



November 10, 2016

Dr. Talina R. Mathews  
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Kentucky Public Service Commission  
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**Re: APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR  
APPROVAL OF STATE WAIVER OF THE REASSESSMENT INTERVAL  
REQUIRED BY 49 C.F.R. §192.939  
Case No. 2016-00386**

Dear Dr. Mathews,

On December 16, 2015, 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. That application was assigned Case No. 2015-00419. LG&E subsequently withdrew that application in response to the Pipeline and Hazardous Materials Safety Administration changing the reassessment interval. On April 8, 2016 the KPSC entered an Order granting LG&E’s Request to Withdraw the Waiver or Reassessment Interval.

This letter is LG&E’s re-application for a state waiver of the reassessment interval. LG&E meets the requirements for a state waiver pursuant to 49 U.S.C. § 60118(c) and 49 C.F.R. § 192.943.

As set forth in more detail herein, LG&E states that this application is made in good faith, that a longer reassessment interval for the covered segment of pipeline is necessary given the recent unavailability of the required in-line inspection (“ILI”) tools, the current need to maintain product supply during the heating season, and that LG&E has taken steps to ensure the safety of the covered segment until the reassessment is completed. LG&E further states that this application is made less than 180 days from when the reassessment is due, but the deadline does not apply given that product supply is at issue. The waiver application is also made as soon as reasonably practicable in light of the attendant circumstances.

State waivers are similar to special permits, but before the state may issue a state waiver, the state must provide the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) with a 60-day review period. To provide sufficient background and detail in support of this state



waiver request, LG&E is submitting this application consistent with the requirements for a special permit under 49 C.F.R. § 190.341. In support of this application, LG&E states as follows:

**1. The name, mailing address, and telephone number of the applicant and whether the applicant is an operator.**

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The applicant is the pipeline operator.

**2. A detailed description of the pipeline facilities for which the special permit is sought, including:**

LG&E operates a natural gas transmission pipeline known as the Ballardsville West gas transmission pipeline (the “Ballardsville Pipeline”).

**i. The beginning and ending points of the pipeline mileage to be covered and the Counties and States in which it is located;**

The Ballardsville Pipeline begins at Elder Park City Gate Station and ends at Zorn Avenue. It is located in Oldham and Jefferson Counties and is approximately 19 miles long.

**ii. Whether the pipeline is interstate or intrastate and a general description of the right-of-way including proximity of the affected segments to populated areas and unusually sensitive areas;**

Ballardsville Pipeline is an intrastate pipeline under the jurisdiction of the Kentucky Public Service Commission. The pipeline lays in road right-of-way at some points and traverses private property in other locations. Approximately 65% of the pipeline is in a Class 3 area and the remainder is in Class 1 and 2 areas. Approximately 4-1/4 miles of the pipeline are in high consequence areas (“HCA”).

**iii. Relevant pipeline design and construction information including the year of installation, the material, grade, diameter, wall thickness, and coating type; and**

The Ballardsville Pipeline is primarily 12-inches in diameter, but includes two road crossings that are 16-inches in diameter. The pipeline was originally installed from December 31, 1964 to July 12, 1967, prior to the effective date



of the federal pipeline safety regulations. The pipe in the HCA is made of steel and is 12-inches in diameter.

**iv. Relevant operating information including operating pressure, leak history, and most recent testing or assessment results.**

The pipeline commonly operated between 220 psig and 390 psig in 2016. The peak pressure of 390 psig was obtained on July 12, 2016. LG&E completed a direct assessment of the Ballardsville Pipeline on February 2, 2006. Seven years later, LG&E completed a confirmatory direct assessment of the pipeline as required under the regulations. Results of the direct assessment and confirmatory direct assessment indicated the pipeline was in good condition. Two leaks occurred on the pipeline; one in 2008 and the other in 2014, both were addressed promptly.

