

**Docket No. SA-534**

**Exhibit No. 2-DL**

**NATIONAL TRANSPORTATION SAFETY BOARD**

**Washington, D.C.**

CPUC SEPTEMBER 24, 2010 LETTER TO PG&E REGARDING  
GO 112E AUDIT OF PG&E PENNINSULA DIVISION

(47 Pages)

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



September 24, 2010

Mr. Glen Carter, Senior Director  
Gas Engineering  
Pacific Gas and Electric Company  
375 North Wiget Lane  
Walnut Creek, CA 94598

**SUBJECT:** General Order 112-E Audit of PG&E's Peninsula Division

Dear Mr. Carter:

On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission, Aimee Cauguiran, Terence Eng, and I conducted a General Order (GO) 112-E Inspection of PG&E's Peninsula Division from August 9 through 13, 2010. The audit included a review of Peninsula Division records for the period 2008 and 2009.

During the audit, we identified one or more violations of GO 112-E. These violations are itemized within the Audit Summary enclosed with this letter. Please note that the violations included within the Audit Summary may differ from the potential violations discussed with PG&E's representatives during the exit meeting of our audit. Any differences are generally attributed to research, conducted subsequent to the audit, which can result in some potential violations being excluded and other violations, not discussed during the exit meeting, being included in the Audit Summary.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by PG&E to address the violations noted in the Audit Summary.

If you have any questions, please contact me at (415) 703-2214.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dennis Lee", is written over a horizontal line.

Dennis Lee, P.E.  
Utilities Engineer  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division

Enclosure: Audit Summary

Copy: Larry Deniston – Pacific Gas and Electric Company  
Larry Berg – Pacific Gas and Electric Company

## AUDIT SUMMARY

### AREAS OF VIOLATIONS

1. Title 49 CFR §192.723 Distribution systems: Leakage surveys.

§192.723 (b)(1) requires that "A leakage survey with leak detector equipment must be conducted in business districts, including tests of the atmosphere in gas, electric, telephone, sewer, and water system manholes, at cracks in pavement and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year."

During the review of the annual leak survey records, we noted that some of the areas indicated on map 3348-C1 were not leak surveyed in 2008 as required by §192.723 (b)(1). The entire area on map 3348-C1 was leak surveyed in 2009.

2. Title 49 CFR §192.621 Maximum allowable operating pressure: High-pressure distribution systems.

§192.621 requires that "No person may operate a segment of high pressure distribution system at a pressure that exceeds the lowest of the following pressures, as applicable: (1) The design pressure of the weakest element in the segment..."

Title 49 CFR §192.619 Maximum allowable operating pressure: Steel or plastic pipelines.

§192.619 requires that "No person may operate a segment of steel or plastic pipeline at a pressure that exceeds the lowest of the following: (1) The design pressure of the weakest element in the segment..."

During the review of the regulator station records, we noted that the pressure ratings on the downstream valves at regulator / relief stations, C-28, A-59, and A-15, were less than the maximum allowable operating pressure (MAOP) of the regulator / relief station for which the valves were employed. Regulator / relief station C-28's downstream valve pressure rating is 175 psi, which is less than the inlet station MAOP of 375 psi. Regulator / relief station A-59's downstream valve pressure rating is 125 psi, which is less than the inlet station MAOP of 375 psi. Regulator / relief station A-15's downstream valve pressure rating is 200 psi, which is less than the inlet station MAOP of 375 psi.

PG&E performed Operational Lockup at these stations in 2008 and 2009 as part of its normal Regulator Station Maintenance. If the regulators at these stations do not properly lockup during testing or normal operations, the pressure ratings on the valves could be exceeded, which is a violation of §192.621 and §192.619.

Please ensure that PG&E's entire system regulator / relief stations have the appropriate station pressure ratings so that the pressure ratings will not be exceeded.

## PG&E INTERNAL AUDIT FINDINGS

Prior to start of the audit, PG&E provided the results of their internal audit of the division's records dated August 6, 2010. Many of PG&E's internal audit findings are violations of PG&E's own standards, and therefore a violation of Title 49 CFR §192.13 (c). In addition, many of the internal audit findings are violations of Title 49 CFR 192 as show in Table 1. We also note that most of the findings have been corrected.

Please provide updates on items that were still pending corrective actions as of the last day of the audit.

Table 1. PG&E Internal Audit Violations

	Title 49 CFR	Topic	Number of Violations	PG&E Have Remediated The Violation	PG&E Have Not Remediated The Violation
1	192.723	Leak Survey Distribution (1, 2, & 3)	57	1, 2, & 3	n/a
2	192.603(b)	Leak Survey Distribution (4 & 5)	32	4 & 5	n/a
3	192.13(c)	Leak Survey Distribution (6, 7, 8, & 9)	36	7, 8, & 9	6
4	192.706	Leak Survey Transmission (1, 2, 4, & 6)	117	1, 2, 4, & 6	n/a
5	192.13(c)	Leak Survey Transmission (3 & 5)	48	3 & 5	n/a
7	192.703(c)	Leak Repairs (1)	1	1	n/a
6	192.13(c)	Leak Repairs (2, 3, 4, 6, 7, 8, & 9)	198	2, 3, 4, 6, 7, 8, & 9	n/a
8	192.503	Leak Repairs (5)	2	n/a	5
9	192.465	Corrosion Control (1, 2, & 4)	10	1, 2, & 4	n/a
10	192.13(c)	Corrosion Control (3, 5, 6, 7, 8, & 9)	19	3, 5, 7, & 8	6 & 9
11	192.481(c)	Corrosion Control (10)	2	n/a	10
12	192.805(b)	Corrosion Control (11)	1	11	n/a
13	192.13(c)	MAOP Records (1, 2, 3, & 4)	14	1, 2, 3, & 4	n/a
14	192.621 & 192.619	Regulator Stations (2)	6	n/a	2
15	192.13(c)	Regulator Stations (1, 3, 4, 5, 6, & 7)	90	1, 4, 6, & 7	3 & 5
17	192.13(c)	Emergency Valves (1, 2, 3, & 4)	80	1, 2, 3, & 4	n/a
18	192.13(c)	Instrument Calibrations (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, & 12)	61	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, & 12	n/a
19	192.13(c)	Pipeline Patrols (1 & 2)	3	1 & 2	n/a
20	192.13(c)	Company Emergency Plan (1 & 2)	2	2	1
21	192.13(c)	Emergency Zones (1, 2, & 3)	17	1	2 & 3
22	192.13(c)	Deactivation Records (1)	16	n/a	1



**Pacific Gas and  
Electric Company®**

**Glen Carter**  
Senior Director, Gas Engineering  
Gas Transmission and  
Distribution

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Walnut Creek, CA 94598

925-974-4231  
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January 16, 2009

Mr. Dennis Lee  
Utilities Safety and Reliability Branch  
Consumers Protection and Safety Division  
California Public Utilities Commission  
505 Van Ness Avenue, 2<sup>nd</sup> Floor  
San Francisco, CA. 94102-3298

Re: State of California – Public Utilities Commission  
General Order 112-E Inspection – Peninsula Division

Dear Mr. Lee:

The following is our response to your letter dated October 17, 2008, which transmitted the results of the July 14 – 18, 2008 General Order 112-E Inspection of Peninsula Division.

### AREAS OF VIOLATIONS

#### USRB Finding:

1. Title 49 Code of Federal Regulations (49 CFR) §192.805 Qualification program

§192.805 (b) requires that “Ensure through evaluation that individuals performing covered tasks are qualified;”

PG&E employee, Terry Gallagher, conducted leak surveys of 66 plat maps in 2007 while not qualified to perform that covered task. Please explain how an unqualified individual was able to perform a covered task. Ensure that individuals performing covered tasks are qualified as per §192.805 (b).

**PG&E Response:**

PG&E agrees with this finding.

In mitigation, PG&E notes that (1) PG&E had discovered this problem in December 2007 during an internal program audit and took immediate and comprehensive action, (2) the surveyor had been fully trained to perform the subject surveys and had been approved by the supervisor who then failed to submit the proper documentation certifying the operator qualification status, (3) despite the training of the surveyor, PG&E performed a resurvey all 66 plats using surveyors with up-to-date qualification records, and (4) PG&E voluntarily brought this matter to the attention of the USRB auditors.

The following actions were taken immediately upon discovering this issue:

1. The 66 plats previously surveyed by Mr. Gallagher were re-surveyed by a qualified employee. This re-survey started on December 15, 2007 and concluded on February 10, 2008. (See Attachment A – 66 plats resurveyed.)
2. The necessary actions were taken to properly qualify Mr. Gallagher for Leak Survey on December 7, 2007. (See Attachment B – Terry Gallagher OQ Record)
3. Reviewed and confirmed qualifications of all Peninsula Division employees who perform covered tasks. This was completed by the Area 1 Operator Qualification Coordinator in January 2008.
4. Reviewed the Operator Qualification program requirements with all Peninsula Division gas distribution supervisors, including Mr. Gallagher's immediate supervisor. This was completed by the Peninsula Division M&C Superintendent on January 8, 2008.

The following actions were taken to prevent recurrence of these problems in Peninsula Division:

1. The Leak Survey Supervisor was removed from the position.
2. The Peninsula Division OQ Coordinator instituted a program to make quarterly reviews of job assignments and qualification records of all employees performing qualified tasks. (See Attachment C –OQ Review Process.)

The following actions were taken to prevent recurrence of these problems system wide:

1. In March 2008, the company instituted a system wide initiative that required each leak surveyor to be re-trained and re-qualified for leak survey prior to being assigned leak survey.
2. We have changed our leak surveyor OQ process so that OQ training and OQ records are centrally maintained at our learning center rather than at individual divisions.

