



Via Electronic Mail

August 5, 2025

Mr. Bryan Jeffery Lethcoe
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration
8701 S. Gessner Road, Suite 630
Houston, TX 77074

**RE: East Tennessee Natural Gas, LLC
Notice of Amendment
CPF 4-2025-038-NOA**

Dear Mr. Lethcoe,

From June 4 to 6, 2024, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected East Tennessee Natural Gas, LLC's¹ (ETNG) procedures for operations and maintenance of its liquefied natural gas (LNG) facilities in Kingsport, Tennessee.

On July 8, 2025, PHMSA issued the above referenced Notice of Amendment (NOA) identifying six (6) apparent inadequacies in ETNG's plans and procedures. The following is a brief summary of PHMSA's concerns and ETNG's response to those concerns.

PHMSA Finding

1. § 193.2503 Operating procedures.

ETNG's written procedures for conducting normal operations activities were inadequate to provide for safe operation of an LNG facility in accordance with § 193.2503(g).

Specifically, ETNG's procedures, including *Liquefied Natural Gas Operations Manual - Storage Tank Procedures*, OPS-67.100-5 (Version 1.0; Dec. 2, 2024), *Liquefied Natural Gas Operations Manual - Send-Out Procedure*, OPS-67.100-6 (Version 1.0; Oct. 15, 2024), and *Liquefied Natural Gas Operations Manual - Miscellaneous Procedures*, OPS-67.100-12 (Version 1.0, Oct. 21, 2024) failed to specify rates and distribution patterns to keep thermal

¹ East Tennessee Natural Gas, LLC, is a subsidiary of Enbridge, Inc.

stresses within design limits in accordance with § 193.2505(a). In addition, none of the procedures included instructions for performing the cooldown of components in accordance with the requirements by § 193.2505(a) and (b).

ETNG must revise its written procedures to include detailed instructions, including cooldown rates of components to keep thermal stresses within design limits, of how the cooldown of components is to be performed according to the requirements of § 193.2505, in accordance with § 193.2503(g).

ETNG Response

ETNG acknowledges that its written procedures *Liquefied Natural Gas Operations Manual - Storage Tank Procedures*, *Liquified Natural Gas Operations Manual - Send-Out Procedure*, and *Liquified Natural Gas Operations Manual - Miscellaneous Procedures* did not include detailed instructions of how the cooldown of components is to be performed according to the requirements of § 193.2505, in accordance with § 193.2503(g).

ETNG has since made revisions to *Liquefied Natural Gas Operations Manual – Liquefaction System Startup Procedure* and *Liquefied Natural Gas Operations Manual – Send-out Procedure* to include the instructions for how the cooldown of components is to be performed. A copy of a revised version of each procedure is enclosed. The revisions to address this concern can be found in section 7.2.16 of the *Liquefaction Startup Procedure* and section 7.1.1 of the *Send-Out Procedure*.

PHMSA Finding

2. § 193.2509 Emergency procedures.

ETNG's written procedures for adequately handling each type of emergency identified under § 193.2509(a) were inadequate to provide for safe operation of a LNG facility in accordance with § 193.2509(b). Furthermore, the procedures provided inadequate guidance regarding the response to controllable emergencies, including notifying personnel and using equipment appropriate for handling the emergency in accordance with § 193.2509(b)(1).

Specifically, ETNG's procedure, *LNG Operations Manual Emergency Tab B* (Rev. 16; January 6, 2022) failed include response procedures for handling emergencies other than fires that may reasonably be expected to occur at an LNG plant due to operating malfunctions, structural collapse, personnel error, forces of nature, and activities adjacent to the plant as

required by under § 193.2509(a). ETNG's procedures included instructions for handling only fires and spills.

In addition, ETNG's *Liquefied Natural Gas Operations Manual - Emergency Procedures OPS67.100-16* (Version 1.1; Nov 14, 2024) also does not list any other type of emergencies other than fires.

Finally, ETNG's procedure, *LNG Operations Manual Emergency Tab B* (Rev. 16; Jan. 6, 2022), section IV.A does not contain detailed instruction of how personnel should respond to a controllable rupture emergency, including notifying personnel and using equipment appropriate for handling the emergency.

