



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

MAR 21 2011

Mr. Victor Gaglio
Senior Vice President, Operations and Engineering
Columbia Gulf Transmission Company
1700 MacCorkle Avenue, SE
Charleston, West Virginia 25314

Re: CPF No. 4-2009-1005

Dear Mr. Gaglio:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation and assesses a reduced civil penalty of \$806,500. The penalty payment terms are set forth in the Final Order. This enforcement action closes automatically upon payment. Service of the Final Order by certified mail is deemed effective upon the date of mailing, or as otherwise provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. Rod M. Seeley, Director, Southwest Region, PHMSA

CERTIFIED MAIL – RETURN RECEIPT REQUESTED[7005 1160 0001 0041 3627]

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, DC 20590**

In the Matter of)

Columbia Gulf Transmission Company,)

Respondent.)
_____)

CPF No. 4-2009-1005

FINAL ORDER

Between December 14, 2007 and April 2008, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted a post-incident investigation of a failure on a 30-inch interstate natural gas transmission pipeline (Line 100) that occurred on December 14, 2007, near Delhi, Louisiana (2007 Failure).

Columbia Gulf Transmission Company (Columbia Gulf or Respondent), the owner and operator of the pipeline that failed, operates three parallel pipelines at this location (Lines 100, 200, 300). Columbia Gulf is owned by NiSource, Inc., an energy company engaged in natural gas transmission, storage and distribution, as well as electric generation, transmission and distribution. Respondent operates approximately 3,400 miles of pipeline and 11 compressor stations located primarily in Louisiana, Mississippi, Tennessee and Kentucky.¹

The 2007 Failure resulted in an explosion and fire, causing one fatality and one non-fatal injury, property damage and the temporary closure of Interstate 20. The two individuals that were injured were members of the public who were traveling east on I-20 at the time of the 2007 Failure.²

On December 19, 2007, PHMSA issued a Corrective Action Order (CAO No. 4-2007-1017H) to Columbia Gulf, requiring the company to take immediate corrective actions to protect public safety.³ A third-party metallurgical firm determined the probable cause of the 2007 Failure was external pitting corrosion of the carrier pipe inside the casing at the crossing with I-20.⁴ The

¹ See <http://www.ngts.com/about-ngts/columbia-gulf-transmission> (last accessed December 30, 2010).

² See Notice of Probable Violation and Proposed Civil Penalty, pg. 2 (February 12, 2009) (on file with PHMSA).

³ This Corrective Action Order (CAO) was closed on January 31, 2011.

⁴ See Metallurgical & Materials Technologies, Inc. (MMT) report attached as Exhibit 1 to Response. The report stated that "moisture in the atmosphere and standing water in the bottom of the casing, in conjunction with a high

metallurgical firm discovered that the external corrosion was caused by moisture in the atmosphere and standing water in the casing.⁵

As a result of the post-incident investigation, the Director, Southwest Region, OPS (Director), issued to Respondent, by letter dated February 12, 2009, a Notice of Probable Violation and Proposed Civil Penalty (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that Respondent had violated 49 C.F.R. §§ 192.605, 192.617, and 192.613 and assessing a civil penalty of \$1,550,000 for the alleged violations.

Columbia Gulf responded to the Notice by letter dated March 24, 2009 (Response). The company contested the items in the Notice and requested that the proposed civil penalty be reduced or rescinded. Columbia Gulf did not request a hearing and therefore has waived its right to one.

FINDINGS OF VIOLATION

Background

Prior to the 2007 Failure, Columbia Gulf experienced three similar incidents in the same area involving either Line 100 or 200. In September of 2000, Columbia Gulf experienced a failure on Line 200. The pipeline ruptured and caught fire approximately two miles from the Delhi Station. A metallurgical evaluation performed after the failure determined that the rupture was caused by external corrosion. Approximately a year later, in August of 2001, the operator experienced an incident on Line 100 which the operator described as a leak. This failure was caused by external corrosion under a casing spacer ring. A second leak occurred in September of 2006 on this same line (Line 100) and again was caused by external corrosion. Approximately, fifteen months later, on December 14, 2007, Line 100 ruptured. This failure was again caused by external corrosion.

