

EXHIBIT NO. ___(SML-3)
DOCKET NO. PG-041624
WITNESS: SUSAN MCLAIN

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

Docket No. PG-041624

**SECOND EXHIBIT TO THE PREFILED DIRECT TESTIMONY OF
SUSAN MCLAIN (NONCONFIDENTIAL)
ON BEHALF OF PUGET SOUND ENERGY, INC.**

AUGUST 15, 2005

3 **Appearances.** James F. Williams, Perkins Coie LLP, Bellevue, Washington,
represents PSE. Lori M. Riordan, Acting City Attorney, Bellevue, Washington,
represents the City of Bellevue. Donald T. Trotter, Assistant Attorney General,
Olympia, Washington, represents Commission Staff.

4 **Procedural History.** On September 13, 2004, the Commission issued a complaint
against PSE alleging certain facts and violations of state and federal rules
concerning the September 2, 2004, explosion. The Complaint directed the
Commission to convene an emergency adjudication and included a list of actions
the Commission could order PSE to perform as emergency relief.

5 Based on the concern expressed in the Complaint that a dangerous condition
remains in the area of Bellevue covered by the rectifier, the Commission issued
on September 13, 2004, a Notice of Emergency Adjudication and Notice of
Hearing for September 15, 2004.

6 On September 15, 2004, the City of Bellevue submitted to the Commission a
Petition to Intervene and counsel for the City filed a Notice of Appearance.

7 Also on September 15, 2004, prior to the hearing, Commission Staff and PSE filed
with the Commission an Agreed Submission by Puget Sound Energy and Staff of
the Washington Utilities and Transportation Commission (Agreed Submission),
which sets forth a statement of agreed facts and agreed actions the Commission
could order PSE to take to address the potential emergency condition.

8 The Commission convened an emergency adjudicative proceeding at 3:00 p.m.
on September 15, 2004, in Olympia, Washington, before Chairwoman Marilyn
Showalter, Commissioner Patrick J. Oshie, and Administrative Law Judge Ann E.
Rendahl.

- 9 During the September 15, 2004, hearing, the Commission granted the City of Bellevue's Petition to Intervene. At the close of the hearing, the Commission found that action was necessary to prevent or avoid immediate harm to the public health, safety or welfare, and ordered PSE to undertake the actions set forth in Section 4.1 of the Agreed Submission.

MEMORANDUM

- 10 **The Complaint.** The Complaint sets forth a number of factual allegations describing the events leading up to and relating to the September 2, 2004, explosion at the house located at 16645 SE 26th Place, Bellevue, Washington. In summary, the Complaint alleges that a hole in the service line to the house allowed natural gas to leak out of the service line into the house, that the leak in the service pipe to the house was caused by corrosion, and that a corrosion control device known as a rectifier was incorrectly configured in such a way to promote, not reduce, corrosion of steel natural gas service lines serving the area in Bellevue where the explosion occurred. *Complaint*, ¶¶ 10, 14, 15.
- 11 The Complaint alleges "that the uncertainty surrounding the precise effects of the rectifier's failure to provide adequate cathodic protection has created an emergency requiring prompt action." *Id.*, ¶ 26. The Complaint directs that an emergency adjudicative proceeding be convened to determine whether an immediate danger exists. *Id.*, ¶ 28. Should the Commission determine that an immediate danger exists, the Complaint sets forth a number of actions the Commission could order PSE to take to avoid or prevent the danger to the public health, safety or welfare. *Id.*, ¶ 29.
- 12 The Complaint seeks not only emergency relief, but also monetary penalties and other appropriate relief in the event the Commission determines in a later phase of this proceeding that PSE violated any laws or rules. The Complaint directs,

pursuant to RCW 34.05.479(5), that a prehearing conference be scheduled to complete any proceedings that do not involve matters of immediate danger.

