

MISSOURI PUBLIC SERVICE COMMISSION
STAFF'S INCIDENT REPORT

Appendix A

Facts Reviewed by Utilities

Summit Natural Gas of Missouri
and
Connect Holding II LLC, d/b/a Brightspeed

*Industry Analysis Division
Safety Engineering Department
Jefferson City, Missouri*

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I. EXECUTIVE SUMMARY

On June 26, 2023, A&A Cable Contractors, Inc. (“A&A Cable” or “The Excavator”) was boring along W. 4th Street in Mountain Grove to place a two-inch conduit¹ for Brightspeed of Missouri (“Brightspeed”). The Excavator had requested marking of buried utility facility locations through Missouri 811.² The locations of the natural gas facilities in the area of planned excavation had been marked prior to the incident.

Natural gas is provided in Mountain Grove by Summit Natural Gas of Missouri, Inc. (“SNGMO”), a subsidiary of Summit Utilities (“Summit”). The Excavator’s intended bore path was east to west along W. 4th Street, parallel to and south of a buried 2-inch diameter plastic SNGMO natural gas main, and crossing an additional buried 2-inch diameter SNGMO natural gas main. The Excavator had not verified the location or determined the depth of the natural gas main that it intended to cross by physically exposing the main prior to excavation.

At approximately 5:35 p.m. on June 26, 2023, the Excavator reported a pipeline damage to local SNGMO staff. SNGMO personnel began arriving on site at approximately 5:45 p.m. and began monitoring for natural gas migration into nearby structures. The Mountain Grove Fire Department (“MGFD”) arrived on scene at approximately 5:51 p.m. Additional details regarding the emergency response efforts are provided in *Section III.A. Incident Description and Emergency Response*, and *Appendix A, Facts Reviewed by Utilities* of this report.

Natural gas escaping from the damaged 2-inch diameter PE gas main exited at a pressure of approximately 38 pounds per square inch gauge (“psig”). Since natural gas is lighter than air³ it tends to migrate along paths of least resistance through the soil and upward into the

¹ Confidential Attachment V to Summit’s response to Staff’s First Information Request.

² Missouri 811 refers to the Missouri One Call System.

³ Natural gas has a specific gravity of 0.6 relative to air with a specific gravity of 1.0.

atmosphere. The location where the bore head hit the natural gas main was paved at the surface. The Excavator had not exposed the main by potholing⁴, so there was not a direct path for the gas to escape from the location of damage into the atmosphere. The natural gas migrated belowground into a detached two-car garage at the Craig-Hurt Funeral Home and ignited. The source of ignition is believed to be a ventless propane wall heater with a standing pilot light.⁵ Details regarding additional structures in which gas was detected are provided in *Section III.A. Incident Description and Emergency Response*, and *Appendix A, Facts Reviewed by Utilities* of this report.

Between 5:51 p.m. and 5:57 p.m., the natural gas that had migrated into the garage ignited. There were no injuries or fatalities reported as a result of this incident. Property damages including the garage structure and two vehicles parked inside at the time of the fire was estimated to be \$250,000.

SNGMO personnel closed an isolation valve to stop the flow of gas to the damaged pipeline segment, making the scene safe at approximately 6:32 p.m. Repairs to the pipeline were completed the following day, June 27, 2023 at approximately 7:37 p.m.

III. STAFF ANALYSIS OF INCIDENT

A. Incident Description and Emergency Response

The natural gas service provider in Mountain Grove, is SNGMO which is a subsidiary of Summit Utilities.

⁴ Potholing refers to the excavation of small test holes from the surface to a buried utility line to expose the utility location. Techniques range from hand digging to using mechanical digging tools.

⁵ A standing pilot light refers to a continuously burning flame near the main burner used to ignite the main burner whenever the appliance is turned on.

On June 26, 2023, the Excavator was boring along W. 4th Street when the bore head struck a SNGMO buried natural gas main, resulting in a federally reportable gas incident⁶. The general location where the incident occurred is shown on Figure 1 of Appendix B of this report. The intended path of the bore head was east to west along W 4th Street, parallel to and south of a 2-inch diameter plastic SNGMO natural gas distribution main, and crossing an additional 2-inch diameter plastic SNGMO natural gas main installed from north to south. The bore head struck the 2-inch diameter plastic SNGMO natural gas distribution main running north and south in an alley west of N. Main Street. Figure 2 of Appendix B of this Report shows the location of the pipeline damage relative to the incident location. Figure 3 of Appendix B of this Report shows the general location of natural gas distribution mains in the vicinity of the damage. The Excavator had not verified the location of the natural gas main at this location by potholing.⁷

The damage was to a 2-inch diameter polyethylene (“PE”) natural gas main, operating at approximately 38 pounds per square inch gauge (“psig”)⁸ at the location and time of the damage (Figures 4 and 5 in Appendix B shows the damage to the pipeline).

At 5:35 p.m., the Excavator reported the damage to local SNGMO staff and was advised by SNGMO to call the Summit Dispatch.⁹ Summit Dispatch documented receiving the report of a natural gas pipeline damage at 5:50 p.m.¹⁰ The subsequent ignition was reported to SNGMO at 5:57 p.m., by the Excavator.¹¹

⁶ The definition of a Federal Incident is provided in 20 CSR 4240-40.020(2)(D). This incident met the criteria because the estimated property damage exceeded \$129,300.

