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Gas Transmission and Distribution

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Function:

Maintenance and Operations

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Title: Gas Clearance Procedures for Facilities Operating Over 60 PSIG

Overview

This work procedure (WP) establishes a clearance process for natural gas facilities operating over 60 pounds per square inch gauge (psig) and associated equipment to ensure that work is performed safely on pressurized gas, air, water, or energized electric systems.

This document covers the following topics:

- 1. Clearance Types Page 2
- 2. Non-Clearance Routine (NCR) Work Page 3
- 3. Basic Clearance Principles and Procedures Page 5
- 4. Emergency Clearances Page 7
- 5. Preparing a Clearance for Review Page 7
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Governing Document

Utility Standard S4100, "Gas Pipeline Maintenance and Construction Requirements" [not yet issued]

Safety

Failure to follow these procedures to clear equipment or a pipeline properly could pose a risk to employee and public safety.

To ensure safety while performing this work, follow all applicable precautions and requirements described in this WP and the following safety programs:

- Utility Standard Practice (USP) 22, "Safety and Health Program"
- Code of Safe Practices

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Training

Complete all required personnel training to perform these procedures before

conducting a clearance.

Perform and document training on an annual basis. Retain training records at

each employee's headquarters indefinitely.

Customer Satisfaction

Maintain service to Pacific Gas and Electric (Company) customers whenever

possible. Always notify customers in advance of planned service

interruptions.

Gas Facilities Clearances

1. Clearance Types

There are two categories of clearances, "System Clearances" and "Non-system Clearances," described as follows:

A. System Clearances

- 1) Affects gas flow, quality, or the ability to monitor the flow of gas. All system clearances require authorization from gas systems operations (GSO) personnel.
- 2) All system clearances must be authorized by GSO personnel.
- 3) System clearances include the following examples:
 - Shutdowns of a line to tie-in an offset to clear a storm drain conflict.
 - Valve maintenance requiring the stroking of a valve.
 - Supervisory Control and Data Acquisition (SCADA) equipment calibration.

B. Non-System Clearances

- 1) Does not affect gas flow, quality, or the ability to monitor the flow of gas.
- 2) All non-system clearances are authorized by the responsible maintenance group at the supervisor level or above. Non-system clearances are not authorized by GSO personnel.
- 3) An example of a non-system clearance is bypassing the glycol filter on a dehydrator to change the filter element.

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C. Clearance Subtypes

Within each of the above categories A and B, there are two distinctive clearance subtypes – "New Clearances" and "Standard Clearances," described as follows:

1) New Clearances

New clearances are for one-time use or the initial submittal of a clearance that becomes a standard clearance.

Examples of new clearances include the following:

- Tying in a new pipeline.
- Welding that requires a pressure reduction on a pipeline.
- Welding without a pressure reduction.
- Tapping and/or plugging that requires a pressure reduction on a pipeline.
- Tapping and/or plugging without a pressure reduction.

2) Standard Clearances

Standard clearances are routine and/or repetitive in nature. The maintenance department submitting the clearance and GSO personnel keep standard clearances on file to reference for future submittals.

Examples of standard clearances include the following tasks:

- Annual maintenance to a regulator valve that must be isolated by valving before it can be operated.
- Greasing and stroking a valve. (Stroking a valve is the full operation of the valve from full open to full closed.)
- Operating any maximum allowable operating pressure (MAOP) separation valve.
- Internal regulator inspections (all internal inspections on regulators must have a clearance).
- Corrective maintenance that requires taking a regulator out of service.

2. Non-Clearance – Routine (NCR) Work

A. If the work meets all the following criteria and is included on the Non-Clearance – Routine Work list, a formal clearance procedure is not required. Before beginning work under this process, notify and provide Brentwood Gas Control with the location and description of the work.