3. We have instituted a monthly reporting process where we check the Integrated Gas Information System (IGIS) data base to confirm that each person who performed leak surveys during the previous month was a qualified surveyor.

**USRB Finding:**

2. Title 49 CFR §192.723 Distribution systems: Leakage surveys

§192.723 (b)(1) requires that "A leakage survey with leak detector equipment must be conducted in business districts, including tests of the atmosphere in gas, electric, telephone, sewer, and water system manholes, at cracks in pavement and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year."

During the review of the leak survey records, we found 21 plat maps that were leak surveyed in 2007 by an unqualified PG&E employee that were subsequently re-surveyed by a qualified PG&E employee in 2008. Since the leak survey's conducted by the unqualified employee did not qualify as leak surveys in 2007, therefore leak surveys of those plat maps were not completed once each calendar year for 2007 as per §192.723 (b)(1).

**PG&E Response:**

PG&E agrees with this finding except that PG&E believes that 22 plats were late not 21 as stated in your letter.

However, in mitigation, PG&E again offers that (1) PG&E had discovered this problem in December 2007 during an internal program audit and took immediate and comprehensive action, (2) PG&E undertook to resurvey all 66 plats using surveyors with up-to-date qualification records, (3) despite PG&E's best efforts, the resurvey of all 66 plats was not completed before the end of the calendar year, and (4) PG&E voluntarily brought this matter to the attention of the USRB auditors.

PG&E completed the resurvey of the 22 plats by February 10, 2008 and all areas are now in compliance with 49 CFR §192.723 (b)(1).

**USRB Finding:**

3. Title 49 CFR §192.603 General provisions

§192.603 (b) requires that "Each operator shall keep records necessary to administer the procedures established under §192.605."

§192.605 (b)(1) states the following: "Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and Subpart M of this part."

Subpart M – Maintenance includes §192.739 Pressure limiting and regulating stations: Inspection and testing.

§192.739 (a) requires that "Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, [to inspections and tests] to determine that it is – (1) In good mechanical condition; (2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed; (3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of §192.201(a); and (4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation."

During the review of the relief device maintenance records, we found two relief stations (A-80 and A-84) that consist of two reliefs per station but only had one entry per station in the maintenance records for the two reliefs. We believe that two entries are needed per station in order to accurately document that the maintenance required by §192.739 was in fact performed for each relief device.

**PG&E Response:**

PG&E agrees with this finding. As a result of this issue, the Gas T&R Supervisor tail boarded the employees completing the maintenance records on July 24, 2008. (See Attachment D -- tailboard agenda and sign-in.) He instructed the employees to complete a separate entry on the maintenance records for each relief device at each regulator station.

The following action will be taken to prevent recurrence of this problem in Peninsula Division:

The Gas T&R Supervisor will review the completed district regulator station maintenance sheets for stations with two reliefs to ensure a separate entry is completed for each relief device at each station.

The following action will be taken to prevent recurrence of these problems system wide:

The Supervising Engineer of Regulatory Support & Analysis (RS&A) will communicate with all gas superintendants and engineers in other divisions to make clear that the maintenance of each regulator station device should be separately recorded by February 15, 2009.



### FIELD OBSERVATION

#### USRB Finding:

1. During the field inspection at regulator station A-79, the monitor did not take over. The inspection of the regulator station was stopped prior to the downstream pressure exceeding MAOP + allowable. The monitor was then reset at a lower pressure and it then took over. Please ensure that regulator station devices are set to the appropriate set points in order to protect against over pressuring.

#### PG&E Response:

For the record, the monitor set point for Regulator Station A-79 was appropriate at the time of the USRB audit (52 psig). However, as you note, during the audit, the monitor did not take over and the monitor was reset at a lower pressure (47 psig).

Subsequently, an internal inspection of the regulator station was performed on July 22, 2008. (See attached documentation.) A full class "B" maintenance inspection was performed. The monitor was torn down, all rubber goods were replaced, monitor was cleaned, reassembled and reinstalled. No problems were observed during the inspection. The monitor regulator was tested and observed to control at 52 psig at the completion of the inspection.

We have inspected and maintained the monitor to ensure proper operation. (See Attachment E – Regulator Station A-79 Maintenance Record.)

### OBSERVATIONS

#### USRB Finding:

1. During the inspection, PG&E provided a document, Peninsula Division MAOP Documentation of Gas Distribution System, in regards to missing MAOP documentation for the Peninsula Division. Further review is being done and there have been on going discussions between PG&E and CPUC related to this issue. Follow up questions and requests will be done on separate letters and/or emails.

#### PG&E Response:

Responses to follow up for Peninsula Division and system wide MAOP questions and requests were sent to Mr. Sunil Shori on December 30, 2008.

#### USRB Finding:

2. During the review of the 2007 10%-er survey records, we noticed that many isolated service locations were noted as "No such address". It is concerning to see so many "No

such address" locations are being found where previous pipe-to-soil readings were taken. Also, if these 10%-ers are not located at the address indicated (as noted by the "No such address"), then the 10%-ers must be located somewhere else and are not being monitored. Please explain what PG&E plans to do about this issue.


**PG&E Response:**

Following the CPUC audit, PG&E reviewed the isolated steel riser (10%-er) Gas Facility Management (FM) data base. We confirmed that the data base contained about 5,500 locations with about 600 "no such address" or similar notations. This appears to be the result of a coding error dating from 2003 when the survey data was up-loaded from our contractor (Mears) to the Gas FM data base. We have checked these locations and determined that they are simply the result of the up-load error and do not physically exist and were not in the original 2003 contractor record.

At the same time, we are rechecking all of the 10%-er locations identified by Mears in 2003 (4,324 locations) to ensure that all are included in the FM data base, are properly coded and included in the Peninsula Division isolated steel (10%-er) program. This investigation will be completed by April 1, 2009 and we will make any changes to both the data base and the inspection schedules that may be necessary.

If you have any questions concerning this report, please contact Larry Berg at (925) 974-4084.

Sincerely,

  
Glen Carter

Attachments

cc: Julian Ajello, California Public Utilities Commission  
Raffy Stepanian, California Public Utilities Commission

ATTACHMENT A

PLEASE PROVIDE DATE EACH

PMW 1-15-09

TAGN ONLY

OCT ANNUAL DOWNTOWN

(10/31-06)

PREVIOUS SURVEY

DATE RESURVEY

WHO ~~DATE~~

	PREVIOUS SURVEY	DATE RESURVEY	WHO
- 3214-C1	10-25-07	12-15-07	AXWT
- 3214-D1	10-25-07	12-15-07	AXWT
- 3214-E2	10-25-07	12-16-07	AXWT
- 3214-E3	10-25-07	12-16-07	AXWT
- 3214-G4	10-23-07	12-15-07	DATA/ABUE
- 3214-G5 / 07-20387	10-23-07	12-15-07	AXWT
- 3214-J8	10-25-07	12-15-07	DATA/ABUER
- 3215-J3	10-9/11-07	12-16-07	JJAJ
- 3277-B4	10-9-07	12-15-07	AZA I
- 3277-C4	10-9-07	12-15-07	DATA
- 3277-C5 / 07-20378	10-9/10-07	12-15-07	IVERSON
- 3277-C6	10-10-07	12-15-07	IVERSON
- 3277-C7	10-10-07	12-15-07	IVERSON
- 3277-C8 / 07-20379	10-10-07	12-15-07	IVERSON
- 3278-A3	10-23/24-07	12-15-07	IVERSON
- 3278-A5	10-11-07	12-15-07	IVERSON
- 3278-B5	10-11-07	12-15-07	JJPS
- 3278-C1	10-11-07	12-15/16-07	JJPS
- 3278-C2	10-11-07 & 10-23-07	12-14-07	JJPS
- 3278-C4	10-24-07	12-15-07	JJPS
- 3278-B5	10-9/11-07	12-15-07	JJPS
- 3279-F1	10-30/31-07	12-15-07	M. POWELL
- 3279-F2 / 07-20388	10/30/07	12-15-07	M. POWELL
- 3279-H2	10-31-07	12-16-07	M. POWELL
- 3279-H5	10-24-07	12-16-07	M. POWELL
- 3279-I2	10-24-07	12-16-07	M. POWELL

was

1/15/07 2/9/00

12/11/07

NOV ANNUAL DOWNTOWN  
(11-6/10-10)

	PREVIOUS SURVEY	RESURVEY	DATE
3214-E5	11-1-07	12-10-07	M. POWELL
3214-F7	11-2-07	12-15-07	IVEASON
3214-F8 / 05-20040	11-1-07	12-16-07	JSPJ/AA
- 3214-G8	11-1-07	12-16-07	JFJ
- 3214-H8	11-2-07	12-16-07	JFJ/AA
- 3214-I8	11-1-07	12-16-07	AXW7
- 3215-G3	11-2-07	12-16-07	IVERSON
- 3215-G4	11-2-07	12-16-07	IVERSON
- 3215-G5 - 05-20055	11-1-07	12-15-07	IVERSON
<del>3215-G5</del>			
- 3215-G7	11-1-07	12-16-07	AXW7
- 3215-H1	11-1-07	12-16-07	AXW7
- 3215-H2	11-1-07	12-22-07	M. POWELL
- 3215-H3	11-5/7-07	12-22-07	M. POWELL
- 3215-H4	11-5-07	12-22/23-07	M. POWELL
- 3215-H5	11-5-07	12-23-07	M. POWELL
- 3215-I1	11-1-07	12-23-07	FXIZ
- 3215-I4	11-2-07	12-23-07	FXIZ
- 3215-I5	11-1-07	12-23-07	FXIZ

TOTAL = 110 PLANTS

18

1

LKN1 - L NELSON

DES NOT INCL.

