

September 3, 2009

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

Attn: Anne Soiza, Pipeline Safety Director

RE: Everett Delta Pipeline Pressure Authorization

Dear Ms. Soiza:

Pursuant to WAC 480-93-020, Puget Sound Energy (PSE) requests approval to operate the existing 16-inch Everett Delta pipeline at a pressure exceeding 500 psig. This pipeline is currently operated by Williams Northwest Pipeline Company (Northwest).

The 9-mile Everett Delta pipeline was installed in 2004 by Northwest under the FERC docket Number PF-04-10-000. PSE is the owner of the pipeline and Northwest operates it under a Facilities Agreement with PSE. The agreement expires November 9, 2009. Therefore, on May 28, 2009, Northwest and PSE filed a "Joint Abbreviated Application for Approval to Abandon Operation of the Everett Lateral Facilities and Request for Non-Jurisdictional Determination" with the FERC. The Filing is designated as docket CP09-422-000. On August 10, 2009, FERC entered an Order Approving Abandonment under this docket.

The 16-inch pipeline was designed and tested for a 960 Maximum Allowable Operating Pressure (MAOP) and has been operating at pressures between 465 psig and 500 psig since it was initially placed into service. PSE's Everett Delta Gate Station (RS-2667) regulates the pressure in the pipeline from Northwest's mainline pressure and the pipeline serves PSE's Everett Limit Station (RS-2665) and the Soper Hill District Regulator Station (RS-2666). In September 2004, PSE was granted authorization by the Commission to operate piping at each of these stations in excess of 500 psig under Docket PG-041370.

The existing pipeline exceeds the minimum federal safety regulations in the following design, operation and maintenance areas:

- **Class Location** – the design and construction specifications meet or exceed the requirements for Class 4 even though the pipeline is in Class 2 and 3 locations. (192.5)
- **Design Factor** – The design factor of 0.20 exceeds the 0.40 factor for a Class 4 location. (192.111)
- **Nondestructive Testing** – 100% of all welds on 6" and larger pipe and fittings was performed. This inspection level far exceeds the minimum federal safety regulations which do not require nondestructive testing of pipelines operating below 20% SMYS. (192.241 and 192.243)

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- **Cover** – The minimum depth of cover over the pipeline is 48". This exceeds the minimum federal requirements of 24". (192.327(b))

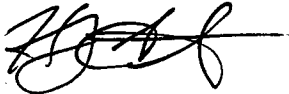
Exhibit A provides additional details on the design and construction of this pipeline.

Also included are the documents requested by the WUTC, and are as follows:

- Everett Delta Lat. Test Post – Location, Description & Reading
- Everett Delta Lat. – Rectifier 1702 Readings
- Everett Delta Lat – Annual Aerial Patrol
- Everett Delta Lat. – Sniff Test
- Everett Delta Lat. – Block Valve Inspection/Maintenance
- Everett Delta Lat. – Land Patrol/Leak Surveys
- Everett Delta Lat. – G317A & B 3.76 Campus Park LLC
- Aerial Map

If you have any questions or require additional information please call me at (425) 462-3967.

Sincerely,



Helge Ferchert  
Puget Sound Energy  
Manager, Gas Compliance & Regulatory Audits

Attachment

cc: Eric Markell  
Karl Karzmar  
Bert Valdman  
Duane Henderson  
Shamish Patel  
Mike Hobbs

## Exhibit A - GENERAL INFORMATION

### 1. Background

The existing 16" Everett Delta pipeline extends approximately 9.15 miles from the outlet of the Everett Delta Gate Station (RS-2667) located at the intersection of State Road 92 and North Machias Road and terminates in North Everett at the Everett Limit Station (RS-2665) which is located north of East Marine View Drive. A mainline block valve assembly with above ground blow downs is located approximately mid-way along the pipeline and coincident with the inlet to the Soper Hill regulator station. The pipeline supplies PSE's high pressure system in North Everett and an intermediate pressure system west of Lake Stevens. The pipeline was installed in 2004 by Williams Northwest Pipeline (Northwest) and is currently operated by Northwest.

### 2. Scope

The piping included in the request consists of all piping downstream of the outlet valve of the gate station, including the pig launcher that is located within the fenced enclosure at the gate station and extending to the outlet of the Everett Limit Station, including the pig receiver that is located within the fenced enclosure for the limit station.

### 3. Pipeline Route

Exhibit B provides an aerial photo of the route of the Everett Delta pipeline.

### 4. MAOP

The 16-inch Everett Delta pipeline was designed and tested for an MAOP of 960 psig.