The following is the list of NCR work criteria:

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- Work is safe to perform without a clearance.
- The first line supervisor for the maintenance group performing the work concurs that the job can be accomplished using an authorized written WP and does not require a clearance.
- The work does not affect transmission system gas flow or gas quality.
- A single qualified clearance holder performs the work, with the option of one person assisting with the work. There are never more than two people involved with the work.
- No other departments are involved with the work other than the department (no more than two people) performing the work.
- The work does not require more than three isolation points, and all isolation points must be in the line of sight of the individual(s) performing the work at all times.
- Individual(s) involved in the work cannot leave the work area until the job is completed and the gas facilities are restored to normal operations.
- · Work must not exceed 1 work day.
- Work must not impact the Company's ability to maintain service to customers.
- Work performed under this work process must conform to all Company and industry regulations and policies concerning the isolation of equipment from energy sources.
- B. This work process may provide the ability to streamline and simplify some routine work activities. At no time is this work process intended to limit the first line supervisors and qualified clearance holder's responsibility to ensure the safety of employees and the public, as well as the safety and protection of the gas facilities.
- C. Perform work under this process using an authorized written WP. The first line supervisor must authorize the WP. At a minimum, the WP must clearly identify the description of the work. The WP can be for a generic type of work and can reference relative rather than specific points, i.e., upstream and downstream valves instead of specific valve numbers.
- D. GSO personnel will not review and/or authorize the WPs performed under this work process.
- E. The following approved work has been accepted under the NCR process:
 - 1) Operating manual valves that are not MAOP separation valves and are not operated to the fully opened or fully closed position.
 - 2) Gas supply rack maintenance for incidental facilities, i.e., a shop heater.
 - 3) Orifice plate inspections on gas gathering lines.
 - 4) Operational checks on regulators, including monthly monitor bump checks (if monitored by SCADA, notify Brentwood Gas Control personnel before beginning work).

5) Backup generator testing.

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6) External inspections on district regulators (only external, all internal inspections on district regulators must have a clearance.)

3. Basic Clearance Principles and Procedures

This clearance procedure applies to all gas facilities and associated equipment operating over 60 psig. It is the responsibility of all personnel to follow this procedure.

Before starting work that requires a clearance, qualified persons must complete the following tasks:

- Obtain the clearance.
- Conduct a clearance tailboard with all individuals performing work under the clearance.
- Ensure that the equipment is properly cleared, safe to work on, and then "Report On."
- "Report Off" and remove all tag(s) when the work is complete.

Observe the following procedure points when conducting a clearance:

A. Clearance Tagging

- Tag all clearance points while the clearance is active.
- Do not operate Man-On-Line (MOL) tagged equipment.
- Clearance points in the field must match the sequence of operations.
- Place MOL tags on all isolation points.
- Attach caution tags (CTs) to valves, open vents, and drain valves identified in the sequence of operations that are not isolation points, but are within the isolation area of the clearance.
- Attach information tags to all valves operated in the sequence of operations outside the isolation area of the clearance.

B. Sequence of Operations

- Include all routing of gas flow in the sequence of operations.
- Review changes to the sequence of operations for an already authorized clearance. Either
 the first line supervisor for a non-system clearance or GSO personnel for a system
 clearance must authorize all changes.

C. Clearance Supervisor

There must be a clearly designated clearance supervisor for all clearances at all times.
 The clearance supervisor must remain responsible and available for the duration of the clearance. If the clearance supervisor becomes unavailable or expects to become unavailable, the clearance supervisor transfers his or her responsibilities to another

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qualified clearance holder who is thoroughly knowledgeable of the clearance in progress. Communicate this transfer of clearance responsibility via a tailboard with all employees working on the clearance and formally notify Brentwood Gas Control. If the clearance supervisor is unable to transfer the clearance, the only individuals who can transfer the clearance supervisor's duties are the maintenance and construction (M&C) superintendents or someone in the line of progression above these individuals.

• In most cases, a single clearance is written to complete a job. If the clearance involves cross jurisdictional boundaries, a single clearance supervisor is chosen and that appointed clearance supervisor incorporates steps provided by the other involved jurisdictional area to create a single clearance. In rare cases, a request is made to allow for two concurrent clearances to be performed by separate clearance supervisors to support one job. The gas control transmission supervisor authorizes these requests on an exception-only basis.

D. Blown Gas

The clearance process accounts for and minimizes blown gas. Set up preliminary blown gas calculations and perform them based upon estimated pressures for all drafting, cross compression, and blow-down operations. There are steps in the clearances that require the collection of the actual pressures during the performance of the clearance. Engineering personnel perform the calculations, with the actual pressures recorded at the time the work is completed.

