PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



July 18, 2012

GA2011-34

Jane Yura, Vice President Gas Operations, Standards and Policies 245 Market Street, Room 1538 San Francisco, CA 94105

SUBJECT: General Order 112-E Audit of the Pacific Gas & Electric Company's Public Awareness Program.

Dear Ms. Yura:

The staff and management of Gas Safety and Reliability Branch (GSRB) of the California Public Utilities Commission and representatives from the Pipeline and Hazardous Materials Safety Administration (PHMSA) conducted a General Order (G.O) 112-E audit of Pacific Gas & Electric (PG&E) Company's Public Awareness Program (PAP) on November 1-3, 2011.

During the audit, GSRB and PHMSA staff reviewed PG&E's PAP plan, milestones, and implementation records such as the stakeholder message pamphlets, and bill inserts. In addition GSRB and PHMSA staff reviewed PG&E's PAP Annual audit and Effectiveness Report. GSRB staff used the PHMSA Public Awareness Program Effectiveness Inspection Form (Form 21) as a reference guideline to conduct the audit. Discussed below are the violations and deficiencies GSRB and PHMSA identified in PG&E's PAP during the audit. PG&E must correct all the violations.

Please review the attached document "PG&E PAP Audit Summary" which contains the findings of our audit consistent with the protocols provided in Form 21. Within 30 days of your receipt of this letter, please provide a written response indicating measures taken by PG&E to address the violations and issues noted.

If you have any questions, please call Matthewson Epuna at (213) 576-7014 or Terence Eng at (415) 703-5326.

Sincerely,

Michael Robertson, Program Manager

Gas Safety and Reliability Branch

Consumer Protection and Safety Division

Mil Refutor

cc: Julie Halligan, Deputy Director, CPSD Matthewson Epuna, CPSD/GSRB Terence Eng, CPSD/GSRB

PG&E PAP Audit Summary November 2011 1-3, 2011

A. Audit Findings Identified in Protocol 1.01, Written Public Education Program, Reference Title 49, Code of Federal Regulations CFR §192.616 (h)

Protocol 1.01 states:

"Does the operator have a written continuing public education program or public awareness program (PAP) in accordance with the general program recommendations in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (incorporated by reference), by the required date, except for master meter or petroleum gas system operators?"

PG&E Public Awareness Program (PAP) lacked sufficient detail in its description of methodologies used for its program's implementation, annual evaluation audits and effectiveness evaluation survey. In addition, the program invoked API 1162, but did not include the edition that was incorporated by reference. We recommend that PG&E add more descriptive information on methodologies used for implementation, annual audits, and effectiveness evaluation survey. PG&E should also reference API RP 1162 edition that is incorporated by reference in the federal regulations.

B. Audit Findings Identified in Protocol 1.02, Management Support, Reference Title 49 CFR §192.616 (a).

Protocol 1.02 states:

"Does the operator's program include a statement of management support (i.e., is there evidence of a commitment of participation, resources, and allocation of funding)?"

PG&E's Management of Support (MOS) states in part:

"PG&E is committed to fully support the successful implementation of this comprehensive Pipeline Public Awareness Program, complying with the standards established by our regulators."

The MOS should include evidence of specific commitments related to management participation, resources and allocation of funding. The MOS does mention the importance of establishing communications with key stakeholders; however, PG&E's MOS did not include the use of external support resources (third party) for implementation or evaluation of its PAP. In addition, the MOS did not include PG&E's Standard Pacific Gas Pipeline which is also covered under its PAP. These items should be included in the MOS. We also recommend the following:

- Specify field personnel (Public Safety Specialists) in public awareness implementation
- Program Effectiveness Report (section 7.2): Assign personnel to develop and manage stakeholder lists for emergency response and public officials

C. Audit Findings Identified in Protocol 1.03, Unique Attributes and Characteristics, Reference Title 49 CFR §192.616(b)

Protocol 1.03 states:

"Does the operator's program clearly define the specific pipeline assets or systems covered in the program and assess the unique attributes and characteristics of the pipeline and facilities?"

Title 49 CFR §192.616 (b) requires:

"The operator's program must follow the general program recommendations of API RP 1162 and assess the unique attributes and characteristics of the operator's pipeline facilities."

PG&E's PAP did not clearly define all of its assets and products regarding its pipelines and storage facilities. Therefore, PG&E is in violation of Title 49 CFR §192.616 (b). PG&E must expand its assessment of its pipeline facilities, including its Standard Pacific pipeline facilities, with the following information:

- Provide more specific asset and facility details for each type of pipeline, storage facility, etc.
- Specify mileage of each pipeline asset for gathering, distribution, transmission, etc.
- Specify in the program which pipeline assets transport un-odorized gas.
- Specify any other products transported other than natural gas (i.e. LNG).

