



***UO Standard S4450***

ISSUING DEPARTMENT: **GD&TS**  
UO SPONSOR: **VP – E&P**  
**VP – CGT**

EFFECTIVE DATE: **4-01**  
REVIEW DATE: **4-04**  
PAGE NO.: **1** OF **2**

**TITLE: Operator Qualification Program**

**Purpose**

This standard establishes the Company’s written operator qualification program in accordance with 49 CFR §192.805, which requires that gas personnel performing covered tasks are qualified. The qualification of personnel performing covered tasks must be completed by October 28, 2002.

This standard supports UO Policy 3-7, “Gas & Electric Maintenance and Operations.”

**Safety**

The procedures and requirements of this standard are intended to preserve public and employee safety by ensuring a qualified work force and reducing the probability and consequence of incidents caused by human error.

**Implementation Responsibilities**

The vice president of Engineering and Planning (E&P) and the vice president of California Gas Transmission (CGT) are responsible for approving, revising and distributing this standard.

Utility Operations (UO) directors, managers and supervisors are responsible for implementing this standard within their respective organizations.

The responsibility for evaluating an employee’s ability to perform covered tasks on pipeline facilities and to recognize and react to abnormal operating conditions on those facilities shall rest with the operating department supervisor with the assistance, as needed, from Human Resources Learning Services or others.

Employees are responsible for carrying out their assigned tasks. For their own safety and that of the general public, employees are responsible for performing only the tasks for which they are trained, knowledgeable and qualified. When necessary, they shall notify their supervisor of any additional training, equipment or resources needed to perform their assigned tasks.

**Revision**

The director of Gas Distribution and Technical Services (GD&TS) or the director of Gas System Maintenance & Technical Support (GSM&TS) may revise and issue updates to Attachments 1 and 2 and the *Operator Qualification Manual*.

**Compliance** Internal Company departments may conduct periodic audits. The California Public Utilities Commission also conducts compliance reviews on the requirements in this standard.

**Definition of Terms** **Abnormal Operating Condition:** A condition that may indicate a malfunction of a component or deviation from normal operations that may: 1) indicate a condition exceeding design limits; or 2) result in a hazard to people, property or the environment.

**Covered Task:** An activity, determined by the Company, that: 1) is performed on a pipeline facility; 2) is an operations or maintenance task; 3) is performed as a requirement of 49 CFR Part 192; and 4) affects the operation or integrity of the pipeline.

**“Directed and Observed”:** In the context of performing work while being directed and observed by a qualified individual, “directed and observed” means the qualified individual is in the immediate area and provides direct oversight as the covered task is being performed.

**Pipeline:** All parts of those physical facilities, owned and operated by the Company, through which gas moves in transportation, including distribution, transmission and gathering lines.

**Date Issued/Updated**

*Effective:* 4-01

*Review Date:* 4-04

Signed,

Signed,

Shan Bhattacharya  
Vice President  
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**Reference Documents**

49 CFR 192 Subpart N

UO/GTS Standard D-S0355, “CPUC and DOT Reportable Incidents, Curtailments and Conditions and Low Pressure System Problem Reporting”

*Operator Qualification Manual*

**Attachment 1**

**Detailed Procedures**

**I. Identification of Covered Tasks**

The Company has compared its tasks with the definition of Covered Tasks and identified those tasks meeting the four-part criteria. The Company's covered tasks are listed in Attachment 2.

**II. Qualification**

- A. All personnel performing covered tasks as of October 28, 2002, will receive their qualification through an appropriate method to ensure they are qualified to perform the covered tasks assigned. Appropriate methods include:
  - 1. written or oral examination,
  - 2. observation during performance on the job, on-the-job training or simulations,
  - 3. other forms of assessment,
  - 4. training history review,
  - 5. work performance history review.
- B. For individuals who were performing a covered task prior to August 27, 1999, the Work Performance History Review may be used as the sole evaluation method for qualification of individuals before October 28, 2002.
- C. Subsequent requalification must include written, oral or hands-on testing and must be performed at least once each five calendar years.
- D. As a part of the training and qualification process, personnel performing covered tasks are instructed on the normal operating criteria for each task and the appropriate actions to take when an abnormal operating condition is identified. The appropriate actions to take may include:
  - 1. making the necessary adjustments to bring the equipment or settings back to normal operating conditions,
  - 2. replacing the component(s),
  - 3. immediately notifying the appropriate personnel of the abnormal operating condition and initiating emergency response procedures,
  - 4. completing the appropriate paperwork to initiate the necessary corrective action.

**III. Non-Qualified Personnel**

Personnel that are not qualified to perform a covered task may do so if directed and observed by a qualified individual.

