EXHIBIT NO. ___(DAH-3T)
DOCKET NO. UG-110723
WITNESS: DUANE A. HENDERSON

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY, INC.,** **Respondent.**	**Docket No. UG-110723**

PREFILED REBUTTAL TESTIMONY (NONCONFIDENTIAL) OF DUANE A. HENDERSON ON BEHALF OF PUGET SOUND ENERGY, INC.

NOVEMBER 8, 2011

PUGET SOUND ENERGY, INC.

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PUGET SOUND ENERGY, INC.

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I. INTRODUCTION

Q. Are you the same Duane A. Henderson who submitted prefiled direct testimony in this proceeding on September 2, 2011 on behalf of Puget Sound Energy, Inc. ("PSE")?

A. Yes.

Q. Please summarize the purpose of your rebuttal testimony.

A. My prefiled direct testimony, Exhibit No. ___(DAH-1T), explained PSE's past and current pipeline integrity efforts and provided an overview of PSE's proposed Pipeline Integrity Program ("PIP"). My rebuttal testimony responds to the testimony of several parties opposing PSE's proposal, including:

1. Mark Vasconi, witness for the Staff of the Washington Utilities and Transportation Commission (“Staff”);
2. Donald W. Schoenbeck, witness for the Northwest Industrial Gas Users ("NWIGU"); and
3. Andrea C. Crane, witness for the Public Counsel section of the Washington State Attorney General’s Office (“Public Counsel”).

II. THE PIP WILL BENEFIT BOTH CUSTOMERS AND PSE

Q. How do you respond to the arguments that the PIP does not provide a net benefit to PSE's customers?

A. PSE disagrees with the view that there will be no net benefit to customers if the PIP is approved. This view ignores the obvious benefits to customers that result from the accelerated replacement of older plastic pipe and older wrapped steel pipe that has been identified as more susceptible to failure. As I previously testified, customers benefit from enhanced integrity and safety as a result of this accelerated replacement of vulnerable pipe. Also, customers will benefit from more efficient replacement of at-risk pipe on a larger scale. With the PIP, PSE can go beyond addressing what must immediately be replaced to meet minimum pipeline safety standards, and can look at what additional pipe should be replaced based on mutually-agreed risk reduction alternatives and resource availability. This will result in replacement of additional at-risk pipe segments, expansion of the scope of pipe replacement projects, lowered risk for the remaining segments, and improved pipeline integrity.

Further, customers benefit by the collaborative process that will be undertaken in the PIP whereby stakeholders—including customer advocates—will have an increased opportunity to provide input into pipe replacement decisions.

Q. Public Counsel witness Andrea Crane claims that the proposed collaborative process under the PIP is an attempt to dilute PSE's responsibility for managing its pipeline replacement activities. Do you agree?

A. No. There is no basis for such a claim. PSE has proposed that stakeholders will have the opportunity to provide input into the process of determining what investments should be included in the PIP on an annual basis. In no way is PSE diluting its responsibility for managing its pipeline replacement activities. PSE is not attempting to shift any responsibility for its pipeline safety program to any other party, nor could it. Collaborative working groups have been effective tools in obtaining stakeholder input into several issues such as conservation resources. As Ms. Crane states, "It is the Company's obligation to operate its system safely and to make the improvements necessary to meet that obligation." Ms. Crane has not shown that obtaining input from those affected by PSE's management decisions is in any way shifting management responsibility to such stakeholders. On the contrary, seeking input and collaboration from stakeholders would be a proactive step forward in PSE's management of its pipeline safety program.

Q. How do you respond to the claim that the PIP is unnecessary?

A. As discussed in more detail in the rebuttal testimony of Tom DeBoer and John Story, the PIP would remove barriers for PSE to undertake accelerated replacement of older plastic pipe and wrapped steel mains and services. Given the tight budgets and competing budget demands, accelerated replacement is less likely to occur without a means to timely recover the cost of such replacement.

While it is true that PSE's system is safe, the PIP allows for expansion and acceleration of replacement programs that will increase overall safety. It is short-sighted to recommend rejection of a proposal that will enhance safety and improve efficiency simply because it is more than the minimum required.

Q. Do you agree with the analysis by other parties that PSE's pipeline replacement programs are working adequately and do not require improvement?

A. Public Counsel points to PSE's plastic pipe replacement as an example of how PSE's system is working adequately and does not require improvement. However, as stated in Exhibit No. ___(DAH-1T), PSE has over 1,000 miles of older DuPont polyethylene ("PE ") pipe in its system which is the most brittle and most susceptible to failure. PSE has currently identified over 100 miles of this pipe that have documented risks due to previous leak history and/or adverse environmental conditions and that are strong candidates for replacement. PSE continues to identify additional segments that are candidates for replacement, averaging approximately 14 new miles identified for replacement each year. It has taken PSE, with its current pipe replacement program, two years to replace approximately six miles of this pipe. Simple math shows that with PSE's current program, it would take several decades to replace all of the most hazardous type of pipe in PSE's system. Rather than a reason to reject the PIP, this rate of replacement under the current system supports the accelerated replacement provided for under the PIP.

Q. Commission Staff witness Mark Vasconi states that PSE has not specified how much remediation will be required for each type of pipe covered by the PIP. Therefore, it not known how, or at what cost to ratepayers, the PIP will expand or accelerate pipe replacement. How do you respond to these concerns?

A. The PIP provides a collaborative forum in which PSE can share the findings of its risk evaluation of this pipe and receive stakeholder input on the amount of pipe it proposes to replace. Thus, although PSE is not establishing a set amount of pipe replacement beyond the amount to be replaced in the current year, PSE will provide such specific information to stakeholders, and ultimately to the Commission, each year when it makes its PIP filing.

