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January 26, 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: Cedar Hills Solid Waste Facility Methane Refining Gas Line Pressure Authorization

Dear Ms. Soiza:

Pursuant to WAC 480-93-020, Puget Sound Energy (PSE) requests approval to operate the new 6" Cedar Hills transmission line at a pressure exceeding 500 psig. The proposed pipeline starts at the Cedar Hills Landfill Gas Processing Facility owned by Bio Energy Washington (BEW) and terminates at a new PSE metering station operated by Williams North West Pipeline (WNWP) which will meter gas into two parallel WNWP 10" lateral transmission lines. The transmission line is approximately one-quarter mile in length and will be installed in an easement on land exclusively owned by King County at the Cedar Hills Regional Landfill located in the city of Maple Valley. Construction is scheduled to begin as early as the beginning of February.

The transmission line is designed for a Maximum Allowable Operating Pressure (MAOP) of 960 psig and all associated components are rated to at least 960 psig. The transmission line will be tested to 1440 psig minimum and will operate at less than 20% SMYS at an MAOP of 960 psig. PSE proposes to operate the transmission line at a minimum pressure of 790 psig and a maximum of 820 psig. The transmission line will be piggable.

The proposed 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 location even though the land parcel is situated in a Class 3 location. (192.5)
- **Design Factor** – the design factor of the station is 0.20, which is more stringent than a 0.40 factor for a Class 4 location. (192.111)
- **Nondestructive Testing** – PSE will perform radiographic inspection of 100% of all welds unless impractical, in which case at least 90% of the welds will be inspected.

This exceeds the minimum federal safety and regulations which do not require nondestructive testing of pipelines operating below 20% SMYS. (192.241 and 192.243)

- **Cover** – PSE’s standards require a minimum cover of 36” over transmission lines, and the pipeline is designed with a minimum 48” cover, this exceeds the minimum federal requirements of 36” (192.327). Also, where the pipeline crosses roads or vehicle traffic areas, the design calls for a protective concrete cap using 4,000 psi minimum compressive strength reinforced concrete installed a minimum of 12” above the pipeline and installed with red dye.

Exhibit A provides a schematic of the proposed transmission line and associated facilities. Exhibit B provides additional information regarding the design, construction, operation and maintenance of this facility. If you require any additional information, please call me at (425) 462-3967.