E. Clearance Reporting

- Each employee that "Reported On" a clearance must understand where all clearance points are located.
- The clearance supervisor formally "Reports On" and "Reports Off" of the clearance through the Brentwood Gas Control Center.
- In addition to formally reporting on and off of a clearance, report the following key isolation steps for the clearance to the Brentwood Gas Control Center before proceeding with the next steps:
 - Start of the draft.
 - Completion of the draft.
 - Start of cross compression.
 - Completion of cross compression.
 - Operation of any piece of equipment that affects the flow and/or pressure of gas as seen by gas control personnel on SCADA.
 - o Turning the line over to general construction (GC) personnel to cut the line.
 - Beginning of welding work.
 - o Completion of welding work.
 - X-ray results.

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The clearance supervisor may execute the following additional steps for a specific clearance:

- Fill in all steps in a system clearance with the time, date, and initials of the person completing the step and file the clearance as completed.
- For non-system clearances, only four steps require the time and date of the task; the Start, Report On, Report Off, and Completed steps. The person completing the step must initial all non-system clearance steps.
- Retain field copies of clearances for at least 1 year.

4. Emergency Clearances

An emergency situation in the field often requires immediate action to make the situation safe and may call for an emergency clearance. Gas control personnel can authorize an emergency clearance with verbal notification and approval over the phone. Call in all field valve operations to make a situation safe without an authorized written clearance to gas control personnel before physically moving the valve, when possible. If, for safety reasons, valve operations must take place before notifying gas control personnel, notify gas control personnel as soon as possible.

Once the system is made safe, no further work may proceed on the line until a written clearance is submitted and authorized. If it is not possible for the clearance supervisor to write up and submit the clearance to gas control personnel, the clearance supervisor can call in with the sequence of operations, and gas control personnel can then put the clearance in writing and review it for authorization.

5. Preparing a Clearance for Review

- A. The clearance supervisor or the supervisor's designee prepares a written clearance for review and approval, using the most current revision of the "Application for Clearance" form on the Clearance SharePoint site found at the following url address: http://wssuo/gso/gc/Clearances/default.aspx.
- B. To facilitate a thorough review of a new system clearance, GSO personnel (Brentwood Gas Control Center, system gas control personnel, operations supervisor, and the transmission supervisor) must receive a complete clearance package at least 10 business days before starting the work. If a clearance is not submitted 10 business days before the start of work, include superintendent approval with the clearance when submitting the clearance to gas control personnel for review.
- C. The complete clearance package contains the following components:
 - Application for Clearance/face sheet.
 - Special instructions.
 - Sequence of operations, if necessary.

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- Up-to-date and correct operating maps and diagrams reference the appropriate operating map and diagram numbers, including the correct sheet and change number, on the Application for Clearance face sheet.
- Any other drawing used to prepare the clearance.
- For clearances that involve piping changes or facility retirements, include a redlined operating diagram or map showing the before and after configuration.
- D. The initial submittal of a standard system clearance requires 10 business days for authorization. All standard system clearances on file require advance notification to Brentwood Gas Control.
- E. The following sequential standard steps are included at appropriate locations in the sequence of operations on every clearance:
 - 1) Request a preliminary clearance (48 hours in advance of a job for new system clearances or as stated on a standard system clearance).
 - 2) Request final clearance (on the day of the job).
 - 3) Ensure that equipment is operational (before the clearance is complete).
 - 4) Report the clearance as complete.
 - 5) Fax a redline copy of station or piping changes to the Brentwood Gas Control Center at the completion of the job.
- F. A preliminary or draft clearance can be submitted to the clearance coordinator in gas control for input towards a final clearance package. The preliminary or draft package is not necessarily a complete package. Before submitting a final clearance package for authorization, the clearance preparer must obtain a review from the first line supervisor (if the first line supervisor is not the clearance preparer), operations engineering (if the transmission backbone is involved), local transmission planner, pipeline engineer, and/or station engineer.

