August 9, 2019

Mr. William Yardley  
Executive Vice President and President  
Gas Transmission and Midstream  
Enbridge Inc.  
5400 Westheimer Court  
Houston, Texas 77056

Re: CPF No. 4-2019-1004

Dear Mr. Yardley:

Enclosed please find the Final Order issued in the above-referenced case to your subsidiary, Texas Eastern Transmission, LP. It makes findings of violation, assesses a civil penalty of $75,600, and specifies actions that need to be taken to comply with the pipeline safety regulations. The penalty payment terms are set forth in the Final Order. When the civil penalty has been paid and the terms of the compliance order completed, as determined by the Director, Southwest Region, this enforcement action will be closed. Service of the Final Order by certified mail is effective upon the date of mailing, as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry  
Associate Administrator  
for Pipeline Safety

Enclosure

cc: Ms. Mary McDaniel, Director, Southwest Region, Office of Pipeline Safety, PHMSA  
Ms. Michele Harradence, Senior Vice President, Gas Transmission & Midstream Operations, Texas Eastern Transmission, LP, 5400 Westheimer Court, Houston, Texas 77056

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
In the Matter of

Texas Eastern Transmission, LP, a subsidiary of Enbridge Inc., Respondent.

CPF No. 4-2019-1004

FINAL ORDER

From March 27 through December 13, 2018, pursuant to 49 U.S.C. § 60117, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of Texas Eastern Transmission, LP/Spectra Energy Partners (TETLP or Respondent), in Texas, Louisiana, Arkansas, Illinois, Indiana, Missouri, and Ohio. In February 2017, Enbridge and Spectra announced a merger and on December 18, 2018, it was completed. TETLP, now a subsidiary of Enbridge, Inc. (Enbridge), operates more than 9,000 miles of gas pipeline between Texas and the northeastern United States, transporting approximately 12 billion cubic feet per day.1

As a result of the inspection, the Director, Southwest Region, OPS (Director), issued to Respondent, by letter dated March 5, 2019, a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order (Notice), which also included a warning pursuant to 49 C.F.R. § 190.205. In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that TETLP had committed five violations of 49 C.F.R. Part 192 and proposed assessing a civil penalty of $75,600 for the alleged violations. The Notice also proposed ordering Respondent to take certain measures to correct the alleged violations. The warning item required no further action, but warned the operator to correct the probable violations or face possible future enforcement action.

Enbridge, on behalf of TETLP, responded to the Notice by letter dated April 4, 2019 (Response). The company did not contest the allegations of violation and agreed to complete the proposed compliance actions. Respondent did not request a hearing and therefore has waived its right to one.

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1 Enbridge website, available at https://www.enbridge.com/map#map:infrastructure,search=%22texas%20eastern%20transmission%20(texas%22 (last accessed July 18, 2019).
FINDINGS OF VIOLATION

In its Response, Respondent did not contest the allegations in the Notice that it violated 49 C.F.R. Part 192, as follows:

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 192.463(a), which states:

§ 192.463 External corrosion control: Cathodic protection.
   (a) Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in appendix D of this part. If none of these criteria is applicable, the cathodic protection system must provide a level of cathodic protection at least equal to that provided by compliance with one or more of these criteria.

The Notice alleged that Respondent violated 49 C.F.R. § 192.463(a) by failing to provide an adequate level of cathodic protection on the Mexico to Santa Fe and the Charco to the end of the line pipeline segments to meet the applicable criteria contained in appendix D of Part 192. Specifically, the Notice alleged that TETLP’s records for calendar years 2015 through 2018, showed that the Appendix D criteria was not met for three inspection cycles for several test points. The annual survey records showed that IR-free readings failed to meet the negative 850 mV “ON” criteria in Sections I and II of Appendix D.

Additionally, the Notice noted that TETLP’s procedure, SOP 2-2200, Application of Cathodic Protection Criteria, states that “If acceptable levels of cathodic protection cannot be demonstrated by at least one of the criteria identified in the ‘Acceptable Criterion’ sections below, take prompt remedial action to perform further testing and/or evaluations that result in adequate levels of cathodic protection.” Section 2-4 of the procedure further identifies three acceptable criteria (- .850 VDC “ON”, - .850 VDC “OFF” and 100 mVDC Polarization), which are the same as those specified in Appendix D. However, TETLP failed to apply any of these other criteria found in Appendix D or its procedure to determine adequacy of cathodic protection for these two pipelines.

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 192.463(a) by failing to provide a level of cathodic protection that complies with, or is at least equal to, one or more of the applicable criteria contained in Appendix D of Part 192.

