



STATE OF WASHINGTON
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
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CERTIFIED MAIL

July 31, 2014

Booga K. Gilbertson
VP Operations
Puget Sound Energy
PO Box 90868 M/S: PSE-12N
Bellevue, WA 98009-0868

Dear Ms. Gilbertson:

**RE: 2014 Natural Gas Standard Inspection - Puget Sound Energy, Lewis/Thurston
Counties Distribution Systems**

Staff from the Washington Utilities and Transportation Commission (staff) conducted a standard inspection from June 2-26, 2014 of Puget Sound Energy's, Lewis/Thurston Counties Distribution Systems. An exit interview was held in Bellevue on June 27, 2014. The inspection included a records review and a field inspection of pipeline facilities and operating personnel.

Our inspection found three probable violations as noted in the enclosed report. We also noted two areas of concern, which unless corrected, could potentially lead to future violation of state and/or federal pipeline safety rules.

Your response needed

Please review the attached report and respond in writing by September 2, 2014. The response should include how and when you plan to bring the probable violations into full compliance.

What happens after you respond to this letter?

The attached report presents staff's decision on probable violations and does not constitute a finding of violation by the commission at this time.

After you respond in writing to this letter, there are several possible actions the commission, in its discretion, may take with respect to this matter. For example, the commission may:

- Issue an administrative penalty under RCW 81.88.040, or;



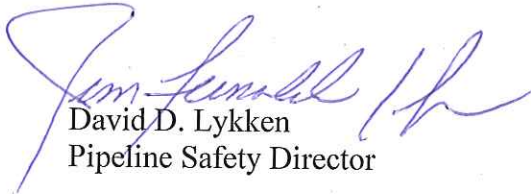
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- Institute a complaint, seeking monetary penalties, changes in the company's practices, or other relief authorized by law, and justified by the circumstances, or;
- Consider the matter resolved without further commission action.

We have not yet decided whether to pursue a complaint or penalty in this matter. Should an administrative law judge decide to pursue a complaint or penalty, your company will have an opportunity to present its position directly to the commissioners.

If you have any questions, or if we may be of any assistance, please contact Dennis Ritter at (360) 664-1159. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,



David D. Lykken
Pipeline Safety Director

Enclosure

cc: Catherine Koch, Director, Compliance, PSE
Harry Shapiro, Director, Gas Operations, PSE
Duane A. Henderson, Manager, Gas System Integrity, PSE
Cheryl McGrath, Manager, Compliance Programs, PSE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2014 Natural Gas Standard Inspection
Puget Sound Energy—Lewis/Thurston Counties

The following probable violations and areas of concern of Title 49 CFR Part 192 and were noted as a result of the 2014 inspection of the Puget Sound Energy Lewis/Thurston Counties Distribution Systems. The inspection included a random selection of records, operation and maintenance (O&M), emergency response, inventory, and field inspection of the pipeline facilities.

PROBABLE VIOLATIONS

1. 49 CFR §192.739 Pressure limiting and regulating stations: Inspection and testing.

(a) Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is-

- (1) In good mechanical condition;*
- (2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;*
- (3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of § 192.201(a); and*
- (4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.*

Finding(s):

PSE Regulator Station (RS) 313 Lacey, WA: records showed this regulator was not inspected and tested in 2013 as an outlet equipment valve was inoperable. Run 1, Stage 2 could not be isolated to perform the required annual maintenance and testing. Annual maintenance was not completed in 2013 as a result.

2. 49 CFR §192.743 Pressure limiting and regulating stations: Capacity of relief devices

(a) Pressure relief devices at pressure limiting stations and pressure regulating stations must have sufficient capacity to protect the facilities to which they are connected. Except as provided in §192.739(b), the capacity must be consistent with the pressure limits of 49 CFR §192.201(a). This capacity must be determined at intervals not exceeding 15 months, but at least once each calendar year, by testing the devices in place or by review and calculations.

(b) If review and calculations are used to determine if a device has sufficient capacity, the calculated capacity must be compared with the rated or experimentally determined relieving capacity of the device for the conditions under which it operates. After the initial calculations, subsequent calculations need not be made if the annual review documents that parameters have not changed to cause the rated or experimentally determined relieving capacity to be insufficient.

- (c) *If a relief device is of insufficient capacity, a new or additional device must be installed to provide the capacity required by paragraph (a) of this section.*

Finding(s):

The records showed the 2012 annual regulator capacity analysis for RS 248 was not sufficient to provide necessary relief capacity--the latest calculation was completed per 49 CFR §192.743(a) in 2011. After further investigation, it was found that PSE discovered this capacity deficiency in 2002. Subsequent capacity analyses have shown it continued to be deficient. PSE did not repair the deficiency within the 12 year timeframe since first discovering the condition.