**IV. Unsatisfactory Performance**

- A. When an employee has performed a covered task that may have contributed to a Department of Transportation reportable incident, as defined by 49 CFR §191.3, the individual's performance of the task must be re-evaluated as part of the incident review.
- B. If at any time there is reason to believe that an individual is no longer qualified to perform a covered task, the employee must not perform the covered task until a re-evaluation has been conducted, except as noted in Paragraph III A. Non-Qualified Personnel.
- C. Re-evaluation may be accomplished through methods prescribed in Paragraph II, Qualification.

**V. Changes to Policies/Procedures**

- A. Changes in Company or local operating methods or the use of new equipment are evaluated to determine the impact on covered tasks. At a minimum, the evaluation will determine:
  - 1. if a current covered task is affected,
  - 2. if a new covered task is created,
  - 3. what changes are necessary to the qualification materials, and,
  - 4. the method for communicating the change to the appropriate employees.
- B. When a gas-related Utility Operations standard, procedure or guideline or a *Gas Standards and Specifications* document is being revised, the author must evaluate whether there are changes to a covered task. If there are changes, the changes must be communicated. Methods for communicating changes may include, but are not limited to:
  - 1. a review of revisions to field manuals,
  - 2. group or individual training and testing,
  - 3. formal training and testing.

**VI. Recordkeeping**

- A. Qualification records may be hard copy or electronic and must include:
  - 1. identification of the qualified individual,
  - 2. identification of the covered tasks the individual is qualified to perform,
  - 3. date(s) of current qualification, and
  - 4. qualification method(s).
- B. For individuals currently performing covered tasks, their current qualification records and previous five years' qualification records must be maintained.
- C. Records of prior qualification(s) and records of individuals no longer performing covered tasks must be retained for a period of five years.

**VII. Contractors and Mutual Assistance**

The Company may accept qualifications obtained under the programs of other operators or contractors when the following conditions have been met:

1. the program complies with all provisions of 49 CFR Subpart N,
2. the standards used for qualification are acceptable to the Company, or
3. documented training is conducted on Company-specific procedures before initiating work activities.

The Company may accept certifications (qualification) of individuals received from nationally recognized agencies, such as, but not limited to:

1. American Society of Non-destructive Testing (ASND)
2. NACE International (formerly National Association of Corrosion Engineers)

**Attachment 2  
Covered Task List**

<b>Task Code</b>	<b>Task</b>	<b>Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>	<b>Gas Standards and Specifications</b>
<b>01-00.00</b>	<b>Cast Iron Repair</b>	01-01.00	Bell Joints and Spigot Seals	192.753	GSS B-50
		01-02.00	Protect Cast Iron Pipeline	192.755	GSS A-39/C-37
		01-03.00	Operations and Maintenance	192.489	GSS C-37, B53/54.1
<b>02-00.00</b>	<b>Repair/Replace Distribution Pipeline</b>	02-01.00	Mechanical Repairs	192.703	GSS B-53/54
		02-02.00	Weld Repairs	192.703	GSS A-60
		02-03.00	Pipe Squeezing Steel	192.703	GSS M23
		02-04.00	Pipe Squeezing - Plastic	192.703	GSS M23/23.1
		02-05.00	Pipe Squeezing - Plastic (1/2" and 1")	192.703	GSS M23/23.1
		02-06.00	Abandonment or Deactivation Pipeline Facilities	192.727	GSS C-30, A93.2
		02-07.00	Pipeline Replacement	192.703	GSS A-34/A 93.1
		<b>03-00.00</b>	<b>Corrosion Control</b>	03-01.00	Distribution Pipe Coatings – Tape/Paint
03-02.00	Transmission Pipe Coatings – All			192.461	GSS E-10
03-03.00	Rectifier Reads			192.461	GSS E-10
03-04.00	Atmospheric Corrosion / Monitor			192.479 / 481	GSS O-16
03-05.00	Pipe Inspection			192.459	GSS O-16
03-06.00	Pipe-to-Soil Reads			192.465	GSS O-16

<b>Task Code</b>	<b>Task</b>	<b>Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>	<b>Gas Standards and Specifications</b>
		03-07.00	Cathodic Protection Maintenance	192.473	GSS O-11.1, 13/13.1-3, 16
		03-08.00	Galvanic Anode Maintenance	192.473	GSS O-13.1
		03-09.00	Internal Corrosion/Monitor	192.475/477	GSS O-16
<b>04-00.00</b>	<b>Leak Test</b>	04-01.00	Soap Test/Stand-up Test	192.725	GSS A-34
<b>05-00.00</b>	<b>Locate Facilities</b>	05-01.00	Mark and Locate Facilities	192.614 (a) / (5)	UO Std - S0214/S4412 and G-1000
		05-02.00	Standby Pipeline	192.614 (6 C)	UO Std - S0214/S4412 and G-1000
<b>06-00.00</b>	<b>Tapping Pipelines Under Pressure</b>	06-01.00	Operate Service Tee Tapping/Plugging Equipment (3/4" to 2")	192.627	GSS C-10/11 30, 31, 33 - 35 & 36.1,
		06-02.00	Operate Top Tapping/Plugging Equipment (3/4" to 4")	192.627	GSS C-16.3 & 16.5
		06-03.00	Operate Split Control Tapping/Plugging Equipment (3/4" to 2")	192.627	GSS C-15.2
		06-04.00	Operate Split Control Tapping/Plugging Equipment (3" to 8")	192.627	GSS C-15.3 & C-32 thru 32.3
		06-05.00	Operate Split Control Tapping/Plugging Equipment (10" to 12")	192.627	GSS C-15.3
		06-06.00	Perform Hot Tapping/Branch Connection	192.627	GSS A-52
		06-07.00	TDW/Stopple 6" and Greater	192.627	GSS C-60
		06-08.00	Low Pressure/Semi-High Bagging Operations	192.627	GSS C-37
		06-09.00	Low Pressure Drilling/Threading Operations	192.627	GSS C-37