Allegations

The Notice alleged that Respondent violated 49 C.F.R. Part 192, as follows:

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 192.605, which states:

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

(a) *General.* Each operator shall prepare and follow for each pipeline, a manual for written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must include procedures for handling abnormal

concentration of chlorides in the environment, and damage to and localized failure of the coating are responsible for the corrosion noted and the failure of the pipe.” MMT report, at 30.

⁵ *Id.* at 30; *See also*, Response, 6.

operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once 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....

(e) *Surveillance, emergency response, and accident investigation.* The procedures required by §§ 192.613(a), 192.615, and 192.617 must be included in the manual required by paragraph (a) of this section....

§ 192.617 Investigation of Failures.

Each operator shall establish procedures for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence.

The Notice alleged that Respondent violated 49 C.F.R. § 192.605(a) and (e) and § 192.617 by failing to follow its procedures for analyzing accidents and failures. According to OPS, Respondent failed to follow its O&M procedures, specifically its twelve-point “Incident Evaluation and Investigation” procedure, for a thorough incident investigation.⁶ Item 12 of this procedure required Respondent’s personnel to “make recommendations to reduce the likelihood of a recurrence of an incident [and] assign someone to act upon the recommendation(s) and track progress.”⁷ In the Notice, OPS argued that Columbia Gulf failed to follow its procedures by either failing to make recommendations after each failure or making recommendations that did not address the cause of the prior incidents and therefore could not reduce the likelihood of a repeat failure.

According to Columbia Gulf’s records supplied to OPS after the 2007 Failure, the probable cause of the 2000 failure was external corrosion, specifically microbiological induced corrosion (MIC).⁸ However, in response to this failure, Columbia Gulf recommended running a smart pig on the Delhi to Inverness segment and installing a rectifier at the rupture site.⁹ OPS asserted that these recommendations could not have reduced the likelihood of a repeat failure caused by microbiological induced corrosion. On this basis, OPS alleged that Columbia Gulf failed to follow its Incident Evaluation and Investigation procedures.

⁶ Response, Exhibit 9, Columbia Gulf Incident Evaluation and Investigation Procedure, at 24.

⁷ *Id.*

⁸ Response, at 12. The metallurgist stated that “the exact cause of the corrosion was not determined. However, isolated pitting and otherwise un-corroded pipe, the morphology of the pitted surfaces, and the detection of sulfur on the pitted surface suggests that the pitting was due to microbiologically influenced corrosion.” See Response, Exhibit 10.

⁹ Violation Report, Exhibit 4, Form #2377-EG4 completed in response to 2000 incident.

The cause of the 2001 leak was external corrosion under a spacing ring.¹⁰ In response, Columbia Gulf made recommendations to replace the affected pipe within the casing but did not make any recommendations for other casings on this particular line or nearby lines.

Finally, in response to the third incident, which was caused by corrosion of a carrier pipe inside a cased crossing, Columbia Gulf replaced the carrier pipe where the leak occurred and filled the casing but did not make any recommendations to investigate other casings on the system. OPS asserted that the recommendations Columbia Gulf did make were not specific to the cause of the failures and therefore could not reduce the likelihood of a reoccurrence. OPS alleged that the recommendations summarized above were not tailored to the cause of the prior failures and therefore could not reduce the likelihood of a repeat failure.

Response

In its Response, Columbia Gulf contended that it had established the necessary procedures for analyzing accidents and failures, its personnel followed these procedures after each incident, and its procedures did not require the company to investigate other locations on the pipeline system for similar deficiencies.

Columbia Gulf disagreed with OPS' reliance on the Incident Evaluation and Investigation procedures for all four events. Columbia Gulf asserted that its procedures entitled "Manual of Approved Procedures" dated April 12, 1993 were in effect at the time of the 2000 and 2001 incidents and not the twelve-point Incident and Evaluation and Investigation Procedure.¹¹

Columbia Gulf also disagreed with the application of the Incident Evaluation and Investigation procedures to the 2006 leak. Although these procedures were issued in 2004 and therefore were in use at the time of the 2006 incident, Respondent stated that the 2006 incident was a Grade 2 leak and did not meet the criteria to take action under these. In support, Columbia Gulf cited page 24 of these procedures which state that "the impact and severity of the incident shall be considered to determine whether an investigation is necessary."¹² Therefore, Columbia Gulf argued that the requirement to make recommendations after the 2006 incident did not apply. Since the Manual of Approved Procedures (1993) was the controlling document during the 2000 and 2001 incidents and did not require specific recommendations and the 2006 leak was not severe enough to initiate the Incident and Evaluation Investigation Procedure (2004), Columbia Gulf argued that Item #1 should be withdrawn.