⁷ Potholing refers to the excavation of small test holes from the surface to a buried utility line to expose the utility location. Techniques range from hand digging to using mechanical digging tools.

⁸ SNGMO’s response to Staff Information Request 3 item 32 (PHMSA F 7100.1 incident report) submitted July 20, 2023.

⁹ SNGMO’s response to Staff Information Request 1 item 11.

¹⁰ SNGMO’s response to Staff Information Request 3 item 32 (PHMSA F 7100.1 incident report) submitted July 20, 2023.

¹¹ SNGMO’s response to Staff Information Request 1 item 11.

On June 26, 2023 at 5:45 p.m., SNGMO personnel arrived on scene and began a leak investigation. At approximately 5:51 p.m. the Mountain Grove Fire Department (“MGFD”) arrived on the scene. Shortly thereafter, ignition occurred in the garage located on the parking lot of the Craig-Hurtt Funeral Home property at 315 N. Main Street. MGFD and SNGMO personnel began to evacuate the occupants in buildings adjacent to the incident.

SNGMO personnel, including an Operations Supervisor, Operations Manager, and Technicians were dispatched in response to the report of ignition, and arrived at the incident location between 6:00 - 6:15 p.m. In coordination with the MGFD, SNGMO personnel monitored the area for sub-surface gas migration. SNGMO personnel closed an isolation valve to stop the flow of gas to the damaged pipeline segment, making the scene safe at approximately 6:32 p.m. SNGMO technicians investigated the insides of nearby structures for the presence of natural gas with Combustible Gas Indicators (“CGI”)s¹².

SNGMO’s operations procedures in effect at the time of the incident were the October 31, 2023¹³ revision of the *Summit Utilities, Inc. Operations & Maintenance Manual* (“O&M Manual) revision date 10/31/23.¹⁴ Section 4.12 Exposure to Hazardous Concentration of Combustible Gas of the O&M Manual states:

** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹² Combustible Gas Indicators, also referred to as explosimeters, measure the volume of flammable gas in a gas-air mixture.

¹³ Staff noted that the October 26, 2023 date was in error following SNGMO’s review of the facts, and has revised to June 26, 2023, in the report text.

¹⁴ Staff noted that the October 26, 2023 date was in error following SNGMO’s review of the facts, and has revised to June 26, 2023, in the report text.

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MGFD's report noted that SNGMO personnel obtained a reading of 4.9% LEL in the bathroom of the funeral home, and 23% LEL in the basement of the funeral home. Readings of up to 27% of LEL were found in nearby structures.¹⁵ A total of six individuals were evacuated from structures as a result of this incident.¹⁶ Summit ventilated these structures and continued to monitor until gas concentrations within the structures posed no hazard.

No deaths or injuries were reported as a result of this incident. Property damages include a two-car garage with two vehicles. Summit estimated that the property damage from the incident to be \$254,500, including \$250,000 cost of non-operator public and private property damage and \$4,500 of operator property. Emergency response costs were estimated at \$15,000 and \$1,600 was estimated for the cost of natural gas lost.¹⁷ On the following day June 27, 2023, at 4:15 p.m., the Excavator notified Missouri 811 of the damage (Ticket No. 231783976).¹⁸

The natural gas escaping from the damaged 2-inch diameter PE gas main exited at a pressure of approximately 38 psig. Since natural gas is lighter than air, it will tend to migrate along paths of least resistance through the soil and upward into the atmosphere. Because the Excavator had not exposed the main at this location, there was no break in the pavement for gas to vent at the damage location. The natural gas migrated through the soil and is assumed to have either entered the sewer line or followed the annular space around the sewer lines, then entered the buildings through drains in the garage that connected to the sewer line. The two-car

¹⁵ Attachment C – Fire Report provided by SNGMO with its response to Staff Information Request 1.

¹⁶ Summit's Incident Report – Gas Distribution System Form PHMSA F 7100.1 submitted July 20, 2023.

¹⁷ SNGMO's response to Staff Information Request 1 item 11.

¹⁸ SNGMO's response to Staff Information Request 1 item 7.

garage had a ventless propane wall heater with a standing pilot light¹⁹. The pilot light from this heater is the assumed ignition source for the natural gas migrating into the garage.

