BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket Nos. UG-110723
Puget Sound Energy, Inc.'s
Tariff filing for Pipeline Integrity Program

PUBLIC COUNSEL DATA REQUEST NO. 005

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Regarding the wrapped steel service assessment program, older polyethylene ("PE") pipe assessment and replacement program, and assessment and replacement of wrapped steel mains program, discussed on page 3, lines 3-7 of Mr. Henderson's testimony, please provide:

a. a brief description of each program,
b. the year each of the programs began,
c. the amount spent by year for each program, and
d. the length of pipe or number of services replaced each year, by program.

Response:

Wrapped Steel Service Assessment Program

Description: A program to evaluate the risk of older (pre-1972) wrapped steel service lines and develop appropriate mitigation, including replacement, of those identified with the highest risk.

Discussion: The Wrapped Steel Service Assessment Program ("WSSAP") was initiated in 2006 (Docket PG-041624) to evaluate the risk of the wrapped steel services installed prior to 1972 and ensure those with high risk are mitigated. The program uses a risk model to categorize approximately 100,000 WSSAP services into four mitigation categories; Priority Replacement, Scheduled Replacement, Increased Leak Survey, and Standard Mitigation. These categories specify the appropriate mitigation to apply. The risk model is updated annually with current operating history and performance information and new risk scores are calculated for each service address. Based on these risk scores, each service is placed into one of four mitigation categories and mitigation measures are implemented as appropriate.

The initial goal of WSSAP was to replace all services originally identified in the two highest priority categories (Priority and Scheduled Replacement) by December 31, 2010. In subsequent years, the risk model will be updated with current operating history

and performance and a new risk score will be calculated for each service. This may lead to additional services being identified as requiring additional mitigation.

Year	Capital Expenditures	Number of Services Replaced
2007	$1,400,000	166
2008	$7,600,000	1,308
2009	$12,200,000	1,397
2010	$5,800,000	569

Older Polyethylene Pipe Replacement

Description: A program to identify and replace older vintages of polyethylene ("PE") pipes that have exhibited performance characteristics that are not equivalent to more modern installations.

Discussion: Some segments of older (defined as pre-1986) PE pipe have factors that lead to an increased risk of repeat failures including fusion failures and through-wall brittle cracking. These factors include substandard fusion and backfill practices and a pipe resin inferior to that in use today. In 2008, PSE implemented improved processes in materials failure analysis that greatly enhanced the ability to identify fusion and brittle-like cracking failures on older PE pipe, especially the high-density PE DuPont pipe that is most susceptible to these failures. In 2009, PSE developed a risk model for DuPont pipe segments that prioritizes the replacement of these pipes based on their failure history.

Year	Capital Expenditures	Retirement Footage
2005	$500,000	6,584
2006	$4,000	0
2007	$900,000	5,724
2008	$1,000	0
2009	$1,500,000	3,704
2010	$2,400,000	10,973

Pre-1972 STW Main Replacement Program

Description: A program to evaluate the risk of older (pre-1972) wrapped steel mains and develop appropriate mitigation, including replacement, of those identified with the highest risk.

Discussion: Pre-1972 steel wrapped main adjacent to WSSAP priority and scheduled replacement services have been reviewed to determine if there is evidence of corrosion and whether they should be replaced.

Additional pre-1972 steel wrapped mains not adjacent to WSSAP priority and scheduled replacement services are also being reviewed to determine if there is evidence of corrosion and whether replacement or other mitigation is appropriate.

Year	Capital Expenditures	Retirement Footage
2010	$1,000,000	4,062