In its Response, Columbia Gulf also confirmed the steps that it took in response to each incident including conducting internal line inspections (ILIs), coating repairs, and replacement of pipe. Respondent stated that it completed a high resolution internal inspection for the Delhi, LA to Inverness, MS segment on Line 200 after the 2000 Failure.¹³ Results from this ILI confirmed

¹⁰ Response, at 2.

¹¹ Response, Exhibit 4.

¹² Response, Exhibit 9, page 24.

¹³ Response, 13.

external corrosion in several locations. Thereafter, Columbia Gulf performed approximately 472 feet of pipe replacement and coating repairs.¹⁴ In 2008, Columbia Gulf completed a second ILI at this location requiring no immediate repairs.¹⁵ Columbia Gulf maintained that an ILI is the most effective approach for conducting inspections for wall loss due to external corrosion. After the 2001 leak, Columbia Gulf replaced the entire segment of Line 100 involved in this specific incident with newly coated steel pipe.¹⁶ Columbia Gulf replaced 312 feet of new pipe through the casing and increased cathodic protection measures by installing a new rectifier and a deep well anode bed.¹⁷ Columbia Gulf also stated that it installed 200 feet of newly coated steel pipe and filled the casing with non-conductive casing filler material.¹⁸ When a year later, this line ruptured (2007 Failure), Columbia Gulf stated it immediately engaged Metallurgical & Materials Technologies, Inc. to perform a failure analysis and expedited ILIs of Lines 100, 200, and 300. Columbia Gulf confirmed that all ILIs on Line 100 had been completed with the exception of three segments.¹⁹ These areas were scheduled to be completed in 2009. Columbia Gulf also modified its leak surveillance program with respect to casings to provide for instrumented leak surveys on a semi-annual basis.²⁰ Columbia Gulf maintained that all these steps were appropriate measures to minimize the likelihood of future incidents caused by external corrosion and therefore Item #1 should be withdrawn.

Analysis

There was some dispute as to which procedures were in effect at the time of each incident. In its Response, Columbia Gulf argued that the procedures referenced in the Notice were not in effect until 2003 and therefore were inapplicable in the 2000 and 2001 incidents.²¹

I have reviewed both sets of procedures and evaluated the parties' arguments. I find that the 1993 procedures were Respondent's failure investigation procedures at the time of the 2000 and 2001 incidents. These procedures required Respondent to complete Form 2377-EG4 which included making recommendations for future action. The 1993 procedure specifically states that "the Section Superintendent shall prepare a written report of all failures and malfunctions, as

¹⁴ Response, 7.

¹⁵ *Id.*

¹⁶ Response, at 8.

¹⁷ Response, at 13.

¹⁸ Response, 14.

¹⁹ Response, 9.

²⁰ *Id.*

²¹ Only the 2004 procedures were provided to OPS in response to the January 29, 2008 Request for Specific Information. The Request for Specific Information required Columbia Gulf to provide all procedures and investigation reports for the 2000-2007 Incidents.

defined in Section II.B, using Form 2377-EG4, “Incident/Failure Report”.²² Both the 2000 and 2001 failures met Columbia Gulf’s definition of a failure in its 1993 procedures (“a failure is further defined in Section II.B of this procedure as a “...failure or malfunction of any pipeline facility, equipment, or component, whether or not a release of gas is involved.”)²³

Although Columbia Gulf argued that it had followed its procedure for the 2000 and 2001 failures by completing the form, the company left the recommendation section for the 2001 incident blank.²⁴ The instructions for this form required personnel to “provide a full description of what happened and respective actions as called for.”²⁵ Therefore, for the 2001 incident, the failure to complete Form 2377-EG4, which included making recommended future actions, is a violation of the operator’s 1993 procedures and accordingly I make a finding of violation.