TABLE 1: SUMMARY OF EVENTS (Day 1)		
Date	Time	Activity
06/26/23	5:35 P.M.	Excavator reported the damage to SNGMO staff
	5:45 P.M.	SNGMO service technicians arrived on site the area of damage monitored for possible sub-surface gas migration.
		SNGMO Technicians investigated nearby homes / businesses with CGI's and evacuated all structures that contained natural gas.
	5:50 P.M.	Summit Dispatch received report from Excavator on line strike
	5:51 P.M.	MGFD arrived on scene to evaluate situation and witnessed the building ignition.
	5:51 – 5:57 P.M.	Approximate time of ignition within garage.
	5:57 P.M.	Excavator reported the ignition to SNGMO
	6:00 - 6:15 P.M.	SNGMO personnel arrive on scene and coordinate with the MGFD ²⁰
	6:32 P.M.	SNGMO shut off main line valve and isolated damaged section
	7:14 P.M.	SNGMO called in an emergency locate request (Ticket No. 231774715)

TABLE 2: SUMMARY OF EVENTS (Day 2)		
Date	Time	Activity
06/27/23	9:00 A.M.	SNGMO personnel pigged ²¹ the 2" PE line to remove mud, dirt, & debris.
	9:00 A.M. - 6:05 P.M.	Summit repaired the 2" main via plastic fusion replacing the damage portions
		Completed pressure and soap tests
	7:37 P.M.	Gas was restored to all the main lines and services that were interrupted

¹⁹ A standing pilot light refers to a small, continuously burning flame located near the main burner. The purpose is to ignite the main burner whenever the appliance is turned on.

²⁰ SNGMO noted in its October 23, 2024, email to Staff that from this point on, SNGMO worked diligently with local emergency officials to secure the scene, evacuate affected residents and businesses, and monitored gas levels inside structures.

²¹ Pigging is utilizing a device to clean debris and accumulated liquids, to conduct inspections, or to remove residual product from the pipeline between product transfer operations.

1. Summit's Actions to Comply with 20 CSR 4240-40.030(12)(J):

Summit provided a copy of its applicable emergency procedure *Summit Utilities, Inc. Emergency Response Program*. ("ERP"), revised May 31, 2023, which was in effect at the time of the incident.

B. Excavator Notification and Reporting of Pipeline Damages

Summit stated that it did not have any information regarding when or if the Excavator contacted 911.²²

C. Incident Reporting Requirements

2. Summit's Actions to Comply with Reporting Requirements:

2.1 Summit's Actions Related to 20 CSR 4240-40.020(3)(A)

Summit provided a notification to the National Response Center ("NRC") via telephone at 5:37 p.m. on June 27, 2023, under report number 1371439. Staff was able to verify Summit's initial notification by reviewing the NRC's report data and reviewing NRC notifications through the PHMSA Portal.

2.2 Summit's Actions Related to 20 CSR 4240-40.020(3)(B)

Summit's initial notification to the NRC, report number 1371439, included the name of the name of the operator (Summit), the name of the person making the report, the phone number of the person making the report, the location of the incident, the time of the incident, that there were no injuries or fatalities, and additional facts known at the time by Summit.

²² Summit's response to Staff Information Request to Summit, item 38.

2.3 Summit's Actions Related to 20 CSR 4240-40.020(3)(C)

Summit stated that it confirmed its initial notification to the NRC at 4:37 p.m. CST on June 28, 2023. Staff was unable to verify that this 48-hour notification was made through NRC data or the PHMSA Portal.

2.4 Summit's Actions Related to 20 CSR 4240-40.020(4)(A)

Summit stated that it first provided telephonic notification of a potential reportable incident to the Missouri Pipeline Safety Program Manager at 6:00 p.m. CST on June 26, 2023.

2.5 Summit's Actions Related to 20 CSR 4240-40.020(5)(A)

Summit submitted a completed Form PHMSA F 7100.1 ("incident report") for this incident to PHMSA on July 20, 2023. Summit submitted a copy of the initial incident report submitted to PHMSA to designated commission personnel on July 21, 2023.²³ Summit submitted a supplemental incident report to PHMSA and designated commission personnel on August 18, 2023. Summit submitted an additional supplemental incident report to PHMSA and designated commission personnel on August 25, 2023.

2.6 Summit's Actions Related to 20 CSR 4240-40.020(6)(A)

Summit submitted the initial incident report to PHMSA on July 20, 2023, and to

²³ Staff notes that it received a copy of the report from SNGMO by an email with time and date of 7/21/2023 7:46 AM, however SNGMO stated in its comments provided to Staff by email on October 23, 2024, that the information was sent on the 20th of July, not the 21st.

designated commission personnel on July 21, 2023.²⁴

2.7 Summit's Actions Related to 20 CSR 4240-40.020(6)(B)

Summit submitted supplemental incident reports to PHMSA and designated commission personnel on August 18, 2023, and August 25, 2023.

3. Staff Analysis:

3.1 Summit's Compliance with 20 CSR 4240-40.020(3)(A)

Staff requested the date and approximate time that Summit determined that this incident met the Federal Incident²⁵ criteria to verify that Summit provided notification to the NRC within one (1) hour of confirmed discovery. Summit's response on August 14, 2023, stated that it had not yet confirmed the dollar amount of the damages but reported as a "courtesy statement"²⁶ to the NRC.²⁷ Staff requested a further response regarding the date and approximate time that Summit had information to reasonably determine, even if based on a preliminary evaluation, that a Federal Incident had occurred. Summit's response on January 11, 2024, referenced question 18 of the supplemental incident report²⁸ dated August 18, 2023, and additionally included a date and time of June 27, 2023, at 5:35 p.m.²⁹

²⁴ Staff notes that it received a copy of the report from SNGMO by an email with time and date of 7/21/2023 7:46 AM, however SNGMO stated in its comments provided to Staff by email on October 23, 2024, that the information was sent on the 20th of July, not the 21st.

