



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

400 Seventh St. S.W.  
Washington D.C. 20590

**OCT 24 2003**

Mr. Greg Bilinski  
Vice President, Transmission & Engineering  
Duke Energy  
Texas Eastern Transmission Corporation  
5400 Westheimer Court  
Houston, TX 77056-5310

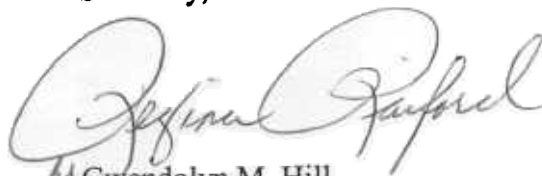
Re: CPF No. 3-2003-1010H

Dear Mr. Bilinski:

Enclosed is a Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It requires you to take certain corrective actions with respect to the operation of your pipeline.

Service is being made by certified mail and facsimile. Your receipt of the enclosed document constitutes service of that document. The terms and conditions of this Corrective Action Order are effective upon receipt.

Sincerely,



Gwendolyn M. Hill  
Pipeline Compliance Registry  
Office of Pipeline Safety

Enclosure

**VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND TELECOPY**

**DEPARTMENT OF TRANSPORTATION  
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION  
WASHINGTON, DC 20590**

**In the Matter of**

**Texas Eastern Transmission Corporation,**

**Respondent**

**CPF No. 3-2003-1010H**

**CORRECTIVE ACTION ORDER**

**Purpose and Background**

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Texas Eastern Transmission Corporation (Respondent) to take the necessary corrective action to protect the public and environment from potential hazards associated with a failure on Respondent's War Emergency Pipeline (WEP) 24-inch Line 1 System in Orange County, Indiana. Pursuant to 49 U.S.C. § 60117, the Central Region, Office of Pipeline Safety (OPS), initiated an investigation of the failure.

**Preliminary Findings**

- On October 14, 2003, at approximately 1:30 p.m. CST, Respondent's WEP 24-inch Line 1 System ruptured at approximately Mile Post (MP) 630 in Orange County, Indiana, resulting in the release of natural gas.
- The incident occurred about three miles west of the town of French Lick, Indiana, in a predominantly rural, Class 1 area. The failure site is immediately downstream of the French Lick Compressor Station, MP 629.55, which is between the Oakland City Compressor Station, MP 587.05 and the Seymour Compressor Station, MP 688.46 (the Oakland-Seymour segment). The Oakland-Seymour segment crosses three Class 3 areas, designated as such by virtue of the number of houses present in the area. The Class 3 area near the French Lick Discharge, at MP 632.83 - MP 633.85 also contains a manufacturing plant. There is a Class 3 area upstream of the French Lick Compressor Station, at MP 612.49 - MP 613.26, and a second near the French Lick Discharge, at MP 630.62 - MP 632.67. The Oakland-Seymour segment crosses at least eight state and local highways. The line also crosses the Wabash River, the Lost Underground River, and the White River. The record does not reveal whether or not recreational activities take place at these rivers.

- The failure resulted in the release of approximately 64 million cubic feet of natural gas and produced a large crater in the ground surrounding the failure point. No fires, deaths, injuries, or evacuations were reported.
- Following the failure, Respondent isolated the affected line segment by shutting down the French Lick Compressor Station at MP 629.55, the block valve at MP 633.01, and the head-gate valve west of the French Lick Compressor Station.
- Respondent removed a 70-foot segment of pipeline containing the failed pipe and sent the segment to a metallurgist for analysis.
- Preliminary investigation at the failure site indicated a 16-inch long area of external metal loss possibly associated with coating failure due to soil stress on the coating. The metal loss was on buried pipe approximately 20 feet downstream of an exposed area. The coating at the failure site exhibited a crack along the top of the pipe, which coincided with the area where the failure ultimately occurred. Respondent has observed other instances of similar cracking in the coating on the top of pipe where the line had been exposed. The same coating is prevalent on most of the line.
- Respondent's WEP 24-inch Line 1 System originates in Harrison County, Texas, and extends approximately 1220 miles, terminating in Staten Island, New York.
- The WEP 24-inch Line 1 System was installed in 1943 and is constructed predominantly of 24-inch nominal diameter, 0.375-inch wall thickness, 5LX-37 grade, seamless, carbon steel pipe manufactured by National Tube Corporation.
- The WEP 24-inch Line 1 System has a maximum allowable operating pressure (MAOP) of 800 psig, which was based on the maximum operating history of the line from 1965 to 1970. The operating pressure was 794 psig at the French Lick Compressor Station at the time of the failure.
- The Oakland-Seymour segment was internally inspected in 1993. The segment from the French Lick Compressor Station to the Seymour Compressor Station was hydrostatically tested at a pressure of 1156 psig in 1974.
- There are no previously reported leaks on the Oakland-Seymour segment. There are two previously reported leaks on other portions of the WEP 24-inch Line 1 System. In 2003, a leak occurred approximately 100 feet from the west bank of the Mississippi River, 15 miles south of Cape Girardeau, Missouri, at MP 448.07. In 1987, there was a corrosion leak in Williamson County, Illinois, at approximately MP 500.
- Respondent has replaced the removed 70-foot segment of pipe and returned the line to service at a 20 percent reduction of operating pressure between the Oakland City Compressor Station and the Seymour Compressor Station. Respondent has informed OPS that it has scheduled to run a high-resolution MFL tool on the line.