With respect to the 2000 incident, Columbia Gulf did follow its procedures by completing the Form 2377-EG4 to include recommended future actions of “smart pig line from Delhi to Inverness, Miss; also install rectifier in area of rupture”.²⁶ In the Notice, OPS asserted that because Columbia Gulf had failed to make recommendations to address microbiological induced corrosion (MIC), a violation had occurred. However, the metallurgist stated that “the exact cause of the corrosion was not determined.”²⁷ Since the metallurgist could not determine if the cause of the external corrosion was specifically microbiological induced corrosion, Respondent’s procedures did not require it to make recommended future actions tailored toward this type of corrosion. Although a prudent operator may have recommended future actions to address any potential threat by microbiological induced corrosion, Columbia Gulf was not required to do so at the time of the 2000 incident. In addition, the 1993 procedures were silent as to the types of recommended action that should be made and only required the completion of the form. No further detail was provided in these procedures as to the extent or substantive nature of the recommended future actions. In fact, whether a formal investigation would occur was a discretionary decision of the Vice President-Engineering.²⁸ Although the company could have taken more expansive future action, they were not required to do so under the procedures in effect at the time of the 2000 incident. Therefore, the probable violation associated with the 2000 incident is withdrawn. A finding, however, is made with respect to the 2001 incident.

Columbia Gulf’s 2004 Incident Management Plan, including the Incident Evaluation and Investigation procedures, was in effect at the time of the 2006 incident and 2007 Failure. These procedures defined an incident as “a non-routine event that requires immediate company

²² Response, Exhibit 4, page 6.

²³ *Id.* at page 2.

²⁴ Response, Exhibits 5 and 6.

²⁵ Response, Exhibit 4, page 17.

²⁶ Response, Exhibit 5.

²⁷ Response, Exhibit 10.

²⁸ Exhibit 4, page 9.

response and either has or could threaten the safety or security of the public, company employees or facilities; cause significant property damage; interrupt service; and/or bring notable attention to the company”.²⁹ Further, the Incident Evaluation and Investigation procedures, a subset of the Incident Management Plan, required Respondent’s personnel to “make recommendations to reduce the likelihood of a reoccurrence of an incident [and] assign someone to act upon the recommendation(s) and track progress.”³⁰ In response to the 2006 leak, the company did not make any recommendations to reduce the likelihood of a reoccurrence. In its Response, Columbia Gulf stated that the 2006 leak was a Grade 2 leak and did not meet the criteria of the Incident Management Plan. In support of its argument that the 2006 leak was not an “incident” per its Incident Management Plan, Columbia Gulf attached a Work Order Report which confirms that the company categorized it as a leak.³¹ However, the company filed a RSPA 7100.2 report which cited \$150,000 of property damage and demonstrated that it was a reportable incident. It is therefore reasonable that this incident was non-routine, required immediate company response, involved enough property damage to require incident reporting and could have threatened the safety or security of the public. Particularly since it was a reportable incident, Respondent should have initiated its Incident Management Plan and made recommendations to reduce the likelihood of a reoccurrence of an incident. On this basis, I find that Respondent did not follow its procedures with regard to the 2006 incident.

In the Notice, OPS alleged that Respondent failed to follow its incident investigation procedures after the 2000, 2001, and 2006 incidents. Having reviewed the evidence, I find that Columbia Gulf failed to follow its procedures after the 2001 and 2006 incidents but complied with its procedures for the 2000 incident. Accordingly, having reviewed the evidence in the record, I find that Respondent violated §§ 192.605(a) and 192.617 with respect to the 2001 and 2006 incidents.

Item 2: The Notice alleged that Respondent violated 49 C.F.R. §§ 192.605 and 192.613, which state:

§ 195.605 Procedural manual for operations, maintenance, and emergencies.

(a) *General.* Each operator shall prepare and follow for each pipeline, a manual for written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must 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 once 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....

(e) *Surveillance, emergency response, and accident investigation.* The procedures required by §§ 192.613(a), 192.615, and 192.617 must be included in the manual required by paragraph (a) of this section....

²⁹ Response, Exhibit 9.

³⁰ *Id.*

³¹ Response, Exhibit 3.

§ 192.613 Continuing Surveillance

(a) Each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operating and maintenance conditions.