6. Requirements for Submitting an Application for Gas Clearance Approval

- A. The clearance application must completely describe the work to be performed.
- B. All new clearances must have the start and end times, dates, and the clearance supervisor's name. All standard clearances sent to GSO personnel for authorization must have "varies" on the clearance form (see <u>Section 1.C.2</u>, "Standard Clearances," on Page 3 for examples of standard clearances).
- C. Incorporate all outside agency and supporting division/district input and/or approval into the clearance before sending it to GSO personnel for authorization.
- D. The first line supervisor or the upgraded supervisor-in-charge must review and authorize all standard clearances.

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- E. All standard system clearances on file require advance notification to gas control personnel. Submit new system clearances for authorization 10 business days before the start of work. The 10-day notification begins on the date the clearance is emailed to GSO personnel.
- F. GSO personnel authorize all system clearances.
- G. The first line supervisor reviews/authorizes all non-system clearances.
- H. GSO personnel request any required changes to system clearances via email to the originator of the clearance application. If the originator agrees with the changes, the originator makes the changes and resubmits the clearance for authorization from GSO personnel.
- I. GSO personnel electronically authorize (sign) and date the bottom of the application.
- J. The clearance originator prints and distributes a hard copy of the application, as necessary.
- K. Once a clearance is submitted for authorization, the first line supervisor and GSO personnel, in the case of system clearances, authorize changes.

7. Requirements for Requesting a Clearance to Perform Maintenance

- A. Standard clearances must include the clearance supervisor's name and dates and times the work is to begin and end.
- B. Persons requesting the clearance must check the clearance points and ensure that they are adequate for the work to be performed safely.
- C. The clearance supervisor must request preliminary clearance.
- D. The clearance supervisor must request "final" clearance on the day of the job (the first step of the sequence of operations).

8. Clearing Equipment

- A. The clearance supervisor or the supervisor's designate ensures that the clearance points safely isolate the equipment for the work to be performed.
- B. The clearance supervisor clears equipment by placing field clearance points in the correct position and tagging them. The clearance supervisor may designate any qualified clearance holder to clear equipment.
- C. After the equipment is properly cleared and tagged, the clearance supervisor "Reports On" to the Brentwood Gas Control Center. The clearance supervisor is the first person to "Report On" and the last person to "Report Off" on any clearance.
- D. All secondary clearance holders must "Report On" and "Report Off" to the clearance supervisor. The clearance supervisor must notify the Brentwood Gas Control Center of any secondary clearance holders working under their clearance.

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9. Reporting On as a Secondary Clearance Holder

Note: An employee must not "Report On" or "Report Off" equipment for another employee, with the exception of the M&C superintendent in the case of "Reporting Off." See Section 12. "Reporting Off," on Page 11 for additional information.

- A. The qualified clearance holder walks down the equipment, checking that clearance points are in the correct position, properly tagged, and cleared safely for the work, and then notifies the clearance supervisor that he or she is ready to "Report On" as a secondary clearance holder.
- B. Any qualified clearance holder has the option of placing secondary MOL tags on all clearance points.
- C. The qualified clearance holder communicates with the clearance supervisor, stating clearly that they are "Reporting On" (protocol) with the following information: name, clearance number, and equipment associated with the clearance. The clearance supervisor or designee must then notify the Brentwood Gas Control Center, who logs the qualified person "Reported On" as a secondary clearance holder in the clearance log.
- D. Work can begin once the "Report On" information is recorded at Brentwood Gas Control. If the work is performed in a major station, the clearance log is updated, and the qualified clearance holder is officially "Reported On" and authorized to work on the cleared equipment.

Note: It is the clearance supervisor's responsibility to confirm that Brentwood Gas Control personnel have recorded the secondary clearance holder.

10. Performing Work Under a Clearance

Note: If at any time an employee feels equipment being worked on is not properly cleared, work must stop and the clearance supervisor must be notified. Do not perform work on equipment that is not properly cleared under any circumstances.