### **Determination of Necessity for Corrective Action Order and Right to Hearing**

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action as appropriate. The basis for making the determination that a pipeline facility is hazardous, requiring corrective action, is set forth both in the above referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112, and the regulations promulgated thereunder, provides for the issuance of a Corrective Action Order without prior opportunity for notice and hearing upon a finding that failure to issue the Order expeditiously will result in likely serious harm to life, property or the environment. In such cases, an opportunity for a hearing will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact, I find that the continued operation of the Oakland-Seymour segment without corrective measures would be hazardous to life, property and the environment. I further find that a failure to issue expeditiously this Order, requiring immediate corrective action, would result in likely serious harm to life, property, and the environment. This finding is based on the line's proximity to populated areas, public highways and waterways, the highly combustible nature of the product the pipeline transports, and the physical characteristics of the pipe.

The Oakland-Seymour segment runs through three areas populated by homes and a manufacturing plant. The line crosses at least eight public highways, which most likely are frequented by freight trucks, school buses, and passenger cars. The line also crosses three rivers, where recreational activities may take place. In light of the highly combustible nature of natural gas, a failure on the Oakland-Seymour segment would likely result in serious harm to life, property, and the environment due to the line's proximity to these areas.

The same coating found on the pipe that failed is prevalent on most of the segment. The preliminary investigation indicated that the leak was a result of corrosion, in which this coating may have been a significant factor. Respondent also has observed similar cracked coating on other segments of the pipeline as that found on the failed pipe, suggesting similar conditions could exist on other portions of the line. After consideration of the above facts, I find that a failure to issue expeditiously this Order, requiring immediate corrective action, would result in likely serious harm to life, property, and the environment.

Accordingly, this Corrective Action Order mandating needed immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, delivered personally, by mail or by telecopy at (202) 366-4566. The hearing will be held in Kansas City, Missouri or Washington, DC on a date that is mutually convenient to OPS and Respondent.

After receiving and analyzing additional data in the course of this investigation, OPS may identify other corrective measures that need to be taken. In that event, Respondent will be notified of any additional measures required and amendment of this Order will be considered. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

### **Required Corrective Action**

Pursuant to 49 U.S.C. § 60112, I hereby order Respondent to immediately take the following corrective actions with respect to its WEP 24-inch Line 1 System:


1. The operating pressure on the WEP 24-inch Line 1 System extending from the Oakland City Compressor Station, MP 587.05 to the Seymour Compressor Station MP, 688.46 (the Oakland-Seymour segment) is not to exceed 80 percent of the actual operating pressure in effect just prior to the October 14, 2003 failure. Specifically, the pressure is not to exceed 635 psig. This pressure restriction shall remain in effect until written approval to increase the pressure or return the pipeline to its pre-failure operating pressure is obtained from the Director, Central Region, OPS.
2. Conduct a detailed metallurgical analysis of the pipe that failed on October 14, 2003 to determine the cause and contributing factors of the failure. Submit a copy of the report of this analysis to the Regional Director within one week of your receipt of the report.
3. Submit a written plan to verify the integrity of the line from the Oakland City Compressor Station to the Seymour Compressor Station. The plan must provide for the integration of all available operational data and the evaluation and remediation of all known or suspected factors contributing to the October 14, 2003 failure. The plan shall be submitted to the Regional Director for approval within 60 days of receipt of the metallurgical analysis required by Item 3. The plan should consider the following actions as applicable:
  - a. the running of an internal inspection tool emphasizing identification and evaluation of metal loss due to corrosion;
  - b. a detailed description of the inspection and repair criteria for field evaluation of the anomalies that are identified by the internal inspection tool;
  - c. an evaluation of the line for areas of corrosion and damaged or disbonded coating, including but not limited to, a close-interval, current interrupted, pipe-to-soil potential survey, and visual inspection of pipe exposed at spans or other locations;

- d. an evaluation of coating condition and an analysis of the influence of soil stress;
  - e. a review of data from the 1993 internal inspection and a detailed description of the inspection and the anomalies repaired, focusing on the anomalies with similar characteristics as those noted in the area of the present failure, and comparing the findings (anomalies) of the 1993 data with the 2003 tool data; and
  - f. a schedule for completing each item of the plan and for submitting the results and data for testing programs performed to the Regional Director.
4. Implement the plan as approved by the Regional Director. The Regional Director may provide approvals *incrementally*
  5. Revise the plan as necessary to incorporate new information obtained during the failure investigation and analysis actions required by this Order. Submit such plan revisions to the Regional Director for prior approval.
  6. In order to allow OPS the opportunity to monitor the work, notify the Regional Director in advance of any excavations or pipe repairs or replacements required under this order.

The Regional Director may grant an extension of time for compliance with any of the terms of this Order for good cause. The request for an extension must be in writing. Decisions of the Regional Director may be appealed to the Associate Administrator for Pipeline Safety.

The procedures for the issuance of this Order, described in Part 190, Title 49, Code of Federal Regulations, § 190.233, a copy of which is enclosed, is made part of this Order and describes the Respondent's procedural rights relative to this Order.

Failure to comply with this Order may result in the assessment of civil penalties of not more than \$100,000 per day and in referral to the Attorney General for appropriate relief in a United States District Court.

  
 Stacey  
 Associate Administrator  
 for Pipeline Safety

OCT 24 2006

Date Issued