With the PIP, PSE will identify specifically how much more pipe can be replaced in a given year, how much faster it can be replaced, and stakeholders would have a voice in the collaborative effort to identify exactly how much should be spent. In a collaborative setting, the Commission and stakeholders would actually see more cost detail than with PSE's current system.

Approval of the PIP tariff will provide an opportunity to accelerate the replacement of these older PE pipe segments at a pace that reflects stakeholders risk reduction objectives.

Q. Do you agree with the testimony of Public Counsel witness Andrea Crane that the Company's obligation with regard to pipeline integrity management has not changed over the years?

A. At a fundamental level, the requirement has always existed to manage the integrity of our natural gas distribution system. However, the Pipeline and Hazardous Materials Safety Administration ("PHMSA") adopted the Distribution Integrity Management Program ("DIMP") to formalize and improve many of the practices already in existence within the industry. The regulation requires companies to formally document their integrity management practices and evaluate the entire program on an ongoing basis to determine if changes are necessary based on system performance metrics. Through the process of formalizing our integrity management processes, our approach to integrity management has evolved and will continue to evolve as intended by the regulation. As Mr. Lykken so aptly describes, the intent of the integrity management regulations is to "promote continuous improvement in pipeline safety by requiring operators to identify and invest in risk control measures beyond core regulatory requirements." This is exactly the aim of the PIP tariff.

Q. Has the Commission Pipeline Safety Staff been receptive in the past to ideas that would encourage accelerated pipe replacement beyond the minimum amount the Company is required to do to comply with regulations and maintain a safe pipeline system?

A. Yes, PSE has had discussions over the past several years with members of the Commission's Pipeline Safety Staff regarding ways to encourage a more proactive replacement of pipe—such as older plastic pipe—that has a higher incidence of failure. There has been recognition by Pipeline Safety Staff and PSE that although PSE is meeting the federal and state standards, more could be done to enhance the safety of PSE's system, and both Pipeline Safety Staff and PSE have looked for ways to remove barriers to pipe replacement. The PIP proposal is designed to achieve this goal.

Q. How do you respond to Mr. Lykken's testimony regarding the problem presented by older polyethylene pipe and PSE's exposure to it?

A. Mr. Lykken provides a good summary of the circumstances that support accelerated replacement of pipe as proposed in the PIP. While PSE's exposure to pre-1985 PE pipe, identified by PHMSA as having a higher risk of leaking due to brittle-like cracking, is only a fraction of the entire amount of plastic pipe in its system, there still exists an increased concern regarding the continued safe operation of a portion of this pipe. As mentioned earlier in my testimony, PSE has identified over 100 miles of this older vintage PE pipe that is considered a candidate for replacement. Approval of the PIP tariff will allow for the accelerated replacement of this pipe.

Q. Why does PSE need to accelerate replacement of wrapped steel services given your testimony that the majority of wrapped steel service lines fall

within the lower risk categories of "Increased Leak Survey" and "Standard Mitigation"?

A. Although the majority of wrapped steel service lines fall within the lower risk categories that do not require replacement, PSE continues to find new leaks on a portion of these services. The services with these leaks receive a new risk ranking annually and are typically replaced as a result of the new risk ranking. With the PIP tariff in place, PSE could expand the replacement criteria resulting in additional services being replaced proactively, prior to leakage.

Q. Why does PSE need to accelerate replacement of wrapped steel mains given your testimony that the majority of the wrapped steel mains are performing very well and are expected to reliably provide gas service for years to come?

A. The majority of wrapped steel mains are performing very well and we do expect them to continue to reliably provide gas service for years to come. However, in certain areas, leakage rates are increasing. With the PIP tariff in place, PSE could expand the replacement efforts resulting in additional mains being replaced proactively resulting in fewer leaks and less risk.

Q. How do you respond to assertions by Public Counsel witness Andrea Crane that because the majority of leaks involve bare steel mains and because most new leaks are categorized as Grade C, lowest priority leaks, the Company's current program is sufficient to address the most serious problems?

A. PSE agrees with the assertion that bare steel mains have the highest number of leaks per mile of pipe. This is one reason why PSE agreed in 2004 to replace all bare steel pipe. It is also the reason why PSE is only replacing wrapped steel mains and older PE based on a risk ranking of each segment, and is not proposing to replace the entire population of these other pipes.

PSE also agrees with the statement that, excluding excavation damage, most new leaks are categorized as Grade C which are non-hazardous at the time of detection and are expected to remain non-hazardous. However, this statistic is dramatically different when evaluated for the populations of materials for which PSE is proposing to accelerate replacement. Due to the nature of brittle-like cracking on older vintage PE pipe, leaks that occur are often more hazardous. In fact, more than 75 percent of the leaks found require immediate or next day repair and less than two percent are Grade C. For wrapped steel mains and services, approximately 30 percent of the leaks found require immediate or next day repair and less than 15 percent are Grade C. These statistics exclude leaks due to excavation damage which almost always require immediate repair and are not related to pipe integrity. However, the hazard of excavation damage will be mitigated by these pipe replacement programs as all new services and existing services associated with a main replacement will have an excess flow valve installed at the time of replacement. Excess flow valves shut off the flow of gas when the service is damaged by excavation therefore reducing the hazard due to excavation damage of the service.

Q. How do you respond to testimony of NWIGU witness Donald Schoenbeck that the PIP does not address situations of increased capacity that may occur when a PIP program results in larger capacity installations?

A. As stated in my prefiled direct testimony, any increase in capacity is not intended for new or additional customers, but rather to remove existing constraints.

III. CONCLUSION

Q. Does this conclude your testimony?

A. Yes, it does.