11-15-07

(11-2/18-06)	NOVEMBER ANNUAL DOWNTN PREVIOUS SURVEY	RESURVEY	WHO
- 06-E03	11-15/16-07	2-10-08	LKN1
- 06-E04	11-16-07	2-9-08	LA POWELL
- 06-E05	11-20/21-07	1-20-08	FXIZ
- 06-E06	11-21-07	1-20-08	FXIZ
- 06-F05	11-21-07	1-20-08	FXIZ
- 07-B08	11-15-07	1-19-08	B OLIVOLD
- 07-D07 / 07-20169	11-15-07	1-19-08	B OLIVOLD
- 07-D15	11-14-07	1-19-08	LKN1
- 07-D16	11-14-07	1-19-08	L NELSON
- 08-A02	11-21-07	1-19-08	B OLIVOLD
- 08-A04	11-21-07	1-19-08	B OLIVOLD
- 08-A06	11-20-07	1-19-08	B OLIVOLD
- 08-C03 / <sup>07-20163</sup> 07-20164	11-8-07	1-20-08	LKN1
- 08-C04	11-7-07	2-9-08	LKN1
- 08-C05	11-8-07	2-9-08	LKN1
- 08-C06	11-8-07	2-9-08	LKN1
- 08-D01	11-13-07	1-20-08	LKN1
- 08-D03	11-7/13-07	2-9-08	LKN1
- 08-D04	11-13-07	2-9-08	LKN1
- 08-E01	11-7-07	1-19-08	B OLIVOLD
- 08-E02	11-20-07	1-19-08	B OLIVOLD
- 08-F03	11-20-07	1-19-08	B OLIVOLD

22



ATTACHMENT B

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**PG&E**  
Employee Transcripts

Date: 1/15/2009

Page: 1

**Selection Criteria:**


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<b>Corp ID:</b> tagn	<b>Employee Type:</b>	<b>Job Code:</b>
<b>Employee Name:</b>	<b>Org:</b>	<b>Course Type:</b> OQ
<b>PCC:</b>	<b>Date From:</b> 1/1/2007	<b>Date To:</b> 12/31/2007

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**Employee Name:** Gallagher, Terry**Corp ID:** TAGN**Org:** M&C Area 1 Gas Constr - P**PCC:** 11778

<u>Course Code</u>	<u>Course Name</u>	<u>Course Type</u>	<u>Status</u>	<u>Status Date</u>
OQ09-01.00	Conduct Survey	Operator Qualification	Initial Qual	12/7/2007
OQ09-02.00	Leak Investigation	Operator Qualification	Initial Qual	12/7/2007
OQ09-03.00	F. S. Leak Investigation	Operator Qualification	Initial Qual	12/7/2007



ATTACHMENT C

# DOT Gas Operator Qualification Program

## Monthly & Quarterly Review

(Course Code GAS\_-0134)



### What is Operator Qualification?

The Code of Federal Regulations (CFR) rule requires pipeline operators to develop and maintain a written qualification program for individuals performing covered tasks on pipeline facilities.

### Why Operator Qualification?

To ensure a qualified workforce and to reduce the probability and consequence of incidents caused by human error. The Company is also responsible for all individuals working on its pipeline systems. This includes hiring hall and contract personnel.

### Plan Requirements

The Company responsibility is to follow a written qualification program. This program includes provisions to:

- Identify covered tasks.
- Ensure that individuals performing covered tasks are qualified.
- Ensure that unqualified individuals are directed by a qualified individual while performing covered task(s).
- A process to determine if an individual's performance contributed to an incident defined in Part 191.
- Evaluate an individual if the Company has reason to believe that the individual is no longer qualified to perform a covered task.
- Communicate changes that affect covered tasks to individuals performing those tasks.
- Identify those covered tasks and the intervals at which evaluation of the individual's qualification is required.
- The Company shall maintain records that demonstrate compliance with this program.

### Contractors & Hiring Hall

All contractors and subcontractors who perform covered task(s) work must be qualified to perform such work. Furthermore, they must be able to recognize and react appropriately to abnormal operating conditions that may indicate a dangerous situation or a condition exceeding design limits.

It is the local supervisor and Local Gas Operator Qualification Plan Coordinator's (LGOQPC) responsibility to notify the System Gas Operator Qualification Program Coordinator (SGOQPC) to review the contractor OQ program before starting work.

### Contractors & Hiring Hall (Continued)

Their qualifications will expire upon completion of the project or as determined in writing by Pacific Gas & Electric Company.

### What is a Covered Task?

A covered task is an activity, identified by the Company, that is:

- Performed on a pipeline; and
- An operations or maintenance task; and
- Performed as a requirement of this CFR 49 Part 192; and
- Affects the operation or integrity of the pipeline.

A covered task must meet all four criteria to be considered a covered task.

### Local Responsibility

- Each Supervisor is responsible to ensure employees are qualified to perform covered tasks on pipeline facilities in their organizations.
- Supervisors may contact HR-Learning Services for qualifying, subsequent qualifying and training individuals to maintain sufficient qualified individuals to perform covered tasks on pipeline facilities.
- Each area will appoint a Local Gas Operator Qualification Plan Coordinator (LGOQPC) to maintain the plan in their local operating department.
- **All gas employees** are responsible for knowing and understanding the gas operator qualification plan.
- **All gas employees** are responsible for performing, without supervision, **only** those covered tasks for which they have been qualified under this plan.
- It is the employee's responsibility to know which tasks, they are and are **not** qualified to perform.
- **All gas employees** (including hiring hall) are responsible for communicating to local supervision any significant changes which affects their qualification to perform covered tasks they are assigned to perform.
- **All Department Directors/Managers/Superintendents/Supervisors** share the responsibility to ensure that the skill evaluations have been completed for the employees with gas covered task responsibilities in their areas, and that the evaluations are properly documented for developing any skill deficiencies found during the gas operator qualification evaluation(s).

# DOT Gas Operator Qualification Program

## Monthly & Quarterly Review

(Course Code GAS\_-0134)



### Monthly and Quarterly Review & Responsibility

The Local Gas Operator Qualification Plan Coordinator (LGOQPC) will administer the GAS\_-0134 review monthly with all supervisors and superintendents within their respective area. Also, the Local Gas Operator Qualification Plan Coordinator (LGOQPC) will administer the GAS\_-0134 review quarterly with all employees within their respective area. The review (Gas\_-0134) shall be documented on an original signed roster and mailed to:

- Heidi Haas, Rm B101, 3301 Crow Canyon Rd. San Ramon, CA.

### Monthly and Quarterly Review & Responsibility (Continued)

In order to ensure immediate input into Training Server, the LGOQPC shall submit an electronic template identifying employees who received GAS\_-0134. The GAS\_-0134 review may occur in conjunction with tailboards, gas emergency training or any other forms of group communication.

### Initial Qualification

Initial qualification is the qualification of individuals who did not perform a particular covered task on a regular basis prior to August 27, 1999.

A written test and a performance based qualification evaluation is used for the Initial Qualification, HR Learning Services will provide the appropriate test document for qualification under this requirement.

Initial qualification is supported by the appropriate knowledge and skill through:

- Formal training by HR Learning Services
- Structured on-the-job training (OJT)
- OJT mentoring by a qualified person
- Written Test

### Subsequent Qualification

The subsequent evaluation of an individual's qualification to perform one or more covered tasks (after a transitional or initial qualification to perform the same covered tasks) is done at intervals established by the company. The subsequent qualification process may utilize different evaluation criteria than were used for transitional or initial qualification.

The schedule will be designed to stagger or cycle the evaluations to avoid an unreasonable number of re-qualifications in any one year.

The Company will use a written test and performance based evaluations when conducting subsequent qualifications.

### Abnormal Operating Conditions

Abnormal operating condition means a condition identified by PG&E that may indicate a malfunction of a component or deviation from normal operations that may:

- indicate a condition exceeding design limits; or
- result in a hazard(s) to persons, property, or the environment.

Below are examples of abnormal operating conditions that employees must recognize and react to, but are not limited to those listed below.

#### Pressure Related Conditions

- Uncontrolled or unauthorized leakage of natural gas.
- Pipeline pressure deviations exceeding design limits.
- Conditions requiring shutdown or pressure reduction in a pipeline.

#### Material / Equipment Failure Conditions

- Material failure or defect.
- Malfunctioning component or component failure.
- Loss of protection on the pipeline.

#### Facility Damage Conditions

- Pipeline system damage.
- Unintended movement or abnormal loading on the pipeline.

#### Facility Instrumentation or Control Systems Conditions

- Emergency alarms.
- Activation of a pipeline safety device.
- Unexplained gas facility status change.

**LOCAL GAS OPERATOR QUALIFICATION PLAN  
COORDINATOR INSTRUCTIONS FOR ADMINISTERING THE  
GAS\_0134 MONTHLY & QUARTERLY REVIEW.**

**Coordinator instructions for supervisors and superintendents. (Monthly)**

1.	Distribute GAS_0134 packet to all individuals present.
2.	Review GAS_0134 content in detail and answer all questions.
3.	Provide OQ sign-in roster.
4.	Submit original OQ sign-in roster to Heidi Haas. Make 2 copies and submit one to your superintendent, and keep one for yourself.
5.	Review monthly metric to ensure compliance.