13 **The Agreed Submission.** Commission Staff and PSE filed with the Commission just prior to the hearing, an Agreed Submission that sets forth a statement of agreed facts and agreed actions. The statement of facts is nearly the same as that set forth in the Complaint, except that it identifies that the rectifier provided cathodic protection to approximately 2,600 homes, not 2,400 homes as stated in the Complaint. *Agreed Submission, ¶ 2.12; Tr. at 11.* The actions proposed in the Agreed Submission are also nearly the same as those proposed in the Complaint, except for actions relating to leak detection and repair in Section 4.1(b) and leak surveys in Section 4.1(h) of the Agreed Submission. *Tr. at 10-11.*

14 PSE and Staff agree in Section II of the Agreed Submission to the following facts leading up to and relating to the September 2, 2004, explosion:

- 2.1 Natural gas is a combustible gas. If it is present inside a house or other structure (other than properly contained inside the gas piping or properly contained in a functioning natural gas furnace or appliance), it can explode and cause significant damage to persons and property.
- 2.2 On September 2, 2004, an explosion (hereafter "the explosion") occurred at the house located at 16645 SE 26th Place, Bellevue, Washington (hereafter "the house"). The explosion was caused when natural gas inside the house ignited. The explosion destroyed the house and critically injured its resident, Ms. Frances F. Schmitz. Ms. Schmitz was in the house at the time of the explosion.
- 2.3 Ms. Schmitz is a residential customer of PSE. PSE provides natural gas to Ms. Schmitz at the house pursuant to residential gas service tariffs PSE has on file with the Commission.

- 2.4 On September 2, 2004, PSE provided gas to the house by means of a service line extending to the house from a PSE gas main located in front of the house. The main and service line are owned, operated and maintained by PSE. After the explosion, PSE removed all, or substantially all, of the service line.
- 2.5 At the time of the explosion, there existed a hole in the service line near a wall of the house. The hole permitted natural gas to leak out of the service line. The gas that leaked out of the service line entered the house through a hole or other sort of gap in the foundation of the house.
- 2.6 The service line to the house was composed of steel pipe, with a layer of coal tar wrap.
- 2.7 The service line to the house was protected by a cathodic protection system. PSE uses cathodic protection systems to prevent or reduce corrosion of metallic pipe and other metallic facilities. Cathodic protection is a method by which an underground metallic pipe is protected against corrosion. Corrosion will be reduced where sufficient electric current flows onto the pipe. A rectifier is an electrical device that changes alternating current to direct current, which is impressed onto the underground pipe to protect it against corrosion.
- 2.8 The house was served by a cathodic protection system owned, operated and maintained by PSE. An element of this cathodic protection system was a piece of equipment called a Vasa Park Rectifier, located at the intersection of 163rd Avenue SE and 164th Place SE in Bellevue, Washington (hereafter "the rectifier").
- 2.9 Based on the information available at this time, the leak in the service pipe was caused by corrosion.

- 2.10 At the time of the explosion, the rectifier was incorrectly configured. In particular, the lead that should have been connected to the positive terminal was in fact connected to the negative terminal, and the lead that should have been connected to the negative terminal was in fact connected to the positive terminal. This wiring of the rectifier resulted in the cathodic protection system not working as it was intended to work. The effect of such wiring can promote, not reduce corrosion of the steel service lines and other steel pipeline facilities to which the rectifier is connected.
- 2.11 After the explosion, and upon discovering the incorrect configuration of the rectifier, PSE correctly configured the rectifier.
- 2.12 The rectifier was designed to provide cathodic protection to an area containing approximately 2,600 homes served with natural gas by PSE. Some are served with service lines consisting of plastic pipe. Cathodic protection systems do not affect, and are not intended to affect, plastic pipe.