The Notice alleged that Respondent violated 49 C.F.R. § 192.605(a) and (e) and § 192.613 by failing to define and implement a specific continuous surveillance program to detect potential repeat failures at cased crossings along Lines 100, 200, and 300. Specifically, the Notice alleged that Columbia Gulf failed to have surveillance procedures which would take into account the similar failures that occurred in 2000, 2001, 2006, and 2007 and implement a specific program tailored to the cause of the repeated failures or leaks in this area. According to OPS, Columbia Gulf should have recognized the pattern of failure in cased pipelines and initiated a surveillance monitoring program to prevent related incidents elsewhere on the three parallel lines. In response to OPS's Request for Specific Information, Columbia Gulf provided no evidence of continuous surveillance procedures or that such surveillance was performed on these parallel lines to determine if other cased crossings may have had the same type of damage, corrosion, and risk of failure.³²

Response

In response to the Notice, Columbia Gulf stated that "its ongoing high resolution inspections of the Mainlines, coupled with its instrumented leak detection surveillance program for all cased pipe, which was in place prior to 2000, were appropriate to prevent recurrences."³³ In addition, Columbia Gulf stated that it uses facility patrols in Class 1 and 2 areas once per calendar year, at intervals not to exceed 15 months.³⁴ Columbia Gulf stated that it conducted investigations after each incident and in the company's judgment, considered its standard and high resolution internal pipeline inspection and instrumented leak detection for cased piping to be appropriate continuous surveillance tools.³⁵

Analysis

Pursuant to § 192.613 and § 192.605, Columbia Gulf was required to have and follow a procedure for continuing surveillance to determine and take appropriate action concerning changes in operation and maintenance conditions including failures, leakage history, and corrosion."³⁶ In the Notice, OPS alleged that the operator failed to "define and implement" a continuous surveillance program specifically designed to detect ongoing corrosion in cased

³² See Request for Specific Information dated January 29, 2008.

³³ Response, 17.

³⁴ Notice, 4.

³⁵ Response, 3.

³⁶ 49 C.F.R. § 192.613

pipelines. I have reviewed the evidence in the case file which includes the Violation Report exhibits, the documents supplied by Columbia Gulf in response to the Request for Specific Information, and the documents attached to the Response. I did not find any documentation of continuous surveillance procedures implemented under § 192.613, other than the procedures effective December 15, 2007, one day after the 2007 Failure. Since these procedures are dated after the four incidents, they certainly do not reflect actions that Respondent took in response to the earlier incidents.

Columbia Gulf argued in its Response that it had conducted continuous surveillance through a series of maintenance activities such as standard and high resolution internal inspections, leak detections, and facility patrols, however, none of these activities were incorporated into specific surveillance procedures under § 192.613. In addition, all three of these safety measures are already required under the pipeline safety regulations. Columbia Gulf did not accelerate the timeframe for conducting any of the three activities which further calls into question whether the company had a continuous surveillance program. Leakage surveys were conducted once per calendar year at intervals not exceeding 15 months which is the required timeframe under 49 C.F.R. § 192.706. Further, Columbia Gulf cited to right-of-way patrols conducted as a method of surveillance. However, since the prior incidents occurred in casings it is questionable whether Respondent could have used routine right-of-way patrols as a method of continuous surveillance.

Finally, Columbia Gulf maintains that it used ILIs as the most accurate and reliable form of surveillance. However, Respondent performed an ILI on the segment between Delhi and the Mississippi River in 1996 and not again until after the 2007 Failure. Allowing eleven years to pass between ILIs, which is supposedly the cornerstone of Respondent's surveillance program, calls into question whether Respondent had a defined surveillance program. Moreover, the ILI completed in January of 2008 was a requirement of the Corrective Action Order issued on December 19, 2007. If the CAO had not been issued and the ILI was performed as previously scheduled by the company for the year 2010, fourteen years would have transpired between ILIs for this line. In fact, the 2008 ILI required by the CAO revealed an immediate repair condition involving 80% wall loss.³⁷ This anomaly was discovered on the carrier pipe at another cased crossing on the same segment that had failed. Certainly, performing an ILI every eleven to fourteen years is not an effective form of surveillance.

