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August 28, 2008

David W. Danner, Executive Director and Secretary
Washington Utilities and Transportation Commission
PO Box 47250
Olympia, WA 98504-7250

Attn: Anna Soiza, Pipeline Safety Director

RE: 2008 Standard Inspection of Thurston/Lewis Counties Distribution System, Docket PG-080032

Dear Ms. Soiza,

This letter is in response to the "2008 Standard Inspection of Thurston/Lewis Counties Distribution System" report dated June 26, 2008. In this report Staff identified six probable violations and one area of concern. Below are PSE's responses to these findings.

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 hat might prevent proper operation.*

Finding(s):

(a) PSE has a regulating station serving a low pressure distribution system located at 210 4th Ave. W, Olympia. Records indicate that this regulating station has not been maintained annually, not to exceed 15 months as required.

(b) PSE has a regulating station serving a low pressure distribution system located at 402 4th Ave, E, Olympia. This regulation station serves 402, 404, 406, 408, 410 and 412 4th Ave. E. Records indicate that this regulating station has not been maintained annually, not to exceed 15 months as required.

Response:
PSE has remediated these locations by installing individual services thus eliminating the requirement for operating and maintaining a regulator station. Both projects are now completed.

Additionally, PSE had previously identified elsewhere in our system, service regulators installed in sidewalk vaults. PSE has begun the assessment process to determine the appropriate course of remediation required on a site by site basis. The assessment of each site will be completed by the end of the first quarter of 2009, at which time PSE will meet with the WUTC to present the findings and the corresponding remediation program. Included will be discussions with the WUTC on the application and intent of the applicable CFR as it relates to the suitable inspection of these types of installations.]

(c) During the PSE inspection of the Regulator Station RS-0245, the outlet relief (54 psig setpoint) required the use of full inlet pressure (approximately 100 psig) to clear rocks and mud from the 2nd stage relief stack. PSE indicated that the relief stack had been damaged earlier by a vehicle. PSE failed to insure that the relief stack was properly installed and protected from dirt and liquids. PSE procedure 4700.1620 requires that the mechanic operability of the relief valve be verified. PSE failed to do this resulting in mud and debris remaining in the relief piping after the vehicle damage was repaired.

Response:
PSE, as per GFP 4700.1600 and 4700.1620, does have field procedures in place for inspecting and adjusting relief valves. During the investigation of this particular example, the procedure appears to have been performed albeit it did not completely remove the debris from the relief stack. PSE immediately remediated this condition and will take this example as a training opportunity to further re-enforce the current well documented field procedures. In addition, a group of internal PSE stakeholders have begun discussions on how to enhance either the field procedures and/or the mechanical configuration of relief stacks so as to ensure that a more thorough inspection be performed, especially in cases where the relief stack was involved in an accident or where debris could have been introduced to the relief stack

2. **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:

1) *If the pipeline is located onshore at least once every 3 calendar years, but with intervals not exceeding 39 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):

(a) PSE was unable to provide records indicating that atmospheric corrosion surveys had been conducted on the service piping off a low pressure distribution system located at 210 4th Ave. W, Olympia. Two of the service risers show heavy atmospheric corrosion and pitting.

(b) PSE was unable to provide records indicating that atmospheric corrosion surveys have been conducted on the regulator station piping inside the vault serving the low pressure system at 210 4th Ave W, Olympia. The regulator station piping shows signs of heavy atmospheric corrosion.

(c) PSE was unable to provide records indicating that atmospheric corrosion surveys have been conducted on a regulator station located at a vault at 402 4th Ave. E., Olympia

(d) PSE was not able to conduct an adequate inspection for atmospheric corrosion on pipe surfaces contacting four pipe supports at the Olympia Gate station. PSE has three concrete supports and one metal support on the out let of the RS-1358 Gate Station at 4027 Boulevard Rd. in Olympia.

Response:

On (a), (b) and (c) PSE was able to provide atmospheric corrosion inspection records for these locations. These documents were provided to the inspector on May 21, 2008. PSE respectfully requests the removal of these probable violations.

On (d) PSE has remediated the issue related to the upper metal portion of the concrete supports. PSE previously recognized that these type of supports are indeed problematic in there inability to be thoroughly inspected for atmospheric corrosion. As such PSE had already begun the process of identifying pressure regulating stations that would require future remediation. PSE has already replaced the pipe supports at stations when a station rebuild is required (i.e., South Seattle Gate Station and SWARR). PSE will continue to validate the current listing of stations with pipe supports of this design, identify any gaps and assess each pressure regulator station for the proper course of remediation. This effort will result in the development of a remediation program. The initial plan of identification and assessment will be completed by the end of the first quarter of 2009 at which time PSE will meet with the WUTC to present the findings and the corresponding program and related timelines for completion.