²⁵ Defined at 20 CSR 4240-40.020(2)(D).

²⁶ Staff notes that notifications to the NRC are either an initial notification that an incident has occurred, or a confirmation or revision of the initial report to the NRC. Staff further notes that notifications sent to the NRC do not include "courtesy statements". If a Federal Incident has occurred, a notification to the NRC is required. If a Federal Incident has not occurred, a notification to the NRC is not necessary.

²⁷ Summit's response to Staff's Information Request to Summit, item 21.

²⁸ Line 18 under Part A – Key Report Information of the incident report includes the "Local time (24-hr clock) and date of initial operator report to the National Response Center".

²⁹ Summit's response to Staff's Information Request to Summit, item 26.

Staff requested copies of all of Summit's plans, procedures, policies, and documents pertaining to incident reporting. Summit provided copies of its O&M Manual and ERP.³⁰

3.3 Summit's Compliance with 20 CSR 4240-40.020(3)(C)

Staff asked if Summit had revised or confirmed its initial notification to the NRC, and requested that Summit provide a copy of the revised or confirmed report. Summit provided the date and time that it confirmed its initial "courtesy" notification to the NRC, but stated that they could not provide a written report since the confirmation was made via telephone.³¹

D. Summit's Damage Prevention Program

1. Summit's Actions to Comply

2.1 20 CSR 4240-40.030(12)(I)1.

Summit identified Section 8: Damage Prevention & Public Education, revised February 2, 2024, Effective March 4, 2024 of the Summit Utilities, Inc. O&M Manual³² as the written program to prevent damage by excavation activities ("Damage Prevention Plan"), and provided a copy to Staff.

2.2 20 CSR 4240-40.030(12)(I)3.A

SNGMO provided its listing of persons involved in excavation activities to Missouri 811 on January 13, 2023.

³⁰ Summit's response to Staff's Information Request to Summit, item 29.

³¹ Summit's response to Staff's Information Request to Summit, item 24.

³² Provided as **

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Staff notes that Summit did not have MasTec Communications Group, Inc., JDC Utilities Underground, or A & A Cable Contractors, Inc. on its list of excavators³³ to receive educational material at the time of Summit’s July 29, 2022, annual mailings of Damage Prevention educational material. Summit stated “Summit did not identify the above contractors on their excavation mail out list. The excavator mail out was done on July 29, 2022”.³⁴

In regards to compliance with Section 319.030 and 319.015 RSMo of the “Underground Facility Safety and Damage Prevention Act”, Summit provided a copy of all contemporaneous documentation regarding locates in the area. Summit provided a copy of the original Missouri One Call Locate Request³⁵, and photos³⁶ of the scene where locates were done to show that locates had been completed accurately leading up to the incident.

In regards to compliance with 20 CSR 4240-40.030(12)(I)3.A, SNGMO provided a listing³⁷ of the identities of persons involved in excavation, construction, or operation of heavy equipment near a pipeline.

³³ Provided by Summit in ** [REDACTED] ** in response to Staff’s Third Information Request.

³⁴ Provided quote in document SNGMO West 4th St. Mtn Grove Incident – 3rd Request Response 3.28.2024.pdf as a response to Staff question 48(b) in response to Staff Information Request 3.

³⁵ Provided as Attachment A – Routine Ticket in Summit’s Response to Staff Information Request 1.

³⁶ Photographs of locate accuracy are located in Appendix B – Figures 6 and 7. Original photographs were provided as (Attachment 42(A) and Attachment H through L.pdf) in Summit’s Response to Staff Information Request 3.

³⁷ Provided as ** [REDACTED] ** in Summit’s Response to Staff Information Request 3.

2.3 20 CSR 4240-40.030(12)(I)3.B.

Summit stated: “Summit partners with MO811 to educate excavators in addition to Summit initiated mailings to excavators.”³⁸ Summit provided the annual public awareness excavator brochure³⁹ and quarterly MO811 educational mailer⁴⁰ sent out to Excavators and Contractors for compliance.

2.4 20 CSR 4240-40.030(12)(I)3.E.

Summit provided a copy of Summit’s annual mailer⁴¹ sent to excavators on July 29, 2022,⁴² and a copy of Missouri 811’s quarterly mailer⁴³ sent to excavators on April 14, 2023,⁴⁴ as evidence of compliance with document retention requirements.

In regards to compliance with the requirement of 20 CSR 4240-40.030(12)(I)3.E.III to address Chapter 319, RSMo, Summit provided a copy of educational material sent out through Summit’s participation in an excavator education program of a one-call notification

³⁸ Provided quote in document SNGMO West 4th St. Mtn Grove Incident – 3rd Request Response 3.28.2024.pdf as a response to Staff question 49 in response to Staff Information Request 3.

³⁹ Provided as Attachment 49(A) Summit PA Excavator Brochure 2022 in Summit’s Response to Staff Information Request 3.

⁴⁰ Provided as Attachment 49(B) MO811 in Summit’s Response to Staff Information Request 3.

⁴¹ Provided as Attachment 49(A) Summit PA Excavator Brochure 2022 in Summit’s response to Staff Information Request 3.

