

May 1, 2015

Ms. Charlotte F. TerKeurst
Program Manager, CPUC, ESRB
California Public Utilities Commission
505 Van Ness Boulevard
San Francisco, CA 94102

Reference: CPUC ID E20141112-01
Notice of Violation of GO 128, Rule 17.7 and GO 128, Rule 33.4-A3a
Incident at [REDACTED] Scottsdale Drive, San Jose on November 7, 2014

Dear Ms. TerKeurst:

This letter is in response to the ESRB Notice of Violation (NOV) sent on March 30, 2015 regarding the ESRB investigation of a PG&E electric incident¹ that occurred on November 7, 2014 at [REDACTED] Scottsdale Drive in San Jose. The incident involved a San Jose City employee contacting a PG&E 21 kV underground conductor while replacing a sewer pipe resulting in burn injuries. ESRB's letter cited PG&E for allegedly violating General Order 128, Rule 17.7 and 128, Rule 33.4-A3a and asked that PG&E advise you no later than May 1, 2015 of corrective measures taken by PG&E to prevent the recurrence of such incidents in the future.

General Order 128, Rule 17.7 requires location of underground facilities to be properly marked and General Order 128, Rule 33.4-A3a requires separation from other cables, ducts, pipes and structures to be at least 6 inches when crossing. The ESRB's NOV states that PG&E did not properly mark all of its underground facilities in the delineated area, thus allegedly violating General Order 128, Rule 17.7. In addition, ESRB's NOV states that PG&E did not install its underground facilities with a minimum clearance of six (6) inches from the sewer pipe at this location, thus allegedly violating General Order 128, Rule 33.4-A3a.

As previously reported², the PG&E locator had marked the underground gas and electric lines in the delineated area of the sidewalk; however, the 21kV primary line in the street was not marked. PG&E's locator marked the PG&E electric facilities on Map [REDACTED] that were installed in the joint trench in the sidewalk area but failed to locate and mark a second line on Map [REDACTED] that was located in the street, approximately eight (8) feet west of the joint trench.

¹ PG&E Electric Incident reference number EI141107A

² PG&E's Final Electric Incident Report EI141107AF Sent to the CPUC on December 10, 2014

Following the incident, PG&E had a Stand-Down with all Locate & Mark Supervisors on December 3rd, 2014. The known details of the incident were reviewed and the following was emphasized:

- Ensure that all locators follow procedures, specifically: Request a Qualified Electrical Worker (QEW) to assist with difficult Electric locates.
- Ensure that all locators fully understand how to read and interpret Electric Maps.
- All supervisors were reminded that there is an Electric Map reading “Web-based training, (WBT)” available (GAS-0876WBT Electric Map Reading Basics for Locate & Mark). Any employees needing updated training should be directed to re-take the WBT – on an as-needed basis.

Additionally, PG&E implemented a Rolling Stand-Down in which the Director and one Superintendent of Gas T&D Locate and Mark Program visited every PG&E Division to meet with all locators throughout the PG&E system. The San Jose dig-in incident was incorporated in the agenda with emphasis on:

- Criticality of the Locate & Mark function
- Importance of not leaving a locate request until all facilities are fully identified and marked, and,
- Call for assistance if needed for a difficult locating request.

At this point, PG&E has completed the Rolling Stand-Down visits to all PG&E Divisions with the exception of Los Padres and Central Coast Divisions which are scheduled to be completed by May 8, 2015. This incident has been entered into PG&E’s Corrective Action Program and assigned to the Locate and Mark Director. PG&E has also reissued and reviewed with locators the importance of following the Damage Prevention Handbook, which has step-by-step procedural steps with photos and phone numbers noted to call if a locator is unclear or has a question.

The electric facilities were on the electric plat [REDACTED]. In order to improve the geospatial reference of the facility to the street, road, and property lines, revisions were made to the electric plat [REDACTED] (See Attachment 1 – Map [REDACTED] Correction).

The cross-bore through the sewer lateral was an existing condition from prior construction activities at this location. The underground 21kV cable was installed in 1990 under the Cable Replacement Program.

A possible cause of the cross-bore with the sewer lateral was the informal practice used in the 1990’s timeframe to estimate a maximum depth of the sewer lateral based on previous experience. This approach was utilized because sewer laterals were often made of nonconductive materials (e.g. clay) making them incompatible with conventional locating technology. Furthermore, PG&E would often not receive location information (e.g. plan and profile) from the local municipality from which to develop an appropriate boring depth.

Following the incident, the addresses listed below were inspected to verify no other sewer lateral cross-bore exists:

- [REDACTED] Scottsdale Drive, San Jose CA 95148

- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148
- [REDACTED] Fairfax Ave, San Jose CA 95148
- [REDACTED] Scottsdale Drive, San Jose CA 95148

The practice of boring facilities without receiving positive confirmation of sewer lateral locations took place in-part because PG&E procedures and government regulations at the time did not require cross-bores to be identified and repaired during construction and the lack of detection techniques available or being implemented at the time (e.g., acoustics and in-line cameras)³.

PG&E has since amended its boring practice to require pre and post-construction sewer confirmation (See Attachment 2 – Utility Bulletin TD-4412B-012 - Cross Bore Prevention Requirements). Because many sewer and storm drain facility owners are not members of Underground Service Alert (USA), sewer and storm drain locates are required for identification of facility locations. Sewer and storm drain facilities must be located and marked on the ground by a PG&E approved sewer inspection contractor so that PG&E and contract crews are aware of all underground utilities, facilities, or structures. Also to identify:

- Any pre-existing damage which can be documented
- Any branches in the sewer so that they can also be located

After the bore, a post construction camera inspection is completed and documented; see Attachment 3 – Cross Bore Prevention Log.

The expectation is the same for PG&E hired contractors when the scope of the work includes boring. PG&E's Master Service Agreements with contractors include PG&E's cross bore prevention requirements.

Please contact me at [REDACTED] if you have any questions regarding this response.

Sincerely,

/x/

Eric Back

³ California Safe Excavation Policy (California Governmental Code 4216) exempts owner / operators of "non-pressurized" facilities (e.g. sewers) from USA requirements.

Director, Compliance and Risk Management

cc: Ms. Elizaveta Malashenko, Deputy Director, Safety and Enforcement Division
Mr. Fadi Daye, P.E., Program and Project Supervisor, CPUC-LA
Mr. Alok Kumar, P.E., Senior Utilities Engineer, Supervisor, CPUC-SF
Mr. Raymond Cho, Utilities Engineer, Specialist, CPUC-SF