D. Audit Findings Identified in Protocol 1.04, Stakeholder Audience Identification Reference Title 49 CFR §192.616 (d), (e), and (f)

Protocol 1.04 states:

"Does the operator's program establish methods to identify the individual stakeholders in the four affected stakeholder audience groups: (1) affected public, (2) emergency officials, (3) local public officials, and (4) excavators, as well as affected municipalities, school districts, businesses, and residents?"

Title 49 CFR §192.616 (f) requires:

"The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports gas."

PG&E provided the buffer zone information and shape files to its vendors with a buffer of Potential Impact Radius (PIR) 660 feet specified. PG&E identified the affected public stakeholder groups who reside in the each buffer zone. However, PG&E did not clearly specify in its PAP the methods used by its vendors to determine the buffer zone, gaps in stakeholder totals, vacant properties on stakeholder lists, and other relevant audience identification information. We recommend that PG&E describe in its PAP the methods used to identify its intended audience, including:

- Clearly describe the process / methodology used to determine buffer / tolerance for each stakeholder audience (shape files, PIR 660', geo-coding, SIC approach, Contractor Beware codes, Pipeline Association for Public Awareness (PAPA) data, asset counties).
- Specify plan for measuring the percentage of stakeholders reached in each of the affected stakeholder groups
- Analyze and adjust accordingly oversight of how vendors developed mailing lists.
- Analyze stakeholder totals to identify reasons for significant gaps in stakeholder totals.
- Analyze vacant properties on stakeholder lists for accuracy and follow-up.

E. Audit Findings Identified in Protocol 1.06, Written Evaluation Plan, Reference Title 49 CFR §192.616 (c) and (i)

Protocol 1.06 states:

"Does the operator's program include a written evaluation process that specifies how the operator will periodically evaluate program implementation and effectiveness? If not, did the operator provide justification in its program or procedural manual?"

Title 49 CFR §192.616 (c) requires:

"The operator must follow the general recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all of certain provisions of the recommended practice is not practicable and not necessary for safety."

PG&E's PAP did not identify planned activities and associated metrics for each activity in conducting its annual audits and effectiveness evaluations. PG&E did not provide an adequate justification explaining why it was not necessary to include the planned activities and associated metrics in its PAP. Therefore, PG&E is in violation of Title 49 CFR §192. 616 (c)

In addition, we recommend that PG&E add the Public Safety Specialists to the committee in Section 1.3 of its PAP plan.

F. Audit Findings Identified in Protocol 2.01, English and other Languages, Reference Title 49 CFR §192.616 (g)

Protocol 2.01 states:

"Did the operator develop and deliver materials and messages in English and in other languages commonly understood by a significant number and concentration of non-English speaking populations in the operator's areas?"

Title 49 CFR §192.616 (g) requires:

"The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area."

PG&E did develop and deliver materials and messages in other languages to non-English speaking populations in its areas. However, PG&E's PAP did not identify the data source and process that it used in determining the need for additional languages for the non-customers in its affected areas. It is not clear how effective PG&E PAP is in disseminating information that can be readily understood by these non-customers within its affected areas. We recommend that PG&E clearly define in its PAP the methods it employs to determine the other languages it needs to thoroughly notify all portions of its stakeholder audience.

GSRB staff called PG&E's "Gas Control" phone number (800) 811-4111, and discovered that PG&E's gas control operator did not specify the company name when answering. PG&E should specify its company name when answering its "Gas Control" phone line.

G. Audit Findings Identified in Protocol 2.02, Message Type and Content, Reference Title 49 CFR §192.616 (d) and (f)

Protocol 2.02 states:

"Did the messages the operator delivered specifically include provisions to educate the public, emergency officials, local public officials, and excavators on the

- Use of a one-call notification system prior to excavation and other damage prevention activities;
- Possible hazards associated with unintended releases from a gas, hazardous liquid, or carbon dioxide pipeline facility;
- Physical indications of a possible release;
- Steps to be taken for public safety in the event of a gas, hazardous liquid, or carbon dioxide pipeline release; and
- Procedures to report such an event to the operator"

Title 49 CFR §192.616 (f) requires:

"The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports gas."

We recommend that PG&E perform the following items regarding its public awareness messages:

- Include PG&E specific information in PAPA documentation, for all baseline messages
- Send targeted mailing (single page) to online billing customers as designated stuffer (online customers may not read the email in its entirety or clicking on the online bill stuffer may not happen often).

- Specify in the Emergency Responder (ER) meeting invitation letter why it is important for the ER to attend (i.e. natural gas pipeline emergency response planning).
- Require on-line billing customers to review a public awareness page prior to submitting payment
- Conduct seminars tailored to PG&E's incident command structure for ERs

H. Audit Findings Identified in Protocol 2.03, Message on Pipeline Facilities Locations, Reference Title 49 CFR §192.616 (e) and (f)

Protocol 2.03 states:

"Did the operator develop and deliver messages to advise affected municipalities, school districts, businesses, and residents of pipeline facility location?"

Title 49 CFR §192.616 (e) requires:

"The program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facilities locations."

PG&E provided messages to affected stakeholders; however, its PAP did not specify the messaging the operator is using to advise municipalities, school districts, businesses, and residents of pipeline facility locations. In addition, the messaging was sent to the main offices of the municipalities and school districts and not the municipality departments and local schools most affected by PG&E's pipeline facilities. Therefore, PG&E is in violation of Title 49 CFR §192.616 (e). PG&E must clearly reflect the activities it engages in to reach out to the various types of stakeholders and ensure that the messaging reaches the stakeholders within its affected areas.

I. <u>Audit Findings Identified in Protocol 2.04, Baseline Message Delivery Frequency, Reference Title 49 CFR §192.616 (c)</u>

Protocol 2.04 states:

"Did the operator's delivery for materials and messages meet or exceed the baseline frequencies specified in API RP 1162, Table 2-1 through Table 2.3? If not, did the operator provide justification in its program or procedural manual?"

PG&E has identified excavation activities as a major problem. As part of PG&E PAP improvements, it should target the top five counties with the most excavation damage. PG&E should continuously track the mailings and analyze the top five counties to determine if its messaging achieves the desired result to reduce the number of damages. Based on its findings, PG&E should subsequently make changes to adjust its PAP to include more counties or other areas as necessary.

J. Audit Findings Identified in Protocol 2.06, Maintaining Liaison with Emergency Response Officials, Reference Title 49 CFR §192.616 (c)

Protocol 2.06 states:

"Did the operator establish and maintain liaison with appropriate fire, police, and other public officials to: learn the responsibility and resources of each government organization that may respond, acquaint the officials with the operator's ability in responding to a pipeline emergency, identify the types of pipeline emergencies of which the operator notifies the officials, and plan how the operator and other officials can engage in mutual assistance to minimize hazards to life or property?"

PG&E's PAP does not ensure that PG&E is effectively establishing and maintaining liaison with appropriate fire, police, and other public officials. PG&E invites ER officials to attend its ER meetings. However, not all the ER officials invited attend the meetings. Therefore, PG&E did not make its emergency response plan available, as appropriate, and necessary to all the emergency response officials in its affected areas. In addition, PG&E did not demonstrate how it notifies these officials and how it determines the resources they have and ability to respond to pipeline emergencies. Therefore, PG&E is in violation of Title 49 CFR §192.616 (c).

In addition, we recommend:

- Specify in the ER Officials meeting invitation letter why it is important for the ER to attend (i.e. natural gas pipeline emergency response planning). This may help ER officials clearly understand the need to attend the meetings and improve liaison relations.
- Make public emergency response plan available on ER portal.
- Review elected official ER lists to ensure there is adequate contact information to reach out to each Emergency Official stakeholder audience.
- Determine the appropriate and applicable information from your ER Plan to share with Emergency Responders and ensure it is easily assessable.
- Specify in the written program how mailings will be sent to ER officials (i.e. mail or email).

K. <u>Audit Findings Identified in Protocol 3.02</u>, Acceptable Methods for Program Implementation Audits, Reference Title 49 CFR §192.616 (c)

Protocol 3.02 states:

"Did the operator use one or more of the three acceptable methods (i.e., internal assessment, 3rd-party contractor review, or regulatory inspections) to complete the annual audit or review of its program implementation? If not, did the operator provide valid justification for not using one of these methods?"

We recommend that PG&E expand annual audit attendees to include cross-functional company personnel (i.e. Public Safety Specialists, etc).

L. Audit Findings Identified in Protocol 3.03, Program Changes and Improvements, Reference Title 49 CFR §192.616 (c)

Protocol 3.03 states:

"Did the operator make changes to improve the program and/or the implementation process based on the results and findings of the annual audit? If not, did the operator provide justification in its program or procedural manual?"

PG&E's PAP did not have a clear mechanism to analyze the results of changes arising from the use of different vendor methodologies and how to track and verify the stakeholder audience data accuracy. PG&E's must develop a metric to analyze and review this information, and to implement improvements to its PAP as necessary. Therefore, PG&E is in violation of Title 49 CFR §192.616 (c) for not having procedures to adequately address changes in its PAP.

M. Audit Findings Identified in Protocol 4.01, Evaluating Program Effectiveness, Reference Title 49 CFR §192.616 (c)

Protocol 4.01 states:

"Did the operator perform an effectiveness evaluation of its program (or no more than 4 years following the effective date of program implementation) to assess its program effectiveness in all areas along all systems covered by its program? If not, did the operator provide justification in its program or procedural manual?"

PG&E's PAP did not have sufficient detail regarding the processes used for the effectiveness evaluation. API RP 1162, Section 8.4 (2003 Edition) defines the measures that pipeline operators should follow to ensure that actions taken are achieving the intended goals and objectives directed towards their stakeholder audience. PG&E's PAP did not address by whom and how the effectiveness evaluations would be conducted for various stakeholder audiences. Therefore, PG&E is in violation of Title 49 CFR §192. 616 (c)

N. <u>Audit Findings Identified in Protocol 4.03, Measure Percentage Stakeholders Reached, Reference Title 49 CFR §192.616 (c)</u>

Protocol 4.03 states:

"Did the operator determine the percentage of the individual or entities actually reached within the target audience within all areas along all systems covered by its program? If not, did the operator provide justification in its program or procedural manual?"

PG&E's PAP did not measure whether its public awareness messages are getting to the intended stakeholders. As a result, some stakeholders within PG&E's affected areas may not receive the public awareness messages as required. As defined in API RP 1162, Section 8.4.1 (2003 Edition) PG&E needs to establish a methodology to track the number of individuals or entities reached within an intended audience. Additionally, this

measure should estimate the percentage of the stakeholders actually reached within the targeted geographic areas. Therefore, PG&E is in violation of Title 49 CFR §192.616 (c) for not having a method for tracking its public awareness messages.

O. Audit Findings Identified in Protocol 4.04, Measure Understandability of Message Content, Reference Title 49 CFR §192.616 (c)

Protocol 4.04 states:

"In evaluating effectiveness, did the operator assess the percentage of the intended stakeholder audiences that understood and retained the key information in the messages received, within all areas along all assets and systems covered by its program? If not, did the operator provide justification in its program or procedural manual?"

PG&E's PAP did not analyze and document the effectiveness of the languages used by PG&E for understandability of message content. PG&E needs to measure the percentage of the intended stakeholder audience that understood and retained the key information in the message received. This measurement is essential for PG&E to evaluate the effectiveness of the delivery media and the message style and content. Therefore, PG&E is in violation of Title 49 CFR §192.616 (c).

P. <u>Audit Findings Identified in Protocol 4.06, Measure Bottom-Line Results, Reference Title 49 CFR §192.616 (c)</u>

Protocol 4.06 states:

"In evaluating its public awareness program effectiveness, did the operator attempt to measure bottom-line results of its program by tracking third-party incidents and consequences including: (1) near misses, (2) excavation damages resulting in pipeline failures, (3) excavation damages that do not result in pipeline failures? Did the operator consider other bottom-line measures, such as the affected public's perception of the safety of the operator's pipelines? If not, did the operator provide justification in its program or procedural manual?"

PG&E's PAP did not have a clear process of measuring its bottom-line results and other related measures. API RP 162, Section 8.4.4 (2003 Edition) states that operators should track the number of incidents and consequences caused by third party damage. This should include reported near misses; reported pipeline damage occurrences that did not result in a release; and third-party excavation damage events that resulted in pipeline failures. The tracking of leaks caused by third-party excavation damage should be compared to statistics of similar pipeline facilities and components. In addition, PG&E PAP currently provides for trend analysis of excavation damage on its transmission pipelines; however, PG&E does not perform a similar analysis of its distribution pipeline systems. Therefore, PG&E is in violation of Title 49 CFR §192.616 (c) for not developing a clear process for measuring its bottom-line results and analyzing data involving excavation damage in its distribution pipeline systems.

Q. Audit Findings Identified in Protocol 4.07, Measure Program Changes, Reference Title 49 CFR §192.616 (c)

Protocol 4.07 states:

"Did the operator identify and document needed changes and/or modifications to its public awareness program(s) based on the results and findings of its program effectiveness evaluation? If not, did the operator provide justification in its program or procedural manual?"

At the time of the audit, PG&E was in process of completing its database for its PAP and implementing all the changes that it has documented from its Program Evaluation and Continuous Improvement (Effectiveness) exercise. The database was to include the results and findings of its PAP effective evaluations. Please provide us an update on the progress PG&E has made in completing its PAP database and the documented changes it gathered from its effectiveness evaluation. We recommend that PG&E include in its PAP database the agricultural public awareness efforts.