⁴² Provided in Summit’s Response to Staff Data Request 4 in document SNGMO Response to 4th info request – West 4th St. Mountain Grove Incident 6.28.2024 “The excavator mail out was done on 7-29-2022...”.

⁴³ Provided as Attachment 49(B) MO811 in Summit’s Response to Staff Information Request 3.

⁴⁴ Provided in Summit’s Response to Staff Data Request 0004 in document SNGMO Response to 4th info request – West 4th St. Mountain Grove Incident 6.28.2024 “The MO811 Spring Newsletter was mailed April 14, 2024, per Missouri 811’s Marketing Manager.”

center⁴⁵. Staff reviewed this educational material²⁵, and found it contained a summary of the provisions of Chapter 319, RSMo, in the Spring 2023 section on pages 25-30⁴⁶.

2.5 RSMo 319.030

A notification of intent to excavate in the city of Mountain Grove, between N Greene Ave and E 5T St was requested to Missouri 811 on June 18, 2023 at 3:14 p.m.⁴⁷ SNGMO provided markings on the street surface above the SNGMO facilities between N Greene Ave and E 5T St and updated the ticket status as marked at 9:10 p.m. on June 21, 2023.

2.6 RSMo 319.015(1) In response to notification of intent to excavate between N Greene Ave and E 5T St., SNGMO provided Approximate Location⁴⁸ markings⁴⁹ on the street surface above Summit facilities.

E. Summit's Distribution Integrity Management Program (DIMP)

2. Summit's Actions to Comply with 20 CSR 4240-40.030(17):

Staff's initial inspection for compliance with the Distribution Integrity Management Program ("DIMP") requirements for the natural gas distribution system in Mountain Grove, Missouri was conducted in May 2012 and was for a DIMP Plan dated August 2, 2011, developed by Southern Missouri Natural Gas Company, L.P., the distribution system

⁴⁵ Provided as Attachment 49(B) MO811 in Summit's Response to Staff Information Request 3.

⁴⁶ Missouri 811 provided a draft of the Spring 2023 mailer to designated commission personnel on March 29, 2023. Designated commission personnel provided comments to Missouri 811, which were addressed in the Spring Mailer.

⁴⁷ Missouri 811 Ticket No. 231690282 was submitted by JDC Utilities Underground, indicating work being done for Brightspeed.

⁴⁸ "Approximate Location" is defined by 319.015(1) as a strip of land not wider than the width of the underground facility plus two feet on either side thereof.

⁴⁹ Photos of locate markings by SNGMO substantiating "Approximate location" were provided in (Attachment H-L & Attachment 42(A).pdf) in response to Staff Information Request 3. These photos can be found in Appendix B – Figures 6 and 7.

operator before SNGMO. Staff's feedback on the inspection was provided to SNGMO on June 4, 2012.

Summit subsequently modified its DIMP Plan for Missouri, combining the historical Southern Missouri Natural Gas Company, L.P., and Missouri Gas Utility (also acquired by Summit) into a combined plan dated January 15, 2013. Staff provided feedback to Summit in a March 6, 2013 letter, including a comment related to the omission in the 2013 plan of measures that had been included in the previous plan to reduce the risk of damages by third parties. Specifically, ** [REDACTED]

[REDACTED]

[REDACTED] **.

In April 2017, Staff again conducted a DIMP inspection of Summit's Missouri operating areas, which was intended to include an evaluation of the program implementation. As noted in Staff's April 25, 2017 letter to Summit, the then current version of the SNGMO DIMP, dated 12-21-2016 ** [REDACTED]

[REDACTED]

[REDACTED] **. For these reasons Staff was unable to conduct an implementation evaluation, and instead limited the 2017 inspection to the new DIMP Plan. Staff's comments included citations to rule requirements to develop baselines to evaluate performance measures,⁵⁰ and to collect data for each performance measure,⁵¹ actions which Summit did not appear to have carried over from the

⁵⁰ 20 CSR 4240-40.030(17)(D)4.

⁵¹ 20 CSR 4240-40.030(17)(D)5.

prior written programs. SNGMO provided a revised DIMP Plan with effective date of June 26, 2017, and a listing of baselines to be used for monitoring of future performance.

On February 22-24, 2022, Staff conducted an inspection of Summit's DIMP, including Summit's DIMP Plan effective June 26, 2017, and identified two Areas of Probable Violation ("APVs").⁵² ** [REDACTED]

[REDACTED]

[REDACTED] 53

[REDACTED]

[REDACTED] ** 54

Summit created a comprehensive DIMP Plan, effective date May 1, 2023, that covers all of Summit's operating companies,⁵⁵ and was the DIMP Plan in effect at the time of the incident. Staff requested that Summit provide the performance measure baselines required by 20 CSR 4240-40.030(17)(D)5.A., and Summit provided graphs showing data from 2018-2022 for the number of excavation damages (categorized by root cause), hazardous leaks by material (PE and Steel – Bare), leaks on mains by cause, total leaks, leaks on

⁵² An Area of Probable Violation means that based on inspection findings, there has been a probable violation of a pipeline safety regulation or a document provision that is incorporated by reference in the pipeline safety regulations, or information that is specifically required to be included in a plan or procedure has been omitted.

