

Frances Yee Manager Regulatory Compliance Gas Operations 6111 Bollinger Canyon Rd. 4th Floor San Ramon, CA 94583 925-328-5733

Fax: 925-328-5591 Internet: FSC2@pge.com

January 10, 2014

Mr. Mike Robertson Gas Safety and Reliability Branch Safety and Enforcement Division California Public Utilities Commission 320 West 4th Street, Suite 500 Los Angeles, CA. 90013

Re: State of California – Public Utilities Commission General Order 112-E PG&E's Operator Qualification Program Audit

Dear Mr. Robertson:

The Safety and Enforcement Division (SED) conducted a General Order 112-E audit of PG&E's Operator Qualification (OQ) Program from October 22 - 26, 2012. On November 7, 2013, the SED issued its audit report, identifying probable violations and recommendations. Attached is PG&E's response to the CPUC audit report.

As noted in a number of the responses, PG&E will significantly modify its Operator Qualification program with implementation of Utility Standard TD-4008S and six Utility Procedures. Therefore, per 49 CFR §192.805(i), PG&E will submit under separate cover notification of the changes.

Please contact	Redacted	for any	questions	you may	have
regarding this i	response.				

Sincerely,

/S/ Frances Yee

Attachments

cc: Adriana Crasnean, CPUC Dennis Lee, CPUC Liza Malashenko, CPUC Jane Yura, PG&E

Redacted Bill Gibson, PG&E

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 -26, 2012	NOV-1	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

	<u> </u>	IN FINDING
CPUC		
Finding		
	1.	Title 49, Code of Federal Regulations (CFR), § 192.805 Qualification Program.
		"Each operator shall have and follow a written qualification program."
		SED reviewed PG&E's OQ Program and determined that it did not follow its own procedures. SED determined the following deficiencies:
	a)	PG&E did not follow its own procedure and document individuals' evaluations. Several evaluation records were not available during the audit. PG&E explained to SED staff that PG&E does not retain evaluation documentation. PG&E's OQ Plan, Section 1.1.10, last paragraph states,
		"All department 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 were properly documented".
		Therefore, PG&E is in violation of Title 49 CFR § 192.805 for not following its procedures.
	b)	PG&E did not follow its own procedure and evaluate all individuals performing covered tasks for their capabilities to recognize and react to Abnormal Operating Conditions (AOC).
		PG&E OQ Plan, Section 1.1.1, states:
		 "All individuals who operate and maintain pipeline facilities: be qualified to operate and maintain the pipeline facilities, and have the ability to recognize and react appropriately to abnormal operating conditions that may indicate a dangerous situation or a condition exceeding design limits."
		In addition, PG&E OQ Plan, Section 1.2.4, when addressing criteria for the evaluator, states:
		"He or she, through knowledge or experience, must only be able to: ascertain partipant's ability to perform a covered task, and substantiate an individual's ability to recognize and react appropriately to abnormal operating conditions that might occur while performing the task".
		SED staff reviewed PG&E's OQ records and concluded that it did not evaluate all individuals who perform covered tasks for their capability to recognize and react to AOCs. Therefore, PG&E is in violation of Title 49 CFR § 192.805.

Definitions:

I		DC0 E/2 CO Dian Casting 1.2 Castates
	c)	PG&E's OQ Plan, Section 1.2.6, states:
		"The criteria below are applied to each covered task and classification to determine the
		appropriate evaluation frequency for that task.
		1. Repetitive nature
		2. Level of risk
		3. Complexity
		4. Existence of checks and balances, such as:
		(a) Checklists; written plans
		(b) Follow-up actions
		(c) Audits
		(d) Job aids
		5. Regulatory requirements
		6. Gas Standards and Specification materials
		7. Written materials
		8. Work performance history
		9. Observation during:
		(a) Performance on the job
		(b) Simulation
		(c) Other form
		10. OJT support"
		In Addition, PG&E OQ Plan, Section 1.2.6.1, states:
		"Re-qualification intervals for all covered tasks shall not exceed five (5) years for each covered task."
		PG&E used across the board five year reevaluation intervals for all covered tasks and failed
		to determine task specific reevaluation intervals for each covered task by taking into
		consideration the Difficulty, Importance, Frequency Analysis, Safety, Complexity, Risk
		Analysis, or Consequences if the covered tasks were incorrectly performed.
		By not including the requirements of the above procedures in determining the Re
		qualification Intervals for all covered tasks, PG&E is in violation of Title 49 CFR§ 192.805.
	-1)	DC0 E/2 CO Dian Castian 1.1.11 ((Audit Cabadula and Damanaikilita)) states
	d)	PG&E's OQ Plan, Section 1.1.11, "Audit Schedule and Responsibility", states:
		"The System Gas Operator Qualification Program Coordinator will maintain a list of all Local
		Gas Operator Qualification Plan Coordinators. The SGOQPC will audit the LGOQPC annually,
		or more often if needed, to verify all copies of the plan are up to date and to initiate
		changes if any copies are not up to date. The annual audit shall be documented."
		In addition, PG&E OQ Plan, Section 1.1.12, "Annual Review and Responsibility", states:
		"The Local Gas Operator Qualification Plan Coordinator/Local Supervision will at a minimum
		annually review the list of covered tasks and subtasks with covered and non-covered
		employees. The annual review shall be documented on an original signed roster".
		PG&E did not document its review of the following sections of itsOQ Plan as listed in Table 1

