



STATE OF WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

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CERTIFIED MAIL

July 26, 2016

Booga K. Gilbertson
Senior Vice President-Operations
Puget Sound Energy
PO Box 97034 M/S: PSE-12N
Bellevue, WA 98009-9734

Dear Ms. Gilbertson:

**RE: Natural Gas Incident Investigation: 900 SW Holden St., Seattle, Washington,
March 4, 2016 (Insp. No. 6909)**

Staff from the Washington Utilities and Transportation Commission (staff) conducted an investigation into the natural gas incident which occurred at an aboveground district regulator in Seattle, WA on March 4, 2016, at the above address. A natural gas pipeline had a release of gas due to an outside force, resulting in no injuries or fatalities. Our investigation concluded that there were no violations of federal or state pipeline safety rules which led to or exacerbated the incident.

The release of gas was caused by an outside force, a driver under the influence of alcohol, driving a car travelling north on 9th Ave SW at a high rate of speed smashed through the fence of a PSE district regulator station damaging the outlet intermediate pressure regulator run of the station. The Remote Telemetry Unit (RTU) within the station was also impacted. The damaged 6" diameter steel pipeline was operating at an MAOP of 45psig at the time the damage occurred. Two sensing lines were also replaced on two different runs of the regulator due to the vehicle damage.

Staff has no follow up or recommendation for PSE. A copy of staff's investigation report is attached for your reference.

Puget Sound Energy
Natural Gas Incident Investigation (Insp. No. 6909)
July 26, 2016
Page 2

If you have any questions or if we may be of any assistance, please contact Scott Anderson at (360) 664-1297. Please refer to the inspection number above in any future correspondence pertaining to this inspection.

Sincerely,



Alan E. Rathbun
Pipeline Safety Director

Enclosure – Form H – UTC Incident Investigation Form

cc: Cara Peterman, Director, Enterprise Risk Management & Compliance, PSE
Harry Shapiro, Director, Gas Operations, PSE
Cheryl McGrath, Manager, Compliance Programs, PSE
Stephanie Silva, Gas Compliance Program Manager, PSE
Monica Ferguson, Regulatory Compliance Analyst, PSE

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Notification ID:	2983	Investigation ID:	6909
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Inspector Name:	Scott Anderson
Date Report Submitted to Chief Engineer:	7/19/2016
Date Report Reviewed & Approved by Chief Engineer:	7/19/2016, Joe Subsits

Operator:	Puget Sound Energy (PSE)
District/Unit:	King County West
Location:	Highland Parkway & SW Holden St., Seattle WA
Incident Date:	March 4, 2016

Description:
<p>On March 4, 2016, Puget Sound Energy (PSE) responded to a report of damage to a PSE Facility at 900 SW Holden St., Seattle, WA. Upon arrival PSE first responders found a damaged aboveground regulator station. The damage was caused by impact from a car that resulted in an uncontrolled release of gas. First responders were able to stop the flow of gas by shutting off the header valve to the regulator run that was damaged.</p> <p>The City of Seattle Fire Department evacuated approximately 60 people from an apartment building and neighboring homes.</p>
Facts/Chronology of Events:
<p>On March 4, 2016 , at approximately 12:00 AM, a driver under the influence of alcohol driving a car travelling north on 9th Ave SW at a high rate of speed smashed through the fence of a PSE district regulator station damaging the outlet intermediate pressure regulator run of the station (see photos). The Remote Telemetry Unit (RTU) within the station was also impacted (see photos). The damaged line was a steel 6" running at an MAOP of 45psig at the time the damage occurred. Two sensing lines were also replaced on two different runs of the regulator due to the vehicle damage (see photos).</p> <p>PSE arrived on-site at approximately 12:19 AM, the emergency was controlled and one hundred percent shut down by 1:45 AM by closing a valve and using the existing bypass to serve customers. The incident was reported from Stephanie Kreshel (PSE) to Anthony Dorrrough (UTC) at approximately 2:37 AM. The time of temporary repair was at approximately 4:00 AM.</p>

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In determining how an aboveground facility is to be protected from possible vehicular damage, PSE uses five considerations: Proximity of the facility to the edge of the travel lanes, the expected speeds in the travel lanes, the width of the travel lane, the volume of vehicular traffic, existing nearby building damage or other indicators of vehicle damage that may have already occurred. The standards also say that all aboveground regulator stations are to be protected by a chain-link fence.

The aboveground facility was protected from vandalism, tampering, and third-party damage with a six foot, chain-link fence with barbwire at the top. The facility is located approximately 60' north of SW Holden St., approximately 28' west of Highland Parkway SW/9th Ave SW and approximately 8' west of a driveway for an apartment complex. There was no indication of how fast the vehicle was travelling at the time of the damage but the posted speed limit on Highland Parkway SW/9th Ave SW is 30 MPH.

According to a representative from PSE, at the time of installation, this station was reviewed and determined not to be subject to anticipated vehicular damage. The criteria in section 6 of GOS 2525.3700 were considered; documentation of the consideration of these factors is not required by the operating standard. The station was located approximately 50' from the nearest roadway and surrounded by a fence. It was further surrounded by a hillside to the east, a utility pole to the southeast, and a building to the west. Therefore PSE concluded that the station was not subject to anticipated vehicular damage (see photo).

Causes/Contributing Factors:

The incident is due to outside force from a driver under the influence of alcohol crashing through the fence of a district regulator station and damaging one of the runs of the regulator.

Regulatory Analysis/Violations:

According to 49 CFR Part 192.317(b) states that each aboveground transmission line or main, not located offshore or in inland navigable water areas, must be protected from accidental damage by vehicular traffic or other similar causes, either by being placed at a safe distance from the traffic or by installing barricades.

