



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

March 13, 2020

Mr. John Malloy
Vice President, Gas Distribution
Louisville Gas & Electric Co.
220 W. Main St.
P.O. Box 32010
Louisville, KY 40202

CPF 1-2020-0001M

Dear Mr. Malloy:

From July 22 - 25, 2019, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected Louisville Gas & Electric Co.'s (LG&E) procedures for Underground Natural Gas Storage (UNGS) in Louisville, Kentucky.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within LG&E's plans or procedures, as described below:

1. **§ 192.12 Underground natural gas storage facilities.**
 - (a) ...
 - (e) **Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to § 192.605.**

LG&E's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, LG&E's Storage Integrity Management Plan (SIMP) did not require a frequency for performing the reviews of risk assessment results within its Section 9.6, in accordance with API

RP 1171, Section 8.5.2 Methodology (Section 8.5.2).

Section 8.5.2 states in part:

The operator shall assess risk related to the storage operation using a consistent process. The operator should determine the risk assessment method applicable for the facilities. A risk assessment method should include the following characteristics in the risk assessment protocol:

- (a) ...
- (f) regular, periodic risk assessment reviews to update information and evaluate risk management effectiveness.

At the time of the inspection, LG&E's SIMP, Section 9.6 referenced a periodic evaluation, but did not define a regular frequency for performing reviews of risk assessment results.

2. **§ 192.12 Underground natural gas storage facilities.**

(a) ...

(e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to § 192.605.

LG&E's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, LG&E's Annulus Pressure Monitoring Procedure did not address monitoring for the presence of annular gas where well annulus cannot be monitored, in accordance with API RP 1171, Section 9.3.2 Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part:

The operator shall monitor for presence of annular gas by measuring and recording annular pressure and/or annular gas flow. The operator shall evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment.

At the time of the inspection, LG&E's written procedures failed to address how they would monitor the integrity of wells without annular ports.

3. **§ 192.12 Underground natural gas storage facilities.**

(a) ...

(e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established

pursuant to § 192.605.

LG&E's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, LG&E's Annulus Pressure Monitoring Procedure did not define a threshold or limit for the annular pressure and/or annular gas flow, in accordance with Section 9.3.2.

Section 9.3.2 states in part:

The operator shall monitor for presence of annular gas by measuring and recording annular pressure and/or annular gas flow. The operator shall evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment.

At the time of the inspection, LG&E's annular pressure thresholds were in draft form only and had not gone through the Management of Change process.

4. § 192.12 Underground natural gas storage facilities.

(a) ...

(e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to § 192.605.

LG&E's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, LG&E's Annulus Pressure Monitoring Procedure did not require that each annular gas occurrence that exceeds operator-defined or regulatory-defined threshold levels be evaluated, as required by Section 9.3.2.

Section 9.3.2 states in part:

The operator shall monitor for presence of annular gas by measuring and recording annular pressure and/or annular gas flow. The operator shall evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment.

At the time of the inspection, LG&E's written procedures failed to address how they would evaluate annular gas occurrences that exceeds annular pressure thresholds or limits.

5. § 192.12 Underground natural gas storage facilities.

(a) ...

(e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written

procedures for operations, maintenance, and emergencies established pursuant to § 192.605.

LG&E's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, LG&E's emergency response (ER) training plan did not define a frequency for ER training, as required by API RP 1171, Section 10.6.2 Training (Section 10.6.2).

Section 10.6.2 states:

Storage operations and applicable staff shall receive training in the use of the emergency preparedness/response plan. The training can include mock drills and participation in table-top exercises at regular intervals. The table-top exercises or mock drills can include civil emergency responders to enhance understanding and successful incident response.

At the time of the inspection, LG&E's ER plan described periodic training. The ER plan failed to define the actual interval to be used for performing the training.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.206. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, revised procedures, or a request for a hearing under §190.211. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Louisville Gas & Electric Co. maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Robert Burrough, Director, PHMSA Eastern Region, 840 Bear Tavern Road, Suite 300, West Trenton, NJ 08628. Please refer to **CPF 1-2020-0001M** on each document you submit, and whenever possible provide a signed PDF copy in electronic format. Smaller files may be emailed to robert.burrough@dot.gov. Larger

files should be sent on USB flash drive accompanied by the original paper copy to the Eastern Region Office.

Additionally, if you choose to respond to this (or any other case), please ensure that any response letter pertains solely to one CPF case number.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert Burrough".

Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Enforcement Proceedings*