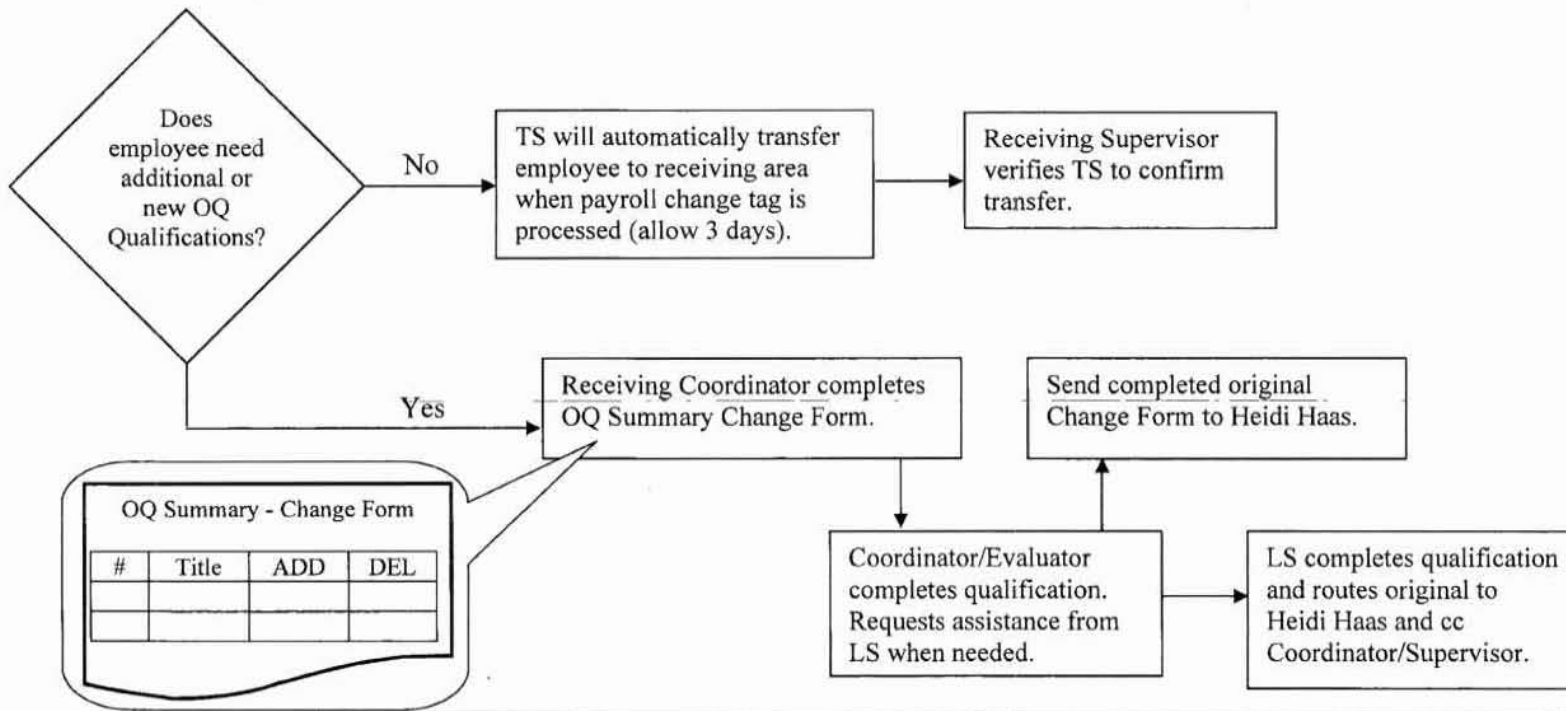
**Coordinator instructions for bargaining unit employees. (Quarterly)**

1.	Distribute GAS_0134 packet to all individuals present.
2.	Distribute respective Employee Gap Analysis (EGA) to all employees present. Review EGA with employees.
3.	Review GAS_0134 content in detail and answer all questions.
4.	Provide OQ sign-in roster.
5.	Submit original OQ sign-in roster to Heidi Haas. Make 2 copies and submit one to your superintendent, and keep one for yourself.
6.	Review quarterly metric to ensure compliance.

# OQ Change of Area Process

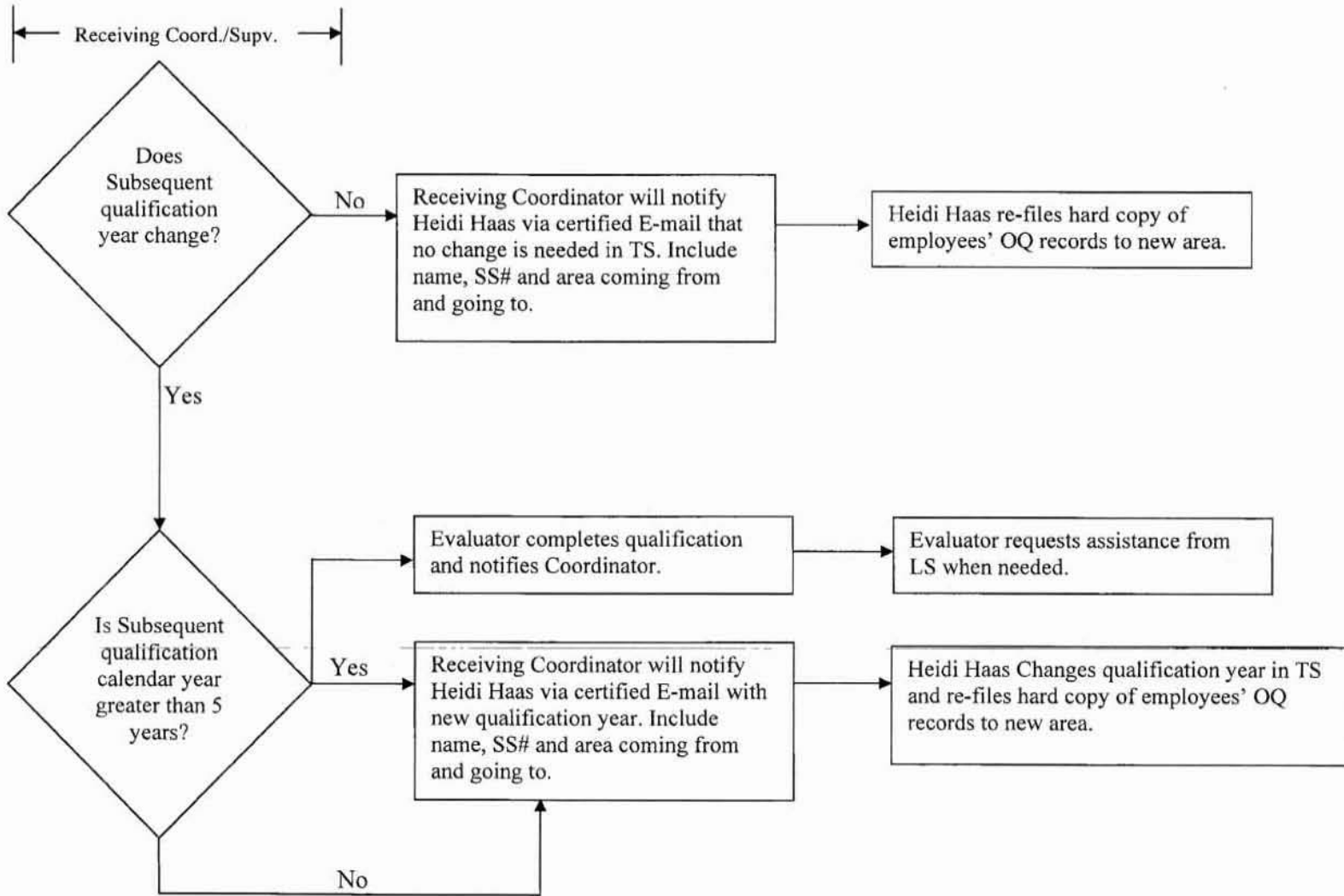
**Process Map** Use the below procedure/flowchart when OQ employees are transferring between areas.

Initiation Process		
Sending Supervisor	Sending Coordinator	Receiving Supervisor
<ul style="list-style-type: none"> <li>Notifies area coordinator of transfer or receipt</li> </ul>	<ul style="list-style-type: none"> <li>Notifies Heidi Haas of transfer or receipt</li> <li>If employee is transferring to any other department other than Gas, Coordinator to complete and submit Change Form.</li> </ul>	<ul style="list-style-type: none"> <li>Reviews employee's OQ records in Training Server (TS)</li> <li>Determines if any additional qualifications are needed, or</li> <li>If subsequent qualification year is in alignment with receiving area</li> <li>Notify area coordinator of transfer.</li> </ul>



*Continued on next page*

# OQ Change of Area Process, Continued





**Utility - OQ Subtask List  
(Level 1 and 2 Detail)**

**UOQC**

	<b>Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>
<b>Cast Iron Repair</b>	01-01.00	Bell Joints and Spigot Seals	192.753
	01-02.00	Protect Cast Iron Pipeline	192.755
	01-03.00	Operations and Maintenance	192.489
<b>*Repair/Replace Distribution Pipeline</b>	02-01.00	Mechanical Repairs	192.703
	02-02.00	Weld Repairs	192.703
	02-03.00	Pipe Squeezing Steel	192.703
	02-04.00	Pipe Squeezing - Plastic	192.703
	02-05.00	Pipe Squeezing - Plastic (1/2" and 1")	192.703
	02-06.00	Abandonment or Deactivation Pipeline Facilities	192.727
	02-07.00	Pipeline Replacement	192.703
<b>Corrosion Control</b>	03-01.00	Distribution Pipe Coatings – Tape / Paint	192.461
	03-02.00	Transmission Pipe Coatings – All	192.461
	03-03.00	Rectifier Reads	192.461
	03-04.00	Atmospheric Corrosion / Monitor	192.479 / 481
	03-05.00	Pipe Inspection	192.459
	03-06.00	Pipe-to-Soil Reads	192.465
	03-07.00	Cathodic Protection Maintenance	192.473
	03-08.00	Galvanic Anode Maintenance	192.473
	03-09.00	Internal Corrosion / Monitor	192.475 / 477
	03-10.00	Rectifier Maintenance	192.465D
	03-11.00	Testing/Inspecting for Adequate Electrical Isolation	192.467D
<b>Leak Test</b>	04-01.00	Soap Test / Stand-up Test	192.725
<b>Locate Facilities</b>	05-01.00	Mark and Locate Facilities	192.614 (a) / (5)
	05-02.00	Standby Pipeline	192.614 (6 C)
<b>*Tapping Pipelines Under Pressure</b>	06-01.00	Operate Service Tee Tapping / Plugging Equipment (3/4" to 2")	192.627
	06-02.00	Operate Top Tapping / Plugging Equipment (3/4" to 4")	192.627
	06-03.00	Operate Split Control Tapping / Plugging Equipment (3/4" to 2")	192.627
	06-04.00	Operate Split Control Tapping / Plugging Equipment (3" to 8")	192.627
	06-05.00	Operate Split Control Tapping / Plugging Equipment (10" to 12")	192.627
	06-06.00	*Perform Hot Tapping / Branch Connection	192.627
	06-07.00	TDW Shortstop II – 6" to 12"	192.627
	06-08.00	Low Pressure / Semi-High Bagging Operations	192.627

\*Welding and Plastic qualifications/re-qualifications are maintained under separate DOT Subpart E and Subpart F Requirements respectively

\*\*Welding qualifications/re-qualifications are maintained under separate DOT Subpart E Requirements.