49 CFR Part 192.353(a) states that each meter and service regulator, whether inside or outside a building, must be installed in a readily accessible location and be protected from corrosion and other damage, including, if installed outside a building, vehicular damage that may be anticipated. However, the upstream regulator in a series may be buried.

PSE's Gas Operating Standards (GOS) section 2525.3700 Protecting Aboveground Facilities subsection 6 Protection from Vehicular Damage:

6.1.1 In determining whether or not vehicular damage may be anticipated, consideration shall be given to the following:

- 6.1.1.2 Proximity of the facility to the edge of the travel lanes;
- 6.1.1.3 The expected speeds in the travel lanes;
- 6.1.1.4 The width of the travel lane;
- 6.1.1.5 The volume of vehicular traffic;

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6.1.1.6 Existing nearby building damage or other indicators of vehicle damage that may have already occurred;

Subsection 7 Protecting from Vandalism, Tampering, and Third-Party Damage:

7.2 Chain-Link Fence

7.2.1 When a chain-link fence is installed, it shall be constructed according to the requirements set forth in PSE Specification 1025.9310.

7.2.2 Installation of fencing shall be considered for the following situations:

7.2.2.4 Always at aboveground regulator stations, except as approved by the Manager Engineering.

After reviewing the federal code and PSE's GOS, staff believes that the district regulator met standards.

Follow up/ Recommendations:

Staff does not have any recommendations.

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Photo 1: Location of Regulator Station Aerial View

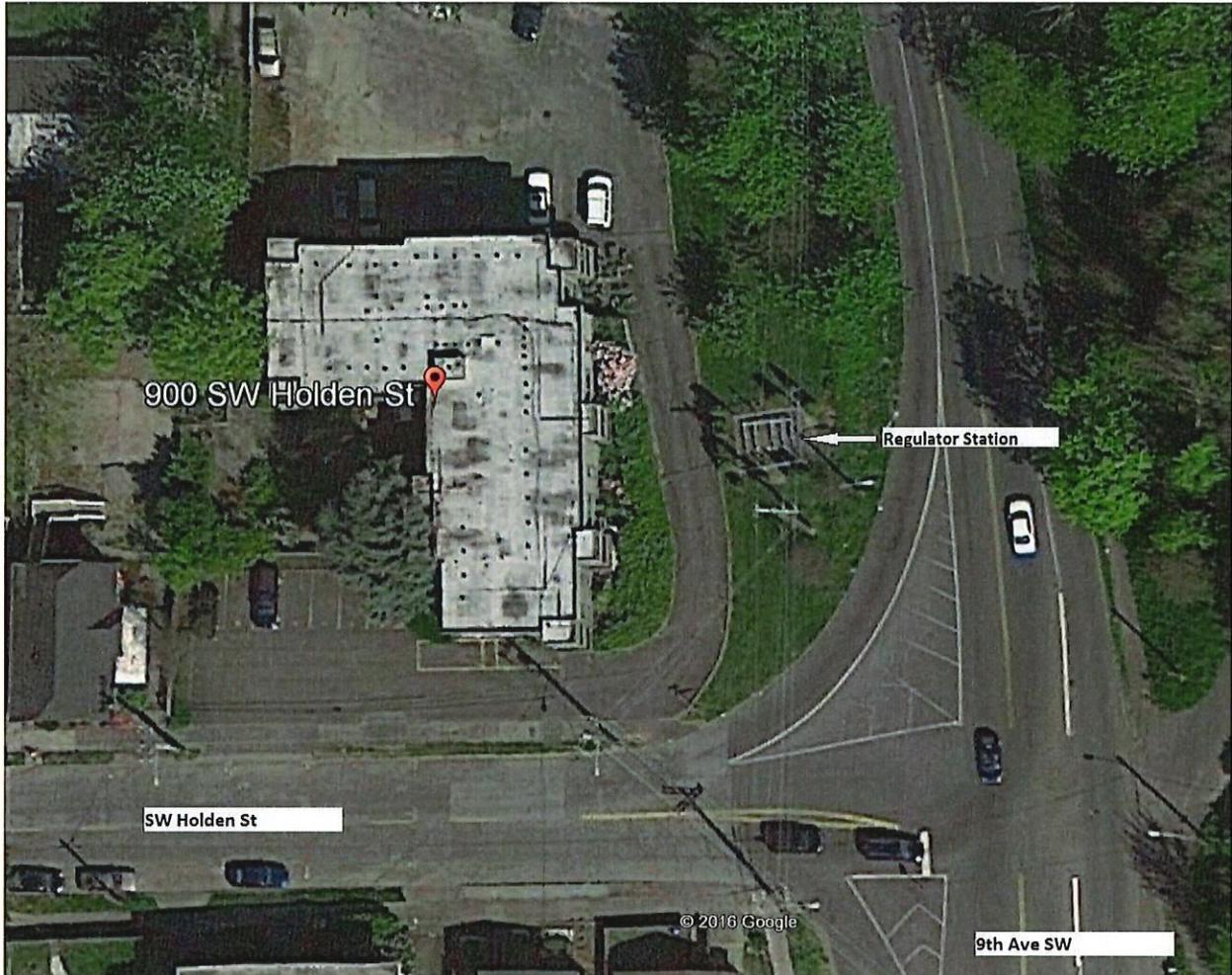


Photo 2: Street View of Regulator Station



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Photo 3: Path of Vehicle That Damaged Regulator (Photo provided by PSE)



Photo 4: Regulator Run Damaged by Vehicle



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Photo 5: View of Damaged Regulator Run



Photo 6: Replaced sensing line



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Photo 7: Damaged Regulator Run including Damaged Pole with RTU



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Photo 8: The shown sensing line was damaged and replaced on this run of the regulator



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Photo 9: The shown sensing line was damaged and replaced on this run of the regulator