- A. Before beginning work on cleared equipment, persons performing the work either "Report On" the clearance or report to a qualified clearance holder who is "Reported On." Personnel not trained as a qualified clearance holder must work under a qualified clearance holder.
- B. Clearance points may be changed on an active clearance at the discretion of the clearance supervisor or secondary clearance holder with review and approval from the first line supervisor on standard clearances. In the case of system clearances, GSO personnel must also authorize the changes.
 - 1) All clearance holders "Reported On" the clearance must concur with the proposed addition or deletion of clearance points.
 - 2) All secondary clearance holders that "Reported On" the clearance "Report Off." Clearance points can be changed and then secondary clearance holders can report back on.

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60 PSIG 3) Note the clearance points that were changed on the Application for Clearance and clearance

log. If applicable, revise standard clearances changes and resubmit them for authorization as soon as practical.

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- C. Transfer a clearance from one person to another, as follows:
 - 1) The person assuming the clearance walks down the clearance points and "Reports On" in the
 - 2) The party relinquishing the clearance "Reports Off."

11. Testing Cleared Equipment to be Operational

Note: No work may be performed under a clearance in "test" status.

Perform the following steps to "Report Off" for a test:

- A. Secondary clearance holders inform the clearance supervisor that they want to test equipment.
- B. All other secondary clearance holders "Report Off" the clearance before the test is performed.
- C. If there is no secondary clearance holder, the clearance supervisor notifies the Brentwood Gas Control Center when they are ready for the test and confirms that Brentwood Gas Control has recorded clearances in test status in the clearance log. The clearance supervisor must replace MOL tags with CTs on all test points before proceeding with testing.
- D. Upon completion of the test, follow the "Report On" or "Report Off" format, as appropriate.
- E. In the event that no personnel need to "Report On" the equipment again, the clearance supervisor may "Report Off," and the equipment is made available.

Note: In the event that reporting back on the clearance is required, the original tags may be reinstalled.

12. Reporting Off

- A. Only the clearance supervisor that "Reported On" a clearance can report off that clearance. Or, if the clearance supervisor is unavailable, the M&C superintendent may "Report Off" that clearance.
- B. After work is complete, secondary clearance holders "Report Off" to the clearance supervisor. In the event other personnel are working under a secondary clearance holder, secondary clearance holders ensure that all persons are clear before "Reporting Off."
 - Note: If the clearance supervisor is not available, the secondary clearance holder notifies the first line supervisor and then logs in the clearance log (protocol) that he or she has "Reported Off."
- C. The clearance supervisor may "Report Off" the clearance to Brentwood Gas Control personnel and confirm that they reported off in the clearance log.

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- D. The clearance supervisor removes the tags from the field clearance points and makes the equipment available.
- E. For quality assurance purposes, retain the Application for Clearance package (with signatures, times, and dates) for 90 days.

Note: If, due to injury, illness, or unavailability, it becomes impossible for a clearance supervisor to "Report Off," the M&C superintendent, after receiving all reasonable assurances that it is safe for employees and equipment, has the authority to "Report Off" for the clearance holder.

13. Working in Major Stations

- A. For the purposes of this clearance process, major stations are identified as follows: "backbone" compressor stations; storage facilities; and the Milpitas, Irvington, and Antioch gas terminals.
- B. A clearance communications board is established and maintained for all clearance work at major stations. If the established and designated master clearance point for cleared equipment is in a major station, use a clearance communications board.
 - Locate the clearance communications board in an area readily accessible to all personnel at the major station. The clearance supervisor's clearance communications board MOL tag is the first tag placed on the clearance communications board and remains on the board for the duration of the clearance. Tags for secondary clearance holders "Reported On" a clearance are also located on the clearance communications board. The clearance supervisor's clearance communications board MOL tag is not removed until all secondary clearance holders "Report Off" and their tags are removed. All clearance communications boards post a clearance log to quickly identify all ongoing clearances at the station.
- C. After ensuring that all clearance points safely isolate the equipment to be cleared in a major station, the clearance supervisor places a master clearance point MOL on the clearance communications board.
- D. If a secondary clearance holder wishes to "Report On," he or she must walk down the equipment, checking that the equipment is properly cleared and ready to work, and then notify the clearance supervisor. The clearance supervisor notifies gas control personnel that there is a secondary clearance holder and places a MOL tag on the clearance communications board.
- E. When testing equipment, the clearance supervisor places a CT over their MOL tag on the clearance communications board at the same time that they change the isolation points to CTs for testing.
- F. When working in a major station, the clearance supervisor removes the master clearance point MOL tag from the clearance communications board after they have reported off to the Brentwood Gas Control Center. If a secondary clearance holder is "Reported On," they must "Report Off" before the primary clearance holder can "Report Off."

