



Puget Sound Energy
P.O. Box 97034
Bellevue, WA 98009-9734
PSE.com

October 4, 2012

David Lykken
Pipeline Safety Director
Washington Utilities and Transportation Commission
Pipeline Safety Section
1300 S. Evergreen Park Drive S.W.
PO Box 47250
Olympia, WA 98504-7250

RECEIVED
OCT 05 2012
State of Washington
UTC
Pipeline Safety Program

Dear Mr. Lykken,

RE: 2012 Natural Gas Standard Inspection Puget Sound Energy-Kittitas County

PSE has received and reviewed your letter dated September 6, 2012 regarding the "2012 Natural Gas Standard Inspection Puget Sound Energy-Kittitas County" and pursuant to your request is submitting the following response, including actions taken to address the noted findings.

PROBABLE VIOLATIONS

1. WAC 480-93-180 Plans and Procedures.

- (1) *Each gas company must have and follow a gas pipeline plan and procedure manual (manual) for operation, maintenance, inspection, and emergency response activities that is specific to the gas pipeline company's system.*

Finding(s):

In August of 2010, storms produced enough water to allow Manastash Creek to overflow its banks and travel down roadside ditches along Cove Rd. In doing so, the water scoured enough soil to expose almost 5000 ft of IP PE main. PSE promptly replaced this main with new pipe. However, when crews responded to this event, they "found" an above ground bridge crossing of Manastash Creek which prior to this event, Kittitas County PSE operations was unaware of. As local crews were unaware, they failed to follow the plans, procedures and programs as required under 49 CFR Part 192 for this above ground bridge crossing.

In particular, PSE failed to:

- a. take annual pipe-to-soil reads on cathodically protected underground steel pipe per 49 CFR Part 192.465(a).

- b. conduct atmospheric inspections of the exposed steel casing per 49 CFR Part 192.481(a).
- c. patrol the line crossing a bridge per 49 CFR Part 192.721(b)(2).

PSE Response:

PSE agrees with the finding above with the exception that the washout event occurred in the spring of 2011 and the pipe segment subject of this finding was not encased as indicated in bullet point (b). Storm response and restoration efforts by PSE led to uncovering approximately 40 feet of steel pipe connected to the 5000 feet of PE main. Subsequently, PSE discovered that atmospheric corrosion inspections, cathodic protection monitoring and line patrols as required by PSE's Operating Standards were not conducted.

PSE took immediate actions to remediate the situation and prevent a recurrence including:

- An atmospheric corrosion inspection was conducted and pipe-to-soil reads were taken. No corrosion was found on the segment of relatively new installation.
- Location and pipe classification were entered into the SAP work and materials management database to ensure that the pipe is inspected for atmospheric corrosion at the required intervals.
- Location and pipe classification were entered into the SAP work and materials management database to ensure that pipeline patrols are performed at the required intervals.
- PSE surveyed all bridge crossings in the area for pipeline hanging on existing bridges. No additional, previously unidentified, steel segments were found.
- PSE researched the as-built drawings and project documentation provided by PSE's contractor responsible for the line installation and found no records of the steel segment.
PSE believes that the absence of such documentation contributed to the failure of conducting the required inspections.
- In addition, PSE reviewed the leakage survey and leakage management records for any reported leaks on the main and found that no leaks were historically identified in the area of the bridge.

2. WAC 480-93-018 Records.

- (1) *Each gas pipeline company must maintain records sufficient to demonstrate compliance with all requirements of 49 CFR §§ 191, 192 and chapter 480-93 WAC.*
- (5) *Each gas pipeline company must update its records within six months of when it completes any construction activity and make such records available to appropriate company operations personnel.*

Finding(s):

In reference to the Manastash Creek event, PSE failed to inspect the facility and generate the records which demonstrate compliance with all requirements of 49 CFR Parts 191, 192 and Chapter 480-93 WAC.