Item 3: The Notice alleged that Respondent violated 49 C.F.R. § 192.911(l), which states:

§ 192.911 What are the elements of an integrity management program?
   An operator's initial integrity management program begins with a framework (see§ 192.907) and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program. An operator must make continual
improvements to its program. The initial program framework and subsequent program must, at minimum, contain the following elements. (When indicated, refer to ASME/ANSI B31.8S (incorporated by reference, see § 192.7) for more detailed information on the listed element.)

(a) . . .
(l) A quality assurance process as outlined in ASME/ANSI B31.8S, section 12.

The Notice alleged that Respondent violated 49 C.F.R. § 192.911(l) by failing to follow its Integrity Management Plan (IMP), Section 10 – Quality Assurance Plan, Rev. 7, dated March 4, 2016, for a quality assurance process, as required by ASME/ANSI B31.8S, section 12. Specifically, TETLP failed to analyze the results for satisfactory performance, to recommend changes to improve the integrity management program, and to perform internal/external audits to review overall functioning of IMP performance, in accordance with Sections 10.5.4.2, 10.5.5.1, and 10.5.6.1 of its IMP, respectively.

OPS found that TETLP failed to analyze the results from each region, as identified by the operator, for satisfactory performance on a business unit by business unit basis, as required by Section 10.5.4.2 of its IMP. TETLP also failed to document recommended program changes and corrective actions to improve the IMP or monitor the effectiveness of its implementation. Furthermore, TETLP failed to perform an internal audit of the IMP during 2017. Additionally, the 2016 annual Pipeline Integrity Performance Evaluation report was inadequate. Finally, TETLP had yet to commission an external audit, as required by its IMP, at the time of the inspection.

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 192.911(l) by failing to follow the quality assurance process in its IMP.

Item 4: The Notice alleged that Respondent violated 49 C.F.R. § 192.917, which states, in relevant part:

§ 192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?

(a) . . .
(b) Data gathering and integration. To identify and evaluate the potential threats to a covered pipeline segment, an operator must gather and integrate existing data and information on the entire pipeline that could be relevant to the covered segment. In performing this data gathering and integration, an operator must follow the requirements in ASME/ANSI B31.8S, section 4. At a minimum, an operator must gather and evaluate the set of data specified in Appendix A to ASME/ANSI B31.8S, and consider both on the covered segment and similar non-covered segments, past incident history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, internal inspection records, and all other conditions specific to each pipeline.
(c) Risk assessment. An operator must conduct a risk assessment that follows ASME/ANSI B31.8S, section 5, and considers the identified threats for each covered segment. An operator must use the risk assessment to prioritize the covered segments for the baseline and continual reassessments (§§192.919, 192.921, 192.937), and to determine what additional preventive and mitigative measures are needed (§192.935) for the covered segment.

The Notice alleged that Respondent violated 49 C.F.R. § 192.917(b)-(c) by failing to gather, integrate existing data, and validate the result of risk rankings. Additionally, the Notice alleged that TETLP did not follow its own pipeline IMP, Section 13 – Risk Assessment, Rev 7, dated March 4, 2016, in particular Sections 13.1 and 13.3.

The Notice alleged that TETLP did not use an adequate or appropriate process to input data and information into its risk analysis process or to confirm that its output data was accurate. Specifically, TETLP failed to employ the correct methodology for calculations of external corrosion for one of its segments following an in-line inspection (ILI) in 2012. Despite having ILI data for the segment, TETLP did not use the appropriate methodology to calculate external corrosion under Method 2 of Section 2.1 of its Risk Algorithm Document (RAD). Furthermore, TETLP could not explain risk calculations in its risk model for the following:

- External Corrosion: TETLP did not consider coating age factor of 10 for 1950-vintage pipe. Coating age is weighted 10 percent of baseline susceptible score;
- Internal Corrosion: TETLP indicated that it is in process of inputting data into the Risk Model and running the analysis related to internal corrosion threat;
- Third Party Damage Threat: The Modeled Impact Frequency Score ("F in the Hit Susceptibility Equation) (1-10) is not consistent with RAD, section 2.3. Spectra has not performed a depth of cover survey for 1950-vintage pipeline and selected 2.99 feet of cover by default; and
- The risk score calculation spreadsheet provided for Construction threat is not consistent with RAD. TETLP failed to integrate the data into RAD.

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 192.917 by failing to identify and evaluate the potential threats to covered pipeline segments by gathering and integrating existing data and information on the entire pipeline that could be relevant to the covered segments.

