

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CLOSURE OF INVESTIGATION OF)	
AUGUST 21, 2017 INCIDENT - LOUISVILLE)	CASE NO.
GAS AND ELECTRIC COMPANY)	2018-00267

ORDER

The Commission, on its own motion, initiates this proceeding to close the investigation of an unintentional ignition of gas that occurred on August 21, 2017, when an employee of Louisville Gas and Electric Company's (LG&E) contractor, Miller Pipeline, was performing welding work near Cox's Creek in Nelson County, Kentucky. Commission Staff (Staff) investigated the incident and found two probable violations of state and federal regulations enforcing minimum pipeline safety standards. Staff issued LG&E a Demand for Remedial Measures and Penalty Assessment, a copy of which is attached to this Order as an Appendix, to resolve all compliance and enforcement matters pertaining to the August 21, 2017 incident. LG&E paid the proposed penalty and completed all remedial measures required by Staff.

The Commission finds that LG&E has addressed to its satisfaction the probable violations cited by Staff in connection with the August 21, 2017 incident. The Commission further finds that the Commission's investigation of the incident should be closed.

IT IS THEREFORE ORDERED that:

1. LG&E's payment of Staff's proposed penalty and completion of remedial measures required by Staff is accepted and resolves all alleged violations of KRS 278.495, 807 KAR 5:022, 807 KAR 5:027, or 49 CFR Part 192, as well as any penalty

that could be assessed under KRS 278.992(1), arising out of the August 21, 2017 incident.

2. The Commission's investigation of the August 21, 2017 incident is closed.
3. This case is closed and removed from the Commission's docket.

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By the Commission

ENTERED
AUG 17 2018
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

A. J. H. [Signature]
Executive Director for
Gwen R. Tinsion

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00267 DATED **AUG 17 2018**



Matthew G. Bevin
Governor

Charles G. Snively
Secretary
Energy and Environment Cabinet

Commonwealth of Kentucky
Public Service Commission
211 Sower Blvd.
P.O. Box 615
Frankfort, Kentucky 40602-0615
Telephone: (502) 564-3940
Fax: (502) 564-3460
psc.ky.gov

Michael J. Schmitt
Chairman

Robert Cicero
Vice Chairman

Talina R. Mathews
Commissioner

April 13, 2018

Paul W. Thompson
Chairman, CEO and President
Louisville Gas and Electric Company
220 W. Main Street
P.O. Box 32010
Louisville, KY 40232-2010

Re: Louisville Gas and Electric Company
August 21, 2017 Cox's Creek Incident – Calvary Line

DEMAND FOR REMEDIAL MEASURES AND PENALTY ASSESSMENT

Dear Mr. Thompson:

On August 29, 2017, Louisville Gas and Electric Company (LG&E) reported to the Public Service Commission an incident that occurred on August 21, 2017 during the replacement of a long-radius elbow of the 12-inch transmission line near the community of Cox's Creek in Nelson County, Kentucky. According to LG&E's summary incident report to the Commission, employees of LG&E's contractor, Miller Pipeline, were performing welding work when an unintentional ignition of natural gas occurred. After the flame was extinguished, the crew determined that the air mover needed to run longer and that natural gas may have been leaking through a valve into the pipe on which the work was being performed. The crew ran the air mover for a longer time but did not check for a valve leak before resuming work. Thereafter, as a result of welding or the grinding of a defective weld, a second ignition occurred. After the flame was extinguished, the crew determined that a bleed valve, which should have been open, was, in fact, closed. The bleed valve was opened, and the crew completed the work without further incident. The two ignitions did not result in any injuries.

Commission Staff (Staff) performed an investigation of the incident and prepared the attached incident report. Based on its investigation of the incident, Staff determined that LG&E committed the following violations of state and federal regulations enforcing minimum pipeline safety standards:

1. 807 KAR 5:027, Section 3(1)(c) requires each utility to provide telephonic notice to the Commission of any incident that results in gas ignition within two

- hours of discovery of the incident. LG&E did not notify the Commission of the Cox's Creek incident until eight days after its occurrence; and
2. 49 CFR Section 192.751(b) prohibits welding on pipe or pipe components that contain a combustible mixture of gas and air in the area of work. LG&E's contractor twice performed welding on pipe containing a combustible mixture of gas and air resulting in ignition.