In particular, PSE failed to:

- a. maintain records and maps of cathodically protected facilities and galvanic anodes per 49 CFR Part 192.491(a).
- b. update their maps within 6 months of completing a construction activity and then making those accurate records of construction and maps available to operating personnel per 49 CFR Part 192.605(b)(3).

PSE Response:

PSE strives to maintain and achieve accurate and complete maps. It follows good practices to gather, validate and verify data reflected on its maps. An omission error on as-built drawings led to not identifying on PSE maps the 40 foot of steel line integrated in the larger PE pipeline system. Missed information relative to the PE-to-steel transition fittings interconnecting the pipes contributed to transferring this error to PSE maps of cathodically protected facilities. PSE maps have since been revised to incorporate the transition fitting details and better identify the steel segment.

PSE is in the process of implementing a Geographic Information System (GIS) mapping system. In its aim of continuous improvement of its mapping quality, PSE plans on utilizing GIS for corrosion management as it can visually display and generate reports on pipe segments required to be cathodically protected.

AREAS OF CONCERN

1. **49 CFR §192.631 Control Room Management.**

(f) *Change management. Each operator must assure that changes that could affect control room operations are coordinated with the control room personnel by performing each of the following:*

- (1) *Establish communications between control room representatives, operator's management, and associated field personnel when planning and implementing physical changes to pipeline equipment or configuration;*

Finding(s):

When UTC staff visited the Kittitas Gate Station with representatives from PSE to conduct field inspection and OQ validation, it was stated that the operation of the station during the summer is different from winter. The difference is that pressure settings are changed to a lower setting during the summer months and the supply is run through the bypass, not through the high pressure runs. When asked while onsite, field representatives from PSE responded that it is because the Becker automatic valves have a software issue and they can't reliably communicate with the PSE system. Subsequent conversations with Mr. Joe Ewing, Consulting Engineer, indicate that gas control, can and does, communicate with these valves in a reliable manner.

In view of the confusion by operating personnel, and the fact that this system is operated differently than other PSE regulator stations, it would be prudent to develop a separate procedure for this station. The additional procedure should be readily available onsite explaining how the system is operated, including the Management of Change (MOC) documents supporting the current pressure settings.

PSE Response:

Customer loads in Kittitas County vary significantly with the weather hence the operation at the station varies between the summer and winter seasons. PSE designed and built the regulator station to accommodate such variation and to reliably and remotely communicate pressure data with PSE's Gas Control center. Since its construction in 2008, the station has been maintained and inspected regularly as required by PSE's operating standards and procedures.

Because Williams' meter at the station does not have the rangeability required to accurately measure the lowest flows possible through the station, PSE voluntarily kept the Becker valves closed during summer months and instead utilized the bypass to minimize the times the station is at very low flows. Williams is now completing a project that will add a smaller meter in parallel with the existing meter to increase the station's rangeability. Once Williams' project is completed, expected to be by the end of October, 2012, PSE will need to make changes to its on-site program that controls the operation of the Becker valves. Those changes are expected to be completed before the end of 2012.

Historical data relative to operation and maintenance at the station including regulators' pressure settings is recorded in an SAP database. In addition, pressure changes at the station were recently governed by control room management (CRM) procedures and are now being documented on Management of Change (MOC) forms maintained by Gas Control. Field personnel performing activities to maintain or enhance operations at the regulators are required to obtain a copy of the Design Data Sheet from SAP prior to performing work. This data sheet contains pressure settings and reflects information included in the MOC document. Field personnel also coordinate pressure information with Gas Control on the day the work is being performed.

PSE believes that its current practice of utilizing the SAP datasheet and coordinating with gas control is adequate and sufficient and the use of the MOC documents in the field was not the intent of the CRM regulations and may be redundant. However to address the concern raised in this finding, PSE will take the following actions:

- PSE will conduct a review of the station schematic available in the field and make changes as needed by 11/30/2012
- PSE will develop a checklist to guide pressure control personnel performing field inspection and maintenance by 12/31/2012
- PSE will review the information conveyed by the Kittitas gate station's SAP design data sheet by 12/31/2012 for possible improvements.

