive and analyze the results of the sampling program. Staff recommended more frequent leakage surveys as a means to increase the public’s safety by identifying potential leaks sooner (within one year) than such leaks might otherwise be found by the current leakage survey schedule (within three years) in the areas where joints may have been completed by a joiner during a time interval in which the joiner had not been requalified within 15 months.

As of October 23, 2024,⁴ there have been a total of ** [REDACTED]

[REDACTED]

[REDACTED] ⁵ [REDACTED]

[REDACTED] ⁶ [REDACTED] ⁷ [REDACTED] **. ⁸ Therefore,

Staff maintains its position that annual leakage surveys should be performed until such a time that Spire can demonstrate through the sampling and testing program that the plastic pipe joints installed by joiners that had not been requalified within 15 months are not at an increased risk of failure.

⁴ October 23, 2024 is the date of Spire’s response to Staff Data Request 0003.0.

⁵ As described in 20 CSR 4240-40.030(14)(C)1., a Class 1 leak is a gas leak which, due to its location and/or magnitude, constitutes an immediate hazard to a building and/or the general public.

⁶ As described in 20 CSR 4240-40.030(14)(C)2., a Class 2 leak is a leak that does not constitute an immediate hazard to a building or to the general public, but is of a nature requiring action as soon as possible.

⁷ As described in 20 CSR 4240-40.030(14)(C)3., a Class 3 leak is a leak that does not constitute a hazard to property or to the general public but is of a nature requiring routine action.

⁸ Spire’s response to Staff Data Request 0003.0 in Commission Case No. GC-2024-0260.

6. Staff Recommendation 6.

A. Recommendation

Spire shall develop and follow written procedures that include a detailed summary of the processes put in place by Spire's Quality Assurance department for the purpose of monitoring of Operator Qualification ("OQ") expiration dates and conducting field audits to verify the qualification of individuals completing work in the field. Spire shall include the installation of service lines as a work type that is prioritized for periodic field audits in addition to those listed in Spire's response to Staff Data Request 0035.3.

B. Spire's Answer

Paragraph 34 of Spire's *Answer* reads "**Recommendation 6.** Respondent understands Staff's rationale behind this recommendation and proposes to implement an accelerated leak surveying program if, through the sampling program, Respondent and Staff determine that the joints in question are leaking due to being completed by a joiner during a time interval in which the joiner had not been requalified within 15 months. If an accelerated leak surveying program is implemented, Respondent proposes that the program continue until further risk of leaks from the joints in is negligible."

C. Staff's Reply

The response in Paragraph 34 of Spire's *Answer* appears to Staff to be a response to Staff Recommendation 5; although Paragraph 34 of Spire's *Answer* references Staff Recommendation 6, the response discusses leakage surveys which was the subject of Staff Recommendation 5. Therefore, it is unclear to Staff if Spire has provided a response to Staff Recommendation 6.

7. Staff Recommendation 7. Staff and Spire are in agreement.

8. Staff Recommendation 8.

A. Recommendation

Spire shall revise its procedure for determining leak causes ** [REDACTED] ** to include:

- a. When leaks must be exposed to determine the leak cause;
- b. When it is acceptable to not expose a leak;
- c. Failure category and leak classification information consistent with the information

for the leak causes in PHMSA's Instructions for Completing Form PHMSA F 7100.1-1;

- d. Instructions for completing leak repair documentation and additional information for which "Leak Cause" and "Leak SubCause" field personnel should select for determining leak causes;
- e. That field personnel must document leak repairs in sufficient detail to support the leak causes that are determined; and,
- f. That if a leaking facility is not exposed to determine the leak cause, the justification for that decision must be documented.

Furthermore, Spire shall train field personnel responsible for determining leak causes following procedure revisions.

B. Spire's Answer

Paragraph 36 of Spire's *Answer* reads "**Recommendation 8.** Respondent agrees with this recommendation. Respondent has an open field on leak orders that allows technicians to provide more information when a leak may have special circumstances associated with the selected leak cause. Respondent will retrain technicians on adding detail as appropriate. For leaks on newly installed facilities that are repaired by replacement and are not exposed, Respondent agrees with Staff that there are benefits to completing an additional investigation of those occurrences. Respondent does not and will not repair by replacement all leaks on newly installed facilities, therefore a sample of newly installed facilities are anticipated to be exposed and investigated for a specific cause."