Prior to December 2007, Columbia Gulf did not have procedures developed to establish a concerted plan to identify areas experiencing unusual operating and maintenance conditions.³⁸ Respondent has provided little or no evidence of its continuous surveillance program other than stating that it relied on ILIs and instrumented leak surveys which do not appear to be part of a specific plan to identify any pipeline facilities experiencing abnormal or unusual operating conditions. Accordingly, having reviewed the evidence in the record, I find that Respondent violated §§ 192.605(a) and 192.613.

³⁷ Violation Report, at 3.

³⁸ The 2007 continuous surveillance procedures which were effective after the 2007 Failure discuss quarterly instrumented leakage surveillance which is the type of evidence that supports an ongoing continuous surveillance program.

Item 3: The Notice alleged that Respondent violated 49 C.F.R. §§ 192.605(a), which states:

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

(a) *General.* Each operator shall prepare and follow for each pipeline, a manual for written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must 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 once 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....

The Notice alleged that Respondent violated 49 C.F.R. § 192.605(a) by failing to follow its procedures for the investigation of shorted casings. Specifically, Respondent's procedure 70.01.01 in its O&M manual entitled "External Corrosion Control", dated March 5, 2007, stated that "as a general rule, if the potential difference between the casing and the pipeline is over 100 mV, the casing should be considered not shorted....if the potential difference between the casing and the pipeline is less than 100 mV, the casing will be considered shorted until further testing is completed to determine its status (clear or shorted)....if the status of the casing is unknown, it shall be treated as a shorted casing".³⁹

The last annual potential survey of Line 100 at the Interstate 20 crossing occurred on June 27, 2007. The readings revealed pipe-to-soil potential of -979 mV and the casing to soil potential of -879 mV amounting to exactly a 100 mV difference. Respondent's procedure notably only covers the potential difference of *over* 100mV or *under* 100 mV but is silent as to a potential difference that is exactly 100 mV. OPS argued that since the status of the casing was neither shorted nor unshorted under these procedures, the status of this particular casing therefore must be unknown. Since the operator's procedures require personnel to treat unknown casings as shorted necessitating additional testing, OPS asserted that Columbia Gulf should have performed additional testing with regard to this casing. For shorted casings, the Respondent's procedures require "at a minimum, all shorted casings must be monitored with leakage detection equipment according to Plan 220.03.01, Facility Patrol and Leakage Inspection."⁴⁰

Response

In its Response, Columbia Gulf asserted that it had proper O&M procedures and its personnel handled the casing under these procedures. Columbia Gulf admitted that although the procedures in place at the time of the 2007 Failure were not a model of clarity, the procedures did not *require* an investigation to determine if the casing was metallicly shorted. However, Columbia Gulf stated that it added the casing to a list of shorted casings "that were to be included in the instrumented continuing surveillance program for shorted casings".⁴¹ Columbia

³⁹ Response, Exhibit 20, page 7-8.

⁴⁰ Response, Exhibit 20, page 6.

⁴¹ Response, at 6.

Gulf also stated that neither the internal investigations of the 2001 and 2006 leaks nor the third-party analysis of the 2007 pipeline failure revealed that shorted casings caused or contributed to the 2007 Failure. Since shorted casings were not a contributing factor to the 2007 Failure, Columbia Gulf alleged that it did not violate its O&M procedures.

Analysis

Upon consideration of all of the evidence and the arguments of the parties, I find that a violation of § 192.605(a) occurred. I find that the status of the casing was unknown at the time of the assessment since Columbia Gulf could not determine if it was shorted or unshorted and Columbia Gulf therefore should have conducted additional testing on this particular casing.

I also find that Columbia Gulf did not conduct the required additional testing and therefore violated its procedures. The operator's procedures state that "at a minimum, all shorted casings must be monitored with leakage detection equipment."⁴² I did not find any compelling evidence in the case file that this additional testing did in fact occur. Columbia Gulf stated in its Response that the casing had not been tested for leaks; however, it attached a copy of a Leak Detection Test dated "June 2007" for the "Delhi line".⁴³ I find that this record does not sufficiently demonstrate that this testing occurred since it lacks a specific date other than "June 2007" and fails to state with any specificity which casing was examined. It is also noteworthy that in order for Columbia Gulf to conduct leak detection testing on this casing in "June 2007", it would have had to complete the testing on the two days directly following the assessment since the annual potential survey of the Interstate 20 crossing occurred on Wednesday, June 27, 2007 and only three days (two of which were business days) remained in the month of June.

