



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

**NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 17, 2013

Mr. Pete Kirsch
Sr. VP - Pipeline Operations and Engineering
Centerpoint Energy Gas Transmission Co
Mississippi River Transmission Co
1111 Louisiana Street
Houston, TX 77002

CPF 4-2013-1010

Dear Pete Kirsch:

On multiple occasions between January 30 and October 19, 2012, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code conducted an onsite inspection of Centerpoint Energy Gas Transmission Co. and Mississippi River Transmission Co. (together, CEGT) procedures and records for Operations and Maintenance, Integrity Management, Emergency Response, Operator Qualification, and Construction Specifications in Shreveport, LA.

As a result of the inspection, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

1. §191.5 Immediate notice of certain incidents.

- (a) At the earliest practicable moment following discovery, each operator shall give notice in accordance with paragraph (b) of this section of each incident as defined in §191.3.**

CEGT failed to give notice at the earliest practicable moment following discovery of Incident No. 20070063-5058: At approximately 10:30 a.m. on May 25, 2007, during disassembly of an unloader involving compressor #3 on unit 2 (Unionville CS), an employee was struck in the abdomen when the pressurized equipment caused an actuator to blow out and this required immediate hospitalization for several days. CEGT did not report the incident to the National Response Center (NRC) until May 30, 2007 despite the absence of any circumstances that would have prevented it from making the telephonic report at or about the time the employee was hospitalized.

2. §191.15 Transmission systems, gathering systems, and liquefied natural gas facilities. Incident report.

- (a) Transmission or Gathering. Each operator of a transmission or a gathering pipeline system must submit DOT Form PHMSA F 7100.2 as soon as practicable but not more than 30 days after detection of an incident required to be reported under § 191.5 of this part.**

CEGT failed to submit a Form 7100.2 incident report as soon as practicable but not more than 30 days after an incident required to be reported under §191.5 occurred on August 31, 2010 in Fouke, AR.

On August 31, 2010 an incident occurred involving a lightning strike resulting in a fire at the Fouke Town Border Station that required an incident report to be filed within 30 days. CEGT submitted the Form 7100.2 for this incident on October 5, 2010. As a result, CEGT exceeded the maximum 30 day time frame by five (5) days.

3. §191.17 Transmission systems, gathering systems, and liquefied natural gas facilities. Annual report.

- (a) Transmission or Gathering. Each operator of a transmission or a gathering pipeline system must submit an annual report for that system on DOT Form PHMSA 7100.2.1. This report must be submitted each year, not later than March 15, for the preceding calendar year, except that for the 2010 reporting year the report must be submitted by June 15, 2011.**

CEGT failed to submit annual reports for the years 2007-2010 that included its entire pipeline system by omitting to report bare unprotected steel pipe for OPID 602.¹

¹ OPID 602 consists of approximately 6140 miles of pipeline located in the following states: Arkansas, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee and Texas.

The 2008, 2009 and 2010 Annual Reports (AR, LA, and OK) for OPID 602 omitted all quantities of Bare 'Unprotected' steel pipe. The 2007 Annual Report (LA) for OPID 602 listed a quantity of 3 miles of Bare 'Unprotected' steel pipe.

During its inspection, PHMSA reviewed the 2011 Annual Report confirming that there was actually 22.3 miles of Bare 'Unprotected' steel pipe. The quantities are as follows: 16.63 miles (Line 9 in the Western Region-OK); 0.3 miles (Line FT-3 in Southern Region-LA); and 5.35 miles (Line KM-26 in Southern Region-AR). CEGT personnel said that they had been unaware that the pipeline mileage had been omitted until it conducted a verification of its pipeline data in accordance with Advisory Bulletin ADB-12-06.

