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**GILL RANCH STORAGE®**

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August 27, 2018

**VIA U.S. & ELECTRONIC MAIL [KENNETH.BRUNO@CPUC.CA.GOV]**

Kenneth Bruno  
Program Manager  
Gas Safety and Reliability Branch  
Safety and Enforcement Division  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102-3298

RE: General Order 112-F Gas Inspection of the Gill Ranch Storage  
(Comprehensive Standard Transmission & Operation and Maintenance Plan)

Dear Mr. Bruno:

Gill Ranch Storage, LLC (“GRS”) operates the Gill Ranch Storage Facility (“Gill Ranch”). GRS is committed to a culture and operations that value public and worker safety as a first priority. GRS appreciated the opportunity to demonstrate its commitment to actively and aggressively pursue safe and reliable operations during the recent four-day Safety and Enforcement Division (“SED”) General Order (“GO”) 112-F Inspection of GRS’s Comprehensive Standard Transmission Operation and Maintenance Plan, associated records (from 2015-2017), and field observation of GRS individuals performing covered tasks.

GRS has carefully reviewed the SED’s GO 112-F Summary of Inspection Findings and has addressed each of the probable violations and concerns listed by the SED below.

## I. Probable Violations

### SED Findings

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.

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.

## II. Concerns

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 up 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.

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.

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 materials.

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.

#### **GRS O&M Manual, Corrosion Control Program, 12.5.1.2 – Test Stations**

1. Each pipeline under cathodic protection will have sufficient test stations or other contact points for electrical measurement to determine the adequacy of cathodic protection.
2. The type and location of these test stations and related cathodic protection equipment will be recorded in the Corrosion Control Report and updated as necessary to maintain accuracy. The frequency of testing of test stations and related cathodic protection equipment will follow the schedule listed in Gill Ranch Storage's Inspection and Testing Program.
3. Each test lead wire will be connected to the pipeline so as to remain mechanically secure, electrically conductive and with minimum of stress concentration on the pipe. 192.471(a)
4. Each lead wire must be attached to the pipeline so as to minimize stress concentration to the pipe. 192.471(b)

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5. Each bared test lead wire and bared metallic area at point of connection to the pipeline will be coated with an electrical insulating material compatible with the pipe coating and the insulation on the wire. 192.471(c)
6. Each test lead at the test station will be kept clean and free from corrosion. It is imperative that good contact be made between the test equipment leads and the test station or test points. Test station leads and terminals will be cleaned as needed using wire brushes, emery cloth or other suitable means. Test leads that are not serviceable will be replaced.

As stated above, GRS takes safety very seriously and continuously seeks to improve its practices. GRS appreciates SED's input on our Comprehensive Standard Transmission Operation and Maintenance Plan and we look forward to working with the SED over the years to come. Please contact me if you have any questions about this response or require additional information.

Sincerely,



David A. Weber  
President & CEO