MEMORANDUM

TO: Missouri Public Service Commission

Official Case, Case No. GS-2023-0372

Spire Missouri, Inc.

FROM: Safety Engineering Department

John D. Kottwitz, Associate Engineer Brian J. Buchanan, Compliance Inspector Kathleen A. McNelis, PE, Engineer Manager

/s/ Kathleen A. McNelis, PE 04/01/2024

Safety Engineering Department/ Date

SUBJECT: Staff's Response to Commission Order in the Matter of Spire Missouri Inc., d/b/a

Spire and Gateway Infrastructure, LLC Concerning a Natural Gas Incident at

Millers Ct. in O'Fallon Missouri

DATE: April 1, 2024

Staff filed its *Staff's Incident Report* in this Case on April 26, 2023, with its Motion to Open Case. In its Incident Report, Staff made three recommendations to Spire Missouri Inc., d/b/a Spire ("Spire" or "Spire Missouri" or "Company"). Spire filed a Response addressing these recommendations on May 30, 2023, and provided a status update on February 2, 2024. On March 15, 2024, the Commission ordered Staff to state whether Spire has complied with all of Staff's recommendations, and whether Staff believes the Commission should order Spire to address anything further.

Staff's response is provided below. For ease of reference, each of Staff's recommendations to Spire and the associated responses from Spire are copied with Staff's response following.

1. Staff Recommendation 1

A. Recommendation²

Staff recommends that Spire review, evaluate and update, as necessary, its reporting procedures to ensure that such procedures require revision or confirmation of its initial telephonic notice to the NRC within 48 hours after the confirmed discovery of an incident as required by 20 CSR 4240-40.020(3)(C).³

¹ Numbered recommendations 1-3 on pages 27 and 28 of Staff's Incident Report.

² Numbered recommendation 1 on page 27 of Staff's Incident Report.

³ In this recommendation, the abbreviation "NRC" means the National Response Center.

B. Spire's Response⁴

Spire Missouri agrees with Staff's recommendation. Spire has included this in SOP100.0.

C. Spire's Update⁵

Spire did not provide an update for this recommendation.

D. Staff Response to Commission Order

Staff believes that Spire has complied with Staff's Recommendation 1 to Spire, and that no further order is necessary.

2. Staff Recommendation 2

A. Recommendation⁶

Staff recommends that Spire evaluate actions that Spire can take to minimize damages to its natural gas pipelines by excavations involving boring and directional drilling. Staff further recommends that Spire submit the results of the evaluation and a schedule for actions to the Commission.

B. Spire's Response⁷

Spire Missouri agrees with Staff's recommendation. Spire Missouri has recently implemented a new ticket management system in April 2023 and is piloting a risk model to prioritize excavator communication and onsite monitoring of excavations based on risk. In addition, Spire Missouri introduced an additional line locate company in May 2023 in a portion of the Spire Missouri East territory. Spire Missouri continues to reinforce damage prevention efforts through direct communication with excavators from the Damage Prevention team and annual public awareness mailings and material from the Public Awareness team. The Company is committed to providing a status report of its evaluation within 60 days and more detailed analysis and reporting in the near future.

⁴ From page 4 of Spire's May 30, 2023 Response.

⁵ Spire's Status Report filed February 2, 2024.

⁶ Numbered recommendation 2 on page 27 of Staff's Incident Report.

⁷ From page 4-5 of Spire's May 30, 2023 Response.

C. Spire's Update⁸

In April 2023, Spire Missouri implemented a new ticket management system. The Company is continuing to implement full functionality of this system in order to have the most useful information for identifying risk. Each ticket receives a risk score (from 0-100), which depicts the potential consequence should a damage occur. This score is based on the location and type of gas facility within the ticket scope. In addition, each ticket also receives an incident prediction score (from 0-1), which shows the likelihood of damage occurring. There are several factors that are used to calculate this score, such as directional boring and the ticket type. Spire Missouri will continue to import more data into the system in order to enhance the scoring model, which will refine the incident prediction score and allow the Company to identify and eliminate risk, including excavators' history of damage. Spire Missouri will then be able to utilize the incident score to drive efforts to educate and audit excavators. In May 2023, the Company assigned a portion of territory in Missouri East to an additional line locate company, **

** The Company will continue monitoring the timeliness and quality of its vendors. Spire Missouri also continues to communicate with excavators in order to reinforce damage prevention.