4. § 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.**

49 CFR Part 192 Appendix D:

I. Criteria for cathodic protection—

A. Steel, cast iron, and ductile iron structures.

- (1) **A negative (cathodic) voltage of at least 0.85 volt, with reference to a saturated copper-copper sulfate half cell. Determination of this voltage must be made with the protective current applied, and in accordance with sections II and IV of this appendix.**
- (2) **A negative (cathodic) voltage shift of at least 300 millivolts. Determination of this voltage shift must be made with the protective current applied, and in accordance with sections II and IV of this appendix. This criterion of voltage shift applies to structures not in contact with metals of different anodic potentials.**
- (3) **A minimum negative (cathodic) polarization voltage shift of 100 millivolts. This polarization voltage shift must be determined in accordance with sections III and IV of this appendix.**
- (4) **A voltage at least as negative (cathodic) as that originally established at the beginning of the Tafel segment of the E-log-I curve. This voltage must be measured in accordance with section IV of this appendix.**
- (5) **A net protective current from the electrolyte into the structure surface as measured by an earth current technique applied at predetermined current discharge (anodic) points of the structure.**

II. Interpretation of voltage measurement. Voltage (IR) drops other than those across the structure-electrolyte boundary must be considered for valid interpretation of the voltage measurement in paragraphs A(1) and (2) and paragraph B(1) of section I of this appendix.

III. Determination of polarization voltage shift. The polarization voltage shift must be determined by interrupting the protective current and measuring the polarization decay. When the current is initially interrupted, an immediate

voltage shift occurs. The voltage reading after the immediate shift must be used as the base reading from which to measure polarization decay in paragraphs A(3), B(2), and C of section I of this appendix.

CEGT is utilizing the Appendix D(I)(A)(1) criteria of a negative (cathodic) voltage of at least 0.85 volts (-850 mV) but fails to fully consider IR drop as required under section II of the Appendix for a valid interpretation of the voltage measurement.

CEGT's *Corrosion Control Program* Procedure PS-03-02-210 *Cathodic Protection Criteria* section 2.2 states:

"Where P/S potentials below -0.900 volts (current applied) are measured, further evaluation is required."

Where CEGT utilizes the Appendix D section (I)(A)(1) criteria of -850 mV, CEGT personnel acknowledged that IR drop was not considered if the reading is more negative than -900 mV. CEGT's practice is to add an additional -50 mV to the -850 mV criteria and look for a minimum of -900 mV criteria. However, this approach of assuming an IR drop of 0.50 V everywhere along the system fails to account for areas where IR drop exceeds 50 mV. CEGT could not demonstrate that the IR drop was limited to .50 V along their pipeline system. In fact records show that in some areas the IR drop exceeded 50mV. Therefore, CEGT's use of a 50 mV buffer and only taking action when 'On' potentials are more positive than -900 mV does not give a valid interpretation of the voltage measurement that would meet the applicable requirement.

In addition, CEGT's *Corrosion Control Program* Procedure PS-03-02-400 *Cathodic Protection: Centerpoint Energy Midstream Operation's Use Of -0.85 Volt Criteria and IR Drop* was not referenced by PS-03-02-210, the functional procedure for executing cathodic protection electrical checks.

5. §192.491 Corrosion control records.

- (c) Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist. These records must be retained for at least 5 years, except that records related to §§192.465(a) and (e) and 192.475(b) must be retained for as long as the pipeline remains in service.**

CEGT failed to maintain records of each test, survey, or inspection required by Subpart I in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist for the Carlisle Team Area for the January 2009 to June 2012 period.

CEGT procedure PS-03-02-001 *Corrosion Control Program* section 2.12 *Corrosion Control Records* states:

“The Company will maintain records for a minimum of five years for each analysis, check, demonstration, examination, inspection, investigation, review, survey and test required by this Program in sufficient detail to demonstrate the adequacy of corrosion control measures or that corrosion requiring control measures does not exist.”

PHMSA reviewed the ‘Digout of Buried Pipe’ inspection reports for the Buckley, Chickasha and Carlisle Team Areas dated between January 2009 and June 2012. In the Carlisle Area report, there were 4 specific Work Orders (WO) Nos. 718482, 718484, 718485 and 718486 that contained inaccurate or incomplete information such as whether external inspections were applicable and whether the disposition of each inspection reflected the completion of all field work needed including closed work orders having comments to the effect that the work was still in progress. PHMSA reviewed the raw data driving the reports and verified that it wasn’t a data output issue but a failure to complete the documentation accurately.

