



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

8701 South Gessner, Suite 1110  
Houston, TX 77074

## NOTICE OF AMENDMENT

### 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 4-2013-1012M**

Dear Mr. Kirsch:

From March 12 through September 19, 2012, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected Centerpoint Energy Gas Transmission Co. and Mississippi River Transmission Co (CEGT) procedures for Operations and Maintenance, Integrity Management, Emergency Response, Operator Qualification, and Construction Specifications in Shreveport, LA.

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

1. **§192.605 Procedural manual for operations, maintenance, and emergencies**  
**Each operator shall include the following in its operating and maintenance plan:**
  - (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.

CEGT O&M Manual, Operator Qualification Plan, Emergency Manual, and Construction Specifications do not address the handling of the payethylene (PE) transmission pipe.

As documented in the 2011 Annual Report, CEGT owns and operates 27.20 miles of plastic transmission main. The operator does not perform maintenance activities on the plastic facilities, those tasks are allotted to the adjoining LDCs. CEGT's personnel are not trained or qualified to handle the plastic pipe. The CEGT Manual of Construction Specifications contains: Specification 60, *Installation of Polyethylene - Plastic Pipe (PE)*; Specification 61, *Procedure for Joining Plastic Pipe and Fittings and Certifying Personnel as Qualified to Perform the Joining Procedure*; and Specification 62, *Insertion of Polyethylene Pipe through Pipe*.

Although the CEGT Specifications noted above deal with certain aspects of PE pipe, there are many areas not addressed in current CEGT plans and procedures/specifications. CEGT procedures fail to address the entity/entities that will perform the maintenance activities on the PE pipe. The procedures do not address the responsibilities of CEGT personnel during emergency situations or when responding to an emergency dealing with the PE transmission pipe. The CEGT procedures do not address the operator qualification requirements for personnel working with PE pipe or covered tasks for PE pipe. CEGT plans or procedures do not address if said entity/entities will use CEGT procedures for all activities. If so, CEGT must prepare procedures to address the activities associated with the PE pipe. If not, CEGT must address that the entities' procedures will be reviewed and accepted for use on CEGT facilities.

**2. §192.605 Procedural manual for operations, maintenance, and emergencies**

**Each operator shall include the following in its operating and maintenance plan:**

- (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.**

§192.463 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.

CEGT procedure PS-03-02-210 does not reference procedure PS-03-02-400.

PHMSA inspectors discussed cathodic protection monitoring criteria used by CEGT during this inspection. PHMSA reviewed the CEGT procedures: PS-03-02-210 *Cathodic Protection Criteria*, sections 2.2 *-0.850 Volts Pipe-to-Soil (P/S) Criteria* and 2.6 *Methods for IR Drop Consideration* and PS-03-02-400 *Cathodic Protection: CenterPoint Energy Midstream Operation's Use Of -0.85 Volt*

*Criteria and IR Drop* to determine whether CEGT is applying the criteria properly. It was noted during the review that procedure PS-03-02-210 does not reference procedure PS-03-02-400.

3. **§192.605(a) Procedural manual for operations, maintenance, and emergencies (see item #2)**

§192.465 External corrosion control: Monitoring.

- (e) After the initial evaluation required by § § 192.455(b) and (c) and 192.457(b), each operator must, not less than every 3 years at intervals not exceeding 39 months, reevaluate its unprotected pipelines and cathodically protect them in accordance with this subpart in areas in which active corrosion is found. The operator must determine the areas of active corrosion by electrical survey. However, on distribution lines and where an electrical survey is impractical on transmission lines, areas of active corrosion may be determined by other means that include review and analysis of leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment.

CEGT's Procedure PS-03-02-001 and PS-03-02-210 contradict each other. CEGT must amend their procedures to meet the requirements of §192.465(e).

In reviewing Corrosion Control Procedures, PS-03-02-001 *Corrosion Control Program*, section 2.13 *Electrically Nonconductive Pipelines* and PS-03-02-210 *Cathodic Protection Criteria*, section 2.7 *Three Year Evaluation Summary Of Unprotected Pipe*, the two procedures contradict each other. PS-03-02-001 states '*Due to the impracticality of conducting electrical surveys on electrically nonconductive pipelines, the Company will evaluate areas which may be detrimental to public safety by the study of corrosion and leak history records at intervals of every three years, not exceeding 39 months.*' PS-03-02-210 states '*Non-electrically conductive pipelines; are considered to be unprotected and shall be evaluated every 3 years with intervals not to exceed 39 months to determine where areas of active corrosion may exist. (Active corrosion per DOT 49 CFR Part 192 means continuing corrosion which, unless controlled, could result in a condition that is detrimental to public safety).*'

On one hand, CEGT states that they perform the 3-year review on unprotected pipe in areas which may be detrimental to public safety, but on the other hand they state that public safety is not involved based on PHMSA's definition of Active Corrosion and the Potential Impact Radius (PIR) for these areas. Therefore, CEGT states they do not have "active corrosion".