ETNG must revise its written procedures to include the types and places of emergencies other than fires that may reasonably be expected to occur at an LNG plant due to operating malfunctions, structural collapse, personnel error, forces of nature, and activities adjacent to the plant as required by § 193.2509(a). ETNG must also include instructions for personnel responding to controllable emergencies, including notifying personnel and using equipment appropriate for handling the emergency in accordance with § 193.2509(b)(1).

ETNG Response

ETNG acknowledges that its written procedures *LNG Operations Manual Emergency Tab B* and *Liquefied Natural Gas Operations Manual - Emergency Procedures* did not include types and places of emergencies other than fires as required by § 193.2509(a), as well as instructions for personnel responding to controllable emergencies in accordance with § 193.2509(b)(1).

ETNG has since made revisions to *Liquefied Natural Gas Operations Manual – Emergency Procedures* to include the types and places of emergencies other than fires that may reasonably be expected to occur at an LNG plant. A copy of the revised version is enclosed. The revisions to address this concern can be found in the *General Emergency Procedures* section 7.2.

PHMSA Finding

3. § 193.2605 Maintenance procedures.

ETNG's written procedures for conducting maintenance activities were inadequate to provide for safe operation of a LNG facility in accordance with § 193.2605(b).

Specifically, ETNG's procedures, *LNG Maintenance Manual M-1 Maintenance Procedures Tab A* (Rev. 8; Aug. 8, 2018) and *Hazardous Energy Control Lockout/Tagout Procedure SAF-58.300* (Version 1.1, Apr. 2, 2024) failed to identify components that are required to be inspected and tested, to include details of the inspections or tests determined under paragraph (a) of § 193.2604, the activities required to maintain each component, including any required corrosion control, frequency of performance, or any descriptions of other actions necessary to maintain the LNG plant according the requirements of Subpart G, in accordance with § 193.2509(b)(1) and (2).

ETNG must revise its written procedures to include detailed instructions on components requiring inspections and tests, including any required corrosion control, instructions to personnel on performing required maintenance, a schedule of the frequency of maintenance performance, and a detailed description of any other actions necessary to maintain the LNG plant in accordance with the maintenance requirements in Subpart G in accordance with § 193.2509(b).

ETNG Response

ETNG acknowledges that its written procedures *LNG Maintenance Manual M-1 Maintenance Procedures Tab A* and *Hazardous Energy Control Lockout/Tagout Procedure* did not include detailed instructions on components requiring inspections and tests in accordance with the maintenance requirements in Subpart G in accordance with § 193.2509(b).

ETNG has since made revisions to the *Liquefied Natural Gas Maintenance Manual* to include detailed instructions on components requiring inspections and tests in accordance with § 193.2509(b). A copy of the revised version is enclosed. The revisions to address this concern can be found in *Maintenance Procedures*, *Sendout System Procedures*, *Holding System Procedures*, *Fire Protection System Procedures*, *Control Testing Procedure*, *Auxiliary Generator Procedure*, *Corrosion Procedures*, and *Component Description* sections.

PHMSA Finding

4. § 193.2605 Maintenance procedures.

ETNG's written procedures for conducting maintenance activities were inadequate to provide for safe operation of a LNG facility in accordance with § 193.2605(c) are insufficient to adequately enable personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of § 191.23 of this subchapter, in accordance with § 193.2605(c).

Specifically, ETNG's procedure, *Safety-Related Condition Reporting Procedure, SOP 5-2040* (Version 2.5; Dec. 1, 2023) failed to provide adequate guidance for personnel to recognize safety-related conditions (SRCs).

Section 6.1 *Potential Reportable Conditions* lists SRCs that repeat the list in 49 CFR § 191.23 and includes conditions that are specific to transmission pipelines and underground natural gas storage facilities, but does not include any instructions to personnel on recognizing potential SRCs at its Kingsport LNG facility.

ETNG must revise its written procedures to enable personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requires of § 191.23, in accordance with § 193.2605(c).

ETNG Response

ETNG acknowledges that its written procedure *Safety-Related Condition Reporting Procedure* did not include any instructions to personnel on recognizing potential SRCs at its Kingsport LNG facility in accordance with § 193.2605(c).