**Utility - OQ Subtask List  
(Level 1 and 2 Detail)**

**UOQC**

<b>Task</b>	<b>Input Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>
	06-09.00	Low Pressure Drilling / Threading Operations	192.627
	06-10.00	Operate Riser Valve Changer Equipment	192.627
	06-11.00	Low Pressure Foaming Operations	192.627
	06-12.00	TP - Operate Service Tee Tapping / Plugging Equipment (3/4" to 2")	192.627
	06-13.00	PE Tapping Tee (outlet sizes 1/2" to 2")	192.151
	06-14.00	PE Hot Tapping / Branch Connection (McElroy), (2" and 4")	192.367
	06-15.00	PE Hot Tapping / Branch Connection (Christie), (1/2", 1" and 2")	192.367
<b>Purging of Pipelines</b>	07-01.00	Air Purging	192.629 (a)
	07-02.00	Gas Purging	192.629 (b)
	07-03.00	Inert Purging	192.629 (b)
	07-04.00	Air Mover Operations	N/A
<b>Patrolling</b>	08-01.00	Inspect and Maintain Transmission Line	192.613
	08-02.00	Inspect and Maintain Distribution Line	192.705
	08-03.00	Maintain Line Markers	192.707
<b>Leak Survey / Investigation</b>	09-01.00	Conduct Survey	192.706, 723
	09-02.00	Leak Investigation	192.706, 723
	09-03.00	F. S. Leak Investigation	192.703 (c)
	09-04.00	Leak Survey – (OMD)	192.706, 723
	09-05.00	Leak Survey – (RMLD)	192.706, 723
	09-06.00	Hydrogen Flame Ionization – Heath DP3 & DP4	192.706, 723
	09-07.00	Hydrogen Flame Ionization – OVA-88	192.706, 723
<b>**Transmission Line Repairs</b>	10-01.00	Repair Procedures	192.713 (1)
	10-02.00	Testing Welds	192.713 (2)
	10-03.00	In-Service Welding (INACTIVE)	192.715 (b)
	10-04.00	Transmission Line Repairs – Mechanical	192.711, 192.713, 192.717 (b)
<b>Inspect and Test Remote Control Shutdown Devices</b>	11-01.00	Inspect / Test/ Compressor Remote Shutdown Devices	192.731 (c)
	11-02.00	Test Remote Control Devices	192.731 (c)

\*Welding and Plastic qualifications/re-qualifications are maintained under separate DOT Subpart E and Subpart F Requirements respectively

\*\*Welding qualifications/re-qualifications are maintained under separate DOT Subpart E Requirements.

**Utility - OQ Subtask List  
(Level 1 and 2 Detail)**

**UOQC**

<b>Task</b>	<b>Input Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>
Starting, Operating and Shutdown Compressor Units	12-01.00	Start / Operate / Shutdown Turbine - Local	192.605 (b, 7)
	12-02.00	Start / Operate Turbine Motor Remote	192.605 (b, 7)
	12-03.00	Start / Operate / Shutdown - Recip / Local	192.605 (b, 7)
<b>Maintaining Gas Detection and Alarms Systems</b>	13-01.00	Inspect / Test / Maintain Gas Detection / Alarms	192.736 (a)
	13-02.00	Remote System Monitoring	192.736 (b, 1)
<b>Inspect and Test Pressure Regulating and Limiting Devices</b>	14-01.00	Maintain / Operate Regulators (includes valves operating as regulators regardless of service)	192.739
	14-02.00	Inspect / Test Pressure Reg. And Limiting Devices	192.739
Monitor Telemetry and/or Pressure Recording Devices	15-01.00	Monitor System Conditions (SCADA)	192.741
	15-02.00	Monitor Distribution Recording Devices	192.741
	15-03.00	Monitor Telemeter &/or Pressure Devices	192.741
	15-04.00	Inspect and Maintain SCADA RTU's	192.741
Inspect and Test Relief Devices	16-01.00	Test / Maintain Relief Devices	192.739/ 743
Valve Maintenance	17-01.00	Inspect / Maintain Emergency Valves	192.745 / 747
	17-02.00	Remote Valve Operations (SCADA)	192.745 / 747
Vault Maintenance	18-01.00	Inspect Vault	192.749 (a)
Odorization	19-01.00	Inspect & Maintain Odorant Equipment	192.625
	19-02.00	Conduct Sampling of Odorant	192.625

\*Welding and Plastic qualifications/re-qualifications are maintained under separate DOT Subpart E and Subpart F Requirements respectively

\*\*Welding qualifications/re-qualifications are maintained under separate DOT Subpart E Requirements.

2008 OQ Review Schedule

AREA	Jan	Feb	Mar	Aprl	May	June	July	Aug	Sept	Oct	Nov	Dec
1		X			X			X			X	
2	X			X			X			X		
3	X			X			X			X		
4			X			X			X			X
5		X			X			X			X	
6 & Paint Dept.			X			X			X			X
7			X			X			X			X
GC		X			X			X			X	
FS	X			X			X			X		
EDGT M&C			X			X			X			X
GSO		X			X			X			X	

PG&E	Monthly Review of DOT Operator Qualification Program
Location	
	Identify Covered Tasks
	Review OQ Gap Analysis Report
	Any new employees in Your District?
	Did you complete the Change of Area process and/or develop an individual OQ plan?
	Any Contractors or Hiring Hall individuals performing covered tasks?
	Did you inform the System Gas Operator Qualification Program Coordinator (SGOQPC) that you have Contractors performing covered tasks in your district?
	Only Qualified Employees Performing Covered Tasks
	Are All Individuals performing covered tasks able to identify and react appropriately to an AOC?
	All Unqualified individuals when performing covered tasks are directed by qualified employees
	Did any individual's performance contribute to an incident?
	Have you any reason to believe that any individual is no longer qualified to perform a covered task
	Have you communicated changes that affect covered tasks to the individuals performing those tasks
	When will your employees require subsequent qualification

## TRAINING SERVER ROSTER REPORT

COURSE NAME: _____	COURSE CODE: <u>GAS</u> - _____	CLASS DATE: _____
ROSTER LOCATION: <u>San Ramon Valley Conference Center</u>		START TIME: _____ END TIME: _____
TRAINING LOCATION _____	INSTRUCTOR NAME: _____	INSTRUCTOR CORP ID: _____

	CORP ID	SSN	EMPLOYEE <i>(please print legibly)</i>	SIGNATURE	PCC	DEPARTMENT	SUPERVISOR'S NAME <i>(please print legibly)</i>
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							

At class completion: (1) mail original roster to Heidi Haas at 3301 Crow Canyon Road, San Ramon Valley Conference Center and (2) file copy of this roster with the Local Gas Operator Qualification Plan Coordinator (LGOQPC).  
Rosters filed locally should be retained for a three year period following the date of training and are subject to audit.

ATTACHMENT D

**Gas T&R Safety Stand up Meeting  
San Carlos  
July 24, 2008**

7:00AM:	
Dennis McCorkle	Tailboard Topic: Read APR Section 3-7, Rule # 322, "Freeway Driving". (passed around sign in sheet).
Dennis McCorkle	Tailboard Topic: Read email to the group from Mark Hughes; Safety Flash Area 1 Incident Investigation Follow-up Communication. Incident date 5/18/08, Area 1 GC Electric Dept.
Dennis McCorkle	Tailboard Topic: Read to the group from Mark Hughes; Safety Flash Area 5 Incident Investigation Follow-up Communication. Incident date 6/13/08, Area 5.
Dennis McCorkle	Tailboard Topic: Read email to the group Todd Arnett, Gas blow down silencers.
Dennis McCorkle	Tailboard Topic: Read to the group Industrial Ergonomics Newsletter.
Dennis McCorkle	Tailboard Topic: Read to the group letter dated July 15 <sup>th</sup> , 2008 regarding new work processes and flame pack resistant clothing for impacted employees.
Dennis McCorkle	Tailboard Topic: Read email to the group The Bulletin – July 22, 2008.
Dennis McCorkle	Tailboard Topic: Read to the group Driver Check, Incident Report# 1218630 dated 7/23/2008.
Dennis McCorkle	Tailboard Topic: Read email to the group from Ott Reid: June 2008 T&D ELT "Meeting at a Glance".
Dennis McCorkle	Tailboard Topic: Read email to the group from Mitch Kirk: Gas Multiplier Project (Phase 2) Tracking/xs.
Dennis McCorkle	Went over with the group the CPUC Audit finding from last week. Specifically, District Regs, Cathodic Protection at Reg Stations, DRS A-70 HMB.
Dennis McCorkle	Read our vision and values: We act with Integrity and communicate Honestly and Openly. "Our Goals", Delighted customer, Energized Employees, Rewarded Shareholders.
Dennis McCorkle	Reminder to the group on July 30 <sup>th</sup> , 2008 there will be a "Safety Calibration Meeting." BBQ luncheon will be served after the meeting.
Dennis McCorkle	Asked the group if there are any Near Miss: None
Have a Safe Day!	

