

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF LOUISVILLE GAS)	
AND ELECTRIC COMPANY FOR APPROVAL OF)	CASE NO.
STATE WAIVER OF THE REASSESSMENT INTERVAL)	2016-00386
REQUIRED BY 49 C.F.R. § 192.939)	

ORDER

On November 10, 2016, Louisville Gas and Electric Company (“LG&E”) filed an application for a state waiver of the reassessment interval required by 49 C.F.R. § 192.939 for the 19-mile natural gas intrastate transmission pipeline (“Ballardsville West pipeline”), which begins at Elder Park City Gate Station and ends at Zorn Avenue, is located in Oldham and Jefferson counties, and is under the jurisdiction of the Commission.¹ 49 C.F.R. § 192.901 prescribes the minimum requirements for an integrity management program for natural gas transmission pipelines. 49 C.F.R. § 192.939 requires natural gas transmission pipeline operators to reassess those segments of natural gas transmission pipeline that are located in high consequence areas (“HCA”), as

¹ Application at 2.

defined by 49 C.F.R. § 192.903,² at certain required intervals.

LG&E has participated in an informal conference (“IC”) with Commission Staff (“Staff”), has responded to questions raised by Staff at the IC, and has responded to one request for information issued by Staff. On April 21, 2017, the Commission entered an Order stating that this case would be submitted for a decision based on the evidence of record unless LG&E requested an opportunity to file comments or requests a hearing. On May 1, 2017, LG&E filed comments, along with a request that this case be submitted for adjudication without a hearing, based on the record developed in this case. No party sought intervention into this case. The matter now stands submitted to the Commission for a decision.

² 49 C.F.R. § 192.903, which defines a high consequence area as an area established by one of the methods described in paragraphs (1) or (2) as follows:

1. An area defined as –

(i) A Class 3 location under § 192.5; or

(ii) A Class 4 location under § 192.5; or

(iii) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or

(iv) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.

2. The area within a potential impact circle containing –

(i) 20 or more buildings intended for human occupancy, unless the exception in paragraph (4) applies; or

(ii) An identified site.

BACKGROUND

LG&E is a corporation, organized and existing under the laws of the Commonwealth of Kentucky, which furnishes electric and natural gas services in Metro Louisville and adjacent territory in Kentucky, including 17 Kentucky counties,³ and is a utility subject to Commission jurisdiction.⁴

This is the second application filed by LG&E for a state waiver of the reassessment interval required by 49 CFR 192.939 for the Ballardsville West pipeline. On December 16, 2015, in Case No. 2015-00419,⁵ LG&E requested an extension of the reassessment deadline of February 2, 2016. Subsequent to filing Case No. 2015-00419, LG&E learned that the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) had reinterpreted the maximum reassessment intervals required by 49 CFR § 192.939 to be calculated in “calendar years” rather than in “actual years.” This reinterpretation meant that LG&E’s deadline to reassess the Ballardsville West pipeline was December 31,

³ *Annual Report of Louisville Gas and Electric Company to the Public Service Commission for the Calendar Year Ended December 31, 2015* (“Annual Report”) at 4. The counties that LG&E serves in Kentucky include Barren, Bullitt, Green, Hardin, Hart, Henry, Jefferson, Larue, Marion, Meade, Metcalfe, Nelson, Oldham, Shelby, Spencer, Trimble, and Washington.

⁴ KRS 278.010(3)(b).

⁵ Case No. 2015-00419, *Application of Louisville Gas and Electric Company for a Limited Deviation from the Requirements of 49 CFR 192.939*, (filed Dec. 16, 2015).

2016.⁶ LG&E subsequently requested that its application be dismissed, as it believed the requested extension of the reassessment interval was no longer needed.⁷

LG&E's current application for an extension of the reassessment interval for the Ballardsville West pipeline was filed on November 10, 2016, after LG&E determined that it would not be able to meet the December 31, 2016 deadline, based on the unavailability of in-line inspection ("ILI") tools, which LG&E prefers to use in reassessing its pipelines.⁸

LG&E states that the 19-mile Ballardsville West pipeline was originally installed between December 31, 1964, and July 12, 1967, prior to the effective date of the federal pipeline safety regulations.⁹ The Ballardsville West pipeline is located in the road right-of-way at some points, and traverses private property in other locations,¹⁰ with

⁶ Effective January 3, 2012, Congress amended Title 49 of the United States Code, which in part clarified that a pipeline operator must calculate certain assessment intervals as *calendar* rather than *actual* years. PHMSA recently provided further clarification of this revision in its revised response FAQ Number 41 of the Gas Integrity Management Rule, stating:

Re-assessments must be conducted in accordance with an operator's procedures for determining the appropriate reassessment interval. Prior to the enactment of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, the maximum interval was set using actual years from the date of the previous assessment. Note that this change from actual years to calendar years is specific to gas pipeline reassessment interval years and does not alter the actual year interval requirements which appear elsewhere in the code for various inspection and maintenance requirements:

⁷ Case No. 2015-00419, *Application of Louisville Gas and Electric Company for a Limited Deviation from the Requirements of 49 CFR 192.939*, (Ky. PSC Apr. 8, 2016).

⁸ Application at 1.

⁹ *Id.* at 3–4.

¹⁰ *Id.*

approximately 65 percent of the pipeline located in a Class 3 area¹¹ and the remainder located in Class 1¹² and Class 2¹³ areas. According to LG&E, the 19-mile Ballardsville West pipeline includes approximately 17 miles of 12-inch pipeline, but also includes two road crossings that are 16-inches in diameter.¹⁴ Approximately 4.25 miles of the 12-inch pipeline is located in HCAs,¹⁵ requiring reassessment by LG&E.¹⁶ LG&E states that the Ballardsville West pipeline includes 16 non-contiguous segments in HCA locations,¹⁷ all associated with the 12-inch diameter pipe.¹⁸ This pipeline commonly operated between

¹¹ *Id.* See also 49 CFR § 192.5(b)(3) defines a Class 3 location as:

- (i) Any class location unit that has 46 or more buildings intended for human occupancy; or,
- (ii) An area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)

¹² Application at 3. See also 49 C.F.R. § 192.5(b)(1), which defines a Class 1 location as: (i) An offshore area; or (ii) Any class location unit that has 10 or fewer buildings intended for human occupancy.

¹³ Application at 3. See also 49 C.F.R. § 192.5(b)(2), which defines a Class 2 location as any class location unit that has more than 10 but fewer than 46 buildings intended for human occupancy.

¹⁴ *Id.* at 3-4.

¹⁵ LG&E's response to Commission Staff's First Request for Information ("Staff's First Request"), Item 1.a.

¹⁶ Application at 3.

¹⁷ LG&E's response to Staff's First Request, Item 1.b.

¹⁸ *Id.*, Item 1.c. and d.

220 pounds per square inch (“psig”) and 390 psig in 2016, with its peak pressure of 390 psig obtained on July 12, 2016.¹⁹

LG&E recently made modifications to the Ballardsville West pipeline in order to make using ILI tools for the required reassessment possible.²⁰ Due to the variable diameter of the pipeline (some segments having 12-inch diameter and other segments having a 16-inch diameter) as well as internal diameter restrictions, a special ILI tool is required to conduct the reassessment.²¹ At the time of its application, LG&E had identified only one vendor, the ROSEN Group (“Rosen”), as manufacturing ILI tools thought capable of inspecting a line consisting of both 12-inch-diameter and 16-inch-diameter segments of pipeline.²²

On July 12, 2016, LG&E attempted to reassess the Ballardsville West pipeline using Rosen’s special ILI tools, which included a 12-inch metal loss tool and a 12-inch x 16-inch pull unit.²³ LG&E expected that these tools could successfully navigate the tighter internal diameter restrictions of the Ballardsville West pipeline. Instead, during the

¹⁹ Application at 4.

²⁰ *Id.* at 4.

²¹ *Id.* at 4–5.

²² *Id.*

²³ *Id.* at 5–6.

inspection, the ILI tools broke into multiple pieces, which were subsequently recovered from the pipeline.²⁴

On August 5, 2016, following the failed July 12, 2016 reassessment of the Ballardsville West pipeline, LG&E met with Rosen's Challenging Diagnostics group to discuss alternative inspection options.²⁵ On September 1, 2016, Rosen proposed two options to LG&E, including either: (1) waiting for Rosen's development of a new low-flow/low-pressure ("LFLP") 12-inch x 16-inch metal loss tool, which is expected to be available in late 2017; or (2) install a temporary trap and use an existing 12-inch LFLP metal loss tool in the fourth quarter of 2016, which would provide data on only certain portions of the pipeline.²⁶

LG&E had several concerns regarding the use of an existing 12-inch LFLP metal loss tool during the fourth quarter of 2016. These concerns included that the entire pipeline would not be assessed, and therefore the data would be incomplete; that LG&E might be unable to maintain product supply if the tool became stuck in the pipeline during the winter heating season; and, that the data obtained could be compromised due to increased flow rates during the heating season, causing the ILI tool to travel too fast.²⁷

²⁴ *Id.* at 6.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

Based on the above concerns, LG&E decided to wait for the availability of a new LFLP 12-inch x 16-inch metal loss tool that is being developed by Rosen, anticipating that it will be capable of inspecting the entire 19-mile Ballardsville West pipeline, rather than only portions of the pipeline being inspected using an existing 12-inch tool. At the time LG&E filed its current application, it requested an extension for reassessing the Ballardsville West pipeline until August 31, 2018.²⁸ LG&E acknowledges that the LFLP 12-inch x 16-inch tool does not currently exist and that it has received no written assurance from Rosen or any other vendor that an ILI tool capable of reassessing the entire Ballardsville West pipeline will be available to LG&E by a specific date.²⁹

DISCUSSION

49 C.F.R. § 190.9(b)(1) provides that LG&E, as a natural gas operator seeking approval involving intrastate pipeline transportation, must file its petition for an extension of the reassessment interval of the Ballardsville West pipeline with the Commission. In addition, 49 C.F.R. § 190.9(d) requires the Commission to provide PHMSA with its written recommendation regarding LG&E's petition.³⁰

²⁸ *Id.*

²⁹ LG&E's Response to Staff's First Request, Item 2.a.(1).

³⁰ 49 C.F.R. § 190.9(d) provides in part:

A participating state agency receiving petitions initiated under this section shall provide the Administrator a written recommendation as to the disposition of any petition received by them. Where the Administrator does not reverse or modify a recommendation made by a state agency within 10 business days of its receipt, the recommended disposition shall constitute the Administrator's decision on the petition.

49 C.F.R. § 192.939 requires that an operator's "covered pipeline segments,"³¹ which include those segments of a natural gas transmission pipeline located in HCAs, be reassessed at certain intervals, using ILI tools, by pressure testing the pipeline, or through a direct assessment of the pipeline.³² Although LG&E has expressed its preference for using ILI tools capable of reassessing the entire Ballardsville West pipeline, 49 C.F.R. § 192.939 requires LG&E only to reassess the 4.25 miles located in HCAs. In addition, as all of the 16 non-contiguous segments of the Ballardsville West pipeline located in HCAs are associated with 12-inch-diameter pipeline, LG&E can perform the required reassessment using an existing 12-inch ILI tool.

Although LG&E's petition initially sought an extension of the reassessment interval for the Ballardsville West pipeline until August 31, 2018, this deadline was based on Rosen's developing a new LFLP 12-inch x 16-inch metal loss tool, and Rosen's making this new ILI tool available to LG&E.³³ LG&E maintains that reassessing the entire Ballardsville West pipeline using ILI tools would provide "more comprehensive and quantitative data about the integrity of the pipeline than other assessment methods."³⁴ LG&E also notes that prior to the reassessment, it intends to restrict operating pressure to no more than 312 psig, 20 percent below the recent peak pressure of 390 psig obtained

³¹ 49 CFR 192.903.

³² *Id.*

³³ Application at 6.

³⁴ *Id.* at 7.

on July 12, 2016, and 22 percent below the maximum allowable operating pressure of 400 psig, to ensure the safe operation of the pipeline.³⁵ LG&E acknowledges, however, that there could be additional delays.³⁶

LG&E has also examined other methods of reassessing the Ballardsville West pipeline, estimating that using direct assessment of the entire pipeline would cost \$234,000³⁷ and take six months to complete,³⁸ while direct assessment of just those segments located in HCAs would cost \$170,000³⁹ and take four and a half months to complete.⁴⁰ LG&E also estimates that pressure testing the entire Ballardsville West pipeline would cost \$9.5 million⁴¹ and take 57 weeks to complete,⁴² while pressure testing only the segments located in HCAs would cost \$4.9 million⁴³ and take 30 weeks to

³⁵ *Id.*

³⁶ *Id.* at 6. LG&E states:

The 12-inch x 16-inch LFLP metal loss tool, which is currently under development, would not be available to be run in the LG&E's system prior to late 2017. Due to flow rates and system deliverability issues, the 12-inch x 16-inch tool may not be able to be run in LG&E's system until sometime in 2018. Due to flow rates and system deliverability issues, the existing 12-inch LFLP metal loss tool could not be run until sometime in 2017.