Sincerely,



Helge Ferchert
Manager – Gas Compliance and Regulatory Audits

Attachment

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

Exhibit A
PSE's Cedar Hills 6" Transmission Line Schematic

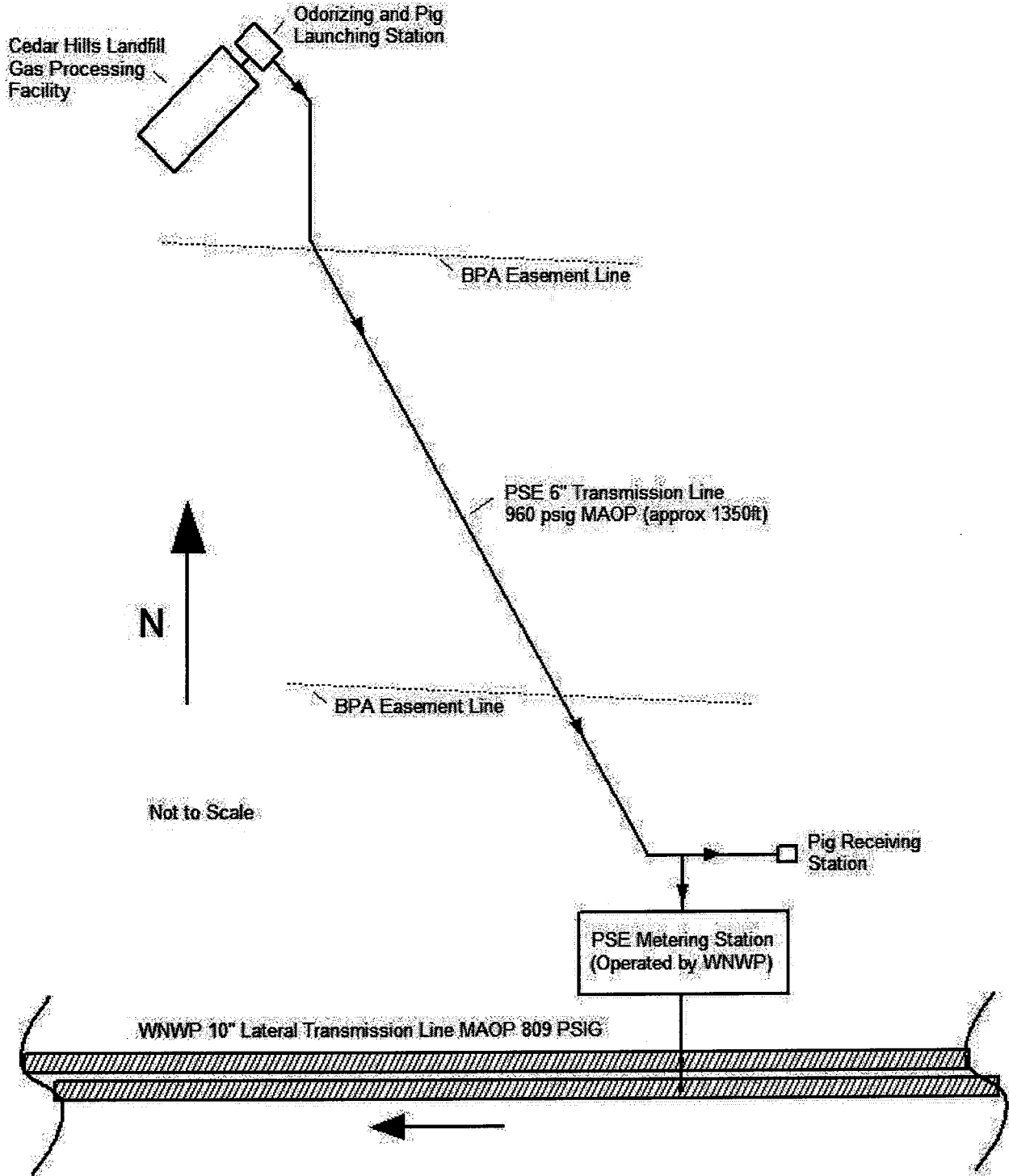


Exhibit B - GENERAL INFORMATION PSE's Cedar Hills 6" Transmission Line

Background:

PSE is requesting a pressure authorization for a proposed 1350' 6" diameter transmission pipeline that will receive pipeline quality gas purchased from the Cedar Hills Landfill Gas Processing Facility located at 16645 228th Ave SE. This gas will be delivered to the 6" transmission line at pressures between 790 psig and 820 psig and it will be odorized, metered, and transported to two parallel WNWP's 10" laterals that supply PSE's gas distribution system. The gas processing facilities is owned and operated by BEW. The transmission line, odorizer and metering equipment will be owned by PSE. The metering equipment will be operated by WNWP. All construction will be completed by Ingenco and will meet PSE standards. This 6" transmission line will allow for recovered landfill pipeline quality gas to be delivered into PSE's gas distribution system to diversify PSE's energy portfolio and serve as an additional gas resource.

Scope:

The piping included in this request extends from the outlet of the Cedar Hills Landfill Gas Processing Facility's 6" flange custody transfer point to the outlet valve of the metering skid and its by-pass outlet valve. This also includes the odorizer and pig launching and receiving piping. The transmission line is approximately 1350 feet in length.

Pipeline Route:

The proposed transmission line route begins at the Cedar Hills Landfill Gas Processing Facility's custody transfer point, a 6" flange upstream of the pig lunching skid, and runs approximately 1350 feet southeast along 228th Ave SE until it reaches the metering equipment. The mid-span of the proposed transmission line crosses under a set of power lines through a Bonneville Power Association (BPA) corridor. The proposed transmission line will be installed on King County owned property. King County will grant easements for the installation of this transmission line and the associated facilities.

