

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

February 14, 2019

GI-2018-05-GRS-38

Mr. David A. Weber, President and CEO (Dave.Weber@nwnatural.com)
Gill Ranch Storage
220 NW 2nd Avenue
Portland, OR 97209

SUBJECT: SED's Closure letter for the Gill Ranch Storage (Comprehensive Standard Transmission & Operation and Maintenance Plan) inspection

Dear Mr. Weber:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission reviewed Gill Ranch Storage's (GRS) response letter dated April 27, 2018 for the findings identified during the GRS Comprehensive Transmission and O&M Plan inspection conducted May 21-25, 2018. The inspection included a review of GRS's Comprehensive Standard Transmission and O&M plan procedures and associated records.

A summary of the inspection findings documented by the SED, GRS's response to SED's findings, and SED's evaluation of GRS's response taken for each finding are outlined in the summary section of this report.

This letter serves as the official closure of the 2018 GRS safety inspection.

If you have any questions, please contact Mohammad Ali at (916) 928-2109 or by email at ma5@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Dennis Lee".

Dennis Lee, P.E.
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Karl Leger, RegSafe (Karl.Leger@regsafe.com)
Todd Thomas, GRS (Tthomas.nwngs@nwnatural.com)
Kenneth Bruno, SED
Claudia Almengor, SED

SUMMARY OF INSPECTION FINDINGS

I. Probable Violations

1. Title 49 CFR §192.465(a) External corrosion control: Monitoring, states in part:

“Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463.....”

Title 49 CFR §192.491(c) Corrosion control records, states in part:

“Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist...”

During the records review, SED identified that no cathodic protection (CP) tests reading were recorded during the tests on 9/12/2016 for 3 CP test points. These were identified as stations 31775, 26403 and 10569.

SED determined that GRS violated §192.465(a) and §192.491(c) by not performing tests on these stations.

GRS Response: Upon initial installation of test stations for monitoring cathodic protection, GRS installed additional test stations with the knowledge that being in a rural farming area, test stations were likely to be damaged at some point in time. Of the test stations listed above, TS 10569 was repaired and the required 100mV shift reading can be seen on the 2017 Annual CP Survey. The other two test stations (31775 and 26403) were unable to be located (because of their location it is assumed that they were destroyed by farming equipment). A new test station has been installed by Cathodic Protection Engineering, Inc. (approximately at the midpoint between these two stations) in a location less prone to damage, to replace them. The new test station coordinates are Lat: 36.647206, Lon: -120.469671. The documentation of this test station installation is in Appendix A of the report from Cathodic Protection Engineering, Inc. (filename: GRS Test Station Final Report.pdf). Note: GRS is also in the process of renumbering/labeling all test stations with a common numbering system so that future identification will be more accurate. All actions and decisions will be documented in accordance with current pipeline safety requirements.

SED’s Conclusion:

SED acknowledges that GRS has repaired and installed CP test stations. SED will verify effectiveness of the corrective actions during the next inspection. SED has opted not to impose a fine or penalty at this time since the violation did not create hazardous conditions for the public or utility employees.

2. Title 49 CFR §192.605 (a) Procedural manual for operations, maintenance, and emergencies, partly states:

“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...”

During records review, SED identified that ETS stations 90163, 31775, 15841 and 8893 could not be located (CNL) during 2017 yearly CP readings. However, no remedial actions were taken as described in Section 12.7.4 of the GRS Operation & Maintenance (O&M) Manual.

SED determined that GRS violated §192.605(a) of CFR by not taking any remedial action to locate the ETS.

GRS Response: Upon initial installation of test stations for monitoring cathodic protection, GRS installed additional test stations with the knowledge that being in a rural farming area, test stations were likely to be damaged at some point in time. Of the test stations listed above, TS 8893 is a test station for an adjacent water main (not owned or operated by GRS). It was removed in April 2018 and will not be listed on the 2018 Annual CP report. Test station 31775 was unable to be located (because of its location it is assumed that it was destroyed by farming equipment). A new test station has been installed by Cathodic Protection Engineering, Inc. in a location less prone to damage, to replace it. The new test station coordinates are Lat: 36.647206, Lon: -120.469671. The documentation of this test station installation is in Appendix A of the report from Cathodic Protection Engineering, Inc. (filename: GRS Test Station Final Report.pdf). GRS has already contacted Farwest Corrosion to determine which test stations are necessary for the adequate monitoring of the pipeline’s cathodic protection so that these stations can be repaired and/or replaced. Test stations 90163 and 15841 are scheduled for repair/removal this year, if appropriate, as based on the analysis of Farwest Corrosion. Note: Farwest Corrosion’s analysis will determine whether a test station may be deemed redundant or not needed to adequately monitor and maintain adequate CP on the pipeline system. GRS is also in the process of renumbering/labeling all test stations with a common numbering system so that future identification will be more accurate. All actions and decisions will be documented in accordance with current pipeline safety requirements.