6. **§192.605 Procedural manual for operations, maintenance, and emergencies**
- (b) **Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.**
- (8) **Periodically reviewing the work done by operator personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance and modifying the procedure when deficiencies are found.**

CEGT has failed to develop procedures that require a periodic effectiveness review and analysis of procedures used during normal operations and maintenance activities. PHMSA reviewed the CEGT O&M Manual, Procedure 102 *General*, section A - *Scope*, item 6 which states:

“Operator personnel are encouraged to comment on the adequacy of the procedures found in the manuals as they are used in normal operations. When a procedure is thought to be deficient, operator personnel will inform the Region Director. The Region Director will notify Compliance & Support Services of the deficiency and Compliance & Support Services will modify the procedure as required by the Company’s Management of Change process.”

Encouraging personnel to comment does not meet the regulatory requirement to periodically analyze incident data, near miss data, meetings to discuss the procedures, job safety analysis, etc., to determine effectiveness and document these periodic reviews and their findings on whether the procedures analyzed were adequate or inadequate.

7. **§192.605 Procedural manual for operations, maintenance, and emergencies**
- (a) **General.** Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least one each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

§192.915 What knowledge and training must personnel have to carry out an integrity management program?

- (a) Supervisory personnel. The integrity management program must provide that each supervisor whose responsibilities relate to the integrity management program possesses and maintains a thorough knowledge of the integrity management program and of the elements for which the supervisor is responsible. The program must provide that any person who qualifies as a supervisor for the integrity management program has appropriate training or experience in the area for which the person is responsible.
- (b) Persons who carry out assessments and evaluate assessment results. The integrity management program must provide criteria for the qualification of any person--
- (1) Who conducts an integrity assessment allowed under this subpart; or
 - (2) Who reviews and analyzes the results from an integrity assessment and evaluation;
or
 - (3) Who makes decisions on actions to be taken based on these assessments.

CEGT has failed to follow its established procedures that require Integrity Management Supervisory personnel to complete, as a minimum, the 5 training modules noted in section 2.6 of Procedure PS-03-01-272 IMP Personnel Qualification Requirements.

CEGT identified thirty-five (35) employees within the Integrity Management Program that were required to complete these courses. All 35 of these individuals are responsible for supervision, oversight, analysis and interpretation of ECDA, ICDA, ILI, SCCDA and Other Technology used as assessment methods within the Integrity Management Program. As of 5/21/2012, twenty-five (25) of the thirty-five (35) employees lacked completing one (1) or more of the modules.

8. **§192.605 Procedural manual for operations, maintenance, and emergencies**
- (a) **General.** Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least one each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

§192.921 How is the baseline assessment to be conducted?

- (a) Assessment methods. An operator must assess the integrity of the line pipe in each covered segment by applying one or more of the following methods depending on the threats to which the covered segment is susceptible. An operator must select the method or methods best suited to address the threats identified to the covered segment (See §192.917).
 - (1) Internal inspection tool or tools capable of detecting corrosion, and any other threats to which the covered segment is susceptible. An operator must follow ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 6.2 in selecting the appropriate internal inspection tools for the covered segment.

CEGT failed to follow its established procedures to provide the ILI Vendor with feature information (feedback) based on the excavation and evaluation of Immediate and Non-Immediate (Scheduled or Monitored) Conditions as follows: CEGT IMP Procedure PS-03-01-248 *ILI Vendor Performance Specification*, section 2.4.3 *Reported Anomalous Conditions*: states:

“ Non-Immediate Conditions: The Company shall provide the ILI Vendor any feature information, based on the excavation and evaluation, for possible tool calibration.”

PHMSA reviewed the following ILI runs: 11-3 East of Pumpkin Center HCA, 8/13/2011; ML-2 Fountain Hill to Perryville, 7/26/2011; ML-3 Carlisle to West Point, 4/28/2011; BT-1-AS Jessieville to Perla Station, 4/21/2010; and F-185 Willow Springs to Coal Barn Trap, 6/18/2009. These were only a sampling of ILI runs and the associated monitored/scheduled condition digs. For all the runs that were reviewed, CEGT did not provide verification that feedback was provided to the vendor for possible tool calibration purposes.

