



**Pacific Gas and
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December 19, 2012

General Jack Hagan, Director
Consumer Protection and Safety Division
California Public Utilities Commission
505 Van Ness Avenue, Room 2205
San Francisco, CA 94102-3298

Re: CPUC Resolution ALJ-274 Self-Identified Non-Compliance Notification
Failure to Protect Against Potential Fault Currents/Lightning in the City of Livermore

Dear General Hagan:

Pursuant to Resolution ALJ-274, PG&E is providing notification of a self-identified non-compliance issue regarding the failure to protect against damage from potential fault currents or lightning for a natural gas transmission line located in close proximity to an electrical transmission tower in the City of Livermore, in violation of 49 CFR Section 192.467(f).

49 CFR Section 192.467 addresses "External corrosion control: Electrical isolation." Section 467(f) provides as follows:

(f) Where a pipeline is located in close proximity to electrical transmission tower footings, ground cables or counterpoise, or in other areas where fault currents or unusual risk of lightning may be anticipated, it must be provided with protection against damage due to fault currents or lightning, and protective measures must also be taken at insulating devices.

The term "close proximity" in Section 192.467(f) is not defined. The only agency guidance with regard to the meaning of "close proximity" under 49 CFR Part 192.467(f) that PG&E is aware of is *PHMSA Interpretation PI-98-009*, which provides as follows:

"[C]lose proximity" means near enough to the listed structures to reasonably expect that a lightning strike or fault current involving the structure might harm the pipeline's corrosion control system. Close proximity is not an absolute or minimum distance, and it could vary depending on site conditions. Under 192.453, the distance must be determined by a person qualified in pipeline corrosion control methods who has knowledge of the circumstances. *PHMSA Interpretation PI-98-009 (Nov. 10, 1998)*; *PHMSA Corrosion Enforcement Manual, page 104 (Dec. 1, 2011) (quoting the same)*.

PG&E has confirmed that segments of transmission [Redacted]

[Redacted]

electrical transmission tower based on a site specific engineering analysis, but do not have proper protection against damage due to fault currents or lightning and thus are in violation of Section 192.467(f).

This lack of protection against fault currents and lightning when a pipeline segment is in close proximity to an electrical transmission tower is also inconsistent with PG&E's Standard O-16 ("Corrosion Control of Gas Facilities"), which provides as follows:

2.H. It may be necessary to provide grounding or other protection in the following cases:

(1) On pipelines which closely parallel high voltage, alternating current (HVac) electric transmission lines.

(2) On pipelines where the anticipated or measured voltage between the pipeline and ground exceeds 15 Vac open circuit or has a source current capacity of 5 mA. For example, protect pipelines that parallel 230 kV or 500 kV HVac circuits of appreciable distance (over 1 mile) and are within 1,000' of an HVac conductor, and any pipeline that parallels an HVac circuit for any distance when the separation is small (less than 1,000').

(3) On pipelines where electrical transmission towers are present.

The need for special precautions is greater when electric loads are higher, and when pipelines are well-coated and/or installed in high-resistance soil. These precautions apply to both pipelines under construction and pipelines operated under the conditions described in this section (Item 2H). Contact corrosion engineering personnel for further evaluation. This applies for both personnel safety and corrosion control reasons.

PG&E has taken action to expose the sections of transmission pipeline near the electrical transmission towers to inspect for possible integrity indications. During this inspection, two indications were identified on BD9304. These indications are anticipated to be removed by the end of 2012 and transported to a laboratory for destructive testing to determine the root cause.

PG&E is taking steps to promptly remediate the pipeline segments identified in Livermore and is currently assessing options for protection. In the meantime, PG&E will continuously monitor these pipeline segments for arcing damage to ensure their integrity. In addition, PG&E has embarked on a system-wide effort to determine whether there are other instances of gas transmission pipeline segments located in close proximity to electrical transmission towers that do not have proper protection in place against fault currents and lightning. Further, PG&E is enhancing its work procedure for conducting a site-specific evaluation to determine whether a gas transmission line is in close proximity to an electrical transmission tower and, if in close proximity, for implementing appropriate protective measures. PG&E expects to complete this new work procedure by June of 2013.

PG&E will notify the local authorities in the City of Livermore and County of Alameda of this issue and will provide confirmation of notification as a supplement to this letter.

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Please feel free to contact [Redacted] at [Redacted] or [Redacted] for any additional questions you may have regarding this notification.

Sincerely,



Frances Yee
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cc: Julie Halligan, CPUC
Dennis Lee, CPUC
Mike Robertson, CPUC
Sunil Shori, CPUC

[Redacted]
Shilpa Ramaiya, PG&E