Definitions:

	since 2009:	
	Document	Review Date
	PG&E Gas Operator Qualification Plan Part I	06/29/2009
	PG&E Gas Operator Qualification Plan Part II	01/14/2003
	Gas Operator Qualification Justification Process	01/13/2003
	Table 1	
	By not annual reviewing and documenting its OQ Plan as require Title 49 CFR § 192.805.	d, PG&E is in violation of
e)	PG&E did not follow the second part of its OQ Plan, Section 1.1.1 Responsibility", which states:	1, "Audit Schedule and
	"The LGOQPC must notify the director responsible for the plan w completed. The report shall include audit findings and an action deficiencies".	
	PG&E identified issues in its periodic review of the effectiveness initiate corrective action. PG&E made changes to its procedures a not update other sections of its OQ Plan to reflect the changes. I of the PG&E OQ Plan includes by reference another procedure: S Notification, Investigation, and Analyses Procedure". PG&E expla procedure is no longer used by PG&E. Instead, the OQ Plan shoul procedure "1465-02 Gas Event", currently used by PG&E.	and covered tasks, but dic For example, Section 1.5.2 H&C 202, 'Incident ined to SED staff that this
	By not revising all relevant sections of its OQ Plan, PG&E is in viol 192.805.	ation of Title 49 CFR§

PG&E RESPONSE

1a) PG&E respectfully disagrees with this finding.

PG&E's Operator Qualification Plan does not specifically state that the knowledge-based written test must be retained as part of the qualification record. Since the inception of PG&E's Operator Qualification Plan, it has been expected that the evaluator will confirm that personnel obtain a 100% score on the knowledge-based written test as part of the evaluation and prior to the completion of the qualification evaluation form. The completed qualification evaluation form serves as the record of evaluation.

To clarify just what qualification evaluation records are to be retained, the Utility Standard TD-4008S Operator Qualification Program Requirements will specify what qualification evaluation records are to be retained.

1b) PG&E respectfully disagrees with this finding.

PG&E's Operator Qualification Plan requires individuals, as part of each task's qualification criteria, to appropriately recognize and react to abnormal operating conditions (AOCs). Evaluators must make this determination through questions and observations during the performance-based portion of the evaluation. The Qualification Evaluation forms (See Attachment A as an example) require that the evaluator records this portion of the evaluation. Many, but not all, of the written knowledge-based portion of the evaluations specifically address AOCs.

To better document questions to be asked and observations to be made by the evaluator relating to abnormal operating conditions, starting in 2013, the performance-based portion of evaluations have been scripted and include a demonstration of the individual's ability to recognize and appropriately react to AOCs. (See Attachment B for an example of an Evaluator Script) By December 31, 2014, all knowledge-based tests will include questions on recognizing and appropriately reacting to AOCs.

1c) PG&E respectfully disagrees with this finding.

Part IV of PG&E's Operator Qualification Plan – Gas Operator Qualification Justification Process (See Attachment C), describes the process that Subject Matter Experts followed to determine each covered task's subsequent qualification intervals. This process took into account internal field audits, use of Gas Standards and Specifications, training, job aids, repetitions of covered tasks, and the ability to review an individual's qualifications at any time there is reason to suspect performance of covered tasks is not adequate. The Subject Matter Experts determined that five-year intervals was appropriate for all covered tasks.