REMEDIAL MEASURES

In order to address the above violations, the following remedial measures must be completed:

- By June 31, 2018, LG&E shall provide proof that it has conducted training, covering the reporting requirements under 807 KAR 5:027 and the safety requirements in 49 CFR Section 192.751, to all applicable staff and contractors who have duties that involve reporting of incidents and prevention of accidental ignition. Copies of the training and supporting documentation shall be mailed to the Public Service Commission, c/o James D. Rice, Pipeline Safety Program Manager, 211 Sower Boulevard, Frankfort, KY 40601.

CIVIL PENALTY

KRS 278.992(1) provides that any person who violates any minimum pipeline safety standard adopted by the United States Department of Transportation or any regulation adopted by the Commission governing the safety of pipeline facilities shall be subject to a civil penalty not to exceed the maximum civil penalty contained in 49 CFR Section 190.223, as of December 31, 2011, for each violation for each day that the violation persists. As of December 31, 2011, the maximum civil penalty under 49 CFR Section 190.223 was \$100,000 per violation per day, not to exceed \$1,000,000 for any related series of violations.

In determining the amount of the proposed penalty, Staff relied upon the assessment factors set forth in KRS 278.992(1): "the size of the business of the person charged, the gravity of the violation, and the good faith of the person charged in attempting to achieve compliance, after notification of the violation." Additionally, Staff considered the assessment factors applied under federal law by the Associate Administrator for Pipeline Safety for the United States Pipeline and Hazardous Materials Safety Administration (PHMSA) to determine the amount of the civil penalty for violation of a federal pipeline safety standard.¹

¹ Federal law provides that PHMSA shall consider: (1) the nature, circumstances and gravity of the violation, including adverse impact on the environment; (2) the degree of the respondent's culpability; (3) the respondent's history of prior offenses; (4) any good faith by the respondent in attempting to achieve compliance; and (5) the effect on the respondent's ability to continue in business. The Associate Administrator also may consider: (1) the economic benefit gained from the violation, if readily ascertainable, without any reduction because of subsequent damages; and (2) such other matters as justice may require. See 49 CFR Section 190.225.

Upon completing its investigation of this matter, Staff made the following determinations:

1. The performance of welding on a pipe containing a combustible mixture of gas and air in the area of work was a causal factor in two separate, reportable incidents of ignition;
2. While Staff acknowledges that the use of an air mover to remove natural gas from a line is an industry best practice, the crew working on the line failed to take adequate steps to ensure removal of gas from the line before resuming work;
3. The violations did not occur in a High Consequence Area and did not result in any injury, property damage, loss of service, or gas release; and
4. LG&E's failure to provide telephonic notice to the Commission within two hours of the incidents minimally affected pipeline safety. LG&E's untimely notice did not cause or contribute to the severity of a reportable incident.

Based on its investigation of this matter and consideration of the penalty assessment factors set forth in KRS 278.992(1), Staff concludes that LG&E should be assessed a civil penalty in the amount of \$55,000.

If LG&E does not wish to contest the proposed civil penalty, LG&E should mail or deliver a cashier's check or money order made payable to the "**Kentucky State Treasurer**" in the amount of \$55,000, within 30 days of the date of this letter, to:

Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602

Payment of the proposed civil penalty and completion of all remedial measures will satisfy and resolve any and all claims against LG&E for any violation of KRS 278.495, 807 KAR 5:022, 807 KAR 5:027 and 49 CFR Part 192, as well as any penalty that could be assessed under KRS 278.992(1), arising out of the August 21, 2017 incident. LG&E's payment of the proposed civil penalty will not be considered an admission by LG&E that it willfully violated any provision of KRS 278.495, 807 KAR 5:022, 807 KAR 5:027 or 49 CFR Part 192. Upon payment of the proposed penalty and submission of proof of completion of remedial measures, the Commission will confirm the resolution of this matter by entry of an order.

If LG&E does not pay the proposed civil penalty within 30 days of the date of this letter, the Commission will assume that LG&E intends to contest the penalty assessment, at which point the Commission will institute an administrative proceeding against LG&E and hold a formal hearing during which LG&E will have an opportunity to present evidence and show cause why it should not be subject to penalties under KRS 278.992(1) as a result of the August 21, 2017 incident.

