

Ryan Truair
Senior Manager, Code Compliance
December 4, 2023

Mr. Scott Rukke
Pipeline Safety Director
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive SW
P. O. Box 47250
Olympia, Washington 98504-7250

Re: NW Natural Response to Columbia Gorge distribution system Inspection, Report No. 8611

Dear Mr. Rukke:

The Washington Utilities and Transportation Commission (WUTC) Staff conducted a Standard Comprehensive inspection of NW Natural's Columbia Gorge Unit from August 29 to October 5, 2023. This letter is the response to the findings of Inspection Report 8611, sent on November 1, 2023.

AREAS OF CONCERN

1. Area of Concern:

WAC 480-93-110 Corrosion Control

- (2) *Each gas pipeline company must complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by any test, survey, or inspection. An additional thirty days may be allowed for remedial action if due to circumstances beyond the gas pipeline company's control the company cannot complete remedial action within ninety days. Each gas pipeline company must be able to provide documentation to the commission indicating that remedial action was started in a timely manner and that all efforts were made to complete remedial action within ninety days. (Examples of circumstances allowing each gas pipeline company to exceed the ninety-day time frame include right of way permitting issues, availability of repair materials, or unusually long investigation or repair requirements.)*

49 CFR §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.*

Finding(s):

In Carson, WA, there was a cathodic protection test at an annual test site that was unable to achieve a polarized "instant off" reading of at least -850mV using a Cu/CuSO₄ reference cell during our field portion. It was at the following location.

122 Henryetta Ln, Carson, Wa. -1059mV CSE PSP (on) -667mV CSE PSP (off).

NW Natural (NWN) Response

NWN would like to provide clarification as to how this code requirement is being met. Appendix D of part 192 section I.A(1), states the required voltage determination of at least -850 mV, using a Cu/CuSO₄ reference cell, must be made with the protective current applied. During field activities it was observed that the "instant off" pipe to soil read of '-667 mV CSE' displayed in this area of concern was taken with the protective current turned off and not applied, it is instead the 'on' pipe to soil read of '-1059 mV CSE' that was taken with the protective current applied thus meeting the federal code requirement.

Per Appendix D of part 192 sections I.A(3), III and IV, a minimum negative polarization shift of 100 mV must be determined by interrupting the protective current and measuring the polarization decay. Based on this information and NWN's SP 463, this -100 mV shift can be used. NWN gathered new "On", "Instant Off", and "Native baseline off" readings on November 9, 2023, and those updated readings are as follows:

For Address: 122 Henryetta Ln, Carson Wa

- On: -1150 mV CSE
- Instant Off: -700 mV CSE
- Native: -440 mV CSE
- Minimum Shift: -260 mV CSE (Code requires a minimum of -100 mV CSE)

NWN is satisfying both the alternate -100 mV shift code and the standard -850 mV CSE code requirement.

2. Area of Concern:**WAC 480-93-110 Corrosion Control**

(2) *Each gas pipeline company must complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by any test, survey, or inspection. An additional thirty days may be allowed for remedial action if due to circumstances beyond the gas pipeline company's control the company cannot complete remedial action within ninety days. Each gas pipeline company must be able to provide documentation to the commission indicating that remedial action was started in a timely manner and that all efforts were made to complete remedial action within ninety days. (Examples of circumstances allowing each gas pipeline company to exceed the ninety-day time frame include right of way permitting issues, availability of repair materials, or unusually long investigation or repair requirements.)*

49 CFR §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.

Finding(s):

In Carson, WA, there was a cathodic protection test at an annual test site that was unable to achieve a polarized "instant off" reading of at least -850mV using a Cu/CuSO₄ reference cell during our field portion. It was at the following location.

1201 Smith Beckon Rd Carson, Wa. -1008mV CSE PSP (on) -613mV CSE PSP (off).

NW Natural (NWN) Response:

Please see NWN's response to the first concern referencing sections of Appendix D of part 192.

During field activities it was observed that the "instant off" pipe to soil read of '-613 mV CSE' displayed in this area of concern was taken with the protective current turned off and not applied, it is instead the 'on' pipe to soil read of '-1008 mV CSE' that was taken with the protective current applied thus meeting the federal code requirement.

Using the -100 mV shift code, NWN gathered new "On", "Instant Off", and "Native baseline off" readings on November 9, 2023, and those updated readings are as follows:

For Address: 1201 Smith Beckon Rd, Carson Wa

- On: -1160 mV CSE
- Instant Off: -700 mV CSE
- Native: -460 mV CSE
- Minimum Shift: -240 mV CSE (Code requires a minimum of -100 mV CSE)

NWN is satisfying both the alternate -100 mV shift code and the standard -850 mV CSE code requirement.

This report finalizes NWN's response to the Columbia Gorge Unit Inspection, Report No. 8611.

Sincerely,



Ryan Truair
Senior Manager, Code Compliance
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