Attendees:

John Dianos  
Mike Kern  
Steve Poulo  
Brad Schuback  
Mike Hickey

Bob Dyson  
Vern Lopes  
Reggie Pryor  
Walter Lee  
Ed Sickinger

Sally Wong  
Tom Ross  
Craig Fazackerley  
Anthony Montalvo

R000

SAFETY RULE: FREEWAY DRAWING.

SECTION 3-7 RULE 322.

OUR VISIONS = VALUES

"USE NET WITH INTEGRITY AND COMMERCIAL HONESTY AND OPENLY"

"OUR GOALS" DELECTED CUSTOMERS, EMPLOYEES  
REGULATED SHAREHOLDERS.

WENT OVER THE CPUC AUDIT FINDINGS FROM  
LAST WEEK.

SPECIFICALLY:

DISTRICT REGS WITH RELIEFS NO DOCUMENTATION  
ON 2 RELIEFS, WILL BE CORRECTED

HMB REG MONITOR FAILED

CATHODIC PROTECTION AT REG STATIONS BELOW 850MV.  
3- BELOW 850MV 1- ABOVE 1600MV.

WILL BE CORRECTED.

DRS A.79 HMB MONITOR FAILED.

"B" MAINT COMPLETED ON 7-22-08





## GAS T&R Stand up Safety Meeting

Date: JULY 24, 2008

	Name	Signature	Classification	Lan ID	Supervisor
1	Dianos, John	<i>[Signature]</i>	GAS MECH	JGD6	D. McCorkle / Poulo
2	Dyson, Robert	VACATION			
3	Fazackerley, Craig	<i>[Signature]</i>	APP. MECH	CYFO	" "
4	Kern, Mike	<i>[Signature]</i>	CORR MECH.	MKG6	S. Poulo
5	Lee, Walter	<i>[Signature]</i>	" "	WXL8	" "
6	Lopes, Vern	<i>[Signature]</i>	G.C.T	VDL1	S. Poulo
7	Poulo, Steve	<i>[Signature]</i>	GAS MECH	SGP4	
8	Pryor, Reggie	<i>[Signature]</i>	CORROSION mech	RXPY	" "
9	Ross, Tom	<i>[Signature]</i>	Corrosion mechanic	Hr0	D. McCorkle
10	Schuback, Brad	<i>[Signature]</i>	MTC	BRS1	" "
11	Wong, Sally	<i>[Signature]</i>	OPR CKTYP	SLWG	" / Pat Vasquez
12	Hickey, Mike	<i>[Signature]</i>	MTC Mech	MXH1	S. Poulo D. McCorkle
13	Sickinger, Ed	<i>[Signature]</i>	mech	ERS9	" "
14	Montalvo, Anthony	<i>[Signature]</i>	CORROSION MECH.	AJMI	" "
15					
16					
17					
18					
19					
20					
21					

ATTACHMENT E



**District Regulator Station Maintenance Record**

Gas FM Station No. A-79 Division PENINSULA Wall Map, Plat, Block 3275 H 8

Location MAIN ST. & H.M.B. RD, HALF MOON BAY Stage \_\_\_\_\_

Associated FM No(s). \_\_\_\_\_

Run: LEFT RIGHT					
Employee Initial: <u>BB</u> <u>BB</u>					
Date: <u>7/22/08</u> <u>7/22/08</u>					

UC Standard 86381 Paragraph	Task Description	Result							
A1A	Fire Valve Accessible and Operated	y,n							
A1B,C	Vault Cover and Surroundings	g,p							
A1D	Gas Leak Test	(% LEL)	g						
A1F	Vault Inspection	g,p	g						
A1E	Ventilating System & Relief Stacks	g,p							
A1H	Locking Devices Present And Operational	y,n							
A2G	Station Valves Checked	y,n	y						
A1G	Piping Condition	g,p	g						

As Found and As Left Settings			AF	AL	AF	AL	AF	AL	AF	AL	AF	AL
A2B	Filter Differential	PSI,W.C.										
A2C	Regulator Pressure Setting	PSI, W.C.	47	47								
	Secondary Pilot Setting (Regulator)*	PSI, W.C.										
A2E	Regulator Lockup	y,n										
	OPP Upstream or Downstream	U,D	D	D								
A2D	Monitor Control Pressure	PSI, W.C.	32	32								
A2E	Monitor Lockup	y,n	y									
A2C	Working Monitor Pilot Pressure	PSI, W.C.										
A2D	Secondary Pilot Setting (Monitor)*	PSI, W.C.										
A2D2	Relief Cracking Pressure	PSI, W.C.										
A2D3	Automatic Shutoff Overpressure Setting	PSI, W.C.										
	Automatic Shutoff Underpressure Setting	PSI, W.C.										
A2F	Inspect and Clear Vent Lines	y,n	y									
A3B,C	Pressure Recorder- 2pt	2	y									
(OVER)	Was Any Corrective Maintenance Done?	y,n	y									
A2H	Return All Equipment, Valves and Locks to Normal Operation and Position	y,n	y									

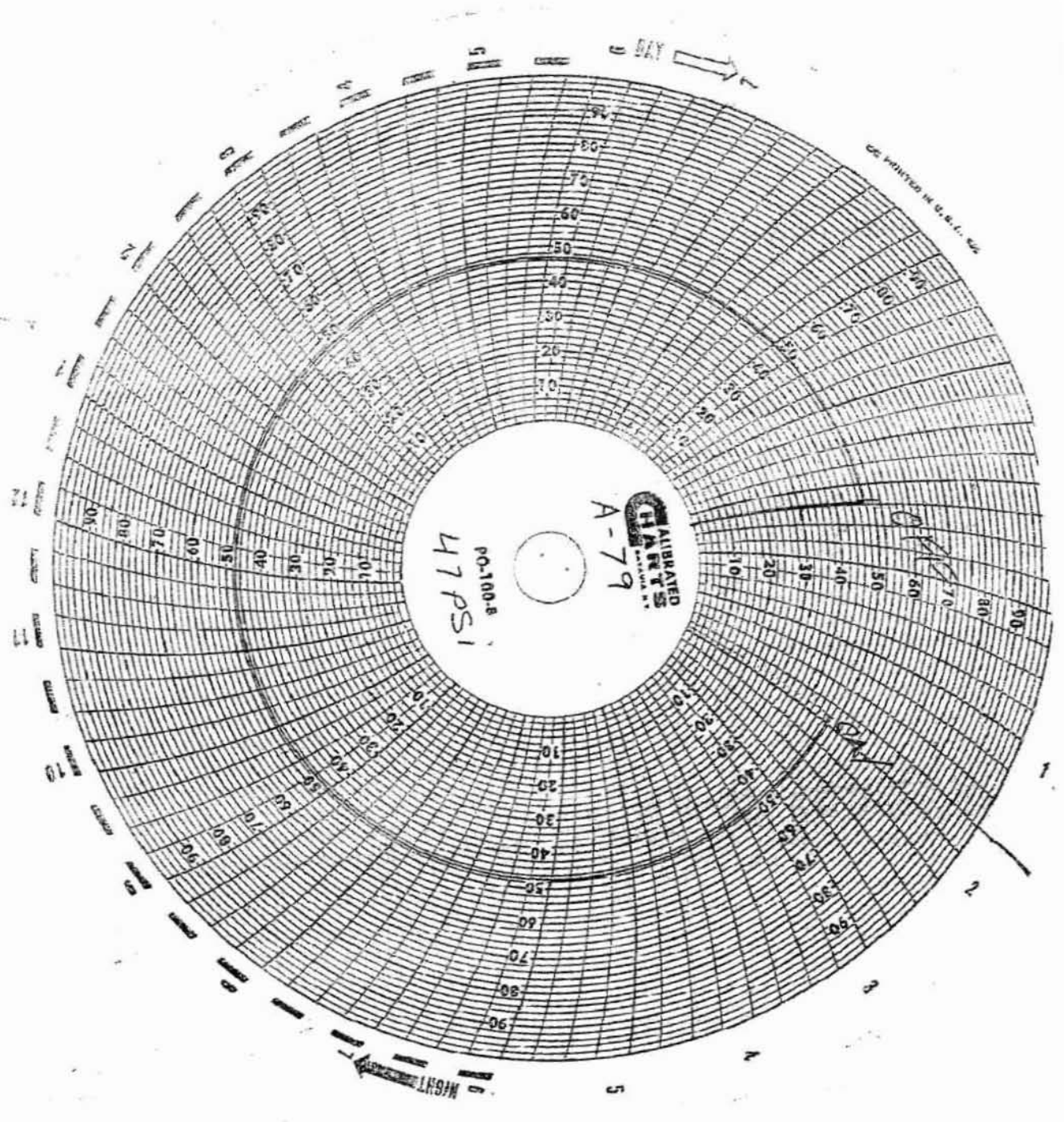
A2B2	Station Filter - Internal	y,n	n									
B4A,B,C,D	Regulator	y,n										
B4A,B,C,D	Overpressure Protection Device	y,n	y									
B3B	Pressure Test Vent & Diaphragm (L.P.)	y,n	y									
B2A,B,C	Regulator Pilot Control Loop (s)	y,n										
D,E	OPP Pilot Control Loop (s)	y,n	y									
	Working Monitor Pilot	y,n	y									

MACP, Station Drawings and Data Sheet Been Updated	y,n	y										
--	-----	---	--	--	--	--	--	--	--	--	--	--

Enter yes, no; good, poor; pressure or % LEL; control loop includes filter, variable restrictor, and tubing; (line out all non-applicable boxes). On back of this form show any corrective work done, other than inspection and testing.