Proximity Survey:

The proposed transmission line and facilities will be located on a King County land parcel in Maple Valley, Washington. A parcel review of the area within 500 feet of the proposed transmission line was conducted. The zoning for the transmission line route is Rural Area with one dwelling unit per 10 acres (RA-10) and is under King County's jurisdiction. There are no buildings or high occupancy structures or areas in existence or under construction along the transmission line route except for three buildings in the vicinity of the proposed tie-in point; one of which is the Cedar Hills Landfill Gas Processing facility. Information on buildings intended for human occupancy within 500 feet of the proposed tie-in point is

presented in Exhibit C. The entire transmission line route conforms to a Class 3 Location according to 49 CFR Part 192.

Design Specifications:

The proposed transmission line is being designed and will be constructed and operated in accordance with the requirements for Class 4 locations. The gas is odorized following receipt from the processing facility.

Operating Pressures:

The proposed 6" transmission line will receive gas from BEW at pressures ranging from 790 to 820 psig.

Pipe and Fitting Specifications:

The proposed transmission line will be constructed from 6" diameter and 0.280" wall thickness API 5L-X60 steel pipe with fusion bonded epoxy (FBE) coating. The pipe and fitting specifications with the corresponding percentage of specified minimum yield strength at MAOP/MOP are shown in the table below.

Material Specification	% SMYS @ MAOP/MOP (960 psig)
Pipe: 4" x 0.280", X-60 (one reducer)	12.86
Pipe: 6" x 0.280", X-60	18.93

All welded branch connections (i.e. purges and blow downs) have sufficient reinforcement not to increase the stress level of the pipe. All other pipeline components (valves, monolithic isolators, meters, etc.) have a working pressure rating of at least 960 psig.

Cathodic Protection:

The cathodic protection will be provided by a galvanic system and the proposed transmission line will be grounded to protect against induced AC voltage. The system is monitored and maintained in accordance with the requirements of section 2600 of the PSE Gas Operating Standards. The following standards are applicable to the station:

- 2600.1000 Cathodic Protection Requirements
- 2600.1100 Coatings for Pipe and Fittings
- 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
- 2600.1700 Monitoring and Remedial Measures for Internal Corrosion
- 2600.1900 Remedial Measures for Corrosion Control
- 2600.2000 Galvanic Anode Installation Requirements

Pressure Testing:

The test medium will be water and the test pressure will be at least 1440 psig (1.5 times MAOP). All testing will be done in accordance with PSE Gas Operating Standard 2525.3300 and in accordance with an approved test procedure.

Welding:

All welding and welding inspection will conform to the following PSE Gas Operating Standards:

- 2525.2700 Installation Requirements for Steel Pipe and Fittings
- 2700.1100 Welder Qualification Requirements
- 2700.1200 Weld Inspection and Repair
- 2700.1200 Weld Inspector Qualification Requirements
- 2700.1200 Welder Qualification Test Requirements

In addition, PSE has a comprehensive set of welding procedures that are included in the Gas Field Procedures Manual. All welding to be done on this project will be governed by these procedures. If any new procedures are required for the welding on this project, they will be qualified in accordance with PSE Gas Operating Standards and added to the Gas Field Procedures Manual.

A minimum of 90 percent of the welds will be x-rayed.

Operation and Maintenance:

Damage Prevention:

Pipeline markers will be installed and maintained 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 transmission lines. These facilities are expected to be at low risk from third party damage since they will be located on property owned by King County.

Leakage Surveys:

Leakage surveys will be conducted annually in accordance with PSE Operating Standard 2625.1100 and PSE Gas Field Procedure 4700.1600.

Pressure Monitoring:

Remote telemetry units (RTU) will 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.

Integrity Management Program (IMP):

The 6" transmission line will be incorporated into PSE's IMP in accordance with the program standards.

Exhibit C – Addresses, Land Use, and Distance of Structures from PSE Owned Facilities

#	Distance (feet) of Structure from PSE Owned Facilities	Address	City	State, Zip	Land Use	Zoning
1	0	16450 228 th Ave SE	MAPLE VALLEY	WA, 98038	RURAL	RA-10, ONE DWELLING UNIT PER TEN ACRES
2	193	16445 228 th Ave SE	MAPLE VALLEY	WA, 98038	RURAL	RA-10, ONE DWELLING UNIT PER TEN ACRES
3	216	16445 228 th Ave SE	MAPLE VALLEY	WA, 98038	RURAL	RA-10, ONE DWELLING UNIT PER TEN ACRES