ETNG has since made revisions to this procedure to include instructions to personnel on recognizing potential SRCs at its Kingsport LNG facility. A copy of the revised version is enclosed. The revisions to address this concern can be found in the *Tasks* and *Compliance* sections.

PHMSA Finding

5. § 193.2605 Maintenance procedures.

ETNG's written procedures for conducting maintenance activities were inadequate to provide for safe operation of a LNG facility in accordance with § 193.2605(b)(2). ETNG's written procedures are insufficient to adequately ensure that repair work on components must be performed and tested in a manner which as far as practicable, complies with the applicable requirements of Subpart D of Part 193 and assures the integrity and operational safety of the component being repaired, in accordance with § 193.2617(a).

Specifically, ETNG's procedures, *LNG Maintenance Manual M-1 Maintenance Procedures Tab A* (Rev. 8, August 8, 2018), and *Hazardous Energy Control Lockout/Tagout Procedure*

SAF-58.300 (Version 1.1, April 2, 2024) do not require that repair work on components is performed and tested in a manner that complies with the construction requirements in Subpart D, to the extent practicable, and fails to provide instructions on performing repairs that assures the integrity and operational safety of the component being repaired in accordance with § 193.2617(a)(1) and (2).

ETNG must revise its written procedures to include specific instructions for performing repair work on components in a manner which, as far as practicable, complies with the applicable requirements of Subpart D of Part 193 and assures the integrity and operational safety of the component being repaired, in accordance with § 193.2617(a).

ETNG Response

ETNG acknowledges that its written procedures *LNG Maintenance Manual M-1 Maintenance Procedures Tab A* and *Hazardous Energy Control Lockout/Tagout Procedure* did not include specific instructions for performing repair work on components in a manner which is in accordance with § 193.2617(a).

ETNG has since made revisions to the *Liquefied Natural Gas Maintenance Manual* to include specific instructions for performing repair work in a compliant manner as described above. A copy of the revised version is enclosed. The revisions to address this concern can be found in the *Maintenance Procedures* section 10.

PHMSA Finding

6. § 193.2017 Plans and procedures.

ETNG's written procedures failed to require ETNG to review and update the plans and procedures required by Part 193 when a component is changed significantly or a new component is installed, and at intervals not exceeding 27 months, but at least once every 2 calendar years, in accordance with § 193.2017(c).

Specifically, ETNG did not provide specific written procedures or instructions in its procedures requiring that all written procedures and plans be reviewed and updated when a component is changed significantly or a new component is installed and at intervals not exceeding 27 months, but at least once every 2 calendar years.

ETNG must update its plans and procedures so that each is reviewed and updated as required by Part 193 when a component is changed significantly or a new component is installed, and at intervals not exceeding 27 months, but at least once every 2 calendar years, in accordance with § 193.2017(c).

ETNG Response

ETNG acknowledges that its written procedures do not include requirements to review and update the plans and procedures when a component is changed significantly or a new component is installed, and at intervals not exceeding 27 months, but at least once every 2 calendar years, in accordance with § 193.2017(c).

ETNG has since made revisions to all Liquefied Natural Gas Operations and Maintenance Procedures to include a requirement to review and update the plans and procedures as described above. A copy of a revised version of one of these procedures is enclosed. The revisions to address this concern can be found in the *Document Control and Maintenance* section of each procedure.

We trust that you will find the revisions to the stated procedures will fully address the issues noted in the NOA. ETNG takes these issues very seriously, and we are committed to addressing these issues in an expeditious manner. Please call me at (713) 627-6601 if you need additional information or have any questions.

Sincerely,



Peter Seydewitz
Director, Operational Excellence
GTM Engineering & Asset Management

Attachments:

1. Liquefied Natural Gas Operations Manual – Liquefaction System Startup Procedure
2. Liquefied Natural Gas Operations Manual – Send-out Procedure
3. Liquefied Natural Gas Operations Manual – Emergency Procedures
4. Liquefied Natural Gas Maintenance Manual_Item 3
5. Safety-Related Condition Reporting Procedure_Compliance
6. Safety-Related Condition Reporting Procedure_Tasks

7. Liquefied Natural Gas Maintenance Manual_Item 5
8. Document Control and Maintenance Section Example