49 CFR §192.743(c) requires that a “*new or additional device must be installed to provide the capacity.*” The code does not state when this needs to occur. There is no federal interpretation on this issue. However, the code language uses the term “*must*” which per Merriam Webster means “to be required or compelled by law, morality or custom.” Furthermore, PSE’s Gas Operating Standard 2575. 5.1.3 states, “*If a system valve is found to have insufficient capacity, a work request will be initiated to install a new or additional relief device to provide the required relief capacity.*” The language in the code and in PSE’s Gas Operating Standards is sufficient to have compelled PSE to repair the deficiency in a much timelier manner.

The purpose of the relief is to protect downstream piping from experiencing pressures in excess of MAOP. PSE has knowingly allowed this safety issue to continue for 12 years.

3. 49 CFR §192.481 Atmospheric corrosion control: Monitoring

- (a) *Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:
If the pipeline is located: Then the frequency of inspection is:*

If the pipeline is located:	Then the frequency of inspection is:
Onshore	At least once every 3 calendar years, but with intervals not exceeding 39 months
Offshore	At least once each calendar year, but with intervals not exceeding 15 months

- (b) *During inspections the operator must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbanded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.*
- (c) *If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by §192.479.*

Finding(s):

During the field inspection, atmospheric corrosion was noted at several industrial/commercial meter sites: Steam Plant meter set on the Capital Campus, Olympia, WA, Sears meter set, Lacey, WA, meter set in alley at 4th and Washington, Olympia, WA, Crown Cork meter set, Olympia, WA. PSE sent crews out to investigate these sites. At the alley site, as soon as the wrap was removed, a leak developed; at the steam plant, crews

found corrosion which was mitigated and requested the concrete around the riser be removed and the pipe be properly wrapped (currently it is not wrapped). At the Sears meter set, PSE rated this a 4 SAI (must be repaired in 90 days). Given the level of corrosion found at these sites, it appears PSE did not inspect these facilities as required by the code or if they were inspected, did not grade or provide appropriate mitigation per 49 CFR §192.481(c) and PSE procedure 2600.1900.

Additionally, there seemed to be some confusion during the inspection as to who is responsible for these facilities, as all of them involve an industrial/commercial meter set. In discussing this issue with PSE, it was stated that in some instances, PSE's leak survey contractor would be responsible, in other locations such as hard to reach locations, PSE personnel are responsible. Additionally, it seems PSE personnel visit some of these sites routinely (i.e. odorant concentration readings) and although on site, did not identify or note the corroded conditions (steam plant and Crown Cork). It seems other PSE departments would be responsible for identifying and remediating atmospheric corrosion issues and leaks (leaks were noted in several valves at the Crown Cork and steam plant industrial meter sets). This is alarming. As such, PSE needs to investigate several aspects of these findings as follows:

- 1) Why did PSE not find the atmospheric corrosion identified during the inspection? One issue may lie in who is responsible. PSE needs to look at its procedures and standards to clearly identify who is responsible and communicate that to appropriate personnel so functional responsibility is not a problem (i.e. responsibility is either PSE's leak survey contractor or PSE Gas First Response or Industrial Meters).
- 2) Were personnel assigned to find this type of corrosion (all occurred at the soil to air interface) properly OQ qualified? Records indicate personnel qualifications were up to date, and records indicate leak all required maintenance was up to date. Yet these conditions were clearly evident when found as part of this inspection.
- 3) PSE OQ personnel routinely visit these sites as part of their normal activities (odorant concentration readings) however, leaks and atmospheric corrosion were evident and not flagged for repair. Do these personnel have the authority and responsibility to call out these types of conditions? If so, do they know this is part of their duties?

There is potentially several reasons why this condition occurred. The interaction of these conditions are complex enough to require a review of processes and oversight of the atmospheric corrosion monitoring requirements for industrial meter sets. What will be done to correct this gap?

AREAS OF CONCERN

1. Regulator station (RS) records inspection showed that for 2012, RS 248 and 249 (Centralia, WA) did not have a finalized capacity analysis completed. The engineer believed these stations were to be replaced in 2012. They were not replaced. PSE did the required review in

the proper timeframe per their procedures; however, due to the internal notes in PSE's database indicating these stations would be retired in 2012, the records were not completed. It would appear these notes caused confusion which led to record not being finalized. PSE needs to take steps to ensure this does not happen in the future.

2. Crown Cork and Seal meter set/RS 258, Olympia, WA. The risers at the Crown Cork showed some evidence of corrosion, however, not nearly as bad as the two PSE facilities noted above. The 2013 S&A 3-year atmospheric corrosion survey did not note any issue, nor did the annual RS 258 maintenance log. However, given that these risers are not wrapped and are located in an area which appears to be visited by landscapers using "weed eaters" PSE may want to consider ensuring that these high pressure risers are part of the annual regulator maintenance inspection. Currently, it is unclear whether pressure control looks at these gas facilities as they are outside of the fenced compound.