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April 28, 2014

VIA E-MAIL

Ms. Elizaveta Malashenko, Deputy Director
Office of Utility Safety and Reliability
Safety and Enforcement Division
California Public Utilities Commission

Re: Update - Carmel Incident of March 3, 2014

Dear Ms. Malashenko,

I wanted to provide you with an update on the actions taken and the results of our analysis for the incident that occurred on March 3, 2014, near the intersection of Third Avenue and Guadalupe Street in Carmel-by-the-Sea (Carmel). A crew performing tapping operations in Carmel drilled into a steel distribution line, which had previously been fitted with an inner plastic pipe they did not know about. Approximately 15 to 30 minutes later an explosion took place in an adjacent, vacant house. We enlisted the expertise of *Exponent Inc.*, an independent engineering consulting firm, to perform an assessment of the incident, the source of ignition, root cause and recommend corrective actions to further enhance PG&E's work practices. Exponent conducted site inspections of the distribution line, damaged house and nearby sewers, in addition to interviewing witnesses and conducting a helium migration test. Based on its analysis, Exponent concluded gas migrated from the space between the inserted plastic pipe and the steel pipe into the soil and, eventually, through an opening in a sewer service lateral into the home. The ignition source was likely the stove pilot light.

Attached is the final Exponent report, issued April 28, 2014. In this report, Exponent concludes the root cause of the incident was *"Inadequate verification of system status and configuration when performing work on a live line."*¹ PG&E has embraced the report's findings, and we are committed to carrying out each of the corrective actions. Specifically, Exponent recommends² the following actions, which PG&E has already initiated:

- 1) "Develop or revise existing procedures to require positive verification of the expected system status and configuration when working on a pipeline. These procedures should emphasize that plat maps should not be considered "as-builts" and are not to be used in lieu of other means of positive verification."
- 2) "Develop or revise existing procedures to require, as part of the design process, further investigation (e.g., field verification) of the system configuration when estimating a job for which "as-builts" are not available."

¹ April 28, 2014 Exponent report on the Carmel Gas Incident, pg. ix

² April 28, 2014 Exponent report on the Carmel Gas Incident, pg. 65

- 3) "With this event in mind, review the current process for receiving, approving and storing job folders, including "as-builts," to assure that all job folders will be adequately filed and the necessary mapping changes made in a timely manner."
- 4) "Develop and implement a process for a more detailed pre-job briefing, including a discussion of what can go wrong and who is responsible for taking what action if it does go wrong, and ensuring that the appropriate equipment is available to handle potential emergencies."

In order to provide an even greater level of transparency, attached is the draft report from Exponent (which you also received on 4/24/14) as well as PG&E's comments on that draft. Our comments were primarily related to improving the clarity of the report as opposed to changing the analysis or recommendations.

PG&E is already taking steps to address the corrective actions identified in Exponent's report. In addition to entering the findings into the Corrective Action Program (CAP), we have:

- o Enhanced the step-by-step process used by gas workers before tapping on a pipeline.
- o Added a new process for gas workers to make sure they have the right equipment and procedures to handle potential emergencies.
- o Added new emergency response training for all PG&E Gas Construction employees.
- o Put in place a quality assurance check system to verify that these new work methods and tools are being followed. With the layers of quality verification, we'll be able to identify additional ways we can improve the way we work.
- o Cut the amount of time in half that it takes to update our mapping system after a construction project is completed.

We will be working with the City to establish a process to resume work once the Police Chief, who is also the Carmel Safety Officer, and others have been able to review the report, and we have been able to walk them through our enhanced approach.

PG&E's focus is to build the safest and most reliable gas company in the nation – a gas system our customers can count on. We are committed to carrying out each of the corrective actions from the Exponent report as well as working across the industry to identify and continue to implement further improvements to our work practices. We will also continue to keep an open line of communication with Carmel officials, the local fire and police departments, and our customers.

Ms. Elizaveta Malashenko, Deputy Director
Office of Utility Safety and Reliability
Safety and Enforcement Division
California Public Utilities Commission
April 28, 2014
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Please let me know if you have any questions or require further information.

Sincerely,



Sumeet Singh
Vice President, Risk and Asset Management

Attachments

- Attachment 1 *Final Report – Carmel Gas Incident*
- Attachment 2 *Draft Report – Carmel Gas Incident*
- Attachment 3 *Carmel Report PGE Consolidated Comments*

cc:

Denise Tyrrell, CPUC
Ken Bruno, CPUC
Dennis Lee, CPUC
Nathan Sarina, CPUC
Terrie Prosper, CPUC

Redacted PG&E
Laura Doll, PG&E
Bill Gibson, PG&E