



STATE OF WASHINGTON

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

1300 S. Evergreen Park Dr. S.W., P.O. Box 47250 • Olympia, Washington 98504-7250
(360) 664-1160 • TTY (360) 586-8203

Ref. No. Docket PG-070179

CERTIFIED MAIL

November 15, 2007

Bert A. Valdman
Executive VP & COO
Puget Sound Energy
PO Box 90868 MS: EST-07W
Bellevue, Washington 98009-0868

Dear Mr Valdman:

Subject: 2007 Standard Inspection of King County Distribution System

We conducted a natural gas inspection from September 17 to October 22, 2007, of Puget Sound Energy's (PSE) King County District. The inspection included a records review and field inspection and field inspection of the pipeline facilities.

Our inspection indicates four probable violations as noted in the enclosed report. We also noted five 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 December 17, 2007. The response should include how and when you plan to bring the probable violations into full compliance. We also request your response to our areas of concern.

If you have any questions, or if we may be of any assistance, please contact Al Jones at (360) 664-1321. Please refer to Docket PG-070179 in any future correspondence regarding this inspection.



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Thank you for your cooperation and interest in pipeline safety and integrity.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carole J. Washburn".

Carole J. Washburn

Executive Secretary

Cc: Sue McLain, PSE

Duane Henderson, PSE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2007 Natural Gas Pipeline Standard Inspection Report
Puget Sound Energy – King County District
Docket No. PG-070179

The following violations of WAC 480-93, which adopts 49 CFR Part 192, were noted as a result of the 2007 pipeline safety inspection of Puget Sound Energy (PSE) King County distribution system. The inspection included a review of the procedures, records, inventory, and field operations and maintenance of the natural gas facilities.

PROBABLE VIOLATIONS

1. **Part 192.199 Requirements for the Design of Pressure Relief and Limiting Devices.**

- (e) *Each pressure relief or pressure limiting device must; "Have discharge stacks, vents, or outlet ports designed to prevent accumulation of water, ice, or snow, located where gas can be discharged into the atmosphere without undue hazard."*

Finding(s):

- (a) The Mark Twain Elementary School at 2450 South Star Lake Drive (Meter No. 556349, 528284, & 629477) in Federal Way.
- (b) The Fire Station at 27015 16th Ave South (Meter No. 1013069) in Federal Way.

Both meter sets are located under extended roof eaves at the inside corner of two exterior walls. The locations are sheltered areas with limited air circulation creating a potential hazard. The Mark Twain Elementary School regulator vent was identified during the 2005 inspection (PG-050516) with a PVC vent extending above the roof. The vent pipe was removed and a 2-inch long steel nipple was placed on the outlet of the regulator. The Commission's response dated September 25, 2006, stated the downward directed nipple does not meet the intent of CFR 192.199(e) discharging into the atmosphere without undue hazard.

2. **Part 192.355 Customer Meters and Regulators: Protection from Damage.**

- (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;*

PSE Gas Operating Standards

2550.1000.3.3.1.1 For regulators that have breather vents, the regulator shall be installed: such that the breather vent is pointed down or a gooseneck shall be attached to the breather vent and oriented down.

Finding(s):

The regulator vents were found placed in the horizontal direction that could potentially allow moisture to accumulate in the regulators located at the Super Mall at Meter No. 629949 & 431045.

3. **Part 192.479 Atmospheric Corrosion Control: General**
(a) *Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere...*

Finding(s):

- (a) The service riser at 3701 SW Ida Street, Seattle (meter # 242425) was found severely pitted.

4. **Part 192.463 External Corrosion Control: Cathodic Protection.**

- (a) *Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in appendix D of this part.*

Finding(s):

A low pipe-to-soil value was found at DR 1565 (-0.676 vDC) because the local rectifier needs maintenance. A new ground bed is proposed to replace the deficient bed at the Allentown Rectifier located in the 4300 block of South 124th Street, Tukwila.

AREAS OF CONCERN

1. **Part 192.605 Procedural Manual for Operations, Maintenance, and Emergencies.**

- (a) *General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response.*

PSE Gas Operating Standards

2600.1500.5.1.1

Voltage shall be within the range of -0.85 V to -2.0 V for the ON read...

Finding(s):

A level of cathodic protection at the South Seattle Gate Station was found to be -3.145 vDC. This exceeds PSE standard (2600.1500.5.1.1) that states, The local rectifier output voltage was increased to provide coverage where the rectifier serving at DR 1565 was out of service (see Violation Item No. 4, above). Excessive voltage could damage the bond between the pipe and its coating.

2. **Part 192.605 Procedural Manual for Operations, Maintenance, and Emergencies.**

- (a) *General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response.*

PSE Gas Operating Standards

2550.2100 Table3-1 Piping Downstream of the Meter

Fuel Line.

Customer that is not a master meter operator.

The piping must meet the requirements of the International Mechanical Code (IMC).

Finding(s):

The fuel lines at the Kent Station Shopping Mall complex are copper tubing with mechanical compression type joints. Please provide documentation for this type of fuel line where welded and screwed joints are not used.

3. **WAC 480-93-170 Tests and Reports for Pipelines**

(10) *Pressure testing equipment must be maintained, The requirements of this section also apply to equipment such as pressure charts, gauges, dead weights or other devices used to test, monitor or check system pressures or set-points.*

Finding(s):

The high pressure hoses used to check the set-point on the overpressure protection relief valves are not maintained by pressure test. PSE does not have a procedure to periodically test high pressure hoses on regular basis.

4. **Part 192.491 Corrosion Control Records.**

(c) *Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures...*

WAC 480-93-018 Records.

(4) *Operators must record and maintain records of the actual value of any required reads, tests, survey or inspections performed.*

Finding(s):

The pipe-to-soil and rectifier monitoring records are electronically stored without sufficient detail to polarity. All data is recorded as positive sign values. Staff recommends that PSE include the standard sign convention for pipe-to-soil and rectifier values in their database.

5. **Part 192.727 Abandonment or Deactivation of Facilities.**

(b) *Each pipeline abandoned in place must be disconnected from all sources and supplies of gas; purged of gas ...*

Finding(s):

The Issaquah gate station located on SE 56th Street and East Lake Sammamish parkway has been taken out of service. The facility has gas at the aboveground valve from the distribution main. The valve is closed and secured. In general, the station is in various stages of being dismantled with the regulators and meters removed. The building that housed the regulators, above ground piping, and odorant tank are on site. The facility has been abandoned for years, the vegetation has encroached on the site, the building has been tagged with graffiti, and the security fence has been damaged. The potential for vandals at the facility exist. Staff recommends the distribution main be disconnected from the fuel source at the street and the odorant tank be removed.