⁵³ 20 CSR 4240-40.030(17)(D)5.A. requires that an operator must develop and monitor performance measures from an established baseline to evaluate the effectiveness of its IM program. 20 CSR 4240-40.030(17)(D)5.A.(V) lists the number of hazardous leaks either eliminated or repaired as required by paragraph (14)(C)1. (or total number of leaks if all leaks are repaired when found), categorized by material as a required performance measure.

⁵⁴ 20 CSR 4240-40.030(17)(D)6. requires that an operator must re-evaluate threats and risks on its entire pipeline and consider the relevance of threats in one (1) location to other areas. Each operator must determine the appropriate period for conducting complete program evaluations based on the complexity of its system and changes in factors affecting the risk of failure. An operator must conduct a complete program re-evaluation at least every five years. The operator must consider the results of the performance monitoring in these evaluations.

⁵⁵ The comprehensive DIMP Plan covers Summit's operating companies in Missouri, Arkansas, Colorado, Oklahoma, and Maine.

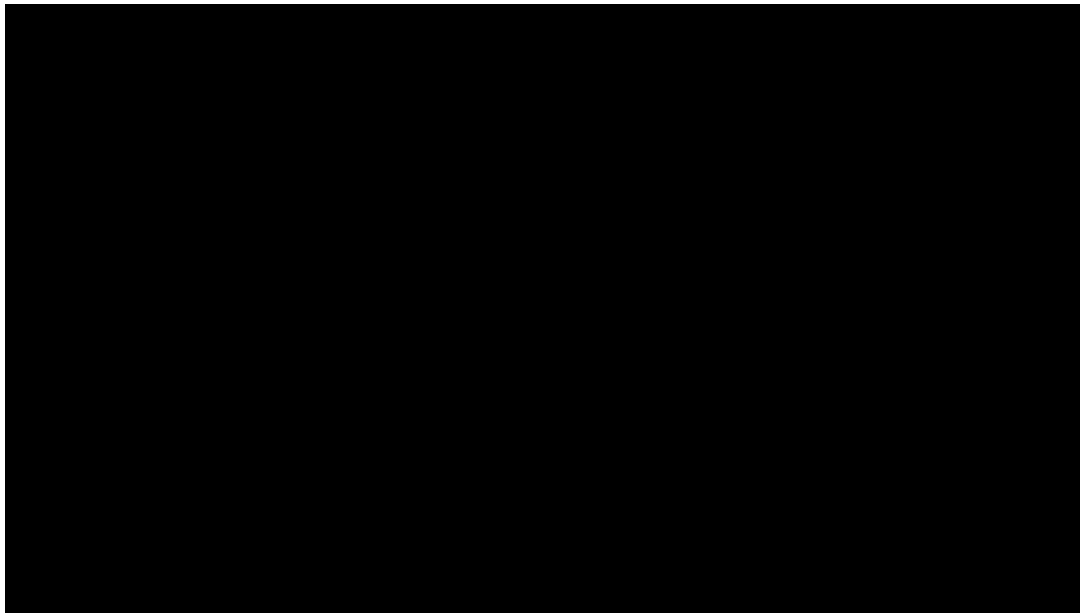
services by cause, and one call tickets completed, and a graph showing leak performance by leak cause.⁵⁶

3. Staff Analysis:

SNGMO provided the following baselines for annual excavation damages with its 2017 DIMP revisions:

- ** [REDACTED] ** excavation damages, and
- ** [REDACTED] ** damages per 1,000 tickets.

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⁵⁶ Summit's response to Staff's Information Request to Summit, item 45.

⁵⁷ The value initially reported by SNGMO of 19,199 was corrected to 19,355 by SNGMO filing a supplemental annual report.

In response to a Staff information request during this investigation, Summit stated that excavation damage is the largest threat based on the interim risk model currently in place for Summit’s Missouri operations.⁵⁸ In its interim risk model, Summit has one threat related to excavation damages and does not differentiate between the root causes of the damages (for example if the damage occurred because no request was made to locate, facility wasn’t located accurately, or it was located accurately but damaged due to excavation practices). Section 7 of Summit’s May 1, 2023, DIMP Plan covers threat identification and describes how threats and sub-threats are to be identified, including example graphs, but does not specifically list the threats identified for Summit’s Missouri operations. Section 7.5 of Summit’s May 1, 2023, DIMP Plan states that threat identification shall be documented in Integrity Compliance Activity Manager (“ICAM”). The risk model provided from ICAM only lists the general threat categories in 20 CSR 4240-40.030(17)(D)2., so it does not appear that Summit has identified any sub-threats for its Missouri operations.⁵⁹

Summit provided a list of excavation damages that occurred in the Mountain Grove area in 2023.⁶⁰ The list of excavation damages included a root cause of the damage (e.g., excavation or locate issue).

⁵⁹ In its October 23, 2024 email response to Staff, SNGMO stated that: **

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **,.

Staff requested a list of all accelerated actions in Summit's DIMP related to the Mountain Grove area, excavation damages, directional boring, or certain excavators.