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G. Maintain and keep a current log attached on all clearance communications boards in the major stations.

Note: Write down information requiring particular attention on the clearance communications board, such as notes, cautions, etc. in **bold** with a hanging indent.

14. Best Practices

- A. Prepare clearances and submit them early for review and authorization. Submit new clearances at least 10 business days before the clearance is needed. If a clearance is required before the date the clearance date is identified, submit a new clearance as a "pending clearance" with the date to be determined (TBD). The authorization is contingent upon system conditions at the time the work is performed.
- B. Clearance supervisors must remain on-site for the duration of the clearance. In the event of a multiple day clearance, with work continuing 24 hours a day, the clearance supervisor must transfer responsibilities to someone who can remain on-site as outlined in Section 3, "Basic Clearance Principles and Procedures," on Page 5. If the work does not continue 24 hours a day, the clearance supervisor must not leave the site before the work completes for the night and must be on-site before the work starts back up. If at anytime the clearance supervisor is transferred to someone else, formally notify Brentwood Gas Control personnel.

Definition of Terms

Active clearance: A clearance is considered active from the time the clearance supervisor requests final authorization until the clearance supervisor reports the clearance complete to gas control.

Caution tag (CT): Used to mark equipment such as switches, valves, breakers, etc., which if operated may endanger equipment or jeopardize systems operations. Must not be operated or changed except upon specific instruction from the station or individual on the tag. Do not use this tag in place of MOL tags where employees are working on lines or equipment. When part of a clearance, use CTs on valves, open vents and drain valves identified in the sequence of operations that are not isolation points, but are within the isolation area of the clearance. Use CTs on open, closed, or throttled valves. If not used in conjunction with a clearance, note CT'd equipment on a station status board.

Clearance: Isolate and tag all energy sources to secure an area between specified points so work can be performed safely.

Clearance communications board: If the established and designated master clearance point for cleared equipment is in a major station, use a clearance communications board. The clearance communications board is located in an area readily accessible to all personnel at the major station. The clearance

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supervisor's clearance communications board MOL tag is the first tag placed on the clearance communications board and remains on the board for the duration of the clearance. Tags for secondary clearance holders "Reported-On" a clearance are also located on the clearance communications board. The clearance supervisor's clearance communications board MOL tag is not removed until all secondary clearance holders have "Reported Off" and their tags are removed. All clearance communication boards post a clearance log to quickly identify all ongoing clearances at the station.

Clearance complete: When the system is returned to normal and notification is made to gas control personnel.

Clearance points: The operating mechanism of all switches, breakers, valves, etc. that control power, gas, vapor, or liquid to the cleared equipment. The clearance supervisor places MOL tags or CTs on clearance points.

Clearance supervisor: The clearance supervisor is responsible for and manages the clearance. Clearance supervisors must be qualified to perform the clearance procedure and equipment they "Report On," knowledgeable of clearance points, and have the ability to ensure that equipment is cleared safely. The clearance supervisor is the first person "Reported On" and the last person "Reported Off" for any clearance. The clearance supervisor is responsible for all clearance logs, clearance communications board documentation, and tagging.

Note: A clearance supervisor can be any qualified journeyman level employee or an exempt supervisor, including but not limited to, an M&C mechanic, first line supervisor, operator mechanic, transmission mechanic, gas control technician, or gas transmission technician.

Clearance tailboard: The clearance tailboard is a meeting held at the beginning of work, when significant changes occur in the clearance, or as needed with all individuals who will work on the clearance. At a minimum, the clearance tailboard addresses safety concerns, objectives of the clearance, work assignments, and communication methods used during the clearance.

Designated person: Qualified clearance holder who, in the clearance supervisor's judgment, is knowledgeable and experienced with the equipment to which the clearance applies. As directed by the clearance supervisor, designated persons clear equipment, place MOL and CTs on clearance points, and prepare grounding documents.