9. §192.605 Procedural manual for operations, maintenance, and emergencies

- (a) **General.** Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least one each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

§192.933 What actions must be taken to address integrity issues?

- (b) Discovery of condition. Discovery of a condition occurs when an operator has adequate information about a condition to determine that the condition presents a potential threat to the integrity of the pipeline. A condition that presents a potential threat includes, but is not limited to, those conditions that require remediation or monitoring listed under paragraphs (d)(1) through (d)(3) of this section. An operator must promptly, but no later than 180 days after conducting an integrity assessment, obtain sufficient information

about a condition to make that determination, unless the operator demonstrates that the 180-day period is impracticable.

CEGT failed to follow its established procedure for analysis of in-line inspection data by failing to identify a foreign metal object in close proximity to the pipe.

The CEGT IMP Procedure, PS-03-01-244 *In-Line Inspection and Analysis*, section 2.5 *Analysis of Inspection Data*: states:

- 2.5.2 Ensure the vendor's ILI Final Report contains at a minimum, the main features requested by the Company.*
- F. The location of any foreign metal objects in close proximity to the pipe.'*

In 2007, an ILI was performed on Line CP which intersected with the El Paso Exploration and Production 6-inch pipeline. The El Paso 6 inch pipeline had been installed by horizontal directional drill (HDD) during the construction of Line CP on January 31, 2007. On December 11, 2007, an MFL/TFI In-Line Inspection was run on Line CP. The ILI identified an unknown feature with metal loss at station 1976+31. Although there was metal loss associated with the anomaly, the site was not chosen as a dig site due to the low level of severity and a foreign line crossing was not identified in the Pipeline Open Data Standards (PODS) at this location. CEGT had failed to update the PODS system with the new 6 inch pipeline installed in January 2007. In December 2010, a second ILI of Line CP resulted in the same feature at station 1976+31 as indicated in 2007. The location was placed on the dig site schedule as a verification dig and excavated and inspected on April 8, 2011. It was discovered that the El Paso pipeline was installed in contact with the bottom of CEGT's 42" Line CP. During the directional drilling, Line CP was struck by the pilot bit of the drilling machine on the North bottom side and struck with the reamer bit on the South bottom side resulting in the removal of the El Paso 6 inch pipeline and the installation of a Type B Weld Sleeve on Line CP on April 9, 2011.

10. §192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) Identify covered tasks;

§192.801 Scope.

(b) For the purpose of this subpart, a covered task is an activity, identified by the operator, that:

- (1) Is performed on a pipeline facility;
- (2) Is an operations or maintenance task;
- (3) Is performed as a requirement of this part; and
- (4) Affects the operation or integrity of the pipeline.

CEGT has failed to develop and include a covered task or tasks in its Operator Qualification Plan for loading, launching, receiving and unloading in-line inspection (ILI) smart tools used to perform integrity assessments to meet the requirements of §192.937(c)(1) and other in-line tools used for cleaning, batching, etc. Loading, launching, receiving, and unloading in-line tools are covered maintenance tasks and meet the four part test required by §192.801(b).

While CEGT has identified covered tasks for: CT-10: *Internal Corrosion Monitoring-Sampling*; CT-14: *Valve Maintenance*; CT-19: *Visual External and Internal Pipe Inspection*; CT-26: *Blow Down, Purge and Return a Pipeline to Service*; and CT-47: *Responding & Investigating Abnormal Operating Conditions*, these covered tasks do not encompass the training and qualification requirements specific to loading ILI tools, launching, receiving, and unloading these tools from both in-service and out of service lines.