CEGT is improperly identifying where corrosion would be detrimental to public safety by misusing the Potential Impact Radius (PIR) calculation specified in Subpart O - Gas Transmission Pipeline Integrity Management §192.903 to define "Public", and thereby areas of active corrosion that would be detrimental to public safety. The PIR calculation identified in §192.903 is intended for defining HCA's. Part 192 does not state nor infer that corrosion outside of a PIR or an HCA would not be a threat to public safety as implied by CEGT's implementation of this process.

As defined by §192.3:

"Active corrosion means continuing corrosion that, unless controlled, could result in a condition that is detrimental to public safety".

PHMSA staff reviewed records where CEGT identified "Active Continuing Corrosion" on line FT-3. This same line was later reported as having no active corrosion despite corrosion leak repairs where CEGT had installed cathodic protection via sacrificial anodes to remediate areas of active corrosion meeting the requirements of §192.465(e). PHMSA staff reviewed additional records where repairs

were made and anodes installed, however CEGT again stated these were not areas of active corrosion.

**4. §192.605(a) Procedural manual for operations, maintenance, and emergencies (see item #2)**

§192.473 External corrosion control: Interference currents.

(b) Each impressed current type cathodic protection system or galvanic anode system must be designed and installed so as to minimize any adverse effects on existing adjacent underground metallic structures.

During the procedures review, PHMSA noted that the PS-03-02-001 referenced PS-03-02-222, but failed to reference PS-03-02-224. CEGT should amend Procedure PS-03-02-001 to reference Procedure PS-03-02-224.

PHMSA discussed the design of cathodic protection systems: impressed current and galvanic anode. CEGT directed the PHMSA inspectors to Procedures PS-03-02-001 *Corrosion Control Program*, section 2.7 *Gas Pipeline Monitoring*, PS-03-02-222 *Impressed Current Groundbeds* and PS-03-02-224 *Sacrificial Anodes*. Procedures PS-03-02-222 and PS-03-02-224 describe in detail the design of each type of cathodic protection system.

**5. §192.605(a) Procedural manual for operations, maintenance, and emergencies (see item #2)**

§192.475 Internal corrosion control: General.

(a) Corrosive gas may not be transported by pipeline, unless the corrosive effect of the gas on the pipeline has been investigated and steps have been taken to minimize internal corrosion.

CEGT procedure PS-03-02-001 and specification 540 are not consistent with regards to the actions taken when an alarm is received for a level of H<sub>2</sub>S > 4 ppm.

CEGT stated that they do not transport corrosive gas. During the review of CEGT Procedure PS-03-02-001 *Corrosion Control Program*, section 2.14 *Product Evaluation*, and Measurement and Control Procedure Specification 540 *Gas Quality Analyzers*, section 4. *H<sub>2</sub>S*, a conflict in the wording of the procedures was noted. Procedure PS-03-02-001 states that a shut-in is recommended if H<sub>2</sub>S is greater than 4 ppm. Specification 540 states *'The alarm output is tied to a valve operator to prevent the H<sub>2</sub>S source from entering our pipeline. This is done by using a 4-way valve, actuated by an electrical signal. When current is applied to the 4-way valve solenoid, piping is connected in a manner to keep the valve operator open. If the circuit is broken by an alarm trip-point, the valve operator will close.'*

PS-03-02-001 says that a shut-in is recommended at an alarm and Specification 540 says the valve will close (shut-in) at an alarm. CEGT told PHMSA that a system shut-in is not automatic if an alarm is received for H<sub>2</sub>S > 4 ppm. CEGT said a shut-in requires controller action.

**6. §192.605(a) Procedural manual for operations, maintenance, and emergencies (see item #2)**

§192.605 Procedural manual for operations, maintenance, and emergencies

Each operator shall include the following in its operating and maintenance plan:

- (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.

The CEGT's OQ Plan does not reference the MOC Procedure PS-03-09-105 Management of Change Process that is an integral part of the OQ Plan effectiveness review.

The OQ procedures are an important part of an operator's manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. The CEGT *OQ Plan* sec 9.0 *Plan Review and Regulatory Notification of Significant Changes to the Operator Qualification Plan* fails to make reference to the MOC procedure PS-03-09-105. Item 12 in the Guidance Material (GPTC) which states the following *'The operator must show that some analysis has been performed to determine the adequacy of a procedure and, if found to be inadequate, made appropriate modifications. The analysis may include incident data, near miss data, meetings to discuss the procedures, job safety analysis, etc., and should include documentation showing the analysis, discussions, etc., that determined the procedure was adequate or inadequate. A tie to the management of change process should show the procedure modification that was made in response to the analysis.'*

**7. §192.605(a) Procedural manual for operations, maintenance, and emergencies (see item #2)**

§192.805 Qualification program.

