

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.
Respondent.

DOCKET PG-041624

NARRATIVE SUPPORTING SECOND
SETTLEMENT AGREEMENT

1 Per WAC 480-07-740(2)(a), this Narrative is filed as documentation supporting the
Second Settlement Agreement filed May 4, 2007. Because all parties are signatories, but the
Commission retains continuing jurisdiction over this matter, the Second Settlement
Agreement represents a “partial settlement,” pursuant to WAC 480-07-730 (2). The Second
Settlement Agreement is subject to Commission approval. *Second Agreement* ¶¶ 3, 4, and
28.

2 In Part IV below (¶¶ 13-34), each Party supplies a statement in support of the Second
Settlement Agreement.

I. PARTIES

3 The Parties to the Second Settlement Agreement are Puget Sound Energy, Inc.
 (“PSE” or “the Company”), the Staff of the Washington Utilities and Transportation
 Commission (“Staff”), and the City of Bellevue (collectively, “the Parties”). *Second
 Settlement Agreement* ¶ 2.

II. INTRODUCTION AND BACKGROUND

4 This docket involves a gas explosion that took the life of Mrs. Schmitz, a PSE gas customer, at her residence in the city of Bellevue. The evidence showed that the PSE service line providing gas to Mrs. Schmitz's house had leaks and significant corrosion.

5 On October 7, 2005, the Commission issued Order 04, "Order Approving Settlement Agreement," which approved the Revised Settlement Agreement filed by the parties.

Paragraphs 14 and 15 of the Revised Settlement Agreement require PSE to evaluate service lines of similar vintage to the one that exploded, and to recommend any further safety steps regarding those lines. Specifically, Paragraphs 14 and 15 state:

14. PSE will gather pipeline data for the services of similar vintage construction as Mrs. Schmitz (i.e., no cathodic protection for more than 5 years). The data PSE will gather includes corrosion leak history (LMS), cathodic protection history, Exposed Pipe Condition Reports (EPCR) information, USGS soils information, and information from field personnel interviews with individuals who have had the opportunity to work on existing buried pipe, including Quality Assurance, Corrosion Control, and Construction.
15. PSE Corrosion personnel will then evaluate the data gathered and described in the preceding paragraph in order to identify issues or trends of concern related to services. This effort will be undertaken in a collaborative effort in conjunction with Commission Staff. Commission Staff will be apprised of these results and PSE will communicate protocols undertaken at each stage. The City of Bellevue will also be provided this information to the extent it applies to services located within the City of Bellevue. Services that are identified as needing further evaluation will undergo further investigation, including as appropriate:
 - a. Determination as to the significance of the information, as it relates to the possible condition of the subject services;
 - b. Recommendation as to follow up activities such as additional testing, examination of the services, or replacement of the services;

- c. Appropriateness of additional measures such as DCVG and CIS assessments, and additional or more frequent leak surveys;
- d. For any problematic areas that may be identified in services that warrant replacement, PSE will then undertake an investigation of adjoining sections of the main to determine if a main replacement is warranted; and
- e. PSE estimates the program will cost at least \$250,000.00.

6 PSE has performed the required evaluation, and the Second Settlement Agreement embodies PSE's commitment to address service lines of the sort at issue in this docket.

7 III. NATURE OF THE SECOND SETTLEMENT AGREEMENT

7 The Parties agree that PSE collected data in compliance with Paragraph 14 of the Revised Settlement Agreement. *Second Settlement Agreement at 11.* The Parties agree that PSE evaluated that data, and that a plan has been developed, in compliance with Paragraph 15 of the Revised Settlement Agreement. *Id.*

8 PSE's plan addresses the safety of wrapped steel service lines installed before July 1, 1971 (the effective date of required cathodic protection by federal pipeline safety rules). The plan is called the "Wrapped Steel Service Assessment Program" ("WSSAP"). The current plan was filed on March 16, 2007 in this docket.