³⁷ LG&E's Response to Staff's First Request, Item 3.a.

³⁸ *Id.* at Item 3.b.

³⁹ *Id.* at Item 3.d.

⁴⁰ *Id.* at Item 3.e.

⁴¹ *Id.* at Item 4.a.

⁴² *Id.* at Item 4.b.

⁴³ *Id.* at Item 4.d.

complete.⁴⁴ LG&E states that pressure testing would also include additional costs to maintain service to customers when feasible.⁴⁵

Although maintaining its preference for reassessing the entire Ballardsville West pipeline using the anticipated 12-inch x 16-inch Rosen ILI tool, based on the level of uncertainty associated with the development and availability of the new Rosen ILI tool, LG&E informed the Commission on March 3, 2017, that it planned to proceed using an existing LFLP 12-inch Rosen ILI tool, stating that it would complete the reassessment in the “second quarter of 2017,” and revising its request for an extension until September 30, 2017.⁴⁶ LG&E stated that using an existing LFLP 12-inch Rosen ILI tool to reassess the Ballardsville West pipeline would reduce the time needed, while ensuring that all pipeline segments in HCA locations were reassessed.⁴⁷ LG&E also asserted that its request for an extension until September 30, 2017, would allow it to complete any follow-up actions should complications occur during the reassessment in the second quarter of 2017.⁴⁸

On May 1, 2017, LG&E filed comments to the Commission’s Order of April 21, 2017 (“LG&E’s Comments”), confirming that it was in the process of completing

⁴⁴ *Id.* at Item 4.e.

⁴⁵ *Id.* at Item 4.d.

⁴⁶ LG&E’s Response to Staff’s First Request, Item 2.a.(2).

⁴⁷ *Id.*

⁴⁸ *Id.*

reassessment of 17 miles of 12-inch diameter segments of the Ballardsville West pipeline, including all of the pipeline located in HCAs. LG&E stated that it expected the inspection to be completed May 1, 2017. In LG&E's Comments, it once again requests an extension to complete the Ballardsville West pipeline reassessment until August 31, 2018, the date originally requested in its application. LG&E states that:

[G]iven the approximately two months required to determine if valid data was collected during LG&E's ILI of the pipeline at issue, and the potential need to react appropriately to that data—including, but not limited to, scheduling and conducting another ILI of the pipeline if the data is not valid—LG&E maintains its request for a waiver as set forth in its application that it be permitted to conduct the inspection prior to August 31, 2018. If another ILI is required due to the invalidity of the data collected recently, scheduling issues and tool availability may prohibit the inspection prior to the heating season and, therefore, prevent the inspection in order to maintain product supply prior to the Spring of 2018.

The Commission finds that LG&E has pursued its request for an extension of the reassessment interval for the Ballardsville West pipeline required by 49 C.F.R. § 192.939 based on its conviction that reassessment of the entire Ballardsville West pipeline using ILI tools would provide the most comprehensive and useful information regarding the condition and safety of the pipeline. The Commission also finds that LG&E's revised request, as set forth in its March 3, 2017 data response, for an extension until September 30, 2017, of the reassessment interval required by 49 C.F.R. § 192.939 for those segments of the Ballardsville West pipeline located in HCAs, is reasonable and should be granted. In the event that LG&E determines that the data recently collected on the

Ballardsville West pipeline is invalid and the September 30, 2017 reassessment deadline cannot be met, a new application for an extension of time should be filed.

IT IS THEREFORE ORDERED that:

1. LG&E's request for an extension of the reassessment interval required by 49 C.F.R. § 192.939 for those segments of the Ballardsville West pipeline in HCA locations until August 31, 2018, is denied.

2. LG&E is granted until September 30, 2017, to complete the reassessment of those segments of the Ballardsville West pipeline located in HCAs as required by 49 C.F.R. § 192.939.

3. LG&E shall inform the Commission in writing within 30 days of the completion of the required reassessment of the Ballardsville West pipeline, but no later than October 30, 2017, as extended by this Order.

4. Pursuant to 49 C.F.R. § 190.9(d), a copy of this Order and recommendation shall be provided to PHMSA for its approval.

5. Any documents filed in the future pursuant to ordering paragraphs 3 and 4 shall reference this case number and shall be retained in the post-case correspondence file.

By the Commission

ENTERED
MAY 11 2017
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:



Executive Director

Case No. 2016-00386

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