



**Michael Hoffman**  
Manager – System Integrity

1700 MacCorkle Avenue  
Charleston, WV 25314

Direct: 304.357.2548  
Fax: 304.357.2770  
mikehoffman@nisource.com

February 28, 2013

Byron Coy, PE  
Director, Eastern Region  
Pipeline and Hazardous Materials Safety Administration  
820 Bear Tavern Road, Suite 103  
West Trenton, NJ 08628

**RE: CPF 1-2013-1002**

Dear Mr. Coy:

This letter is provided on behalf of Columbia Gas Transmission L.L.C. (Columbia Gas) in response to the Notice of Proposed Violation and Proposed Civil Penalty (NOPV) in CPF 1-2013-1002, dated January 24, 2013, and received by Columbia Gas on January 29, 2013. Columbia Gas then sought PHMSA's violation report and additional time to respond to the NOPV. PHMSA provided Columbia Gas until March 10, 2013 to respond. Columbia Gas appreciates this additional time to respond.

The NOPV was issued following inspections conducted by the West Virginia Public Service Commission on September 20-23, 2011, of the Columbia Gas Coco Storage and pipeline facilities. The NOPV alleged a violation of the cathodic protection regulations and proposed a civil penalty of \$26,400. Within this correspondence, we provide clarifications that we believe demonstrate that no violation took place. Columbia Gas respectfully requests that PHMSA withdraw the allegation of violation and the associated proposed civil penalty.

The language from the NOPV is provided in bold below, followed by our response.

- 1. § 192.465 External corrosion control: Monitoring.**  
**(d) Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring.**

**CGT failed to take prompt remedial action to correct any deficiencies indicated by the pipe to soil monitoring of CGT assets 715769 and 293730.**

**The WV PSC review of CGT records indicated that Coco (A) field line F-6 had the following pipe to soil readings:**

1. **Asset 715769**

Date monitored: Reading

- **4/22/2008: -0.689 volts DC**
- **4/27/2009: -0.786 volts DC**
- **6/17/2009: See reference to calendar log book, below.**
- **4/13/2010: -0.941 volts DC**

2. **Asset 293730**

Date monitored: Reading

- **4/23/2008: -0.738 volts DC**
- **4/27/2009: -0.691 volts DC**
- **6/17/2009: See reference to calendar log book, below.**
- **4/13/2010: -1.622 volts DC**

A CGT representative indicated that during the time period from **4/22/2008 to 4/27/2009**, CGT did not promptly make the remedial measures that were needed for asset 715769. Likewise a CGT representative indicated that during the time period from **4/23/2008 to 4/27/2009** CGT did not promptly make the remedial measures that were needed for asset 293730.

A CGT calendar log book, dated **6/17/2009**, showed readings for both assets that met the criteria contained in Appendix D of Part 192. The remediation for both assets was completed 51 days late.

## **Columbia Gas Response**

### **Introduction**

Item 1 of the NOPV alleges that Columbia Gas did not take prompt remedial action to correct cathodic protection (CP) deficiencies indicated by monitoring that took place in April 2008. Specifically, the NOPV alleges that Columbia Gas did not remediate low CP readings within one year of April 22 and 23, 2008. Columbia Gas respectfully contends that it took prompt remedial action to address the low CP at the two locations described in the NOPV. 49 CFR § 192.465(d) does not define the timeframe for prompt remedial action. However, PHMSA has indicated that prompt remediation should occur within one inspection cycle.<sup>1</sup> 49 CFR § 192.465(a) specifies that the inspection cycle for cathodic protection pipe to soil readings is once each calendar year, not to exceed 15 months. Columbia Gas' CP remediation procedures are consistent with this 15 month timeframe. As explained below, Columbia Gas initiated and

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<sup>1</sup> Williams Gas Pipeline, Final Order at 2, CPF No. 4-2003-1004 (Aug. 18, 2005). In the 2005 Williams case PHMSA withdrew certain allegations of violation of § 192.465(d) after the operator demonstrated that it corrected pipe to soil deficiencies within one inspection cycle. Williams Gas Pipeline, Final Order at 2, CPF No. 1-2007-1011 (Aug. 27, 2010). In the 2010 Williams case PHMSA found that the word "prompt" means remediation within the next required inspection cycle.

completed remedial action within 15 months of April 2008 in accordance with the regulations and its own procedures.

### **Columbia Gas Procedures**

The Columbia Gas Operations and Maintenance (O&M) Plan 70.01.01 "External Corrosion Control" contains procedures for responding to deficiencies indicated by required monitoring. Part D of Section 3.2.8 of that plan states:

- D. Remedial Action - Prompt remedial action to correct any deficiencies indicated by monitoring must be taken. The remedial action shall be performed or be in progress within one year of discovery, not to exceed 15 months, or in the case of rectifiers and critical stray current interference/ mitigation devices, before the next scheduled inspection not to exceed 2 ½ months (75 days).

The Columbia Gas O&M Procedure 70.01.01 in place at the time of the April 2008 low CP readings, as well as the subsequently amended version of the procedure are both included in Attachment A.

Columbia Gas initiated remedial actions and mitigated below criteria readings within 15 months of the low CP readings identified on April 22 and 23, 2008. After significant upgrades to the CP system, CP readings at the two test stations noted in the NOPV were back within criteria by June 17, 2009, approximately 14 months from initial discovery of the low readings. The NOPV acknowledges that full remediation was achieved within 15 months when it cites to the Columbia Gas technician's June 17, 2009 calendar log book entry. The log book entry is included as Attachment B to this response.