Taking into consideration the Difficulty, Importance, Frequency Analysis, Safety, Complexity, Risk Analysis, or Consequences if the covered tasks were incorrectly performed, are factors listed in ASME B31Q Standard. ASME B31Q is not an industry standard incorporated by reference per §192.7. In 2013, the Gas Qualifications Department performed an extensive benchmarking process by looking at other utilities nationwide. As a result, Utility Standard S4450 "Operator Qualification Program" is being superseded by TD-4008S "Operator Qualification Program Requirements" which specifies a 3-year subsequent qualification interval for all covered tasks.

Definitions:

1d) PG&E respectfully disagrees with this finding.

PG&E's System Gas Operator Qualification Program Coordinator has annually reviewed the Operator Qualification Plan as part of the annual review of all gas operations and maintenance procedures per §192.605(a). (See Attachment E). Only the portions of the Operator Qualification Plan that are revised are issued with the current date. Sections of the Operator Qualification Plan that have no changes will retain their original dates.

1e) PG&E agrees with this finding.

There were references to outdated procedures that had not been updated in the Operator **Qualification Plan**.

Effective January 2014, PG&E is replacing its Utility Standard S4450 "Operator Qualification Program" and the Operator Qualification Plan with Utility Standard TD-4008S, "Operator Qualification Program Requirements" and six work procedures (See Attachment D). References to other PG&E procedures are electronically linked in all guidance documents on PG&E's electronic Technical Information Library. This ensures that the link will result in referencing the most up-to-date document.

ATTACHMENTS

III III CIIIIIIIIIII			
Attachment #	Title or Subject		
A	Qualification Evaluation Example		
В	Evaluator Script Example		
C	OQ Justification Process		
D	TD-4008S and 6 work procedures		
E	ECTS annual review of S4450 and OQ Plan		

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
TD-4008S to specify record retention of qualification evaluation records	January 31, 2014		Gas Qualifications Dept.
Knowledge and performance portions of all evaluations to include AOCs	December 31, 2014		Gas Qualifications Dept.
PG&E's Operator Qualification Standard to reference current guidance documents	January 31, 2014		Gas Qualifications Dept.

Definitions: NOV - Notice of Violation

AOC – Area of Concern

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 - 26, 2012	NOV-2	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

CPUC	2.	Title 49 CFR, § 192.805 (a) Qualification program.
Finding	(a)	"Identify covered tasks"
		PG&E did not identify some applicable covered tasks in its OQ Plan. These tasks include welding, non-destructive testing, excavation, compressor station maintenance, meter installation and maintenance, regulator installation and maintenance, backfilling, service line installation and repair.
		By not including the above covered tasks in its OQ Plan, PG&E is in violation of Title 49 CFR§ 192.805(a).

PG&E RESPONSE

2) PG&E agrees with this finding for the activities that meet the four-part criteria in §192.801(b).

PG&E has identified covered tasks by comparing all work activities associated with the installation, construction, operations, and maintenance of natural gas facilities with the fourpart criteria in §192.801(b). Tasks listed above that are being performed as part of a new installation do not meet this four-part criteria, and have not been included in PG&E's Operator Qualification Plan. With the CPUC's ongoing proceeding to revise General Order 112-E to include "new construction" activities as operator-qualified covered tasks, PG&E filed comments on September 27, 2013 on the impact of including new construction activities under the Operator Qualification Rule. Weld repairs, transmission station maintenance, including components at compressor stations, regulator maintenance, service line repairs, and excavating and backfilling around critical gas facilities have been part of PG&E's Operator Qualification Plan since inception.

PG&E will be reviewing the remaining activities noted above and incorporate those activities into its Operator Qualification program by December 31, 2015.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Expand list of operator-qualified covered tasks	December 15, 2015		Gas Qualifications Dept.

Definitions:

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 - 26, 2012	NOV-3	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

		PIN FIINDING					
CPUC							
Finding	(b)) "Ensure through evaluation that individuals performing covered tasks are qualified."					
		methods throughout its OQ Prog	t it does not consistently apply its co gram. For example, PG&E qualified so nile others were qualified based on k	ome individuals based			
		By not having a consistent method of evaluation for the same covered tasks, PG&E is in violation of Title 49 CFR § 192.805(b).					
	PG&E must establish a task specific evaluation method that it will consistently use acro OQ Program to ensure as required by Title 49 CFR, Part 192.803, that						
		"Qualified means that an individ	dual has been evaluated and can:				
		(a) Perform assigned covered tas (b) Recognize and react to abnor					
	a. PG&E's OQ Plan does not require evaluation of generic AOCs. At its annual "Ga Qualification Plan AOC" seminars, PG&E communicates the generic AOCs to th However, PG&E does not evaluate the attendees at the seminar.						
		By not including the generic AOCs in the evaluation process, PG&E is in violation of Title 49 CFR § Part 192.805(b).					
	or each covered task. any AOC questions and the specific covered						
		Task Name	AOC included in the evaluation	Comments			
		Distribution Composite Leak Repair	No AOC	Attachment #2			
		Distribution Pipe Coating – Tape / Paint	No AOC	Attachment #3			
		F.S. Mechanical Repair	No AOC	Attachment #4			
		Pipe Replacement	No AOC and test questions are not relevant to the covered task	Attachment #5			
		Weld Repairs	No AOC and test questions are not relevant to the covered task	Attachment #6			
		Mechanical Repair - Steel	No AOC	Attachment #7			