**3. A list of the specific regulation(s) from which the applicant seeks relief.**

LG&E seeks relief from the reassessment interval required by 49 C.F.R. § 192.939. LG&E conducted its prior assessment on February 2, 2006. Thus, under this section, LG&E must complete the reassessment of the covered segment in 2016. The reassessment may be done using ILI tools, or by performing a pressure test or direct assessment. However, the use of ILI provides more comprehensive and quantitative data about the integrity of the pipeline than the other assessment options, and may identify if mechanical couplings are present.

Based on the date of the prior assessment of the Ballardsville Pipeline, the next integrity assessment deadline on that pipeline is December 31, 2016. LG&E cannot meet the December 31, 2016 deadline.

**4. An explanation of the unique circumstances that the applicant believes makes the applicability of that regulation or standard (or portion thereof) unnecessary or inappropriate for its facility.**

Under § 192.943, an operator may apply for an extension of the reassessment interval if: 1) the ILI tool is unavailable, or 2) to maintain product supply. In this case, an extension is necessary to maintain product supply during the heating season.

Consistent with LG&E's commitment to pipeline safety, LG&E recently modified the Ballardsville Pipeline to make it possible to use ILI tools in conducting assessments. However, due to the variable diameter of the pipeline and internal diameter restrictions, a special ILI tool must be used to conduct the assessment. LG&E has been able to

identify only one vendor, the ROSEN Group, which has units capable of performing such an inspection. The following summary of events outlines LG&E's attempts to date to use specialty ILI tools to complete this assessment.

- 3/13/2014 Exploratory digs conducted to confirm pipeline modifications needed to allow passage of ILI tools.
- 7/1/2014 Contract established with ROSEN Group to perform inline inspection of the pipeline.
- 7/16/2014 Pipeline modification construction began to make pipeline capable of passing ILI tools.
- 5/12/2015 Pipeline modifications completed.
- 7/10/2015 ROSEN gauge plate ILI tool successfully run through pipeline.
- 7/14/2015 ROSEN high resolution geometry ILI tool successfully run through pipeline.
- 7/16/2015 After reviewing data gathered by the geometry tool, ROSEN informed LG&E that the 12-inch x 16-inch multi-diameter metal loss ILI tool that had already been mobilized to Louisville, Kentucky and was planned to be used in the line would not be able to pass through the pipeline. A 12-inch x 16-inch pull unit could be used with a 12-inch metal loss tool to inspect the pipeline since this configuration could pass tighter internal diameter restrictions.
- 8/25/2015 The second 12-inch x 16-inch pull unit ROSEN owned was damaged in an alternate pipeline shortly before the scheduled inspection of the Ballardsville Pipeline. ROSEN's other 12-inch x 16-inch pull unit had already been damaged.
- 9/3/2015 ROSEN indicated it had expected the pull unit repairs to take approximately two months, which would make the tool available at the end of October 2015.
- 9/30/2015 Jason Hurt, Kentucky Public Service Commission, Branch Manager, Gas Pipeline Safety Branch, was informed of the situation. As a precautionary measure, in the event the pull unit would not be repaired soon enough for the ILI to be completed in 2015 prior to the winter heating season, Mr. Hurt's assistance was requested in gaining clarification from PHMSA on whether the reassessment deadline for the Ballardsville Pipeline is February 2, 2016 or December 31, 2016.
- 12/7/2015 ROSEN advised that the pull unit was repaired and available for use. However, the inability to maintain product supply should the tool become stuck during the winter heating season precluded the use of the tool at that time.

- 12/14/2015 LG&E filed an application for a state waiver of the reassessment interval with the KPSC for the Ballardsville pipeline due to the uncertainty of the assessment deadline.
- 2/22/2016 LG&E received notification that PHMSA had updated its Transmission Integrity Management FAQ-41 to indicate assessment deadlines are based on calendar years. The deadline for the Ballardsville pipeline assessment is therefore December 31, 2016 rather than February 2, 2016.
- 3/7/2016 LG&E withdrew its application for a state waiver of the Ballardsville pipeline reassessment interval.
- 7/12/2016 ROSEN delivered the 12-inch metal loss tool with a 12-inch x 16-inch pull unit. Despite this tool being able to pass tighter internal diameter restrictions, the tool did not successfully navigate the line and broke into multiple pieces that were recovered from the pipeline.
- 8/5/2016 LG&E met with ROSEN's Challenging Diagnostics group to discuss alternative inspection options and share additional background information to assist ROSEN in making a proposal.
- 9/1/2016 ROSEN delivered a proposal with two options: 1) Wait for completed development of a 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 a pre-existing 12-inch LFLP metal loss tool in 4<sup>th</sup> quarter 2016. Option 2 would only provide data on a portion of the pipeline.
- 9/19/2016 After review of the two inspection options, option 2 was eliminated due to the inability to maintain product supply should the tool become stuck during the winter heating season. Flow rates during the winter heating season would also cause the tool to travel too fast through the Ballardsville pipeline causing data quality issues.