SED’s Conclusion:

SED acknowledges that GRS has engaged a Corrosion Specialist to determine the adequacy of its test stations. SED will verify compliance and corrective actions during the next inspection. SED has opted not to impose a fine or penalty at this time.

II. Areas of Concern/Observations/Recommendations

1. During records review of 2017 ETS readings, SED found locations with bad test leads.
 - Test location along the well lateral piping located north of Avenue 3 and outside E Plant gate
 - Test location 138022
 - Test location 8893

GRS indicated that crews were following on the repair status of the leads, and an evaluation to determine if there are sufficient ETS locations to ascertain adequacy of cathodic protection.

Please provide an update on the repair, or other remedial actions taken by GRS to address the bad test leads.

GRS Response: Upon initial installation of test stations for monitoring cathodic protection, GRS installed additional test stations with the knowledge that being in a rural farming area, test stations were likely to be damaged at some point in time. Of the test stations listed above, TS 8893 is a test station for an adjacent water main (not owned or operated by GRS). It was removed in April 2018 and will not be listed on the 2018 Annual CP report. The other two test stations (ETS N of Avenue 3 outside E Plant gate and 138022) have been scheduled for repair this year. GRS has already contacted Farwest Corrosion to repair these bad test leads. Note: based on Farwest Corrosion's analysis, a test station may be deemed redundant or not needed to adequately monitor and maintain adequate CP on the pipeline system. GRS is also in the process of renumbering/labeling all test stations with a common numbering system so that future identification will be more accurate. All actions and decisions will be documented in accordance with current pipeline safety requirements.

SED's Conclusion:

SED acknowledges that GRS has engaged a Corrosion Specialist to determine the adequacy of its test stations. SED will verify effectiveness of corrective measures during the next inspection.

2. During field observation, SED identified the following locations that did not meet the -850 mV criterion:
 - 11A -635 mV
 - 13A -656 mV
 - 14A -663 mV

GRS was also unable to take instant-off readings to verify if 100 mV criteria were met.

SED recommends GRS to take prompt remedial action to correct the deficiencies as required by §192.465(d).

GRS Response: GRS uses Farwest Corrosion to perform their annual CP survey as well as maintain and resolve any issues they may have with their cathodic protection system. Farwest Corrosion technicians use current interrupters to take On/Off potentials. If the on potential does not meet the -850 mv criteria, then the instant off potential is compared to the native pipe-to-soil potential to determine if the 100mV shift requirement is satisfied.

GRS employees do not perform this type of work themselves as they do not have the necessary equipment onsite to perform a 100mV shift reading. During the 2017 survey, the test stations identified above (11A, 13A, and 14A) all had a pipe-to-soil reading of less than -850mV; however, they all had at least a 100mV shift between the instant off and the native potential which establishes that the current CP is adequate. TS 11A had a -196mV shift, TS 13A had a -268mV shift, and TS 14A had a -212mV shift when checked during the 2017 Annual CP Survey.

SED's Conclusion:

SED reviewed GRS's response and has no further concerns at this time.

3. During SED's review of the GRS O&M Manual, SED observed that Section 11.12.13 currently includes the instruction for installation of test leads, but was missing the language requirements of §192.471 which includes ensuring that the test leads are mechanically secure, electrically conductive, minimize stress concentration on the pipe, and coated with an electrical insulating material.

SED recommends that GRS include this requirement in the O&M Manual.

GRS Response: The GRS O&M Manual does include the referenced language needed to satisfy the above requirement (§192.471). It is located in the Corrosion Control Program of the O&M manual, Section "12.5.1.2 – Test Stations." The section has been included below for your review. GRS has underlined the text that addresses each part of the SED's recommendation. Note, we have added the CFR citation reference in this response for ease of review.

SED's Conclusion:

SED has reviewed the O&M reference which addresses this concern.