9 The essence of the WSSAP is reflected on the table in Paragraph 12 of the Second Settlement Agreement. That table shows that PSE has placed approximately 100,000 services into four categories: i) standard mitigation; ii) increased leak survey; iii) scheduled replacement; and iv) priority replacement. *Second Settlement Agreement at ¶ 12.*

10 PSE agrees to replace all services in the "priority replacement" category by December 31, 2007, and replace all the services in the "scheduled replacement" category by December 31, 2010. *Second Settlement Agreement at ¶ 14.*

11 The WSSAP is not static; PSE agrees to update the plan with the results of additional
leak surveys and cathodic protection electrical surveys. *Second Settlement Agreement at ¶¶*
14 and 21. It is anticipated that services will migrate between these categories as time goes
on and conditions change. *Second Settlement Agreement at ¶ 14*.

12 PSE will annually file status reports with the Commission identifying leaks
discovered on the services in the plan, and the number of services replaced. *Second*
Settlement Agreement at ¶¶ 23-25. PSE will also annually file with the City of Bellevue
reports specific to PSE facilities within the City of Bellevue. *Settlement Agreement at ¶ 26*.

IV. PARTIES' STATEMENTS IN SUPPORT OF THE AGREEMENT

A. Staff's Statement in Support of the Second Settlement Agreement

13 Commission Pipeline Safety Staff (Staff) supports this Second Settlement
Agreement. Staff worked in a collaborative effort with PSE in its preparation of a Wrapped
Steel Service Assessment Plan (WSSAP).

14 In conducting this assessment of wrapped steel services, PSE took a more
conservative approach than that required under the Revised Settlement Agreement, which
required PSE to evaluate all services that had been in the ground for more than five years
with no cathodic protection. *Revised Settlement Agreement at ¶14*. Instead, PSE included in
the WSSAP *all* services that were installed prior to 1972, which is five months after July 31,
1971, the date the federal rules first required gas pipelines to provide cathodic protection of
the pipe.

1. The Second Settlement Agreement Complies With Paragraphs 14 and 15 of the Revised Settlement Agreement

15 In order to properly participate in a review of PSE's efforts to comply with
Paragraphs 14 and 15 of the Revised Settlement Agreement, Staff retained a consultant, Mr.

David Berger, of David Berger Associates. With the assistance of Mr. Berger, Staff thoroughly reviewed not only PSE's data, but also the application of that data in the WSSAP model. Based on these efforts, Staff is able to agree that the Second Settlement Agreement complies with Paragraphs 14 and 15 of the Revised Settlement Agreement.

16 First, PSE has gathered and integrated significant data concerning wrapped steel services installed prior to requirement for cathodic protection. This data includes leak history, exposed pipe condition reports, soil data, cathodic protection history and the judgment PSE's subject matter experts.

17 Second, PSE selected a sophisticated model and populated the model with the available data. PSE tested the output of the model in a pilot area. With the input from subject matter experts, PSE modified the model to better align it with the data.

18 Third, the WSSAP categorizes services and requires PSE to replace those services PSE has classified in the greatest risk category. PSE will conduct more frequent leak surveys on services in the higher risk categories.

19 Finally, the risk assessment approach in the WSSAP is a continual process that will be enhanced as PSE adds data. Staff will periodically review PSE's progress and to assure compliance with the Second Settlement Agreement. Staff will continue to collaborate with PSE in implementing this risk assessment approach.

20 In sum, PSE has complied with Paragraphs 14 and 15 of the Revised Settlement Agreement, and the Commission should approve the Second Settlement Agreement so that PSE can follow through on its commitments.

2. Staff's Review of PSE's Model

21 As described above, Staff accepts the WSSAP as a tool for PSE to use in prioritizing the replacement of wrapped steel services in its system, and to satisfy Paragraphs 14 and 15 of the Revised Settlement Agreement. In this section, Staff wishes to emphasize that while the WSSAP is very useful, it is more a "relative risk model" than a "risk model" (a "risk model" is one that can accurately determine the specific risk category of a specific service line).

22 PSE's original goal was to use a model to estimate a "probability of failure" for each service, based on numerous risk variables. This was an ambitious undertaking, because neither Staff nor its consultant Mr. Berger is aware of any model in current use that can accurately predict when a natural gas service line will fail.