D. Staff Response to Commission Order

Staff met with Spire personnel on February 26, 2024 to discuss Spire's progress on this recommendation. As of February 26, 2024, it appeared to Staff that the new ticket management system was still under development, and its capabilities as a tool to minimize damages to Spire's natural gas pipelines by excavations involving boring and directional drilling were as yet unknown. Additionally, at the time of this meeting Spire did not have a definitive schedule for completion of data input into the system. Staff believes that Spire is

⁸ Spire's Status Report filed February 2, 2024.

continuing to work on development of its new ticket management system, but that evaluation of the system capabilities to minimize damages has not been completed.

Staff's Recommendation 2 to Spire was focused on compliance with ordered paragraph 2 of the Commission Order issued on July 31, 2007 in Case No. GS-2007-0130, specifically actions to minimize damages to Spire's natural gas pipelines by excavations involving boring and directional drilling. Staff infers from Spire's Response and Update that Spire may be intending to replace its overall process for determining the need for and extent of inspections with its new ticket management system. Staff notes that there are additional factors listed in 20 CSR 4240-40.030(12)(I)4 that should be considered as part of Spire's overall process for determining the need for and extent of inspections:

- A. The type and duration of the excavation activity involved;
- B. The proximity to the operator's facilities;
- C. The type of excavating equipment involved;
- D. The importance of the operator's facilities;
- E. The type of area in which the excavation activity is being performed;
- F. The potential for serious incident should damage occur;
- G. The prior history of the excavator with the operator; and
- H. The potential for damage occurring which may not be easily recognized by the excavator.

Staff recommends that the Commission order Spire to provide further updates to the Commission on a quarterly basis regarding its progress and anticipated completion dates for the following milestones:

- a. Spire's completion of importation of data into the system;
- b. Spire's initial use of the ticket management system to drive its efforts to educate and audit excavators;

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- c. Spire's final results of its evaluation of this new ticket management system to minimize damages to its natural gas pipelines by excavations involving boring and directional drilling; and
- d. Spire's evaluation of how the new ticket management system addresses the factors listed in 20 CSR 4240-40.030(12)(I)4, or other programs that Spire will use to address the rule requirements.

3. Staff Recommendation 3

A. Recommendation⁹

Staff recommends that following an evaluation by Spire of actions that Spire can take to minimize damages to its natural gas pipelines by excavations involving boring and directional drilling, Spire seek to modify the Commission Order in Case GS-2007-0130 accordingly.

B. Spire's Response¹⁰

Spire Missouri agrees to seek modification to the Commission Order in Case GS-2007-0130.

C. Spire's Update¹¹

Spire did not provide an update for this recommendation.

D. Staff Response to Commission Order

Staff has seen no evidence that Spire has complied with this recommendation, but notes that the recommendation was to be implemented "...following an evaluation by Spire of actions that Spire can take to minimize damages to its natural gas pipelines by excavations involving boring and directional drilling..." (i.e., Staff Recommendation 2), which Spire has not yet completed. Staff has no recommendations regarding further Commission orders related to Staff Recommendation 3 until Spire has completed Staff Recommendation 2.

⁹ Numbered recommendation 3 on page 28 of Staff's Incident Report.

¹⁰ From page 5 of Spire's May 30, 2023 Response.

¹¹ Spire's Status Report filed February 2, 2024.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Miss Gateway Infrastructure, LI Gas Incident at Millers Ct.	C Concerning a Natural)))	Case No. GS-2023-0372
	AFFIDAVIT OF JOHN	D. KOTTW	TTZ
STATE OF MISSOURI)		
COUNTY OF COLE) ss)		

COMES NOW JOHN D. KOTTWITZ 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.

JOHN D. KOTTWITZ

John D. Kottudy

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 25th day of March 2024.

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

Notary Public ()

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Misso Gateway Infrastructure, LLG Gas Incident at Millers Ct. i	C Concerning a Natural))	Case No. GS-2023-0372			
AFFIDAVIT OF BRIAN J. BUCHANAN						
STATE OF MISSOURI)) ss					
COUNTY OF COLE) 33					

COMES NOW BRIAN J. BUCHANAN 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.

BRIAN J. BUCHANAN

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 28th day of March 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

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc. d/b/a Spire and Gateway Infrastructure, LLC Concerning a Natural Gas Incident at Millers Ct. in O'Fallon, Missouri			Case No. GS-2023-0372				
AFFIDAVIT OF KATHLEEN A. MCNELIS, PE							
STATE OF MISSOURI)						
COUNTY OF COLE) ss)						

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.

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 27th day of March 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