Item 5: The Notice alleged that Respondent violated 49 C.F.R. § 192.935, which states, in relevant part:

§ 192.935 What additional preventive and mitigative measures must an operator take?
   (a) General requirements. An operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the
operator has identified to each pipeline segment. (See §192.917) An operator must conduct, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 5, a risk analysis of its pipeline to identify additional measures to protect the high consequence area and enhance public safety. Such additional measures include, but are not limited to, installing Automatic Shut-off Valves or Remote Control Valves, installing computerized monitoring and leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional inspection and maintenance programs.

(b) . . .

(c) Automatic shut-off valves (ASV) or Remote control valves (RCV). If an operator determines, based on a risk analysis, that an ASV or RCV would be an efficient means of adding protection to a high consequence area in the event of a gas release, an operator must install the ASV or RCV. In making that determination, an operator must, at least, consider the following factors—swiftness of leak detection and pipe shutdown capabilities, the type of gas being transported, operating pressure, the rate of potential release, pipeline profile, the potential for ignition, and location of nearest response personnel.

The Notice alleged that Respondent violated 49 C.F.R. § 192.935 by failing to identify and take additional preventative and mitigative (P&M) measures to mitigate the consequences of a pipeline failure in a high consequence area (HCA). Specifically, the Notice stated that TETLP provided a technical documentation to define the company’s methodology for determining the location of remote control valves (RCV) for the purpose of improving response time and minimizing consequences of pipeline emergencies. This methodology is applicable to both existing facilities and new construction as well as applies to both covered and non-covered segments. However, when OPS requested to review the finalized list of the RCV site candidates, it was found that TETLP considered and addressed only the Priority 1 RCV selection criteria. According to TETLP’s methodology for selection of RCV sites, Priority 1 is valve sites isolating Class 3 or HCAs with a response time greater than 2 hours.

TETLP was unable to provide documentation showing it had conducted analysis that considers swiftness of leak detection and pipe shutdown capabilities, the types of gas being transported, operating pressure, the rate of potential release, pipeline profile, and the potential for ignition. Additionally, TETLP did not consider the factors beyond immediate injury such as prolonged flame exposure to emergency responders and the public, danger to people caught in difficult to evacuate areas, impact on key transportation corridors, and the risk of wildfires.

Respondent did not contest this allegation of violation. Accordingly, based upon a review of all of the evidence, I find that Respondent violated 49 C.F.R. § 192.935 by failing to identify and take additional preventative and mitigative (P&M) measures to mitigate the consequences of a pipeline failure in a high consequence area (HCA).
These findings of violation will be considered prior offenses in any subsequent enforcement action taken against Respondent.

**ASSESSMENT OF PENALTY**

Under 49 U.S.C. § 60122, Respondent is subject to an administrative civil penalty not to exceed $200,000 per violation for each day of the violation, up to a maximum of $2,000,000 for any related series of violations. In determining the amount of a civil penalty under 49 U.S.C. § 60122 and 49 C.F.R. § 190.225, I must consider the following criteria: the nature, circumstances, and gravity of the violation, including adverse impact on the environment; the degree of Respondent’s culpability; the history of Respondent’s prior offenses; any effect that the penalty may have on its ability to continue doing business; and the good faith of Respondent in attempting to comply with the pipeline safety regulations. In addition, I may consider the economic benefit gained from the violation without any reduction because of subsequent damages, and such other matters as justice may require. The Notice proposed a total civil penalty of $75,600 for the violation cited above.

**Item 1:** The Notice proposed a civil penalty of $75,600 for Respondent’s violation of 49 C.F.R. § 192.463(a), for failing to provide a level of cathodic protection that complies with, or is at least equal to, one or more of the applicable criteria contained in Appendix D of Part 192. TETLP neither contested the allegation nor presented any evidence or argument justifying a reduction in or elimination of the proposed penalty. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a civil penalty of \$75,600 for violation of 49 C.F.R. § 192.463(a).

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require such payment to be made by wire transfer through the Federal Reserve Communications System (Fedwire), to the account of the U.S. Treasury. Detailed instructions are contained in the enclosure. Questions concerning wire transfers should be directed to: Financial Operations Division (AMK-325), Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 S MacArthur Blvd, Oklahoma City, Oklahoma 79169. The Financial Operations Division telephone number is (405) 954-8845.

Failure to pay the \$75,600 civil penalty will result in accrual of interest at the current annual rate in accordance with 31 U.S.C. § 3717, 31 C.F.R. § 901.9 and 49 C.F.R. § 89.23. Pursuant to those same authorities, a late penalty charge of six percent (6%) per annum will be charged if payment is not made within 110 days of service. Furthermore, failure to pay the civil penalty may result in referral of the matter to the Attorney General for appropriate action in a district court of the United States.