C. Staff Reply

Spire has previously agreed to parts a. through d. of Recommendation 8.⁹

It is unclear to Staff from the response in Paragraph 36 of Spire's *Answer* if Spire agrees with part e. of Staff's Recommendation 8. Staff notes that part e. of Staff's Recommendation 8 would require Spire to revise its procedure for determining leak causes to include that field personnel must document leak repairs in sufficient detail to support the leak causes that are determined. Spire's response regarding supporting detail for leak causes discusses an existing

⁹ Spire's *Response to Staff Report and Recommendations* filed in Commission Case No. GS-2022-0047.

field on Spire's leak orders that allows Spire's field technicians to provide more information, specifically for "special circumstances".

It is also unclear to Staff from the response in Paragraph 36 of Spire's *Answer* if Spire agrees with part f. of Staff's Recommendation 8. Staff notes that part f. of Staff's Recommendation 8 would require Spire to revise its procedure for determining leak causes to include that if a leaking facility is not exposed to determine the leak cause, the justification for that decision must be documented. Spire's response regarding leaks on newly installed facilities that are repaired by replacement and are not exposed does not reference revisions to Spire's procedure for determining leak causes.

9. Staff Recommendation 9. Staff and Spire are in agreement.

Further Answer

A. Spire's Answer

While Respondent does not dispute the allegations in Staff's complaint, Respondent would note the circumstances of the alleged violations, including the alleged violation that joiners were not requalified within the time allowed by the Commission's rules. The joiners in question were all qualified prior to this incident, no joiner was unqualified longer than approximately eight months, and the average length that a joiner was unqualified was approximately three months. During the requalification of all joiners, which took no more than two months to accomplish, no joiner failed to become requalified. Additionally, this incident occurred during the COVID-19 Pandemic, when Respondent, like many companies across the country, was navigating novel public health requirements while maintaining the business operations necessary to continue providing a vital service to our customers.

B. Staff's Reply

Staff believes that Spire has taken steps to ensure that there will not be a repeated lapse in requalification of joiners. Staff's current concern is with respect to public safety, as there have been leaks discovered on some of the facilities Spire installed in 2020.

In Spire's October 23, 2024 response to Staff data request 0003.0, Spire stated that there had been a total of ** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **. As such, Staff's position is that the severity and breadth of the issue at hand cannot be minimized.

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

The Staff of the Missouri Public Service
Commission,

Complainant,

v.

Spire Missouri Inc. d/b/a Spire,

Respondent.

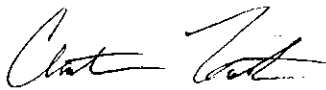
Case No. GC-2024-0260

AFFIDAVIT OF CLINTON L. FOSTER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

COMES NOW Clinton L. Foster, and on his oath states that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Response, in Memorandum form*; and that the same is true and correct according to his best knowledge and belief.

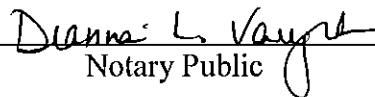
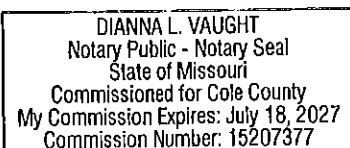
Further the Affiant sayeth not.

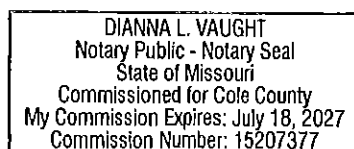


Clinton L. Foster

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 6th day of December 2024.


Notary Public



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

The Staff of the Missouri Public Service
Commission,

Complainant,

v.

Spire Missouri Inc. d/b/a Spire,

Respondent.


Case No. GC-2024-0260

AFFIDAVIT OF KATHLEEN A. MCNELIS, PE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

COMES NOW Kathleen A. McNelis, PE, and on her oath states that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Response, in Memorandum form*; and that the same is true and correct according to her best knowledge and belief.

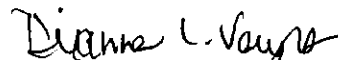
Further the Affiant sayeth not.



Kathleen A. McNelis, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 6th day of December 2024.



Notary Public

DIANNA L. VAUGHT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: July 18, 2027 Commission Number: 15207377