### 5. Pipe and Fitting Specifications

The pipeline was constructed of 16" x 0.344 w.t. API 5L Grade X65 steel pipe with a fusion bonded epoxy (FBE) coating. The pipe and non-rated fitting specifications for the mainline, the pig launcher and receiver, and the block valve assembly with the corresponding percentage of specified minimum yield strength (SMYS) at MAOP and normal operating pressure are shown in the table below. The design of this new facility is below 20% SMYS at an operating pressure of 550 psig.

Material Specification	% SMYS @ MAOP (960 psig)	% SMYS @ Normal Operating Pressure (550 psig)
<b>Mainline:</b>		
16" x 0.344" w.t. API 5L-X65 FBE coated pipe	31.9	19.7
16" x 0.344" w.t. Y65 3R Ells	31.9	19.7
<b>Pig Launcher and Receiver:</b>		
20" x 0.4438" w.t. API 5L-X65	33.3	19.1
16" x 0.344" w.t. API 5L-X65	34.4	19.7
10" x .250" w.t. API 5L-X65	31.8	18.2
6" x .280 w.t. API 5L Gr B	32.5	18.6
4" x .237 w.t. API 5L Gr B	26.0	14.9
16 x .344 w.t. ASTM A-234 Y65 fittings	34.4	19.7
10 x .250 w.t. ASTM A-234 Y65 fittings	31.8	18.2
6 x .280 w.t. ASTM A-234 GR B fittings	32.5	18.6
<b>Block Valve Assembly:</b>		
16" x 0.344" w.t. API 5L-X65	34.4	19.7
6" x .280 w.t. API 5L Gr B	32.5	18.6
16 x .344 w.t. ASTM A-234 Y65 fittings	34.4	19.7
6" x .280 w.t. ASTM A-234 GR B fittings	32.5	18.6

All other pipeline components have a working pressure rating of at least 960 psig.

## 6. Damage Prevention

Pipeline markers will be installed and monitored in accordance with PSE Gas Operating Standards 2525.2500 and 2575.1100. PSE is an active member in the local One-Call System and works closely with the local municipalities and permitting agencies prior to any construction starting in the vicinity of its facilities. In addition, it is PSE standard practice to monitor construction work taking place in the vicinity of its high pressure systems.

## 7. Construction Details

a. Cover –The pipeline was installed with a minimum of 4 feet of cover.

b. Backfill –

- Initial backfill material was soil-based select material or native soil that passes a 1” square screen.
- Final backfill under road surfaces consists of a minimum of 3 feet of CDF as measured from below the surface and may include native soil below the CDF layer. Native soil below the CDF layer is free of rocks larger than 12” diameter or rocks exceeding 100 pounds.
- Final backfill in typical areas consists of native or imported soil free of rocks larger than 12” diameter or rocks exceeding 100 pounds.

c. Clearance - At least 36-inches of separation was maintained between the pipeline and other underground facilities parallel to the pipeline. Where 36-inches separation was not possible, the maximum possible clearance was maintained.

## 8. Cathodic Protection

The corrosion control program was designed and installed per state and federal codes. The following PSE Gas Operating Standards are applicable to the pipeline:

2600.1000	Cathodic Protection Requirements
2600.1200	Test Station Requirements
2600.1300	Designing and Installing Cathodic Protection Systems
2600.1400	Electrical Isolation and Grounding Requirements
2600.1500	Monitoring Cathodic Protection
2600.1800	Examining Buried Pipelines
2600.1900	Remedial Measures for Corrosion Control Discrepancies

### Coating:

The buried pipe is coated with following depending on the location:

- 15 mils fusion bonded epoxy (FBE);
- 12 mils FBE + minimum 45 mils Abrasion Resistant Overlay (Highway Crossings; HDD locations);
- 15 mils FBE + 2” concrete coating (Snohomish County Trail; Creek Crossings).

Any field joints and fittings not supplied with protective coatings had field applied coating. All above-ground piping was painted in accordance with written specifications.

## 9. Testing

The test medium was water and the pipeline was tested in two segments. The easterly segment was tested to 1583 psig at a point 71 feet above the segment low point. The westerly segment was tested to 1540 psig at a point 65 feet above the segment low point.

**10. Welding**

All welds were visually and radiographically inspected.

**11. Pressure Monitoring**

Remote telemetry units (RTU) monitor the pressure in the system. The RTU polls system pressures every 3 seconds. The pressure will be monitored 24-hours a day in PSE's 24-Hour Operations Center.

**12. Leakage Surveys**

Leakage surveys will be conducted in accordance with PSE Gas Operating Standard 2625.1100 (Leakage Survey Program). This Operating Standard requires leak surveys to be conducted every year for pipelines operating at or above 250 psig.