2. **49 CFR §192.605 Procedural manual for operations, maintenance, and emergencies.**

(b) *Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during the maintenance and operations.*

(1) *Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and Subpart M of this part.*

Finding(s):

Staff observed that operations personnel use yellow plastic tags to write the last pressure setting left on the regulator(s) after completing a task. According to PSE crews, this provides other personnel the operating pressure which should be indicated on the pressure gauge(s). The ink used on the yellow tags fades in the sun and cannot be read by operation and maintenance personnel. A revised system should be implemented by PSE to ensure field personnel have the most current information while onsite to perform maintenance. Additionally, this process could not be located in PSE's 2012 Gas Field Procedures. If it is being used in the field, it needs to be included in your procedure to ensure ownership, reliability, and consistency in application.

PSE Response:

As a result of the 2008 Snohomish Audit PSE piloted and later implemented the use of yellow plastic tags to document pressure settings in the field. Pressure data at the station is also available through multiple means prior to and following performing field maintenance and inspection work at the station. This includes:

- SAP reports
- Communication with PSE's Gas Control
- Pressure gauges

To address the concern raised in this finding, PSE began evaluating the use of a different style paint pen and the yellow plastic tags. The results of this evaluation will be communicated to Staff by 11/16/12.

3. **WAC 480-93-200 Reporting Requirements.**

(8) *Each gas pipeline company must file with the commission, and with appropriate officials of all municipalities where gas pipeline companies have facilities, the names, addresses, and telephone numbers of the responsible officials of the gas pipeline company who may be contacted in the event of an emergency. In the event of any changes in personnel, the gas pipeline company must immediately notify the commission and municipalities.*

Finding(s):

PSE was unable to provide proof of correspondence showing they notified appropriate officials of all municipalities where gas pipeline companies have facilities; the names, addresses, and telephone numbers of the responsible officials of the gas pipeline company who may be contacted in the event of an emergency. What PSE did provide was proof of their liaison program with Kittitas emergency responders-fire department, sheriff and 911 dispatch. However, the code does not state that only emergency response

personnel are to be contacted. The code states "*appropriate officials of all municipalities.*" Staff believes this to be at a minimum (as the code identifies municipalities) elected officials, city manager, police and fire chiefs, and others whom PSE determines should get such correspondence. PSE needs to identify who are the appropriate officials for each of the municipalities where PSE has facilities.

PSE Response:

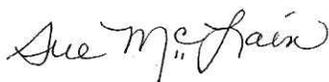
PSE addresses contacts with local municipalities and emergency officials in several of its programs. This includes:

- Public Awareness
- Business Continuity and Emergency Management
- Safety
- Community Relations and Municipal Liaison

As implied in this finding, PSE agrees that the phrase "*appropriate officials of all municipalities*" is subject to interpretation. To address the concern raised by Staff, PSE began working on developing a process where this phrase would be better defined and accordingly appropriate officials be identified for all municipalities within its service territory. PSE intends on contacting all municipalities and with input from local government develop and maintain a list of emergency contacts. A list of names, addresses and telephone numbers of the Company's officials who may be contacted in the event of an emergency would be filed with the appropriate officials as they are better identified. PSE plans on completing this effort and communicating the new process to Staff by March 30, 2013

PSE trusts that the information provided fully responds to and satisfies your request. PSE respects the Commission's responsibilities in auditing and enforcing pipeline safety regulations and we continue our efforts to construct, operate and maintain a safe gas pipeline system that meets high standards of excellence.

Sincerely,



Sue McLain
Senior Vice-President Delivery Operations

CC: Carol Wallace, Director Gas Operations
Grant Ringle, Director Communications
Will Einstein, Director Community and Business Services
Michael Hobbs, Director Operations Program
Greg Zeller, Director Engineering
Cathy Koch, Director Compliance
Cheryl McGrath, Manager Compliance and Regulatory Audits - Gas