If you have any questions regarding this demand for remedial measures and penalty assessment, please contact the Commission's Deputy Executive Director and Acting Director of the Division of Inspections, John S. Lyons.

Sincerely,



Gwen R. Pinson
Executive Director

Attachment

cc: Allyson K. Sturgeon
Senior Corporate Counsel
LG&E and KU Energy LLC
220 West Main Street
Louisville, Kentucky 40202

KPSC INVESTIGATION REPORT

Unintentional Ignition of Natural Gas

Type of Report

17-ED-G-123

Report Number

Keith Mc Bride

Investigators

August 21, 2017

Date of Incident

Location: 8400 Louisville Rd., Cox's Creek, Kentucky 40013

Incident Summary

On August 21, 2017, an LG&E Pipeline Integrity Engineer, LG&E System Regulation and Operation (SR&O) employees and welders from LG&E contractor Miller Pipeline were working to replace a long-radius elbow with a 3R elbow to improve the ability to conduct in-line inspections of the 12" transmission line spanning 54 miles from Lebanon, Kentucky to Louisville, commonly referred to as the Calvary Line.

An unintentional ignition of natural gas occurred at approximately 11:30 P.M.

There were no injuries associated with this incident but due to the ignition the incident met reporting requirements the Kentucky Public Service Commission (KPSC).

Keith McBride Senior Training Consultant, Electric and Public Safety, notified the Kentucky Public Service Commission of the incident on August 29, 2017 at 12:47 P.M.

Incident Investigation

August 21, 2017, an LG&E Pipeline Integrity engineer, LG&E System Regulation and Operation (SR&O) employees and welders from LG&E contractor Miller Pipeline were working to replace a long-radius elbow with a 3R elbow to improve the ability to conduct in-line inspections of the Calvary pipeline.

In preparation for the job, 11 farm taps were isolated and main line valves were closed on each side of the replacement location. The line was blown down to reach 0 psi. An air mover was installed on the blowdown valve next to main line valve on the north side of the repair. The blow-down valve next to the main line valve on the south side of the repair was opened to draw air through. The air mover was turned on to remove gas from the line.

A hole was drilled in the elbow that was being replaced and a CGI monitor was used to check the gas level at the replacement location. The welders cut the elbow out of the line using a cutting torch.

The air mover, south of replacement location, was turned on so that air could be pulled through the line from both the north and the south side of the repair. The welders fabricated piping to be installed on the line and it was lowered into place.

The air movers were turned off to allow the welders to complete a root pass on the first weld. Once the root pass was completed and the air mover to the north side of replacement was turned back on, the welders finished the first weld.

The air mover was again turned off to allow welders to start on the second weld. According to the welders, when the initial arc was struck to tack the second weld, a flame was observed inside of the pipe. The welders told a member of the Miller Pipeline crew that was manning the fire extinguisher to put the flame out. According to the Miller Pipeline crew member manning the fire extinguisher, the fire extinguisher was sprayed and the flame instantly went out but the extinguisher was sprayed continuously for another 10-15 seconds.

All operations members paused work to determine the reason gas had leaked back towards the replacement location. It was determined that the air mover needed to run longer and that natural gas may have been leaking through the valve. The crew ran the air mover again for a longer period of time to clear any gas that may have gathered in the line before the welders began on the second weld. After running the air mover for an extended period, the welders finished the second weld. Once the second weld was finished, the contractor completing the non-destructive testing (NDT) of the welds found that the first weld had a flaw.

One of the welders had to grind out a part of his portion on the first weld to be able to repair the flaw. Either during the grinding process or the weld repair process, the welder observed a flame in the pipeline again. The welder extinguished the flame by covering the repair hole with a cloth.

The crews reconvened to determine the cause of the gas leak and questioned whether the body bleed valve on the main line valve south of the repair was open or closed. The SR&O Lead Technician called the member of his team manning the valve at that location and it was determined that the bleed valve was closed.

The SR&O crew member was instructed to open the bleed valve. The crew waited for the air mover to pull air through the line for several minutes. The CGI was placed as far into the weld repair location as possible and no gas was detected. The welder resumed his repair and finished without issue.

The NDT contractor performed another X-Ray on the weld and determined that it was Acceptable. SR&O employee's purged all air from the line and restored normal operations to the isolated location.

There were no injuries associated with this incident.

DATE OF REPORT: September 20, 2017

END OF REPORT

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