# **POST INSPECTION MEMORANDUM**

Inspector: Scott Rukke/WUTC

Reviewed: D. Lykken/WUTC 5/20/2011

Peer Reviewed:

Follow-Up Enforcement: No Violation PCP\* PCO\* NOA WL YES LOC

Director Approval\*

Date: May 20, 2011

**Operator Inspected:** 

**OPID:** 22189

**Region:** Western

Puget Sound Energy PO Box 90868 M/S PSE-12N Bellevue, WA 98009-0868

**Unit Address:** 

Jackson Prairie Storage Facility 239 Zandecki Road Chehalis, WA 98532

**Unit Inspected:** Jackson Prairie Storage Facility

**Unit ID:** 33875

**Unit Type:** Interstate Natural Gas

Inspection Type: I01 – (6.0) Abbreviated Procedures Standard Inspection, I08 - (0.5) OQ Field

Verification, and I07 – (0.5) IMP Field Verification & Follow up

Record Location: Jackson Prairie Storage, Chehalis, WA

**Inspection Dates:** March 29 – 31, 2011, and April 20, 2011(Lex was not present during April 20 insp.)

**AFOD:** 7 (101 - 6.0, 108 - 0.5, and 107 - 0.5)

**SMART Activity Number:** 

**Operator Contact:** James A. Janson, Manager

### **Unit Description:**

Jackson Prairie storage is the 14th largest storage reservoir in the United States in terms of capacity for natural gas withdrawal and delivery to consumers. The facility is co-owned with equal rights with Puget Sound Energy, Avista Utilities, and Williams Northwest Pipeline. The facility was authorized for underground storage of natural gas in 1963 and certified for commercial service in 1970. Today, the facility has storage for 23 billion cubic feet and is expanding capacity to 25 billion cubic feet by 2012 with an additional 48 billion cubic of "cushion" to provide pressure in the reservoirs. The facility consists of a series of deep, underground reservoirs of porous sandstone deposits approximately 1,000 to 3,000 feet below the ground surface. The storage facility has 102 wells spread across 3,200 acres for injection and withdrawal points for natural gas. The facility can meet up to 25% of the Pacific Northwest's peak natural gas demand on the coldest winter days. Major components of the facility includes: well points, gathering lines, filtration, coalesce, dehydration, compression units for injection to

the storage field or interstate pipeline, cathodically protected transmission pipelines protected by impressed current system, and SCADA control unit.

# **Facilities Inspected:**

The operator's O&M manual was initially reviewed by UTC staff in 2005. Since this time, the gas storage field has been expanded by approximately 28% of its working storage capacity, ten new injection/withdrawal wells have been constructed, and a new turbine compressor station completed. This inspection reviewed the maintenance records, OQ field verification on covered tasks, IMP Field Verification Inspection, and the following field items:

Four transmission lines ROWs from Williams Gate Station to Jackson Prairie Storage Facility including BP's Olympic Pipeline crossing, block valves, rectifiers, CP test sites, cased road crossings. OQ Field verification was conducted on covered task and IMP Field verification was conducted as part of this inspection.

### **Persons Interviewed:**

James A. Janson, Manager	(360) 262-3365
Darryl Hong, Compliance Program Coordinator	(425) 462-3911
Rick Braaten, Supervisor	(360) 262-3365

#### Probable Violations/Concerns:

Two probable violations were noted for the following areas:

- 1. 192.731(a), Compressor Station Relief Devices (1 per yr/15 months).

  CFR 192.731(a) requires that relief devices in compressor stations be inspected and tested at the frequency noted in 192.739(a), which is once each calendar year not to exceed 15 months. Records indicate that over pressure protection relief devices for three compressor station dehydration vessels, #76, #44 and \$43, were not inspected and tested during calendar year 2009 and exceeded 15 months between inspection and testing.
- 2. 192.13(c), Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

  In order to meet the requirements of 192.485 for transmission corrosion issues, PSE procedure 4515.1760 requires engineering notification for pits over a certain depth as outlined in PSE's O&M manual. PSE's engineering department will then determine follow up requirements. At the time of this inspection records indicated that in 2009, several areas of localized pitting were found under the wrap located at the soil-to-air interface of some pipe risers. These pits had a depth greater than that requiring engineering notification. Records were not available indicating that notification was made. This is a probable violation of 192.13(c), failure to follow PSE's procedure 4515.1760.

Follow up on the history of prior offenses that are still open:

Prior Offenses (for the past 5 years)		
PF#	What type of open enforcement action(s)?	Status of the regulations(s) violated (Reoccurrence Offenses, Implement a NOA Revision, Completion o PCO or CO, and etc)
N	J/A	
N	N/A	

### Recommendations:

Recommend that a warning letter be issued for the two probable violations.

Maintain normal inspection cycle.

# **Comments:**

Next inspection should put emphasis on the non-Saturn compressor building. In addition, emphasis should be placed on atmospheric corrosion inspections, findings and remedial action relevant to the soil-to-air interface of pipe risers where previous corrosion has been found.

# Attachments:

PHMSA Form 1A – Standard Inspection - Abbreviated Form

PHMSA Form 12 – Gas Storage Field Review

PHMSA Form 13 – Drug & Alohol

PHMSA Form15 – OQ Field Inspection Protocol

PHMSA Form 16 – IMP Field Verification

PHMSA Form 17 – Supplemental SCC Questionnaire

Pipeline Safety Violation Report

• Exhibit A & B – supporting documents to violation report (compressed zip file folder)

Version Date: 5/5/08