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

- (a) Identify covered tasks;

CEGT's OQ Plan and the eWebOQ modules do not include a covered task for evaluating and testing for External MIC.

The CEGT OQ Plan does not contain a Covered Task or a web course that meets the requirements for evaluation & testing for External MIC. CEGT confirmed no proper reference to External MIC testing was made anywhere in their Covered Task List.

The II team reviewed CT-19: *Visual External and Internal Pipe Inspection* and the referenced eWebOQ Module 503: *Protective Pipeline Coatings* and eWebOQ Module 507: *Internal Corrosion*. CEGT identified the technical considerations in eWebOQ Module 507 to show that personnel qualified to CT-19 were in fact receiving training to carry out the processes associated with MIC testing. PHMSA noted it applied only to Internal Corrosion based on the module name as well as the references within the summarized module details, but agreed the technical considerations, training, qualifications, procedure, and documentation would be identical as captured in eWebOQ Module 507 for CT-19.

8. **§192.605(a) Procedural manual for operations, maintenance, and emergencies (see item #2)**

§192.805 Qualification program.

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

- (i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the Administrator or state agency has verified that it complies with this section.

CEGT does not have the correct PHMSA address to notify PHMSA of significant changes to the OQ Plan. CEGT must amend the address used to notify PHMSA of significant changes made to the OQ Plan. The proper address is as follows:

U.S. Department of Transportation,  
Pipeline and Hazardous Materials Safety Administration  
Office of Pipeline Safety  
Information Resources Manager  
1200 New Jersey Avenue, SE., East Building, 2nd Floor PHP-10  
Room E22-321  
Washington, DC 20590.

It is stated in the CEGT *OQ Plan* that significant changes to the plan will require notification to PHMSA and/or applicable state agencies. CEGT directed PHMSA to the *OQ Plan*, section 9.0 *Plan Review and Regulatory Notification of Significant Changes to the Operator Qualification Plan*. PHMSA reviewed the procedure and then asked where the notifications were to be sent. CEGT then directed PHMSA's attention to the *O&M Manual*, Procedure 104 *Incident Reporting*, section C.3. *Address for Written Reports*. PHMSA noted this address is outdated:

Department of Transportation:  
Information Resources Manager  
Office of Pipeline Safety  
Pipeline and Hazardous Materials Safety Administration  
U.S. Department of Transportation  
Room 2103  
400 Seventh Street SW  
Washington, D.C. 20590.

9. **§192.605(a) Procedural manual for operations, maintenance, and emergencies (see item #2)**

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

(e) Actions to address particular threats. If an operator identifies any of the following threats, the operator must take the following actions to address the threat.

- (5) Corrosion. If an operator identifies corrosion on a covered pipeline segment that could adversely affect the integrity of the line (conditions specified in § 192.933), the operator must evaluate and remediate, as necessary, all pipeline segments (both covered and non-covered) with similar material coating and environmental

characteristics. An operator must establish a schedule for evaluating and remediating, as necessary, the similar segments that is consistent with the operator's established operating and maintenance procedures under part 192 for testing and repair.

The CEGT *Integrity Management Plan*, Procedure PS-03-01-258 *Preventive & Mitigative Measures*, section 2.5 *Corrosion* fails to meet the requirements of §192.917(e)(5) and §192.933(b). CEGT must modify Procedure PS-03-01-258 to include all corrosion issues noted in §192.933.

The II team reviewed the CEGT *Integrity Management Plan*, Procedure PS-03-01-220 *Baseline Assessment Plan*, section 2.2 *Assessment Plan Development*, *Corrosion* which states, '*If corrosion is identified on a covered pipeline segment that could adversely affect the integrity of the pipeline, then all pipeline segments, both covered and non-covered, with similar material coating and environmental characteristics are evaluated and remediated. A schedule is established for evaluating and remediating the similar segments that is consistent with Company operating and maintenance procedures for testing and repair*'. This procedure mirrors §192.917(e)(5).

The II team then reviewed the CEGT *Integrity Management Plan*, Procedure PS-03-01-258 *Preventive & Mitigative Measures*, section 2.5 *Corrosion* which states, '*If corrosion is identified on a covered segment that could adversely affect the integrity of the line, i.e. - meets the Immediate Repair Condition specified in §192.933(d)(i) all pipeline segments on the line (both covered and non-covered) with similar material coating and environmental characteristics must be evaluated and remediated, as necessary. A schedule will be developed for evaluating and remediating these segments*'. This procedure stops short of the requirements of §192.917(e)(5) and §192.933(b) by excluding one-year conditions and monitored conditions. §192.933(b) states '*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.* Item d(1) through d(3) in 192.933 are Immediate Repair conditions, One-year conditions, and Monitored conditions respectively.

#### Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. 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. 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). 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.

If, after opportunity for a hearing, 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. § 190.237). 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 Centerpoint Energy Gas Transmission Co./Mississippi River Transmission 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 R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 4-2013-1012M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



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

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