Definitions:

 $NOV-Notice \ of \ Violation$

AOC – Area of Concern

9

Atmospheric Corrosion / Monitor	One AOC	Attachment #8
Pipe-to-Soil Reads	One AOC	Attachment #9
	Table 2	
PG&E is in violation of Title		tions about AOC specific tasks

PG&E RESPONSE

3a) PG&E respectfully disagrees with this finding.

As noted in our response above to NOV-1.b, PG&E does require that evaluations, through questions and observations during the performance based portion, determine if the personnel being evaluated have the ability to recognize and appropriately react to abnormal operating conditions. (See Attachment A as an example).

The annual refresher training exceeds the requirements of Subpart N – Qualification of Pipeline Personnel of CFR 192, and is provided to all personnel who work on PG&E's gas system. (See Attachment F). The intent of the annual training is to ensure that the workforce is aware of the qualifications necessary to work on the gas system, and to reduce the probability and consequence of incidents caused by human error.

3b) PG&E Respectfully disagrees with this finding.

PG&E's Operator Qualification Plan requires individuals, as part of each task's qualification criteria, to appropriately recognize and react to abnormal operating conditions. Evaluators must make this determination through questions and observations during the performance-based portion of the evaluation. The Qualification Evaluation forms (See Attachment A as an example) require that the evaluator records this portion of the evaluation.

The written knowledge-based tests are currently being revised and are made available when each one has been completed. The revisions will include questions relating to abnormal operating conditions. The written knowledge-based tests for the tasks identified in SED's Table 2 will be issued by February 28, 2014, with the exception of the Distribution Composite Leak Repair task which has been eliminated as an approved method of leak

repair and the OQ task has been eliminated.

ATTACHMENTS

Attachment #	Title or Subject
A	Qualification Evaluation Example
F	Annual OQ Refresher Training

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Issue revised knowledge-based tests			Gas
including AOC questions for identified	February 28, 2014		Qualifications
tasks			Dept.

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 - 26, 2012	NOV-4	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

CPUC	4.	Title 49 CFR, § 192.805 (f) Qualification Program
Finding		"(f) Communicate changes that affect covered tasks to individuals performing those covered tasks;"
		PG&E's OQ Plan, Section 1.7.1, "Communicate Changes" does not include a provision to identify how changes to the procedures, tools standards and other elements used by individuals in performing covered tasks are communicated to its contractors and how these changes are implemented in the evaluation process.
		By not including its contractors in the Communicate Changes process, PG&E is in violation of Title 49 CFR § 192.805(f).

PG&E RESPONSE

4) PG&E agrees with this finding.

TD-4008S will specify what communication, depending on the significance of the change, is required, and what will be required of PG&E's 3rd-party compliance vendor and contractors who perform operator qualified work.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
TD-4008S to include communication requirements for contractors	January 31, 2014		Gas Qualifications Dept.

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 - 26, 2012	NOV-5	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

CPUC	5.	Title 49 CFR, § Part 192.807 (b) Recordkeeping
Finding		"(b). Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task."
		PG&E did not have a complete record of evaluation for individuals qualified to perform covered tasks. SED found that some evaluation records for oral tests and observations of simulation were missing. PG&E explained to SED staff that PG&E does not retain evaluation documentation.
		By not retaining complete records of evaluation for individuals qualified to perform covered tasks, PG&E is in violation Title 49 CFR § 192.807(b).

PG&E RESPONSE

5) PG&E respectfully disagrees with this finding.

PG&E's Operator Qualification Plan Section 1.8, Recordkeeping, specifies the qualifications records that are to be maintained. It does not specifically state that records of oral tests and observations made by the evaluator must be kept as part of the qualification records to be retained. The completed qualification evaluation form serves as the record of qualification, and checking the appropriate box for "Oral Test" or "Observation by simulation" by the evaluator is sufficient to document that portion of the evaluation.