15 In the Agreed Submission, Staff asserts "insufficient information is available to conclude that there is a causal link between the configuration of the rectifier and the corrosion that caused the explosion." *Id.*, ¶ 3.1. The statement is intended to clarify a statement made in the Notice of Hearing. *Tr. at 9.*

16 PSE and Staff agree in Section 4.1 of the Agreed Submission that the following actions should be taken:

- a. Within ten days, prepare and implement a communications plan to educate all customers in the area served by the rectifier (whether the facilities are steel or plastic). The plan will address the following elements: alert affected customers that there may be a problem that is broader than a single

house, the actions customers should take if they detect the odor of natural gas in and around their premises, receive periodic updates on the status of remedial actions taken, and the results of the company's investigation when known. PSE should work with the Commission Staff and the City of Bellevue in implementing this plan. The plan shall be made available to the Commission upon request.

- b. Repair all leaks detected and verified in any of the facilities served by the rectifier. PSE shall apply for any required permits and initiate One Call no later than the next available day following the day the leak is discovered, classifying all of these leaks as emergency locates. In the event that the source of a C Leak cannot be located via excavation, PSE will consult with Commission Staff on next steps. Without consultation with Commission Staff, PSE is not permitted to re-grade any leak for later inspection. PSE shall begin to repair each leak no later than the day following receipt of permits and locates. To the extent this provision is more lenient than applicable safety rules in a given situation, the applicable safety rule shall be followed. Repair records shall be made available to the Commission upon request.
- c. Preserve the service line that served the house, and make it available for inspection by the Commission upon request and any consultant retained by the Commission.
- d. Conduct a metallurgical analysis of the service line that served the house to determine what caused it to leak, and provide the results to the Commission upon request.
- e. Preserve and make available to the Commission upon request all records relating to the installation and maintenance of the rectifier, including any record containing information on the period when the rectifier failed to provide the level of cathodic protection required by Commission rules.

- f. Preserve and make available to the Commission upon request any and all records of any investigations of the explosion and its causes.
- g. Preserve and make available to the Commission upon request any and all documents surrounding any investigation of the explosion, and/or the rectifier, and/or any of the other facilities involved. This includes any leak surveys that are conducted.
- h. Conduct leak surveys of all mains and service lines served by the rectifier on or before October 4, 2004, and every thirty days thereafter, until the Commission orders otherwise, and provide the results to the Commission upon request. The survey to be conducted on or before October 4, 2004 is in addition to the survey PSE conducted within a week of the explosion.
- i. Conduct a test(s) that will determine the condition of the coating of the coated steel service lines and mains in the area covered by the rectifier (including an assessment of the state of corrosion of such service lines and mains), and provide the results to the Commission upon request. PSE will work with Commission Staff to determine the parameters of this survey and follow-up activities.

- 17 The City of Bellevue supports the proposed actions set forth in the Agreed Submission, noting that they are similar to those set forth in the Complaint. *Tr. at 14.* In its Petition for Intervention, the City urged the Commission to order the remedies set forth in the Complaint. *Petition at 3.*
- 18 **The Emergency Hearing.** Commission Staff made available as witnesses Ms. Kim West, a Pipeline Safety Engineer for the Commission, and Mr. Kuang Shi Chu, a Pipeline Safety Industrial Engineer for the Commission. PSE made

available as witnesses Mr. Stephen P. Reynolds, Chief Executive Officer of PSE, Ms. Sue McLain, Senior Vice President of Operations for PSE, and Mr. James P. Hogan, Manager of Standards and Compliance for PSE.