23 The problem is not the accuracy of the data. Staff believes PSE included the best available data in the model. The problem is that PSE simply lacks enough reliable data to "populate the model" for most of the risk variables included in the model. Consequently, from Staff's perspective, PSE's model cannot be used at this time to reliably discriminate between all of the services to place them in the various risk categories.

24 It is true that PSE performed direct visual assessments of nine services within a pilot area. However, Staff and PSE disagree as to whether these direct observations support the conclusions of the WSSAP model. While the nine visual assessments generally verified findings of coating anomalies indicated in an above ground electrical survey, the number of visual assessments comes no where near the number required for a statistically valid sampling.

25 Staff's primary concern with the model's reliability pertains to the services in the
"increased leak survey" category. Staff and PSE agree that PSE must aim additional effort
at assessing the risk of those services in the WSSAP "increased leak survey" category.
However, Staff's concern is largely mitigated through PSE's agreement to conduct
additional electrical surveys and confirmation assessments in this category.

26 In the end, Staff believes that PSE's commitment in the Second Settlement
Agreement ¶ 19 to conduct a minimum one thousand (1,000) electrical surveys and
associated verification assessments will result in enhanced reliability of WSSAP. Moreover,
PSE will add more data elements to WSSAP over time, which should also enhance the tool's
effectiveness.

27 Moreover, even though the initial goal of the WSSAP was not fulfilled, that model is
useful for purposes of complying with Paragraphs 14 and 15 of the Revised Settlement
Agreement.

B. PSE's Statement in Support of the Second Settlement Agreement

28 PSE extends its appreciation to staff for the effort to help develop the
aforementioned plan to further investigate service lines similar to the one at issue in this
docket. PSE further supports this recommendation.

29 PSE believes that both the specific services identified in this Settlement Agreement
together with the risk categorization represents an appropriate plan to further investigate,
monitor, and even replace certain services.

30 These conclusions are the result of an extended investigation undertaken by PSE to
identify and assess all services installed prior to 1972.

31 The model utilized by PSE to analyze these services is populated with the best available data and constitutes a “living model” that will continue to evolve and be refined over time. PSE believes this approach provides the best information while continuing to seek improvements as the model matures.

32 In addition to the commitment provided by PSE concerning investigation and/or replacement, PSE will provide a series of regular communications to the WUTC to insure continuing coordination with pipeline safety staff.

33 PSE believes this settlement constitutes a reasonable approach to address our commitment to further investigation and appropriate replacement going forward and requests Commission acceptance of the same.

C. City of Bellevue’s Statement in Support of the Second Settlement Agreement

34 The City of Bellevue believes that its major concern, the ongoing safety of its residents, is being adequately examined and addressed through the investigation and mitigation/replacement program being undertaken by PSE as part of the original settlement. The approach and methodology adopted by PSE appears reasonable in light of the data available to PSE. The City is pleased with the information provided by PSE to date relative to services located within the City of Bellevue, and is pleased that, through this proposed Second Settlement Agreement, PSE has agreed to update the City on the results of its

ongoing investigation and mitigation program on a yearly basis. The City of Bellevue supports the approval of this Second Settlement Agreement.

DATED: May ___, 2007.

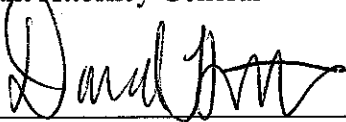
For Commission Staff:

For Puget Sound Energy, Inc.:

ROBERT M. McKENNA

Attorney General

Donald T. Trotter
Assistant Attorney General



Date signed: May 4, 2007

Susan McLain
Senior Vice President of Operations

Date signed:

For City of Bellevue

LORI RIORDAN

City Attorney

Cheryl A. Zakrzewski

Assistant City Attorney

Date signed:

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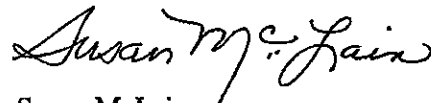
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Senior Vice President of Operations

5-3-07

Date signed:

For City of Bellevue

LORI RIORDAN
City Attorney
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Assistant City Attorney

Date signed: