

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC)	
COMPANY FOR A LIMITED DEVIATION FROM THE)	CASE NO.
PROVISIONS OF CERTAIN SECTIONS OF 807 KAR)	2016-00173
5:022)	

ORDER

On May 25, 2016, Louisville Gas and Electric Company ("LG&E") filed a request for a deviation from 807 KAR 5:022, Section 10(16); 807 KAR 5:022, Section 10(17); 807 KAR 5:022, Section 10(22)(b)(2); 807 KAR 5:022, Section 14(6); and, 807 KAR 5:022, Section 14(8)(a). The first three regulations relate to controlling, monitoring, and keeping record of atmospheric corrosion in metallic gas pipelines, while the last two relate to recordkeeping and repairs of gas transmission line. The application was made pursuant to 807 KAR 5:001, Section 14, which sets forth the general procedure to be followed by a utility in making an application to the Commission. Pursuant to Commission Staff's ("Staff") notice of August 17, 2016, an informal conference ("IC") was held on that same date at the Commission's office in Frankfort, Kentucky. On September 9, 2016, Staff filed into the record of this case a memorandum summarizing the discussion between LG&E representatives and Staff at the August 17, 2016 IC. No person has sought intervention in this proceeding. By this Order, we approve LG&E's requested limited deviations.

LG&E is a utility engaged in the electric and gas business. LG&E generates and purchases electricity, and distributes and sells electricity at retail in Jefferson County

and portions of Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer and Trimble counties. LG&E also purchases, stores, and transports natural gas and distributes and sells natural gas at retail to approximately 320,000 customers¹ in Jefferson County and portions of Barren, Bullitt, Green, Hardin, Hart, Henry, LaRue, Marion, Meade, Metcalfe, Nelson, Oldham, Shelby, Spencer, Trimble and Washington counties.² LG&E is seeking a limited deviation from various requirements of 807 KAR 5:022, the Commission's regulation establishing the general rules which apply to gas utilities.

In the past, certain Commission regulations governing pipeline safety were similar to certain federal regulations, but over time, certain federal regulations have been amended, while the counterpart Commission regulations have not been. Although some overlap still remains, for the five Commission regulations for which LG&E is seeking a limited deviation, the federal regulations now differ from what is required by the counterpart Commission regulation. According to LG&E, approval of its application would allow it more operational flexibility, while still maintaining a safe system.³

LG&E first requests a limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(16), pertaining to atmospheric corrosion control for aboveground pipelines. LG&E states that this regulation does not give a utility the same operational flexibility as 49 CFR 192.479(c) in determining when, and in certain situations if, a pipeline must be cleaned and either coated or jacketed in order to maintain safety. 807 KAR 5:022, Section 10(16), specifically states as follows:

¹ Annual Report of Louisville Gas and Electric Company to the Public Service Commission for the year ended December 31, 2015.

² *Id.* at 4; Application at 1.

³ Letter from Talina R. Mathews, Executive Director, Public Service Commission, to Parties of Record (Sept. 9, 2016).

- (a) Pipelines installed after July 31, 1971. Each aboveground pipeline or portion of pipeline installed after July 31, 1971, exposed to the atmosphere shall be cleaned and either coated or jacketed with material suitable for prevention of atmospheric corrosion. An operator need not comply with this paragraph, if the operator can demonstrate by test, investigation, or experience in the area of application, that a corrosive atmosphere does not exist.
- (b) Pipelines installed before August 1, 1971. Each operator having an aboveground pipeline or portion of pipeline installed before August 1, 1971, exposed to the atmosphere, shall:
 - 1. Determine areas of atmospheric corrosion on the pipeline;
 - 2. If atmospheric corrosion is found, take remedial measures to the extent required by applicable paragraphs of subsections (19), (20), or (21) of this section; and
 - 3. Clean and either coat or jacket areas of atmospheric corrosion on the pipeline with material suitable or prevention of atmospheric corrosion.

LG&E states that the issues addressed in the above regulation are also addressed in the federal standards set forth at 49 CFR 192.479(c), which states as follows:

Except portions of pipelines in offshore splash zones or soil-to-air interfaces, the operator need not protect from atmospheric corrosion any pipeline for which the operator demonstrates by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will –

- (1) Only be light surface oxide; or
- (2) Not affect the safe operation of the pipeline before the next scheduled inspection.

LG&E is requesting to use the atmospheric corrosion control requirements set forth in 49 CFR 192.479 in lieu of those set forth in 807 KAR 5:022, Section 10(16), as this will allow it “operational flexibility to determine whether or not it is appropriate and necessary for safe operation to paint piping before the next scheduled inspection if there is just surface oxide.”⁴ LG&E further states that “[i]f it is not appropriate and necessary to paint the piping, it will be reevaluated during the next inspection.”⁵

LG&E is next seeking a limited deviation from the inspection interval required for a pipeline exposed to the atmosphere under 807 KAR 5:022, Section 10(17), which cannot exceed three years.

807 KAR 5:022, Section 10(17), states as follows:

After meeting the requirements of subsection (16)(a) and (b) of this section, each operator shall, at intervals not exceeding three (3) years, reevaluate each pipeline exposed to the atmosphere and take protective action whenever necessary against atmospheric corrosion.

LG&E points out that pursuant to 49 CFR 192.481, this inspection interval was amended to read, “[e]ach operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion” This regulation also states that if the pipeline is located onshore, each operator must inspect “[a]t least once every three calendar years, but with intervals not exceeding 39 months.” This same regulation requires that “[i]f atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by §192.479.” LG&E notes that this federal regulation “previously also mandated reevaluation at intervals not to exceed three years, but was amended in 2003 to require

⁴ Application at 3.

⁵ *Id.*

reevaluation once every three calendar years not to exceed 39 months.”⁶ LG&E seeks to utilize the longer interval set out in 49 CFR 192.481, as this will allow “operational and scheduling flexibility and also provide efficiencies by allowing some work to be coordinated with leak surveys on cathodically unprotected distributions lines . . . which are completed once every three years, not to exceed 39 months, as required by 49 CFR 192.723(b)(2).”⁷

LG&E next seeks a limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(22)(b)(2), which requires records of each test, survey or inspection demonstrating the adequacy of corrosion control measures be kept “as long as the pipeline remains in service.” Specifically, 807 KAR 5:022, Section 10(22)(b)(2), states as follows:

(b) Each of the following records shall be retained for as long as the pipeline remains in service:

2. Records of each test, survey, or inspection required by this subsection, in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist.

Under 49 CFR 192.491(c), the federal regulation also addresses the length of time these records must be retained, but has been shortened to five years and states as follows:

Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist. These records must be retained for at least 5 years, except that records related

⁶ *Id.*

⁷ *Id.* at 4.

to §§192.465 (a) and (e) and 192.475(b) must be retained for as long as the pipeline remains in service.

LG&E points out that previously the federal regulation also mandated retention of these records for the life of the facility, but the regulation “was amended in 1996 to require retention for five years.”⁸ In further support of its request to follow the shorter retention requirements set forth in 49 CFR 192.491(c), LG&E states that “[r]ecords of this nature older than five years do not provide operational value to LG&E and are an administrative burden to maintain.”⁹ Finally, LG&E argues that the shorter retention period should be allowed in that, “because the Commission’s Gas Pipeline Safety Branch typically inspects utilities’ records every three years, it has an opportunity to review all records prior to expiration of the five-year retention period.”¹⁰

LG&E next requests a limited deviation from 807 KAR 5:022, Section 14(6), which requires that “[e]ach utility shall keep records covering each leak discovered, repair made, transmission line break, leakage survey, line patrol, and inspection, for as long as the segment of transmission line involved remains in service.”

LG&E states that this regulation is similar to federal regulation set forth at 49 CFR 192.709, which requires each operator to maintain certain records for transmission lines for five years, or until the next patrol, survey, inspection or test is completed, whichever is longer. 49 CFR 192.709 states as follows:

Each operator shall maintain the following records for transmission lines for the periods specified:

⁸ *Id.* at 4.

⁹ *Id.*

¹⁰ *Id.* at 4–5.

(a) The date, location, and description of each repair made to pipe (including pipe-to-pipe connections) must be retained for as long as the pipe remains in service.

(b) The date, location, and description of each repair made to parts of the pipeline system other than pipe must be retained for at least 5 years. However, repairs generated by patrols, surveys, inspections, or tests required by subparts L and M of this part must be retained in accordance with paragraph (c) of this section.

(c) A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least 5 years or until the next patrol, survey, inspection, or test is completed, whichever is longer.

LG&E points out that the records retention requirements set forth in 49 CFR 192.709, were similar to 807 KAR 5:022, Section 14(6), in mandating that retention of these records be kept for the life of the facility, but 49 CFR 192.709, was amended in 1996 to require retention for five years. As with its earlier request regarding a limited deviation from the records retention period in 807 KAR 5:022, Section 10(22)(b)(2), LG&E claims that the type of records covered by 807 KAR 5:022, Section 14(6), that are older than five years do not provide operational value to LG&E and are an administrative burden to maintain. LG&E again notes that the Commission's Gas Pipeline Safety Branch has the opportunity to review these records prior to the expiration of the five-year retention period, as it typically inspects utilities' records every three years.

Finally, LG&E requests a limited deviation from 807 KAR 5:022, Section 14(8)(a), pertaining to the permanent field repair of imperfections and damages to transmission lines. 807 KAR 5:022, Section 14(8)(a), states as follows:

(a) Except as provided in paragraph (b) of this subsection, each imperfection or damage that impairs serviceability of a

segment of steel transmission line operating at or above forty (40) percent of SMYS must be repaired as follows:

1. If it is feasible to take the segment out of service, the imperfection or damage must be removed by cutting out a cylindrical piece of pipe and replacing it with pipe of similar or greater design strength.
2. If it is not feasible to take the segment out of service, a full encirclement welded split sleeve of appropriate design shall be applied over the imperfection or damage.
3. If the segment is not taken out of service, operating pressure shall be reduced to a safe level during repairs.

LG&E states that this Commission regulation has been in place for many years, and is similar to previous versions of the federal safety standards for gas transmission lines.¹¹ The current version of that federal regulation, as set forth at 49 CFR Parts 192.713, now states as follows:

- (a) Each imperfection or damage that impairs the serviceability of pipe in a steel transmission line operating at or above 40 percent of SMYS must be –
 - (1) Removed by cutting out and replacing a cylindrical piece of pipe; or
 - (2) Repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe.
- (b) Operating pressure must be at a safe level during repair operations.

LG&E states that in late 1999, the federal regulations governing repairs to transmission lines with imperfections or damage that impair serviceability were

¹¹ *Id.* at 6. Although LG&E states that 807 KAR 5:022, Section 14(8)(a), “is similar to previous versions of federal safety standards for gas transmission ‘and safety’ lines set forth at 49 CFR 192.713,” the referenced ‘and safety’ does not appear in either the Commission’s regulation or the federal regulation.

amended, to “allow for some operator flexibility to utilize repair methods short of removing the affected section of the pipe or utilizing a full encirclement welded split sleeve.”¹² LG&E points out that as part of the rulemaking process that led to this amendment, the U.S. Department of Transportation specifically recognized that one recently developed technology, known as Clock Spring® wrap “reinforces steel pipe that has certain non-leaking defects.”¹³ LG&E argues that the “[u]se of such technologies can often simplify and reduce the average cost of repairs.”¹⁴

LG&E states that its request for a limited deviation from 807 KAR 5:022, Section 14(8)(a), is because “there technically exists an inconsistency between 807 KAR 5:022, Section 14(8)(a), and federal safety standards for gas transmission . . . lines¹⁵ set forth at 49 CFR Parts 192 and 195, with regard to pipeline repairs,”¹⁶ and that LG&E now seeks the use new technologies “which reliable engineering tests and analyses show can permanently restore the serviceability of pipe.”¹⁷ According to LG&E, the “reliable

¹² *Id.* at 6.

¹³ 64 Fed. Reg. 69,660 (1999). The USDOT cited tests and analyses done by the Gas Research Institute (now known as the Gas Technology Institute) which found that, when properly installed, the Clock Spring ® wrap system “permanently restores the pressure containing capability of the pipe.” LG&E describes Clock Spring® wrap as a fiberglass/polyester composite material coiled with adhesive in layers over filler.

¹⁴ Application at 7.

¹⁵ *Id.* Although LG&E states that 807 KAR 5:022, Section 14(8)(a), “is similar to previous versions of federal safety standards for gas transmission ‘and safety’ lines set forth at 49 CFR 192.713,” the referenced ‘and safety’ does not appear in either the Commission’s regulation or the federal regulation.

¹⁶ *Id.* at 7.

¹⁷ *Id.*

engineering tests and analyses” of the new methods of repair would be conducted by the manufacturer, prior to use by the utility.¹⁸

LG&E’s first four requests for a limited deviation from specific Commission regulations were explicitly based on LG&E’s compliance with a particular federal regulation.¹⁹ Although LG&E does not specify that its request for a limited deviation from 807 KAR 5:022, Section 14(8), is to allow it to comply with 49 CFR 192.713, instead, it appears that this was LG&E’s intention.²⁰

LG&E states that each of the identified Commission regulations and its federal regulation counterpart, which are at issue in this matter, were at one time closely aligned. Amendments made to the federal regulations since the implementation of their Commission regulation counterpart have resulted in key substantive differences. For each of the Commission regulations for which a limited deviation is sought, LG&E identifies a federal regulation which addresses similar safety concerns. LG&E emphasizes that compliance with the federal standards would result in the same, or in some instances, enhanced safety benefits while allowing an operator to have increased flexibility and the possibility of operational cost savings.

The Commission having considered the evidence of record and being otherwise sufficiently advised, finds:

¹⁸ Letter from Talina R. Mathews, Executive Director, Public Service Commission, to Parties of Record (Sept. 9, 2016) at 2.

¹⁹ LG&E specifically requested a limited deviation from 807 KAR 5:022, Section 10(16), and that it be allowed to comply instead with the atmospheric corrosion control requirements set forth in 49 CFR 192.479; LG&E specifically requested a limited deviation from 807 KAR 5:022, Section 10(17), and that it be allowed to comply instead with the inspection interval set forth in 49 CFR 192.481; LG&E specifically requested a limited deviation from 807 KAR 5:022, Section 10(22)(b)(2), and that it be allowed to comply instead with the record retention period set forth in 49 CFR 192.491(c); and, finally, LG&E specifically requested a limited deviation from 807 KAR 5:022, Section 14(6), and that it be allowed to comply instead with the record retention period set forth in 49 CFR 192.709.

²⁰ Application at 8.

1. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(16), allowing it to comply instead with the atmospheric corrosion control requirements as set forth in 49 CFR 192.479, is reasonable and should be granted.

2. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(17), allowing it to comply instead with the inspection interval as set forth in 49 CFR 192.481, is reasonable and should be granted.

3. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(22)(b)(2), allowing it to comply instead with the corrosion record retention period as set forth in 49 CFR 192.491(c), is reasonable and should be granted.

4. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 14(6), allowing it to comply instead with the record retention period as set forth in 49 CFR 192.709, is reasonable and should be granted.

5. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 14(8)(a), allowing it to include repair methods which reliable engineering tests and analyses show can permanently restore the serviceability of the pipe as set forth in 49 CFR 192.713, is reasonable and should be granted.

IT IS THEREFORE ORDERED that:

1. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(16), allowing it to comply instead with the atmospheric corrosion control requirements as set forth in 49 CFR 192.479, is granted.

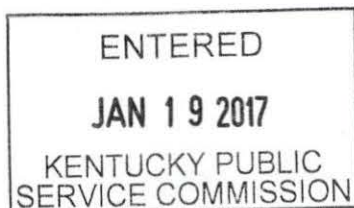
2. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(17), allowing it to comply instead with the inspection interval as set forth in 49 CFR 192.481, is granted.

3. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 10(22)(b)(2), allowing it to comply instead with the corrosion record retention period as set forth in 49 CFR 192.491(c), is granted.

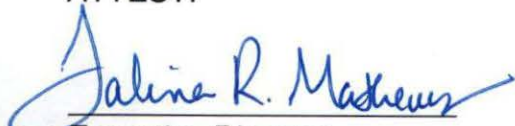
4. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 14(6), allowing it to comply instead with the record retention period as set forth in 49 CFR 192.709, is granted.

5. LG&E's requested limited deviation from Administrative Regulation 807 KAR 5:022, Section 14(8)(a), allowing it to include repair methods which reliable engineering tests and analyses show can permanently restore the serviceability of the pipe as set forth in 49 CFR 192.713, is granted.

By the Commission



ATTEST:


Executive Director

*Honorable Allyson K Sturgeon
Senior Corporate Attorney
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*J. Gregory Cornett
Senior Corporate Attorney
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Rick E Lovekamp
Manager - Regulatory Affairs
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40232-2010

*Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40232-2010