### **Columbia Gas' CP Remediation Efforts**

Asset 715769 is a CP test location at the tie in of storage well Line 12383 with a field line at Falling Rock. Asset 293730 is a CP test location at the beginning of the F-6 Line. Both assets are located in the Columbia Gas Coco A storage field located in Kanawha County, West Virginia. After identifying low CP readings at these two locations, Columbia Gas initiated an evaluation and determined that a new impressed current CP ground bed would need to be installed to supplement existing CP and meet the long term CP current needs for the storage field piping in that area.

The CP test stations and related pipeline are located in a remote area in mountainous terrain. There is no commercial electrical service in the area. The mountainous terrain would have made it very difficult to install an effective traditional horizontal impressed current ground bed. After performing an engineering evaluation, Columbia Gas determined that a deep well anode bed powered by an electrical generator unit would best meet the project needs for additional cathodic protection current.

Deep well anode beds powered by electrical generator units are not typical in the Columbia Gas pipeline system. The unique nature of the system extended the normal time period for the

design, construction and commissioning of the supplemental impressed current system. The deep well impressed current ground bed was designed and installed in 2008. The reciprocating engine and electrical generator unit needed to provide power to the ground bed was also ordered in 2008. Columbia Gas received, installed and placed the engine and generator into operation on May 20, 2009. Evidence of Columbia Gas' prompt remedial efforts can be found in Attachment C. Page two of this attachment contains test station data and other information which shows that a work order for the CP upgrades was submitted and approved in 2008. Following the May 20, 2009 startup of the generator, the pipe was left to polarize. It can take several weeks after initial startup before the pipe to soil potentials meet criteria levels. On June 19, 2009, the Corrosion Technician responsible for this area adjusted the rectifier tap settings and collected additional readings in his calendar log book. As the NOPV states, these readings demonstrate that a -0.85 Volt cathodic protection criteria was met for the two CP test locations at issue. In spite of the geographical and technical challenges associated with designing and installing a new ground bed, Columbia Gas was able to fully remediate the low CP readings within 15 months after the April 2008 low CP readings, as required by the regulations and Columbia Gas procedures.

As indicated in the NOPV, test station readings collected in April of 2010 demonstrate continued compliance with the -0.85 Volt cathodic protection criteria. A copy of the test station reading for Assets 715769 and 293730 for 2008, 2009 and 2010 are shown in Attachment C.

#### **PHMSA's Violation Report**

The violation report contends that a Columbia Gas employee stated that the company did not promptly make remedial efforts to correct the low CP readings. Regardless of the views that may or may not have been expressed by an individual employee, the fact is that Columbia Gas followed the regulation and its procedure by completing remediation and restoring adequate CP readings within the allowed 15 month period following the April 2008 low CP readings.

In the section of the violation report on culpability, PHMSA states that Columbia Gas "failed to take any action or made a minimal attempt to comply with a regulatory requirement that was clearly applicable." Columbia Gas respectfully disagrees with this statement. As described above, Columbia gas overcame technical and geographical challenges, designed and installed new CP equipment and brought CP up to criteria within the 15 month timeframe after the April 2008 low CP readings as required by the regulations and its own procedures.

In the section of the violation report on good faith, PHMSA states that Columbia Gas "did not act to meet its regulatory obligation by not taking prompt remedial action prior to the next scheduled monitoring inspection." Columbia Gas respectfully disagrees with this statement. As explained above, 49 CFR § 192.465(d) does not specify what "prompt" means. However, 49 CFR § 192.465(a) allows for up to 15 months between CP inspections, and PHMSA case law has

indicated that remediation must take place within this timeframe.<sup>2</sup> Columbia Gas therefore had the flexibility to remediate the low CP within 15 months of discovery, and Columbia Gas met this timeframe by completing remediation approximate 14 months after the April 2008 low CP readings.

Finally, the violation report mistakenly indicates that that the alleged violation is a violation of a special permit condition. Columbia Gas wishes to note that this is incorrect.

### **Conclusion**

In summary, Columbia Gas initiated remedial actions to correct the low CP readings and these activities were well "in progress within one year of discovery, not to exceed fifteen months" of the April 2008 low CP readings. The readings collected on June 17, 2009, demonstrate that the remedial actions were completed and cathodic protection pipe to soil readings were back within criteria within approximately 14 months of the time that below criteria readings were indicated on April 22 and 23, 2008. Columbia Gas, therefore, complied with § 192.465(d) and the Columbia Gas O&M Plan 70.01.01. As a result, we respectfully request that PHMSA withdraw the allegation of violation and proposed civil penalty.

Should you have any questions or require any additional information or would like to meet to discuss any of the information above, please do not hesitate to contact me.

Sincerely,



Perry M. Hoffman  
Manager - System Integrity  
Columbia Gas Transmission

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<sup>2</sup> Williams Gas Pipeline, Final Order at 2, CPF No. 4-2003-1004 (Aug. 18, 2005). In the 2005 Williams case PHMSA withdrew certain allegations of violation of § 192.465(d) after the operator demonstrated that it corrected pipe to soil deficiencies within one inspection cycle. Williams Gas Pipeline, Final Order at 2, CPF No. 1-2007-1011 (Aug. 27, 2010). In the 2010 Williams case PHMSA found that the word "prompt" means remediation within the next required inspection cycle.