Specifically, CT10, 14, 19, 26 and 47 include the following pertinent Knowledge Requirements (Training Modules) 400: *Valve Operators*, 401: *Valve Maintenance*, 411: *Pipeline Purging*, 416 *Pipeline Shutdown and Startup Planning*, 1010 *Abnormal Operating Conditions (AOC)*. When PHMSA staff reviewed these “Training Modules” they did not encompass those steps required for pigging operations. Specifically they did not have requirements for identifying the procedures, practices, and equipment needed for conducting pigging operations; the identification of associated valves; steps for associated isolation and lockout/tagout (LOTO) procedures (isolating the barrel from pipeline); relieving pressure within the barrel and/or, inserting or removing internal devices into/from the barrel, pressurizing the barrel to pipeline pressures; launching, monitoring, and/or receiving/removing ILI tools; nor realigning all identified valves to normal operations. These modules also did not reflect the marked differences in pigging operations on in-service and out-of-service lines such as when the use of product is used to propel the ILI tool and specific Abnormal Operating Conditions that individuals performing loading, launching, receiving, and unloading need to be qualified in.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$200,000 per violation per day the violation persists up to a maximum of \$2,000,000 for a related series of violations. For violations occurring prior to January 4, 2012, the maximum penalty may not exceed \$100,000 per violation per day, with a maximum penalty not to exceed \$1,000,000 for a related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violations and has recommended that you be preliminarily assessed a civil penalty of \$137,200 as follows:

<u>Item number</u>	<u>PENALTY</u>
3	\$8,100
7	\$60,900
8	\$27,000
10	\$41,200

Warning Items

With respect to items 1, 2, 5, and 9, we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these items. Failure to do so may result in additional enforcement action.

Proposed Compliance Order

With respect to items 4, 6, 7, and 10 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Centerpoint Energy Gas Transmission. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be 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). 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 a Final Order.

In your correspondence on this matter, please refer to **CPF 4-2013-1010** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



R. M. Seeley
Director, SW Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Centerpoint Energy Gas Transmission a Compliance Order incorporating the following remedial requirements to ensure the compliance of Centerpoint Energy Gas Transmission:

1. In regard to Item Number 4 of the Notice pertaining to CEGT failing to properly considering for IR drop where they are utilizing the Appendix D(I)(A)(1)Criteria of a negative (cathodic) voltage of at least 0.85 volts (-850 mV), CEGT must amend their procedures to properly consider IR drop. Where the -0.85 V criteria is utilized, CEGT must record the Instant Off Reading to show the IR drop associated with this test point. CEGT must provide a summary report to PHMSA Southwest Region detailing areas where IR drop was in excess of 50 mV and any remedial action required by further investigation at these locations as required by 192.463(a).
2. In regard to Item Number 6 of the Notice pertaining to CEGT failing to develop procedures that require an effectiveness review and analysis of procedures used during normal operations and maintenance activities, CEGT must develop procedures to require an effectiveness review and analysis of procedures. This review/analysis must show that some analysis has been performed to determine the adequacy of a procedure and, if found to be inadequate, the appropriate modifications are made. The effectiveness review and analysis of procedures should be directed toward procedure refinement, not employee evaluation.
3. In regard to Item Number 7 of the Notice pertaining to CEGT failing to follow their procedures that require Integrity Management Supervisory personnel to complete, as a minimum, the 5 training modules noted in section 2.6 of Procedure PS-03-01-272 IMP Personnel Qualification Requirements, CEGT must ensure that all Integrity Management Program employees required to complete these training modules successfully complete this task. CEGT must provide PHMSA with records that verify successful completion of the 5 modules by the IM supervisory personnel.
4. In regard to Item Number 10 of the Notice pertaining to CEGT failing to develop and include a covered task or tasks in the Operator Qualification Plan for loading, launching, receiving and unloading ILI smart tools for both in-service and out-of-service pipelines, CEGT must develop covered tasks) for loading, launching, receiving and unloading ILI smart tools for both in-service and out-of-service pipelines and incorporate them into the OQ Program.
5. Provide PHMSA with documentation that verifies completion of numbers 1-4 above within 45 days following the receipt of the Final Order.
6. It is requested (not mandated) that Centerpoint Energy Gas Transmission maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. 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.