Summit provided copies of:

- Newspaper ads run in the Mountain Grove area that contained information about submitting a locate request before digging;
- Confirmation that Summit submitted reports within the Common Ground Alliance ("CGA") Damage Information Reporting Tool ("DIRT") for 2023;
- Summit's Gold Shovel Certificate that demonstrates that Summit has committed to upholding safe excavation practices around underground facilities;
- Summit's geofencing summary which shows the number of impressions, clicks, unique persons reached, and impressions per person related to Summit's digital ads regarding contacting 811 before digging;
- Summit's public awareness application report for the Mountain Grove area which summarizes communication with stakeholders related to public awareness education; and,
- Summit's cross bore summary for Missouri operations regarding additional cross bore specific outreach.

Summit additionally stated that it is expanding the use of Vivax locating equipment to allow location of plastic pipe even when tracer wire damage occurs.⁶¹

⁶¹ Summit's response to Staff's Information Request to Summit, item 43 stated that Summit is expanding the use of Vivax locating equipment to allow location of plastic pipe even when tracer wire damage occurs. Vivax refers to the company Vivax-Metrotech, a company that develops and manufactures products for buried utility locating in addition to other products.

In response to a Staff Information Request, Summit stated that the Excavator identified on the locate request to Missouri 811, JDC Utilities Underground, had damaged a SNGMO pipeline prior to this incident.

I. EXECUTIVE SUMMARY

On June 26, 2023, A&A Cable Contractors, Inc. (“A&A Cable” or “The Excavator”) was boring along W. 4th Street in Mountain Grove to place a conduit for Brightspeed of Missouri (“Brightspeed”), a subsidiary of Connect Holding II LLC d/b/a Brightspeed. The Excavator had requested marking of buried utility facility locations through Missouri 811.⁶²

II. STAFF ANALYSIS OF INCIDENT

A. Incident Description and Emergency Response

Brightspeed contracted with MasTec Communications Group, Inc. (“MasTec”, or “General Contractor”) to install a new fiber optic line in the City of Mountain Grove, Missouri.⁶³ A&A Cable was subcontracted by MasTec to perform part of this work⁶⁴, including placing a two-inch conduit for Brightspeed in Mountain Grove, Missouri along W. 4th Street, west of N. Main St.

On June 26, 2023, the Excavator was boring along W. 4th Street when the bore head struck a SNGMO buried natural gas main, resulting in a federally reportable gas incident⁶⁵. The general location where the incident occurred is shown on Figure 1 of Appendix B of this report. The intended path of the bore head was east to west along W 4th Street, parallel to and south of

⁶² Missouri 811 refers to the Missouri One Call System.

⁶³ Brightspeed’s response to Staff Information Request items 1 and 4.

⁶⁴ Brightspeed’s response to Staff Information Request item 4.

⁶⁵ The definition of a Federal Incident is provided in 20 CSR 4240-40.020(2)(D). This incident met the criteria because the estimated property damage exceeded \$129,300.

a 2-inch diameter plastic SNGMO natural gas distribution main, and crossing an additional 2-inch diameter plastic SNGMO natural gas main installed from north to south. The bore head struck the 2-inch diameter plastic SNGMO natural gas distribution main running north and south in an alley west of N. Main Street. Figure 2 of Appendix B of this Report shows the location of the pipeline damage relative to the incident location. Figure 3 of Appendix B of this Report shows the general location of natural gas distribution mains in the vicinity of the damage. The Excavator had not verified the location of the natural gas main at this location by potholing.⁶⁶

B. Excavator Notification and Reporting of Pipeline Damages

1. Brightspeed's Actions to Comply with Regulatory Requirements:

2.1 Brightspeed's Actions Related to RSMo 319.026.1.

JDC Utilities Underground submitted a locate request (ticket number 231690282) to Missouri 811 (formerly Missouri One-Call) on June 18, 2023 at 3:14 p.m. with an excavation start date of June 22, 2023. The locate ticket included the information required by RSMo 319.026.2.

2.2 Brightspeed's Actions Related to RSMo 319.026.8.

Brightspeed stated that it first learned that a gas leak had occurred after being notified by the Mountain Grove City Administrator on June 26, 2023, that a building was on fire.

⁶⁶ Potholing refers to a to the excavation of small test holes from the surface to a buried utility line to expose its location. Techniques range from hand digging to using mechanical digging tools

Brightspeed stated that it has no knowledge of when any contractor notified Missouri One-Call (now Missouri 811) of damage to the natural gas pipeline.⁶⁷

Brightspeed did not contact 911 regarding the damage to the natural gas pipeline that resulted in the release of gas, and Brightspeed has no information as to when any contractor contacted 911.⁶⁸

C. Brightspeed's Damage Prevention Program and Installation Practices

1. Brightspeed Actions to Comply with Applicable Rules and Statutes

Brightspeed contracted⁶⁹ with MasTec as its general contractor to install fiber optic cable in the City of Mountain Grove, Missouri. According to Brightspeed, MasTec contracted with A&A Cable to install the fiber optic cable along W. 4th Street⁷⁰.