Information tag (IT): Information tags are attached to controls, switches, or equipment where it is desirable to pass on additional information regarding their use in systems operations. Information tags are not used as a substitute for MOL tags or CTs, but may be used in conjunction with those tags. All valves, switches, or equipment associated with a clearance but outside of the

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isolation area (i.e., cross ties, valves used for drafting) must have information tags, not CT or MOL tags, installed.

Major stations: For the purposes of this clearance process, major stations are identified as backbone compressor stations (Tionesta, Burney, Gerber, Delevan, Bethany, Kettleman, Hinkley, and Topock), storage facilities (McDonald Island, Los Medanos, and Pleasant Creek), and Milpitas. Irvington, and Antioch terminals.

Man-On-Line (MOL) tag: Placed on clearance points to ensure that work can be performed safely between clearance points. MOL tags are placed on switches, breakers, gates, valves, etc. to isolate equipment from all sources of energy. Do not operate any clearance point with a MOL tag attached until all work is completed and all "Reported On" persons have "Reported Off." Do not use MOL tags on open vents, drains, or any valve, switch, or control operated under the clearance. Only use MOL tags on isolation points associated with a clearance or at major stations on the clearance communications board.

New clearance: A clearance which does not exist on file and requires the preparation of a new Application for Clearance. New clearances must go through the approval/authorization process and may become a standard clearance.

Non-Clearance - Routine (NCR) work: Work that is safe to perform without a formal clearance. This is limited work identified in Section 2, "Non-Clearance - Routine (NCR) Work," on Page 3 of this procedure. Only work that meets this criteria can be performed as NCR Work.

Non-system clearance: Any new or standard clearance that does not affect gas flow, quality, or the ability to monitor the flow of gas. Non-system clearances do not require authorization from GSO personnel.

Protocol: Official notification indicating the intention to "Report On" equipment to perform work or "Report Off" equipment after work is completed. State to the clearance supervisor and/or log the following information:

- Your full name
- Clearance number
- Equipment associated with the clearance

Qualified clearance holder: An employee who is qualified to perform the clearance procedure and, in their supervisor's judgment, has experience with the equipment to clear. The employee must have knowledge of clearance points and the ability to ensure that the equipment is cleared safely.

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"Reporting Off": Official notification to Brentwood Gas Control and, if applicable, the clearance log indicating that work is complete on cleared equipment. Equipment cannot be made available until all personnel "Reported On" have "Reported Off."

"Reporting On": Official notification that cleared equipment is properly tagged, checked, and safe to work on. Qualified clearance holders cannot begin work until they or the person they are working under are "Reported On" to Brentwood Gas Control and, if applicable, the clearance log. All secondary clearances holders must "Report On" to the clearance supervisor.

Secondary clearance holder: Any person "Reporting On" after the clearance supervisor is a secondary clearance holder. Secondary clearance holders must be qualified to perform work in compliance with this WP and work on equipment they "Report On." Knowledge of clearance points and the ability to ensure that equipment is cleared safely is mandatory.

Standard clearance: A clearance for work that is routine or repetitive with an Application for Clearance on file. The first line supervisor must review and authorize standard clearances.

System clearance: A new or standard clearance that affects gas flow, quality, or the ability to monitor the flow of gas. All system clearances require authorization from GSO personnel.

System flow: Gas flow on pipelines operating over 60 psig outside of station fence lines.

Recision

This WP cancels and supersedes Utility Standard S4420, "Gas Transmission Clearance Procedure," issued September 1998.

Attachments

Attachment 1, "Control Room Clearance Procedure"

Attachment 2, "Gas Clearance Quality Assurance Process"

Attachment 3, "Gas System Operations Gas Clearance Leadership Committee Members"

Attachment 4, "Application for Gas Clearance" (Form F4100-10-4)

Attachment 5, "Gas Clearance Quality Assurance Process – Quarterly List" (Form F4100-10-5)

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Contact for More Information

Date Issued

March 2009

Approved by

Manager

Revision History

Chg No.	Date	Description	By (LAN ID)
00	February 2009	This is a new work procedure.	
01	March 2009	Revisions made to original work procedure.	

Work Procedure March 2009