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\(^{2}\) These amounts are adjusted annually for inflation. See 49 C.F.R. § 190.223; Revisions to Civil Penalty Amounts, 83 Fed. Reg. 60732, 60744 (Nov. 27, 2018).
COMPLIANCE ORDER

The Notice proposed a compliance order with respect to Items 1, 3, 4, and 5 in the Notice for violations of 49 C.F.R. §§ 192.463(a), 192.911(l), 192.917, and 192.935, respectively. Under 49 U.S.C. § 60118(a), each person who engages in the transportation of gas or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. Pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations:

1. With respect to the violation of § 192.463(a) (**Item 1**), Respondent must test, evaluate and, where necessary, enhance its cathodic protection system to comply with Appendix D criteria and submit to the Director, Southwest Region, adequate documentation to demonstrate compliance within 90 days of this Order.

2. With respect to the violation of § 192.911(l) (**Item 3**), Respondent must analyze the result from each region for satisfactory performance on a business unit by business unit basis; identify specific program performance improvements; and determine the need for improvements in its program, procedures, guidelines or specifications and provide program enhancements based on multilevel review. In addition, TETLP must conduct an annual internal audit as well as commission an external audit team to review the overall functioning of its IMP as required by its procedures. TETLP must complete this item within 90 days following the issuance of this Order.

3. With respect to the violation of § 192.917 (**Item 4**), Respondent must ensure the data for the Risk Model is accurate for all pipelines that impact a high consequence area. TETLP must ensure its risk rankings are logical and consistent with industry practice. TETLP must complete this item by December 31, 2020.

4. With respect to the violation of § 192.935 (**Item 5**), Respondent must conduct an evaluation/risk analysis of its pipelines to determine if automatic shut off valves or remote-control valves would be an efficient means of adding protection to each high consequence area in the event of a release of gas to reduce the risks. This study must consider factors such as swiftness of leak detection and pipe shutdown capabilities, the type of gas being transported, operating pressure, the rate of potential release, pipeline profile, the potential for ignition, and location of nearest response personnel. The study should also consider factors beyond immediate injury such as: prolonged flame exposure to emergency responders and public, danger to people caught in difficult-to-evacuate areas, impact on key transportation corridors, and the risk of wildfires. TETLP must complete this item within 90 days following the issuance of this Order.

The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent and demonstrating good cause for an extension.
It is requested (not mandated) that Respondent maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director. It is requested that these costs be reported in two categories: (1) total cost associated with preparation/revision of plans, procedures, studies and analyses; and (2) total cost associated with replacements, additions and other changes to pipeline infrastructure.

Failure to comply with this Order may result in the administrative assessment of civil penalties not to exceed $200,000, as adjusted for inflation (49 C.F.R. § 190.223), for each violation for each day the violation continues or in referral to the Attorney General for appropriate relief in a district court of the United States.

**WARNING ITEM**

With respect to Item 2, the Notice alleged a probable violation of Part 192 but did not propose a civil penalty or compliance order for this item. Therefore, this is considered to be a warning item. The warning was for:

49 C.F.R. § 192.706(a) **(Item 2)** — Respondent’s alleged failure to conduct leakage surveys using leak detector equipment in a Class 3 location on Line 16 at intervals not exceeding 7 1/2 months, but at least twice each calendar year.

In its Response, TETLP presented information showing that it had taken certain actions to address the cited item. Specifically, TETLP acknowledged that process improvements were needed to its Class location survey program to ensure field personnel are immediately notified following a change in Class location. As a result, TETLP has implemented a work management process in SAP to general a work order task that will notify the Area Management of a new Class 3 or 4 locations and create a task to perform leak survey. If OPS finds a violation of this provision in a subsequent inspection, Respondent may be subject to future enforcement action.

Under 49 C.F.R. § 190.243, Respondent may submit a Petition for Reconsideration of this Final Order to the Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address, no later than 20 days after receipt of service of this Final Order by Respondent. Any petition submitted must contain a statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.243. The filing of a petition automatically stays the payment of any civil penalty assessed. The other terms of the order, including corrective action, remain in effect unless the Associate Administrator, upon request, grants a stay. The terms and conditions of this Final Order are effective upon service in accordance with 49 C.F.R. § 190.5.

August 9, 2019  

Alan K. Mayberry  
Associate Administrator  
for Pipeline Safety