Finally, Columbia Gulf was aware that there was a gap in the procedures and a prudent operator would have treated an assessment of exactly 100 mV as a shorted casing until further testing could occur. Based upon the foregoing, I find that there is sufficient evidence to support this allegation of violation. Accordingly, having reviewed the evidence in the record, I find that Respondent violated §§ 192.605(a).

ASSESSMENT OF PENALTY

Under 49 U.S.C. § 60122, Respondent is subject to a civil penalty not to exceed \$100,000 per violation for each day of the violation, up to a maximum of \$1,000,000 for any related series of violations.

49 U.S.C. § 60122 and 49 C.F.R. § 190.225 require that, in determining the amount of the civil penalty, I 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

⁴² Response, Exhibit 20, page 6.

⁴³ Columbia Gulf stated in its Response that "...even if the casing *had been* tested for gas leaks, no leak would have been detected since there was no evidence that the pitting had penetrated the wall of the pipe". Response, at 19 (emphasis added); See Response, Exhibit 19 for a copy of the Leak Detection Test.

of Respondent's prior offenses; the Respondent's ability to pay the penalty and 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 \$1,550,000 for the alleged violations. The Notice proposed a penalty of \$760,000 (Item 1) for failing to follow procedures for analyzing the cause of an accident and minimizing recurrences; a \$35,000 civil penalty (Item 2) for failing to establish procedures for a continuous surveillance program; and a \$760,000 civil penalty (Item 3) for failing to investigate a shorted casing.

Related in a Series Argument

In its Response, Columbia Gulf argued that the proposed civil penalties are for related in a series of violations and therefore pursuant to 49 C.F.R. § 190.233, the total civil penalty cannot exceed \$1,000,000. Respondent contends that the violations are related because more than one violation has been cited in connection with the same incident.

Contrary to Columbia Gulf's assertion, an operator can be cited for more than one violation in connection with a single accident or incident. The pipeline safety laws do not require PHMSA to select only one regulation in an enforcement matter. In exercising its rulemaking authority, a regulatory agency often establishes numerous different regulatory requirements in the same subject matter area.⁴⁴ I am not aware of any court decision or other authority that would force an agency to enforce only one requirement because citing more than one would make separate requirements "related" simply because they involve the same subject matter. Rather, the statute and implementing regulations cap the penalty amount at \$1,000,000 for *related violations*. To be related, the violations must be based upon the *same facts and evidence*. The civil penalty cap of \$1,000,000 is used narrowly in two limited cases where either 1) a single violation occurs over the course of multiple days or 2) violations arise from a continuous, related course of conduct and require the proof of identical facts and evidence. In the latter situation, both factors must be met for the \$1,000,000 cap to apply.⁴⁵

In this case, the Notice alleged in Item 1 that Respondent violated the pipeline safety violations by failing to follow its procedures for investigating incidents. In support of the allegation, OPS relied on the company's response to the Request for Specific Information; the procedures entitled "Incident Evaluation and Investigation"; the procedures entitled "Manual of Approved Procedures" dated April 12, 1993; Columbia Gulf's Incident/Failure Reports for 2000 and 2001; and the company's failure to make recommendations to avoid a similar incident occurring on its lines. In Item 2, the Notice alleged that Respondent failed to define and implement a continuous surveillance program in response to past accidents in the same area that were all caused by external corrosion. In support of this violation, OPS cited to Columbia Gulf's Continuing

⁴⁴ The Code of Federal Regulations is organized into Parts, Subparts, and other subdivisions which often involve a single subject area.

⁴⁵ *In the Matter of Colorado Interstate Gas Company*, CPF No. 5-2008-1005 (November 23, 2008) (available at www.phmsa.dot.gov/pipeline/enforcement).

Surveillance procedures and its Mainline High Resolution Internal Inspection report (Exhibit 2 to Response). Finally, in Item 3, the Notice alleged that Columbia Gulf failed to follow its procedures for examining shorted casings. In support of this allegation, OPS cited to Respondent's External Corrosion Control procedures.