- 19 In his testimony, Mr. Reynolds expressed the Company's support for the Agreed Submission as a way to "allow all parties to expeditiously move to provide whatever appropriate remedies are necessary." *Tr. at 13.*
- 20 In response to questions from the bench, Ms. McLain testified that the Company will alert customers of the potential problem by visiting customers door-to-door, through community meetings, via the telephone, and written materials, but that the Company is open to any and all methods of communication with customers. *Tr. at 19.* Ms. McLain testified that the area covered or served by the rectifier is approximately a four or five square mile area. *Tr. at 20.*
- 21 Ms. McLain also clarified, concerning the actions in Section 4.1(b) of the Agreed Submission, that a grade C leak is a leak where a very small amount of gas is released and detected. *Tr. at 21.* Ms. McLain testified that in the event the source of the grade C leak cannot be located after excavation, that the Company will consult with Staff as to what steps to take to repair the leak. *Tr. at 21-22.* Ms. McLain testified that it is very rare that the Company cannot locate such a leak. *Tr. at 22.*
- 22 Ms. McLain testified concerning the steps the Company has taken so far to alert customers. *Tr. at 23-24.* Ms. McLain also described the process the Company pursues to detect gas leaks. *Tr. at 24-25.*
- 23 Mr. Chu testified that Commission Staff does have concerns for the safety of the public in the area of Bellevue where the explosion occurred, and believes that precautionary measures should be taken to ensure the safety of the public. *Tr. at*

26. Ms. McLain testified that the actions proposed in the Agreed Submission "are appropriate given the issue." *Id.*

24 Ms. McLain testified that action items set forth in Sections 4.1(e), (h) and (i) of the Agreed Submission address the question of whether there is a danger posed by the incorrect configuration of the rectifier. *Tr. at 27.* PSE will use sensing equipment normally used on transmission lines to determine the condition of the coating of the coated steel service and main lines in the area covered by the rectifier. *Id.*

25 Ms. West testified that the purpose of the hearing is to determine if an emergency exists, and if so, what remedies to order, and that the Commission will address other issues raised in the Complaint later in the proceeding. *Tr. at 28-29.*

26 **Discussion and Decision.** Under the Administrative Procedure Act (APA), RCW 34.05.479(1), the Commission "may use emergency adjudicative proceedings in situations involving an immediate danger to the public health, safety or welfare requiring immediate agency action." *See also WAC 480-07-620(1).* The Emergency Adjudicative Proceedings section of the APA, RCW 34.05.479, requires that:

(2) The agency may take only such action as is necessary to prevent or avoid the immediate danger to the public health, safety, or welfare that justifies use of emergency adjudication.

(3) The agency shall enter an order, including a brief statement of findings of fact, conclusions of law, and policy reasons for the decision if it is an exercise of the agency's discretion, to justify the determination of an immediate danger and the agency's decision to take the specific action . . .

(5) After entering an order under this section, the agency shall proceed as quickly as feasible to complete any proceedings that would be required if the matter did not involve an immediate danger.

- 27 Based on the facts set forth in the Complaint, the statement of facts agreed upon by PSE and Staff, and the testimony of Mr. Chu and Ms. McLain, the Commission finds that there exists an immediate danger to the public health, safety or welfare that justifies the use of emergency adjudication. Specifically, there is a possibility that the incorrectly configured rectifier may have caused a dangerous condition in the service and main lines in the area of Bellevue covered by the rectifier. While this question and other issues raised in the Complaint will be addressed in a later phase of this proceeding, the Commission finds that the situation is one of immediate danger to the public.
- 28 The proposed actions for PSE in the Agreed Submission are appropriate given the facts discussed above, and are necessary to prevent or avoid the immediate danger to the public health, safety or welfare. The Commission directs PSE to immediately undertake the actions set forth in Section 4.1 of the Agreed Submission in order to prevent or avoid the immediate danger in Bellevue.
- 29 The actions identified in Section 4.1 are in the public interest as the actions will ensure that the public is kept informed as the nature and extent of the possible danger, and will allow the Company to expeditiously determine the cause of the explosion, find and repair any leaks in the area, and determine any effect the incorrectly configured rectifier may have had on service and main lines in the area covered by the rectifier. The reporting requirements and requirements to consult with Staff will ensure that the Commission and the public are kept informed of the steps taken to address the situation.