1. Pressure setting changes and reason
  2. Parts replacement and reason
  3. Component replacement (District Regulator Data Sheet must be updated)
  4. Leak repairs or equipment repair
  5. Miscellaneous work such as pumping pits, touch-up painting, filter blowdown or cleanout, etc.
  6. Valve Push and/or primed
- \* Secondary Pilots used for special applications.





FM#A-79 Maintenance Type \_\_\_\_\_  
On Date 7/22/08 Time 1:45 PM By \_\_\_\_\_  
Off Date 7/23/08 Time 11:12 By \_\_\_\_\_  
Serial# 8805194 Pressure 47 PSI  
Reviewed By DKWC Date 7-24-08

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



May 22, 2008

Mr. Glen Carter  
Director, Gas Engineering  
375 North Wiget Lane  
Walnut Creek, CA 94598

SUBJECT: GO 112-E Audit of Hollister/Milpitas District, March 17-21, 2008

Dear Mr. Carter:

On behalf of the California Public Utilities Commission's Utilities Safety and Reliability Branch, Stephen Artus and I conducted a General Order 112-E audit of Pacific Gas & Electric's Hollister/Milpitas District from March 17-21, 2008.

The audit included review of the records at both the Hollister and Milpitas service terminals for the years 2006 and 2007, and a field inspection of various segments of their gas transmission system. A Summary of Inspection Findings is included with this letter.

Within 60 days of your receipt of this letter, please provide a written response indicating measures taken by PG&E to address the violations and issues/concerns noted.

If you have any questions, you may contact me at (415) 703-2055.

Sincerely,

Aimee Dalusong  
Utilities Engineer  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division

Enclosure: (1) Summary of Inspection Findings

Cc: Mr. Stephen Artus, CPSD/USRB  
Mr. Rich Arita, PG&E Quality Assurance

## SUMMARY OF INSPECTION FINDINGS

### A. Areas of Violations

#### 1. 49 CFR, Part 192, Section 192.491 – Corrosion control records

§192.491(c) states:

*“Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate...that a corrosive condition does not exist.”*

##### a) Pipe span L-300A, MP 468.97

Our review of cancelled PLM work request ID 129063 created on 9/6/2007 indicated a priority 1 request describing the condition of span as “Pitting is present. Wrapping is not acceptable. Structure is not acceptable.” This PLM request shows as “Cancelled” with no work completion noted. It was explained to us that for a short period after this work request was created, the District was told to use a different work tracking system. As a result, new work requests were created to replace pending PLM requests from the previous work tracking system. Further, they explained that the new work tracking system was discontinued and that they were directed to switch back to the old work tracking system. Since the old PLM request ID 129063 was cancelled, a new request was created as PLM work request ID 135637. PLM work request ID 135637 shows a priority 3 without the original description of pitting and wrapping condition as that indicated in PLM work request ID 129063.

The work request trail described above does not show in detail what was done to address the condition of the span or actions taken that allowed it to be downgraded from a priority 1 to a priority 3.

### B. Issues/Concerns

#### 1. L300A, Span at MP 483

During our field survey, we observed cracks and degradation on the pipe wrap and paint on the north end air-to-soil transition of the span. Review of the patrol record for exposed piping and spans dated 5/10/2007 did not have this condition noted for this location.

#### 2. During inspection of PLS 6B in Hollister, we found two ETS at the pressure limiting station. One ETS near the station gate had a marking of MP 436.84, with a pipe-to-soil reading of -1077mV. An unmarked ETS was observed on the opposite side of the station with a pipe-to-soil read of -1202 mV. When asked about the unmarked ETS, the PG&E technician taking the read was uncertain as to which pipe it is connected to.

Also, during field review in Milpitas we observed some ETS locations with either broken lead wires or missing pipeline and mile point ID markings.

Please explain how PG&E maintains its ETS, including specific standard or company practice that addresses their maintenance, to ensure compliance with 192.469 which states:



*“Each pipeline under cathodic protection required by this subpart must have sufficient test stations or other contact points for electrical measurement to determine adequacy of cathodic protection.”*

3. We reviewed PLM work request ID 108201 and 108204 for a leak found on L-300A/B south valves. The work requests were both completed with work performed by individuals from General Construction (GC). However, the names of GC crews that performed the repair work are not specified on the PLM work request. We believe that the repair work performed were covered tasks as defined in 192.801 (b). Without the names of the individuals performing the work, we were unable to verify the qualification of the GC employees.

For instances similar to the above, please explain how PG&E ensure compliance with 192.805(b) which states:

*“Ensure through evaluation that individuals performing covered tasks are qualified.”*



**Pacific Gas and  
Electric Company™**

**Glen Carter**  
Director, Gas Engineering  
Gas Transmission and  
Distribution

375 N. Wiget Lane, Suite 170  
Walnut Creek, CA 94598

925-974-4231  
Internal: 583-4231  
Fax: 925-974-4220  
Internet: GECj@pge.com

August 1, 2008

Ms. Aimee Dalusong  
Utilities Safety and Reliability Branch  
Consumers Protection and Safety Division  
California Public Utilities Commission  
505 Van Ness Avenue, 2<sup>nd</sup> Floor  
San Francisco, CA. 94102-3298

Dear Ms. Dalusong:

State of California – Public Utilities Commission  
General Order 112-E Inspection  
Milpitas/Hollister Districts

The following is our response to your letter dated May 22, 2008, which transmitted the results of the March 17 – 21, 2008 General Order 112-E Inspection of Milpitas and Hollister Districts.

#### **A. Areas of Violations**

##### **1. 49 CFR, Part 192, Section 192.491 – Corrosion control records**

§192.491(c) states:

*“Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate...that a corrosive condition does not exist.”*

##### **a) Pipe span L-300A, MP 468.97**

Our review of cancelled PLM work request ID 129063 created on 9/6/2007 indicated a priority 1 request describing the condition of span as “Pitting is present. Wrapping is not acceptable. Structure is not acceptable.” This PLM request shows as “Cancelled” with no work completion noted. It was explained to us that for a short period after this work request was created, the District was told to use a different work tracking system. As a

result, new work requests were created to replace pending PLM requests from the previous work tracking system. Further, they explained that the new work tracking system was discontinued and that they were directed to switch back to the old work tracking system. Since the old PLM request ID 129063 was cancelled, a new request was created as PLM work request ID 135637. PLM work request ID 135637 shows a priority 3 without the original description of pitting and wrapping condition as that indicated in PLM work request ID 129063.

The work request trail described above does not show in detail what was done to address the condition of the span or actions taken that allowed it to be downgraded from a priority 1 to a priority 3.

#### PG&E RESPONSE:

Per PG&E's Exposed Pipe Coating Program for CGT-Owned Transmission Lines, pipeline span inspections involve assessment of both exposed piping and air/soil transitions. The exposed piping assessment requires employees to inspect for corrosion, support and paint condition on the exposed section of the span. The air/soil transition assessment requires employees to inspect for corrosion and condition of wrap and paint at the transition where the span enters the ground.

For the air/soil transitions, Pipeline Maintenance (PLM) scheduling program automatically generates a priority 1 work request whenever Pipe Integrity is entered as not being OK. On September 6, 2007, the district's pipeline mechanic, Dave Boyd, noticed signs of corrosion underneath the pipe coating near the air/soil transition of the span at MP 468.97A. The pipeline integrity was entered in PLM as not being OK. This automatically generated a work request (WR 129063) and a failure note in the report as "Pitting is present". Work Request 129063 was inadvertently canceled by the local maintenance planner on November 11, 2007.

As a result of this issue, the PLM program was modified as of June 17, 2008 to automatically contact the appropriate Gas Maintenance Supervisor (GMS) via email whenever any transitions & coating work request gets canceled. The GMS will be instructed to review the work request to ensure that it is appropriate to cancel the work request and the reason for canceling is included.

As a result of this CPUC audit, our Supervising Corrosion Engineer inspected the coating condition at MP468.97A on April 24, 2008. Some surface rust was noted at various locations, but there was no pitting present. However, the Corrosion Engineer understands how it could have been mistaken. There was a section on the downstream transition coating where the paint was peeling. It looked like it could be pitting underneath the paint. However, once he cleaned the area up beneath the paint, the pipe wall did not have any corrosion. The corrosion issue is considered non-existent at this span.

During the inspection of the air/soil transition at the MP 468.97A span, Dave Boyd also inspected the exposed piping portion of the span and determined that the support is leaning and paint is in poor condition and entered this information on the Exposed Piping and Span Annual Inspections form (F4111C). Based on this information, the Gas Maintenance Superintendent created a work request 135637. Poor condition of paint without the presence of corrosion is rated as a priority 3, which means it will be scheduled beyond 7 days. Budgeting and Prioritizing of exposed pipe re-coating is done centrally by the Corrosion Engineering group.

#### **B. Issues/Concerns**

1. L300A, Span at MP 483

During our field survey, we observed cracks and degradation on the pipe wrap and paint on the north end air-to-soil transition of the span. Review of the patrol record for exposed piping and spans dated 5/10/2007 did not have this condition noted for this location.

PG&E RESPONSE:

On April 24, 2008, our Supervising Corrosion Engineer inspected the coating condition at MP483.00A. He rated the condition of the coating as "poor"; however, there are no integrity issues with the span or transition. This is not unusual for the condition of the coating to degrade over a 10 month period.

2. During inspection of PLS 6B in Hollister, we found two Electrolysis Test Stations (ETS) at the pressure limiting station. One ETS near the station gate had a marking of MP 436.84, with a pipe-to-soil reading of -1077mV. An unmarked ETS was observed on the opposite side of the station with a pipe-to-soil read of -1202 mV. When asked about the unmarked ETS, the PG&E technician taking the read was uncertain as to which pipe it is connected to.

Also, during field review in Milpitas we observed some ETS locations with either broken lead wires or missing pipeline and mile point ID markings.

Please explain how PG&E maintains its ETS, including specific standard or company practice that addresses their maintenance, to ensure compliance with 192.469 which states:

*"Each pipeline under cathodic protection required by this subpart must have sufficient test stations or other contact points for electrical measurement to determine adequacy of cathodic protection."*

PG&E RESPONSE:

To meet the requirement in Standard S4133: Corrosion Control of Gas Transmission Facilities, Attachment 1 (2F) to have one ETS at least every 1 mile where practical; the ETS near the station gate of PLS 6B is used for the official pipe-to-soil of Line 300B. It is marked with "MP 436.84" to ensure that it will be read annually. The second ETS located on the opposite side of the station is used to determine the current span when troubleshooting CP issue associated with the line. Since an ETS is located at two completely different locations inside of the station, it is not unusual to observe different pipe-to-soil readings due to such factors as soil conditions, localized moisture variations, proximity to other substructures, etc. It is not surprising to find different pipe-to-soil potentials at two different locations inside such a cluttered station.

Within the Milpitas/Hollister district as well as many other locations, it is not uncommon to find the ETS posts located in open fields to be broken or caps missing due to cattle or farming activities. If the post is broken, normally the wires are still intact and attached to the pipe. As we conduct annual pipe/soil readings, our employees correct these issues as they are found.

3. We reviewed PLM work request ID 108201 and 108204 for a leak found on L-300A/B south valves. The work requests were both completed with work performed by individuals from General Construction (GC). However, the names of GC crews that performed the repair work are not specified on the PLM work request. We believe that the repair work performed were covered tasks as defined in 192.801 (b). Without the names of the individuals performing the work, we were unable to verify the qualification of the GC employees.

For instances similar to the above, please explain how PG&E ensure compliance with 192.805(b) which states:

*"Ensure through evaluation that individuals performing covered tasks are qualified."*

PG&E RESPONSE:

PLM Work Requests 108201 and 108204 were created on June 2, 2006. Work Request 108201 was to cut off and remove the old Unibolt flange at the blow off stack at MP 414.80 on TL-300A, and replace it by welding on a 12-inch blind flange. This old Unibolt flange was prone to leakage. The local Gas Control Technician, Oscar Martinez, was assigned this work request and the OQ skill required was listed as 07-01, Purging of Pipelines – Air Purging. Please see the attached file listing Oscar Martinez's OQ qualifications. The Operator Qualification sub-tasks involved in this work request consist of: 04-01 – Soap Test/Stand-up Test, 07-01 – Air Purging, 09-02 – Leak Investigation, and 17-01 – Inspect & Maintain Emergency Valves. Oscar Martinez was qualified for all of these sub-tasks when this work was performed. Oscar utilized these OQ qualifications to isolate and clear the blow down stack, and continued to monitor the work site while the two GC Welders cut the isolated stack, removed the old flange, fitted and welded on a new 12-inch blind flange. These two Welders, Travis Massey and William Henderson, were qualified to weld on the pipeline per CFR 192.227 and PG&E's Gas Standards & Specifications D-30.2. Cutting of pipe with a welding torch and welding on a de-pressurized pipe are not OQ-covered tasks per PG&E's Operator Qualification Basic Plan and does not meet the four-part definition as specified in CFR 192.801.

Work Request 108204 was to re-coat the blow off stack at the soil-to-air transition. The OQ skill listed for this work request was 03-02 – Transmission Pipe Coatings. It was assigned to Oscar Martinez, who in turn arranged for a GC Paint Crew to prep and re-coat the pipe. The GC Paint Crew consisted of Paul Parslow and Randy Redman. Please see the attached files listing their OQ qualifications. Although both employees' OQ qualifications have lapsed as of the end of 2006, both were qualified for 03-02 – Transmission Pipe Coatings at the time the work was completed.

A reminder email has been issued on July 7, 2008 to all PLM users that documentation of completed work requests must include all employees' names involved in the work and additional OQ skills that are needed to complete the work be specified on the work request. Also, a Regulatory News Flash program is soon to be implemented and this topic will be included.

If you have any questions concerning this report, please contact Larry Berg at (925) 974-4084.

Sincerely,

/S/  
Glen Carter

Attachments

CC: Julian Ajello, California Public Utilities Commission  
Raffy Stepanian, California Public Utilities Commission

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



November 18, 2005

Mr. Kevin J. Dasso  
Sr. Director, Engineering & Planning  
Pacific Gas & Electric Company (PGE)  
123 Mission Street  
Mail Code H15B  
San Francisco, CA 94105

**SUBJECT:** Notice of General Order 112e Inspection Violations in PGE's Milpitas and Hollister Transmission District.

On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission, Jadwinder Singh, Aimee Dalusong, and I conducted a General Order 112e Inspection of Milpitas and Hollister Transmission Districts (the district) between October 31 and November 4, 2005. The inspection included an audit of your records for the period of 2003-2004.

During the inspection, we identified violations of one or more General Orders. A copy of the inspection summary itemizing the violations is enclosed. Within ten business days from the receipt of this letter, please advise me of all corrective measures taken by the Utility regarding the above violations. Please provide the electronic or hard copy records showing the correction date for each violation.

The Utility has full responsibility for maintaining compliance with applicable requirements. (See, for example, Public Utilities Code sections 451, 702, and 2106-2108.) Please take any additional precautions necessary to protect the public and employees from harm until violations are corrected. The ten-day deadline for responding to this letter does not alter the utility's ongoing duty to maintain equipment and facilities that promote the safety and health of patrons, employees and the public, nor its accountability under the Public Utilities Code and other applicable law.

If you have any questions, please contact me at (415) 703-1307.

Sincerely,

Robert M. Turner  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division

Enclosed: Inspection Summary

## INSPECTION SUMMARY

### I. Violations

#### A. Records Inspection.

The audit of the district records found the following:

1. **§192.467** *External corrosion control: Electrical isolation.*

(a) *Each buried or submerged pipeline must be electrically isolated from other underground metallic structures, unless the pipeline and the other structures are electrically interconnected and cathodically protected as a single unit.*

(d) *Inspection and electrical tests must be made to assure that electrical isolation is adequate.*

10/31/2005 – Records indicated several casings sites in the district where PGE was unable to determine whether electrical isolation was obtained, as demonstrated in Work Request (WR) ID 46577, 02/02/2003. Although, there were more locations in the records that cited WR 46577 than were listed in the WR. For example, L-303 mile points (MP) 41.11 and 42.83 were not listed in the WR but the record cited the WR.

Records also indicated casing sites where the casing is shorted to the pipeline or the pipe-to-soil voltage differential between casing and pipeline did not meet PGE standards.

Examples of those locations were on L-100 mile points 143.84, 144, and 145.

2. **§192.463(b)(2)** *External corrosion control: Cathodic protection. The entire buried or submerged pipeline must be cathodically protected at a cathodic potential that meets the requirements of Appendix D of this part for amphoteric metals.*

11/02/2005 – PGE's records reported a pipe-to-soil voltage measurement below -.850 V at L-300 ETS locations between MP 463 and 468.

#### B. Field Inspection.

The physical inspection of District facilities found the following:

1. **§192.471(c)** *External corrosion control: Test leads. Each bared test lead wire and bared metallic area at point of connection to the pipeline must be coated with an electrical insulating material compatible with the pipe coating and the insulation on the wire.*

11/01/2005 – A test lead on a main valve set at L-303 MP 46.24 was connected to the pipe surface without coating on the lead or the pipe surface.

2. **§192.479(a)** *Atmospheric corrosion control. Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.*

11/01/2005 – The span at MP 480.53 on line L-300A had an area on the top portion of the pipe where the coating material was completely worn away and the pipe surface was exposed with evidence of corrosion. The 2004 PGE inspection record did not indicate any issue at the location.

11/03/2005 – The span at MP 428.66 on L-300A had an area of the pipe where the coating material was completely worn away and the pipe surface was exposed. The 2004 PGE inspection record did not indicate any issue at the location.

11/03/2005 – At Dolan station, Valve 7 was exposed and had evidence of corrosion on the pipe surface. Gas rack 2 had evidence of corrosion on the pipe surfaces.

## INSPECTION SUMMARY

### II. Other Observations

#### A. Concerns.

While checking valve stations and pressure stations, a couple of gas rack pressure relief valves that did not operate at their set pressures; one did not operate at all before approaching the MAOP of the pipeline segment. Although these valves are properly checked and maintained annually, their ability to operate as designed and set, between maintenance checks, is critical to operating pipeline segments within MAOP.

Examples of the pressure relief valve (PRV) concern:

- At PLS 7, a PRV did not open at or above set pressure [I did not record the valve number].
- At Sheridan Station, PRV-1 relieved at 126.85 psig, above the 125 psig set pressure.
- At Dolan Station, PRV-201 relieved at 110 psig, above the 105 psig set pressure.

#### B. Conclusion.

I commend PGE's implementation of PLM and SAP automated maintenance scheduling throughout PGE gas operations. The practice is eliminating schedule juggling for maintenance intervals that result in violations as well as ensuring only qualified employees are performing tasks.