In all three items, OPS cited to different procedures to support each alleged violation. The alleged violations do not arise from a continuous, related course of conduct but rather they are based on distinct conduct: 1) failure to follow incident evaluation and investigation procedures; 2) failure to define and implement a continuous surveillance program; and 3) failure to investigate a shorted casing. Therefore, these three items cannot be considered 'related in a series' since they do not arise from a continuous, related course of conduct or require proof of identical facts and evidence. It is of no consequence that these three violations arise out of a single pipeline failure. Therefore, the \$1,000,000 cap does not apply to this enforcement matter.

Civil Penalty Assessments

With respect to Item 1, the Notice proposed a penalty of \$760,000 for Respondent's violation of §§192.605(a) and (e) and 192.617 for failing to follow procedures for analyzing the cause of accidents for the purpose of minimizing a recurrence. As stated above, it was determined that Columbia Gulf did not violate § 192.617 with respect to the 2000 incident. Therefore, the civil penalty is reduced on this basis.

Columbia Gulf experienced four incidents on these lines related to corrosion since the year 2000 and failed to make recommendations to avoid repeat failures. Moreover, this violation occurred over a series of years, involving multiple incidents. Corrosion is one of the major causes of pipeline failure and can lead to leaks, ruptures, and explosions, presenting a major safety threat to the public and environment. The 2007 Failure involved property damage, injuries, and a fatality. Accordingly, having reviewed the record and considered the assessment criteria, I assess Respondent a reduced civil penalty of \$736,500 for violating 49 C.F.R. §§ 192.605(a) and (e) and 192.617.

With respect to Item 2, the Notice proposed a penalty of \$35,000 for Respondent's violation of § 192.605(a) and (e) and 192.613 for failing to define and implement a specific program of continuing surveillance to detect the possibility that similar types of failures could occur at cased crossings, in light of the 2000, 2001, 2006, and 2007 failures. It is particularly relevant that Columbia Gulf had a series of similar incidents involving similar coating on the same lines in the same area and failed to take more affirmative steps to monitor the situation. Developing criteria for surveillance provides an important mechanism for considering the risks of unusual operating conditions. Respondent has presented no information that would warrant a reduction in the civil penalty amount proposed in the Notice for this violation. Having reviewed the record and considered the assessment criteria, I have determined that the proposed civil penalty of \$35,000 is appropriate. Accordingly, I assess Respondent a civil penalty of \$35,000 for violating 49 C.F.R. §§ 192.605(a) and (e) and 192.613.

With respect to Item 3, the Notice proposed a penalty of \$760,000 for Respondent's violation of 49 C.F.R. § 192.605(a) for failing to follow its procedures for the investigation of shorted casings. Although I have determined that a violation did occur, I examined Columbia Gulf's


arguments that this proposed civil penalty should be reduced on account of gravity. I did not find that Columbia Gulf's failure to investigate a shorted casing was a contributing factor to the 2007 Incident. The only evidence of causation in the case file is the metallurgist report that stated that the Incident was caused by moisture in the atmosphere and standing water in the pipe.⁴⁶ Therefore, having reviewed the record and considered the assessment criteria, I assess Respondent a reduced civil penalty of \$35,000 for violating 49 C.F.R. §§ 192.605(a).

Accordingly, having reviewed the record and considered the assessment criteria for each violation, I assess Respondent a total civil penalty of **\$806,500**.

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require this payment 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 (AMZ-341), Federal Aviation Administration, Mike Monroney Aeronautical Center, P.O. Box 269039, Oklahoma City, OK 73125. The phone number for the Financial Operations Division is (405) 954-8893.

Failure to pay the \$806,500 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 United States District Court.

Under 49 C.F.R. § 190.215, Respondent has a right to submit a Petition for Reconsideration of this Final Order. The petition must be received within 20 days of Respondent's receipt of this Final Order and must contain a brief statement of the issue(s). The filing of the petition automatically stays the payment of any civil penalty assessed. All other terms of the Order, including any required corrective action and amendment of procedures, remain in full effect unless the Associate Administrator, upon request, grants a stay. The terms and conditions of this Final Order shall be effective upon receipt.



Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

MAR 21 2011

Date Issued

⁴⁶ Response, Exhibit 1, page 30.