30 **Notice Of Prehearing Conference.** As provided in the Complaint, the Commission schedules a prehearing conference in this proceeding to take appearances and interventions, identify the remaining issues, establish a procedural schedule, if possible, and address any other matters that may aid in the disposition of the proceeding as specified in WAC 480-07-430. A prehearing conference will be held on Thursday, October 21, 2004, beginning at 9:30 a.m., in the Commission's Main Hearing Room, Room 206, Chandler Plaza Building, 1300 S. Evergreen Park Drive S.W., Olympia, Washington.

FINDINGS OF FACT

31 Having discussed above in detail the documentary evidence received in this proceeding concerning all material matters, and having stated findings and conclusions upon issues at impasse among the parties and the reasons and bases for those findings and conclusions, the Commission now makes and enters the following summary of those facts. Those portions of the preceding detailed findings pertaining to the ultimate findings stated below are incorporated into the ultimate findings by reference.

32 (1) Puget Sound Energy, Inc. is a gas and electric company supplying natural gas service to the public for compensation within the state of Washington, and is subject to regulation by the Washington Utilities and Transportation Commission.

33 (2) The Washington Utilities and Transportation Commission is an agency of the State of Washington vested by statute with the authority to regulate the rates, terms, and conditions of service of gas companies within the state.

- 34 (3) The Commission filed a complaint against Puget Sound Energy, Inc. on
September 13, 2004, arising out of the explosion on September 2, 2004, at a
house in Bellevue, Washington, and directing that an emergency
adjudication be convened.
- 35 (4) On September 13, 2004, the Commission issued a Notice of Emergency
Adjudication and Notice of Hearing, scheduling an emergency
adjudicative proceeding for 3:00 p.m. on Wednesday, September 15, 2004.
- 36 (5) On September 15, 2004 Puget Sound Energy, Inc., and Commission Staff
filed with the Commission an Agreed Submission that sets forth an agreed
statement of facts and proposed actions for emergency relief.
- 37 (6) The facts leading up to and relating to the September 2, 2004, explosion
are set forth in Section II of the Agreed Submission.

CONCLUSIONS OF LAW

38 Having discussed above in detail all matters material to this decision, and having
stated general findings and conclusions, the Commission now makes the
following summary conclusions of law. Those portions of the preceding detailed
discussion that state conclusions pertaining to the ultimate decisions of the
Commission are incorporated by this reference.

- 39 (1) The Commission has jurisdiction over the subject matter of this
proceeding and the parties to the proceeding.
- 40 (2) Agencies may use emergency adjudicative proceedings pursuant to RCW
34.05.479(1), "in situations involving an immediate danger to the public
health, safety, or welfare requiring immediate agency action."

- 41 (3) Agencies "may take only such action as is necessary to prevent or avoid
the immediate danger to the public health, safety, or welfare that justifies
use of emergency adjudication." RCW 34.05.479(2).
- 42 (4) The possibility that the incorrectly configured rectifier may have caused a
dangerous condition in the service and main lines in the area of Bellevue
covered by the rectifier presents an immediate danger to the public health,
safety or welfare that justifies the use of emergency adjudication.
- 43 (5) The actions set forth in Section 4.1 of the Agreed Submission are necessary
and appropriate to prevent or avoid the immediate danger to the public
health, safety or welfare in the area of Bellevue covered by the rectifier,
especially given that Puget Sound Energy, Inc., and Commission Staff
agree upon the actions to be taken.

ORDER

THE COMMISSION ORDERS:

- 44 (1) Puget Sound Energy, Inc., must immediately undertake the actions set
forth in Section 4.1 of the Agreed Submission in order to prevent or avoid
immediate danger to the public health, safety and welfare.
- 45 (2) The Commission retains jurisdiction to effectuate the provisions of this
Order.

46 **NOTICE TO PARTIES: This is an Interlocutory Order of the Commission.
Administrative review may be available through a petition for review, filed
within 10 days of the service of this Order pursuant to WAC 480-07-810.**

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DATED at Olympia, Washington and effective this 17th day of September, 2004

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION



MARILYN SHOWALTER, Chairwoman



PATRICK J. OSHIE, Commissioner