3. **49 CFR §192.365 Service lines: Location of valves.**

(a) Relation to regulator or meter. Each service-line valve must be installed upstream of the regulator or, if there is no regulator, upstream of the meter.

(b) Outside valves. Each service line must have a shutoff valve in a readily accessible location that, if feasible, is outside of the building.

(c) Underground valves. Each underground service-line valve must be located in a coverable, durable curb box or standpipe that allows ready operation of the valve and is supported independently of the service lines.

Findings:

(a) PSE has a service line located at 215 Washington, Olympia. Meter numbers 721113 and 466608. The service riser comes out of the pavement, up the wall approximately 8-inches and in through the building wall where it serves a 2 meter manifold. The regulator is vented to the outside. There is no external shut-off valve on the service line as required.

(b) PSE has a service line located at 402 4th Ave E., Olympia. There is no external shut-off valve on the service as required.

(c) PSE has a service located at 404 4th Ave E, Olympia. There is no external shut-off valve on the service as required.

(d) PSE has a service located at 406 4th Ave E, Olympia. There is no external shut-off valve on the service as required.

(e) PSE has a service located at 408 4th Ave E, Olympia. There is no external shut-off valve on the service as required.

(f) PSE has a service located at 410 4th Ave E, Olympia. There is no external shut-off valve on the service as required.

(g) PSE has a service located at 412 4th Ave E, Olympia. There is no external shut-off valve on the service as required.

Response:

PSE has remediated all of the above noted findings. In addition, we will communicate and train, as necessary and applicable, field staff in the identification and appropriate documentation process. When discovered PSE will initiate a process for the appropriate level of remediation on a site by site basis. PSE will complete this by the end of 2008.

4. **49 CFR §192.455 (a)(2) External corrosion control: Buried or submerged pipelines installed after July 31, 1971.**

(a) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:

1) It must have a cathodic protection system designed to protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction.

Findings:

The following facilities did not have adequate cathodic protection:

(a) Service line to 215 Washington, Olympia -0.414mV

(b) Service line to 210 4th Ave. W. -0.717mV

(c) Low pressure main and 3 services downstream of regulator in front of 210 4th Ave W. No addresses were obtained because meters were inside. 0.427mV, -0.502mV. (Staff reads and PSE reads were similar)

Response:
PSE has remediated the locations noted above by installing individual services in late July 2008. In addition, a group of internal PSE stakeholders have begun discussions on how to enhance either the field procedures and/or processes in order to more effectively manage this issue. PSE will present its plan to the WUTC at the end of the first of 2009.

5. **49 CFR §192.161(c) Supports and anchors**.

(c) *Each support or anchor on an exposed pipeline must be made of durable, noncombustible material and must be designed and installed as follows:*

Findings:
PSE has a two meter manifold located at 516 N. Washington, Olympia that is supported by wood blocks. Part 192.161 does not allow the use of combustible materials as support for pipeline facilities.

Response:
PSE has remediated this location with the installation of a standard meter support constructed of a non-combustible material. It should be noted that this installation in no way reflects the current standards or installation practices of PSE. In addition, PSE has taken this opportunity to re-enforce the documented standard through an internal publication named the 'WORD'. The article along with its illustration highlights the proper and improper method of supporting meter sets. Included as Attachment A is a copy of this publication. Further, a formal review of this standard has commenced with all PSE and Contract work forces engaged in this process.

6. **49 CFR§192.355 Customer meters and regulators: Protection from damage**

(a) Protection from vacuum or back pressure. If the customer's equipment might create either a vacuum or a back pressure, a device must be installed to protect the system.

(b) Service regulator vents and relief vents. Service regulator vents and relief vents must terminate outdoors and the outdoor terminal must:

1) *Be rain and insect resistant;*
2) *Be located at a place where gas from the vent can escape freely into the atmosphere and away from any opening into the building; and*
3) *Be protected from damage caused by submergence in areas where flooding may occur.*

(c) Pits and vaults. Each pit or vault that houses a customer meter or regulator at a place where vehicular traffic is anticipated must be able to support that traffic.

Finding(s):
PSE has an underground regulator located in a vault at 109 Washington St., Olympia. The regulator has been vented to the atmosphere up the side of the building. The screen in the regulator vent is completely plugged with heavy paint preventing natural gas from venting freely and affecting the operation of the regulator in the event of an over pressure situation.

