Pacific Gas and Electric Company

INTERFERENCE TEST FORM

GD&TS
03/08
FO-16-E

PG&E NO.	CP SYSTEM NO.	DIVISION	OPERATING HQ	CITY

RECTIFIER

LOCATION	
DC RATING Amperes Volts	DC SETTING Amperes Volts

SOIL RESISTIVITY

AVERAGE SOIL RESISTIVITY FOR SHALLOW WELL ANODES: _____ Ohm/Cm

TOTAL CIRCUIT RESISTANCE FOR DEEP WELL ANODES: _____ Ohms

PIPE-TO-SOIL POTENTIAL

PROTECTED STRUCTURE	ON		OFF	
NON-PG&E STRUCTURE	ON		OFF	
NON-PG&E STRUCTURE	ON		OFF	
NON-PG&E STRUCTURE OWNER			TELEPHONE:	

DRAWING

CORRECTIVE ACTION TAKEN:

Date	PREPARED BY

INTERFERENCE TEST ON SHALLOW BED AND DEEP WELL ANODE INSTALLATIONS:

1. Ensure that the CPA is clear of contacts.
   - Use PCM or hard wire spanning.
2. Take interrupted pipe-to-soil potentials on the closest gas service or test station. Locate the electrode directly over the protected structure when possible.
   - Pipe-to-soil potentials should be no more than -1,600 mV on our gas structure.
3. Take interrupted pipe-to-soil potentials on the closest foreign underground metallic structure. When performing an interrupted test, set the interrupter at 4 seconds on and 1 second off to minimize depolarization.
   - The **ON** potential should be more negative, in most cases, than the **OFF** potential when doing an interruption.
   - If the **ON** potential is more positive (less negative) than the **OFF** potential then a degree of interference is present on the foreign structure.
4. A soil resistivity test is required if one was not previously taken and recorded. If it is a deep well installation, a total circuit resistance test is required.
5. Make a detail drawing of the location and include all measurements of where potentials were measured on the interference form. Show all distances between metallic structures.
6. Refer to Corrosion Control Gas Standard 0-16, page 6 of 14, G. "Rectifier Adjustment."

IF ANODIC INTERFERENCE IS SUSPECTED ON A FOREIGN STRUCTURE, FOLLOW THIS PROCEDURE:

1. Turn down the rectifier while trying to keep P/S readings above –850mV.
2. Water shallow bed anodes or flush deep well anode installations to lower the ground bed resistance, which will lower the voltage gradient of the anode bed.
3. If after turning down the rectifier and watering or flushing the anodes, CP cannot be maintained, try installing galvanic anodes at the lowest read potentials, or try to find a shallow bed location. (This step may require relocating the bimonthly read locations.)

"Interference Test Form" Instructions

RECORD

PG&E Number: Record the rectifier's PG&E identification number.

CP System Number: Record the cathodic protection system number for the area.

Division/Operating Headquarters/City: Record those elements for the tested rectifier.

RECTIFIER

Location: Record the exact location of the rectifier.

DC Rating: Record the manufacturer's rating for the rectifier (amperes and volts).

DC Setting: Record the maximum amperes and volts at the time of the interference test.

SOIL RESISTIVITY

Average Soil Resistivity for Shallow Well Anodes/Total Circuit Resistance for Deep Well Anodes: Record soil resistivity for the shallow or deep well anodes as applicable to the test.

PIPE-TO-SOIL POTENTIALS

Pipe–to–Soil Potentials on Protected and Non–PG&E Structure: After setting up an interrupter, record "ON" and "OFF" P/S potentials on the protected facility (e.g., PG&E Gas Main) and any non–PG&E structures that could be affected by the rectifier.

Non–PG&E Structure Owner and Telephone: Record the name of the owner of non-PG&E structure and a local telephone number.

Drawing: Include a drawing of the rectifier, anode bed, and the location of any non-PG&E structure.

To insert or paste a drawing:

1. Make the following selections on the Word menu bar, View => Toolbars => Forms. The Forms toolbar appears.
2. Click the padlock icon to unlock the form.
3. Paste or insert the drawing in the indicated area of the form.
4. Click the padlock icon to lock the form.

Corrective Action Taken: Record the corrective action taken, if any, needed to mitigate any interference situations.

Date/Prepared by: Record the date and the name of the person who conducted the interference test.