To better document a consistent set of questions asked during the oral test, or observations made during this portion of the evaluation, as well as a demonstration of skills by the personnel being evaluated, PG&E is in the process of creating an Evaluator Script for Record of Evaluation for each covered task. (See Attachment B for Evaluator Script example) These evaluator scripts for all covered tasks are being made available to evaluators as they are completed. All covered tasks will have an evaluator script by June 1, 2015.

ATTACHMENTS

Attachment #	Title or Subject
В	Evaluator Script Example

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
Complete Evaluator Scripts for covered tasks and roll out to evaluators	June 1, 2015		Gas Qualifications Dept.

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 - 26, 2012	NOV-6	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

CPUC	6.	Title 49 CFR, § Part 192.809 (e) General.
Finding		"(e) After December 16, 2004, observation of on-the-job performance may not be used as the sole method of evaluation."
		PG&E's OQ Plan, Section 1.3.2.1, "Method of Qualification Evaluation", states:
		"Performance-based qualification evaluation is used for the initial qualification."
		In addition, Section 1.3.3.2, "Method of Qualification Evaluation", states:
		"The Company will use performance-based evaluation when doing subsequent qualification."
		PG&E cannot use observation of on-the-job performance as a sole method for evaluation for a person initially or subsequently qualified to perform a cover taskafter December 16, 2004. Therefore, PG&E is in violation of Title 49 CFR § 192.809(e).
		PG&E must review and revise its OQ Plan to ensure that it does not use observation of on the job performance as the sole method for evaluation of a person initially or subsequertly qualified to perform a covered task.

PG&E RESPONSE

6) PG&E agrees with this finding.

The Operator Qualification Plan will be replaced with TD-4008S and its six work procedures. (See Attachment D) Section 2.4 of the standard specifically states that observation during on-the-job performance is not to be used as the sole method of evaluation.

ATTACHMENTS

Attachment #	Title or Subject	
D	TD-4008S and 6 work procedures	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
TD-4008S will specify not to use on-			Gas
the-job performance as sole evaluation	January 31, 2014		Qualifications
method			Dept.

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 - 26, 2012	AOC-1	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

CPUC	
Finding	1. <u>Title 49 CFR, §192.3 Definitions.</u>
	"Pipeline facility means new and existing pipeline, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation."
	PG&E Pipeline Facility definition included in its OQ Plan, Section 1.1.2 Definitions, states:
	"Pipeline Facility: all parts of those physical facilities, owned and operated by the company, through which gas moves in the course of transportation, including distribution, transmission, and gathering lines".
	SED discovered that PG&E's definition of pipeline facility does not clearly address all facilities it owns and operates such a "rights of way". PG&E should revise its definition of pipeline facility to be consistent with 49 CFR, §192.3.

PG&E RESPONSE

PG&E agrees with this concern. TD-4008S will include the definition of pipeline facility to be consistent with §192.3.

ATTACHMENTS

Attachment #	Title or Subject
None	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
TD-4008S to have consistent definition of pipeline facility	January 31, 2014		Gas Qualifications Dept.

INSPECTION INFORMATION

Inspection Dates	Finding	CPUC Contact	CPUC Phone #
October 22 - 26, 2012	AOC-2	Adriana Crasnean	(213) 620-2598

INSPECTION FINDING

CPUC	2. <u>Title 49 CFR, § Part 192.805 (c) Qualification Program.</u>
Finding	
	"(c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;"
	PG&E's OQ Plan, Section 1.1.4 (c), "Plan Requirements", states:
	"ensure that non-qualified individuals performing a covered task are supervised by a qualified individual".
	In addition, Section 1.1.10, "Local Responsibility", states:
	"All employees are also responsible for performing without supervision only those covered tasks for which they have been qualified under this plan."
	PG&E should change "supervised" by a qualified individual with "directed and observed" by a qualified individual, to be consistent with 49CFR § 192.805 (c).

PG&E RESPONSE

PG&E agrees with this concern. TD-4008S Section 5 will utilize "directed and observed" instead of "supervised" to describe allowing individuals that are not qualified to perform a covered task. (See Attachment D)

ATTACHMENTS

Attachment #	Title or Subject	
D	TD-4008S and 6 work procedures	

ACTION REQUIRED

Action To Be Taken	Due Date	Completion Date	Responsible Dept.
TD-4008S to use "directed and	1 01 0014		Gas
observed" by a qualified individual instead of "supervise"	January 31, 2014		Qualifications Dept.