As reflected in this timeline, LG&E has made repeated attempts to use the latest and most advanced metal loss tools in existence capable of traversing a 12-inch x 16-inch pipeline. LG&E is now evaluating the use of specialty LFLP tools under development and LFLP tools which could only traverse a portion of the pipeline. The 12-inch x 16-inch LFLP metal loss tool which is currently under development would not be available to be run in 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.



The 180-day waiver application deadline only applies to applications based on lack of ILI tool availability, not to applications based on inability to maintain product supply. Accordingly, LG&E respectfully requests a limited waiver from the assessment deadline requirement of 49 C.F.R. § 192.939 and be allowed to conduct the in-line inspection of its Ballardsville Pipeline prior to August 31, 2018, rather than prior to December 31, 2016, because of the need to maintain product supply.

**5. A description of any measures or activities the applicant proposes to undertake as an alternative to compliance with the relevant regulation, including an explanation of how such measures will mitigate any safety or environmental risks;**

LG&E intends to restrict the pipeline operating pressure to no more than 312 psig, 20% below the recent peak pressure of 390 psig obtained on July 12, 2016, and 22% below the MAOP of 400 psig, to ensure the safe operation of the pipeline. LG&E will not remove the pressure restriction until it is ready to inline inspect the pipeline. The pressure restriction will need to be removed at that time in order to successfully complete the inline inspection. A 20% reduction in operating pressure until that time ensures the pipeline will only be exposed to stress levels well beneath those that it has safely operated under in recent time. The use of such a pressure restriction to ensure pipeline safety is used in federal pipeline safety regulations, such as in § 192.933.

**6. A description of any positive or negative impacts on affected stakeholders and a statement indicating how operating the pipeline pursuant to a special permit would be in the public interest.**

LG&E respectfully states that there will be no negative impact to stakeholders. LG&E conducted a direct assessment in 2006 and a confirmatory direct assessment in 2013. Furthermore, performing a reassessment using ILI tools provides more comprehensive and quantitative data about the integrity of the pipeline than other assessment methods. Therefore, it is in the public's best interest to grant the waiver. LG&E anticipates that the ILI tools will be available by late 2017. Therefore, LG&E respectfully states that the length of the extension to perform the reassessment from December 31, 2016 to August 31, 2018 is reasonable, particularly since LG&E will restrict the operating pressure of the covered segments until the assessment is completed.

**7. A certification that operation of the applicant's pipeline under the requested special permit would not be inconsistent with pipeline safety.**

LG&E certifies that this application for a waiver is not inconsistent with pipeline safety.



- 8. If the application is for a renewal of a previously granted waiver or special permit, provide a copy of the original grant of the waiver or permit.**

Not applicable.

- 9. Any other information PHMSA may need to process the application including environmental analysis where necessary.**

LG&E will provide any additional information that PHMSA requests to support this application.

In conclusion, LG&E meets the requirements for a longer reassessment interval required under § 192.943. LG&E seeks a reasonable extension of this interval, to August 31, 2018. LG&E anticipates that we will be able to complete the requisite in-line inspection prior to August 31, 2018.

Should you have any questions or require any additional information, please do not hesitate to contact the undersigned at (502) 627-2088 or Greg Cornett at (502) 627-2756.

Sincerely,

A handwritten signature in blue ink that reads "Allyson K. Sturgeon".

Allyson K. Sturgeon

cc: Pipeline and Hazardous Materials Safety Administration