On June 26, 2023, A&A Cable was performing work under Missouri One Call Ticket No. 231690282 in Mountain Grove, Missouri and had requested a routine⁷¹ locate on June 18, 2023, with a start date of June 22, 2023. The "Type of Work" field was entered on this ticket as: "Install Fiber Optic" and the field for Equipment Used was entered as: "Directional Bore Machine". Additionally, the ticket field for the Excavator Name was entered as: "JDC Utilities Underground" and the ticket field for Work Being Done For was

⁶⁷ Brightspeed's response to Staff Information Request to Brightspeed, item 21.

⁶⁸ Brightspeed's response to Staff Information Request to Brightspeed, item 21.

⁶⁹ In response to Staff's Information Request 4., part d., Brightspeed responded that "Lumen Technologies Service Group, LLC signed a contracted titled, "Construction Master Services Agreement Between Lumen Technologies Service Group, LLC and MasTec North America, Inc." (hereinafter, "MSA"). The MSA was assigned from Lumen to Brightspeed on October 1, 2022, following the sale of certain Lumen assets and operations to Brightspeed. The specific subsidiary that operates in the location of the occurrence is Brightspeed of Missouri.

⁷⁰ Information obtained from Brightspeed's August 14, 2023, response to Staff Information Request 4, part c. dated July 27, 2023.

⁷¹ Missouri 811 defines a routine locate ticket as a regular locate request. Utilities must respond within 3 working days.

entered as: “Brightspeed”. The Location of work was completed on the ticket as: “FROM N GREENE AVE GO E ON E 4TH ST FOR 80FT. MARK 20FT OFF THE S SIDE OF E 4TH ST W FOR 600FT”.

A day following the incident, on June 27, 2023, at 4:09 p.m. CST, JDC Utilities Underground submitted a Dig Up ticket. The Dig Up locate ticket stated that work was being done for Brightspeed, that the equipment being used was a directional bore machine and an excavator, and that the damage was at 320 N Maple Avenue between W 4th Street and W 3rd Street in Mountain Grove.

According to Brightspeed, the fiber optic line was being installed in an underground conduit system along W. 4th Street in Mountain Gove, Missouri on June 26, 2023⁷². The applicable installation standard is found in Part 3, Section 32 of the NESC.

Brightspeed’s contract with MasTec requires underground fiber optic cable installations by contractors or subcontractors to comply with the NESC.⁷³

Brightspeed stated that it contracted with MasTec as an engineering and construction firm to employ on-site inspectors for its work and that of its subcontractor, A&A.⁷⁴

According to Brightspeed no written information about excavating near underground facilities such as natural gas lines was provided to its contractors or subcontractors for the

⁷² Information obtained from Brightspeed’s August 14, 2023 response to Staff Information Request 12 dated July 27, 2023.

⁷³ Brightspeed’s August 14, 2023, response to Staff Information Request 11 dated July 27, 2023.

⁷⁴ Information obtained from Brightspeed’s August 14, 2023, response to Staff Information Request 14., part b. dated July 27, 2023.

fiber optic cable installation along W. 4th Street between N. Maple Ave. and N. Main Ave. in Mountain Grove, Missouri. However, Brightspeed stated that:

“...Pursuant to ** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **. ⁷⁵

In addition, MasTec is an “independent contractor” and is responsible for controlling all “means and methods” of the work being performed, including responses to any suspected natural gas facility damage.⁷⁶ ** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁷⁵ Brightspeed’s August 14, 2023 response to Staff Information Request 8, part c. and Staff Information Request 15 dated July 27, 2023.

⁷⁶ Information obtained from Brightspeed’s August 14, 2023, response to Staff Information Request 16 dated July 27, 2023.

[REDACTED]

[REDACTED] **. ⁷⁷

According to Brightspeed, no written instructions were given to its contractors or subcontractors about how to respond if they suspect a natural gas facility is damaged during excavation activities including the fiber optic cable installation along W. 4th Street between N. Maple Ave. and N. Main Ave. in Mountain Grove, Missouri.⁷⁸ However, Brightspeed stated that:

“... MasTec is an “independent contractor” and is responsible for controlling all “means and methods” of the work being performed, including responses to any suspected natural gas facility damage. **. [REDACTED] **.”

Brightspeed provided information describing any changes and enhancements it has made to its damage prevention program following the June 26, 2023 incident in Mountain Grove, Missouri:

“Brightspeed employed independent contractors on the subject project (in this case, MasTec) that controlled all aspects of construction, including all “damage prevention programs.” See **. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁷⁷ Brightspeed’s August 14, 2023, response to Staff Information Request 15 dated July 27, 2023.

⁷⁸ Information obtained from Brightspeed’s August 14, 2023 response to Staff Information Request 16 dated July 27, 2023.

[REDACTED]

[REDACTED] **.”

In addition to changes and enhancements made by Brightspeed to its damage prevention program following the June 26, 2023, incident in Mountain Grove, Missouri; Brightspeed provided a copy of the ** [REDACTED] ** which included MasTec’s ** [REDACTED] [REDACTED] ** as a result of this incident. As part of this report, the following preventive and additional actions were taken by MasTec.

** [REDACTED]

- [REDACTED]
[REDACTED]
[REDACTED]
- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

- [REDACTED]
[REDACTED]
- [REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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• [REDACTED]

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