

**Sent Via E-mail and Mail**

January 7, 2005

Jim Hogan  
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Dear Mr. Hogan:

**Subject: WUTC v. Puget Sound Energy, Docket No. PG-041624 Coating Survey Protocols**

This letter is sent to address the coating survey protocols PSE has proposed in order to implement ¶ 4.1(i) of ¶ 14 of the Commission's Order No. 1. According to that paragraph, PSE is to:

*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.*

This letter is part of Staff's efforts to work with PSE to determine the parameters of this survey and follow-up activities. Staff is very willing to meet with PSE and further discuss this topic.

## **A. Background**

Before proceeding to discuss the specific parameters of an acceptable coating survey, it might be helpful to revisit the context of ¶ 4.1(i) quoted above.

First, ¶ 2.9 in ¶ 14 of Order No. 1 states: "Based on the information available at this time, the leak in the service pipe was caused by corrosion;" ¶ 3.1 states: "At this time, the Commission Staff believes insufficient information is available to conclude there is a causal link between the configuration of the rectifier and the corrosion that caused the explosion;" and ¶ 2.12 states: "The rectifier was designed to provide cathodic protection to an area containing approximately 2600 homes served with natural gas by PSE."

In Staff's view, the foregoing statements are still applicable today. In short, to date, there has been demonstrated no definitive link between the mis-configured rectifier and the corrosion that caused the leak and subsequent explosion at the Schmitz residence. Accordingly, at least three principles should guide the coating survey protocols:

1. There should be no assumption that the rectifier caused the corrosion at issue;
2. The coating survey needs to address the integrity of the facilities in the area served by the rectifier;
3. Both service lines and mains need to be evaluated.

## **B. PSE's December 16, 2004 Proposed Coating Survey Protocols**

Staff has reviewed PSE's *Pipe Segment Integrity Study in the Vicinity of the Vasa Park Rectifier* draft protocols. Overall, Staff believes the draft documents do not meet the intent of the Commission's Order No. 1.

The primary problem is the basic design of the protocols PSE proposes. For example, PSE proposes to begin "a direct examination of all survey indications prioritized as immediate or scheduled, within 1,500 feet of the Vasa Park Rectifier. If direct examinations of pipe within 1,500 of the Vasa Park Rectifier indicate corrosion that requires repair or replacement, then all immediate or scheduled indications within an additional 1,000 feet of the Rectifier will be made, within 90 days of completing the first

set of direct examinations.” This reflects an assumption that the rectifier caused the corrosion at issue. That is not consistent with Principles #1 and #2 above.

Second, it is not clear whether both mains and services are intended to be covered by the survey. Will intermediate-pressure pipe be considered mains? Will the survey be conducted on existing or abandoned mains and services? Will the survey be conducted on a sampling basis or all mains and services included? If a sample, what is the basis for the sample?

Staff has other technical concerns that would be best addressed in face-to-face discussions. At this stage, it is important to start from a common understanding of what should be measured, in order to properly achieve that goal.

### **C. Staff's Proposed Approach to Coating Survey Protocols**

In Staff's view, the following parameters need to be included in the coating survey protocols:

- ?? *The facilities located within the area served by the rectifier should be identified. That is the geographic limit of the coating survey required by Commission Order No. 1 (though if PSE desires to expand the survey to other areas, Staff will consider that).*
- ?? *The protocols should specify in detail the types of facilities that will be tested. Order No. 1 refers to “mains and service lines.” Staff assumes this includes intermediate pressure pipe. Also, the protocols should be specific as to whether it includes abandoned pipe (e.g., service lines replaced in PSE's ongoing construction).*
- ?? *The protocols should identify those characteristics that would most likely cause coating failures of service and main lines in this area. These characteristics include vintage of the pipe, construction damage, coating type, distance from the rectifier, etc.*
- ?? *The protocols should identify the source of data available to determine where those characteristics might be found in the area served by the rectifier.*
- ?? *The protocols should state the method by which sites would be selected for testing the coating of pipe in those areas (e.g., random sample, total population, etc.).*

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?? *The protocols should state the type of testing that will occur, and the specific time frames for the testing and results tabulation.* PSE's protocols do the former (though Staff needs to discuss some of those issues) but not the latter. In addition, however, Staff also suggests to protocols include an evaluation of the electrical insulators on the system. Staff needs to understand how long the study is expected to take.

As we indicated above, Staff has other, more technical questions surrounding the protocols PSE has proposed. Staff would be happy to discuss those. However, at this point, it is more important that PSE and Staff come to agreement on the principles and basic structure of the protocols.

Please review the foregoing. Staff is prepared to meet to discuss these points with you. We share a common goal: assuring the safety and integrity of the pipeline facilities in the area at issue.

Sincerely,

Alan E. Rathbun  
Pipeline Safety Director