Response:
PSE appreciates that this matter was brought to our attention and has since remediated the installation. However, PSE does not believe that this citation (49 CFR§192.355) is applicable to this area of concern. The plugging of the regulator vent with what appears to be a heavy paint or coating was the result of recent actions taken by the building owner/occupant. As noted in PSE Gas Operating Standards publication under section 2575.2700 – Continuing Surveillance, standards and corresponding internal processes are in place to identify and remediate unsafe, unsatisfactory and nonstandard conditions in the course of performing construction, operation, and maintenance activities. PSE believes that these internal processes would have allowed for the timely discovery and correction of the condition. In light of this we respectfully request the removal of this probable violation from this audit.

AREAS OF CONCERN

1. Several service lines were observed in the Olympia area that used dresser style compression valves above ground. Most of these were on services with inside meter sets. These were the only external shut-off valve for many of these services. These valves do not have the ability to be locked when in the off position in the event a service needs to be isolated and to prevent unauthorized persons from operating.

   Response:
   While PSE has a limited number of these types of valves, we do have a stock of clam shell locking devices of varying sizes which are used when locking off or securing these types of valves. PSE can provide upon request either photographs or a physical example of these locking devices.

PSE respects the Commission's responsibilities in auditing and enforcing pipeline safety regulations and we continue our efforts to construct and operate a safe system that meets high standards of excellence.

Please feel free to contact me at 425-462-3967 if you have any further questions or comments.

Sincerely,

Helge Ferchert
Manager, Gas Compliance and Regulatory Audits

Attachment

cc: Michael Hobbs
Duane Henderson
Erik Markell
Bert Valdman
Karl Karzmar

THE WORD.

Connecting Commodities With People and Practices

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Natural Gas Meter Support Is Not To Be Taken Lightly

By Kaaren Daugherty (81-3748)

PSE's natural gas meters and regulators are required to be installed in a manner that minimizes anticipated stresses on the connecting piping and the meter. This policy, found in *Gas Operating Standard* (*GOS*) 2550.1000, "Meter Set Assembly Design Policy," comes from the federal pipeline safety regulations. To meet this requirement, a permanent meter support may be necessary.

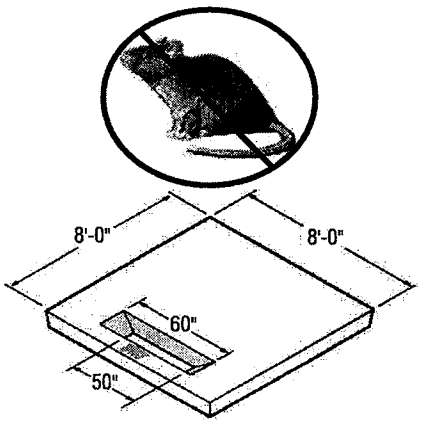
GOS 2525.2400, "Support and Anchor Requirements," requires each support on an exposed pipeline to be made of a durable, noncombustible material (this too is a federal pipeline safety rule). In addition, this standard requires that the support be designed and installed such that inspection for atmospheric corrosion can be accomplished. Therefore, only coded meter supports may be used unless a noncoded support is approved by the Manager Engineering and the Manager Standards.

The adjustable meter stand (**MID 8500610**) is coded and approved to provide permanent support for gas meter set assemblies. Pipe clamps with a channel strut and associated fittings are also approved for use and are required on specific meter sets in accordance with the Meter Set Assemblies section in the *Gas Design and Construction Standards* manual.

If, during normal operations and maintenance activities, you see an existing meter support that does not comply with this requirement, please report this condition on the Reporting Abnormal or Unusual Operating Conditions on Gas Facilities form (PSE Form 3704), aka "the blue card," in accordance with *GOS* 2575.2700, "Continuing Surveillance."

New Vault Lid for Transformer Upgrades

By Helen Turner (81-3728). Also contact Kathy Tilley (81-3798).



8x8 Cover for Transformer Upgrades on 504 Vaults
(MID 9997499)

A new 8'x8' vault lid (**MID 9997499**) has been coded to allow transformer upgrades to 500 kVA or 750 kVA on an existing 4'-8" square vault. The cable access hole in this new lid is beveled to match the inside wall of the 504 vaults. The bevel helps prevent critter access into the vault or transformer.

The 504 vault is PSE's standard for 3-phase transformer installations of less than 500 kVA. Often, changes occur later that require a larger transformer and it is more cost-effective to use same vault. This new vault lid is approved for use in these maintenance situations only.

The MatCat has been updated online this month to show this MID and a number of other new MIDs for 7'x7' risers and rotated switch cabinets placed on existing 5'x9' vaults.

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