<b>Task Code</b>	<b>Task</b>	<b>Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>	<b>Gas Standards and Specifications</b>
		06-10.00	Operate Riser Valve Changer Equipment	192.627	C-54.3
		06-11.00	Low Pressure Foaming Operations	192.627	GGs A-38.2, A-39 and A-36.2
<b>07-00.00</b>	<b>Purging of Pipelines</b>	07-01.00	Air Purging	192.629 (a)	GSS A-38
		07-02.00	Gas Purging	192.629 (b)	GSS A-38
		07-03.00	Inert Purging	192.629 (b)	GSS A-38
		07-04.00	Air Mover Operations	192.629 (b)	GSS A-38
<b>08-00.00</b>	<b>Patrolling</b>	08-01.00	Inspect and Maintain Transmission Line	192.613	UO Std. S0352
		08-02.00	Inspect and Maintain Distribution Line	192.705	UO Std. S0352
		08-03.00	Maintain Line Markers	192.707	UO Std. S0352/4122
<b>09-00.00</b>	<b>Leak Survey/ Investigation</b>	09-01.00	Conduct Surveys	192.706, 723	UO/GTS Std. S0350/S4411
		09-02.00	Leak Investigation	192.706, 723	GSS M-53/53.1
<b>10-00.00</b>	<b>Transmission Line Repairs</b>	10-01.00	Repair Procedures	192.713	GSS A-65
		10-02.00	Testing Welds	192.719 (b)	GSS A-65



<b>Task Code</b>	<b>Task</b>	<b>Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>	<b>Gas Standards and Specifications</b>
		10-03.00	In-Service Welding	192.715 (b)	GSS A-65
<b>11-00.00</b>	<b>Inspect and Test Remote Control Shutdown Devices</b>	11-01.00	Inspect/Test/Compressor Remote Shutdown Devices	192.731 (c)	CGT S-4431/S4432
		11-02.00	Test Remote Control Devices	192.731 (c)	CGT S-4431/S4432
<b>12-00.00</b>	<b>Starting, Operating and Shutdown Compressor Units</b>	12-01.00	Start/Operate/Shutdown Turbine - Local	192.605 (b)(7)	CGT S-4431/S4432
		12-02.00	Start/Operate Turbine Motor Remote	192.605 (b)(7)	CGT S-4431/S4432
		12-03.00	Start/Operate/Shutdown - Recip/ Local	192.605 (b)(7)	CGT S-4431/S4432
<b>13-00.00</b>	<b>Maintaining Gas Detection and Alarms Systems</b>	13-01.00	Inspect/Test/Maintain Gas Detection/Alarms	192.736 (c)	CGT S-4291
		13-02.00	Remote System Monitoring	192.736 (b), (c)	CGT S-4291
<b>14-00.00</b>	<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	S-S0351 Form 62-6321 Section A1A-A5 CGT S4432 Section B3D

<b>Task Code</b>	<b>Task</b>	<b>Subtask Code</b>	<b>Subtask</b>	<b>DOT Reference</b>	<b>Gas Standards and Specifications</b>
<b>15-00.00</b>	<b>Monitor Telemetry and/or Pressure Recording Devices</b>	15-01.00	Monitor System Conditions (SCADA)	192.741	CGT S-4432
		15-02.00	Monitor Distribution Recording Devices	192.741	GSS J-62
<b>16-00.00</b>	<b>Inspect and Test Relief Devices</b>	16-01.00	Test/Maintain Relief Devices	192.739/ 743	GSS H-70 CGT S-4432
<b>17-00.00</b>	<b>Valve Maintenance</b>	17-01.00	Inspect/Maintain Emergency Valves	192.745/ 747	GSS F-11
		17-02.00	Remote Valve Operations (SCADA)	192.745/ 747	GSS F-11
<b>18-00.00</b>	<b>Vault Maintenance</b>	18-01.00	Inspect Vault	192.749	UO Stds. S0446, S0213