PUGET SOUND ENERGY

December 13, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
999 Third Ave., Suite 2424
Seattle, WA 98104-4019

RE: SR 99 Alaskan Way Viaduct Replacement Project
2010 Supplemental Draft Environmental Impact Statement Comments

Dear Ms. Freudenstein:

Puget Sound Energy (PSE) remains engaged in the development and environmental review of both the SR 99 Alaska Way Viaduct Replacement ("Viaduct Replacement Project") and related projects. The additional opportunity to provide comments on the Viaduct Replacement Project Supplemental Environmental Impact Statement (SEIS) is appreciated.

PSE's overarching concern is to protect the safety of our natural gas system and the general public. Ensuring continuity of service and fiscal responsibility throughout all phases of your project is also a priority for PSE, as both an obligation to our utility ratepayers and a requirement of the Washington Utilities & Transportation Commission.

B-001-001

A general but important comment on the project pertains to the inherent challenge of design-build contracts and utility coordination. The compressed schedule coupled with the need for relocations to be accomplished prior to the start of construction or demolition activities means issues must be identified and resolved on a very aggressive timetable. PSE strongly encourages close coordination with private utility providers; regular meetings dedicated to utility issues should be scheduled to accomplish this.

More specific comments are provided below that pertain to and are listed separately for two of the project documents; Appendix K: Public Services & Utilities Discipline Report and the SEIS.

Appendix K: Public Services & Utilities Discipline Report Comments:

B-001-002

1) Page 8, 1.2.3 Utilities Construction Mitigation
This section suggests a safety watch arrangement with respect to Seattle City Light facilities and services. Given the potential safety concerns, a similar arrangement should be considered for PSE's natural gas facilities and services, and the following language added:

- *Coordinate with PSE to provide safety watch during construction, and establish emergency natural gas protection and restoration procedures to minimize the potential for natural gas flow interruption.*

B-001-001

The lead agencies will continue to coordinate with PSE as the project progresses. As part of the WSDOT contract and general construction management practices, there will be regular utility coordination meetings that includes private utilities. Please refer to Final EIS Appendix K, Public Services and Utilities for the discussion of mitigation, which includes coordination efforts, during construction.

B-001-002

Private utilities will be notified of construction activities near their facilities, but provision of a safety watch is the responsibility of the private utility (whereas, with Seattle City Light, safety watch is codified in law). Please refer to the Final EIS Appendix K, Public Services and Utilities, for additional detailed analysis of potential impacts to utilities.

B-001-003

2) Page 13, 2.5.1 Operational Effect Analysis
This section acknowledges the option of modifying design for the Viaduct Replacement Project should utility relocations become prohibitively costly or difficult. PSE supports this flexible approach to design and appreciates the inclusion of this option.

B-001-004

3) Page 31, 4.2.4 Natural Gas
The location of PSE's 12-inch high pressure gas line is incorrectly described as being in Blanchard Street (it is located in Bell Street). In the description of natural gas facilities located within the study area, please consider replacing the second paragraph with the following:

> *"Natural gas service is provided throughout the streets, alleys, public and private properties located within the study area. Natural gas is distributed through a network of high pressure natural gas mains, district regulators that reduce natural gas pressures, mains, service lines, valves and meters, all of which, except for the meters, are located underground.*
>
> *The study area contains three district regulators that serve broad areas of the City by reducing natural gas pressure in the system. Large areas of PSE's system will be affected if these district regulators require relocation or fail due to settlement induced by tunneling activity. The potential effects include safety concerns as well as disruption of natural gas service to large numbers of customers.*
>
> *A 12-inch diameter, high pressure gas main is also located in the study area in S. Main Street and along Bell Street. Disruption of this high pressure gas main would also create safety concerns as well as natural gas service impacts to large numbers of customers."*

B-001-005

4) Page 48, 6.1.2 Utility Effects
The subject of settlement is addressed in this section in a single sentence. Given the importance of this topic, we suggest adding a reference that points to section 6.2.3 Construction Risks and Ground Improvement Methods for more information on the subject.

B-001-006

5) Page 49, 6.1.2 Utility Effects
This section discusses the direct effects to utilities of service disruption. Please note that PSE cannot disrupt service to natural gas customers. The SEIS should note that with few exceptions, new replacement natural gas facilities must be in place before existing facilities can be removed. This is particularly important with respect to the district regulators and 12-inch high pressure pipelines located within the study area.

B-001-003

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the project. Final EIS Appendix K, Public Services and Utilities, identifies project design revisions as a potential means of reducing impacts on utilities.

B-001-004

Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-005

Final EIS Appendix K, Public Services and Utilities, analyzes potential effects from all three build alternatives. Settlement effects are only relevant to the Bored Tunnel Alternative. Section 6.1.2 is a summary section that generally discusses effects to utilities that could result from the construction of any of the alternatives. Settlement is discussed in more detail in the Utilities Effects Specific to the Bored Tunnel Alternative section.

B-001-006

Final EIS Appendix K, Public Services and Utilities, discusses potential effects to all utilities, including service disruption. Specific construction and mitigation strategies will be developed through ongoing coordination between the utility providers and the lead agencies.

B-001-007

6) Page 49, 6.1.2 Potentially Affected Utilities
A reference is made in this section and elsewhere in Appendix K to the Utility Impact Report (Jacobs 2009). These comments will not address the adequacy of that report, however the bullet pertaining to natural gas in this section should be amended to read as follows:
" Natural Gas facilities including high-pressure, intermediate-pressure and low-pressure mains, district regulators to reduce pressure (including vaults) services, valves and metering equipment."

B-001-008

7) Page 52, 6.1.4 Bored Tunnel
The last paragraph in this section discusses the impacts of settlement caused by the tunnel boring machine, and that emergency repairs to utilities could be required. Please add to this section the additional impacts of potential utility service outages and possible safety hazards.

B-001-009

8) Page 55, 6.1.6 Viaduct Removal, Natural Gas
Please include a statement in this section that there is a potential for impact to the 12-inch high pressure gas line and other lines located below the viaduct. The high pressure line is likely be relocated and would need to be moved to a new permanent location prior to the demolition of the viaduct.

B-001-010

9) Page 59, 6.2.2 Utilities
In the bullet list of potential measures that could be used to mitigate effects on utilities, please add the following bullets:

- *Consider the option of modifying project design when utility impacts are prohibitively costly or difficult to accomplish"*
- *Coodinate with PSE to provide safety watch during construction, and establish emergency natural gas protection and restoration procedures to minimize the potential for natural gas interruption*
- *All Contractors should use the 811 "Call Before You Dig" service*

B-001-011

10) Page 61, 6.2.3 Construction Risks and Ground Improvement Methods
Please address the possibility that some ground improvement methods used for construction mitigation could in fact contribute to additional differential settlement that could adversely affect existing natural gas or other utilities.

B-001-012

11) Fact Sheet, Alaskan Way Viaduct Replacement Project, dated October 2010
A minor correction is needed on the Fact Sheet, on sheet III. A list of "Other Seattle Permits/Approvals" is provided and Puget Sound Energy is included as the contact for coordination Transmission Outage Requests. This should be corrected; PSE has no electric transmission corridors in Seattle that would trigger outage notification.

B-001-007

Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-008

Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-009

Final EIS Appendix K, Public Services and Utilities, identifies the 12-inch high pressure line and its treatment will be determined during ongoing coordination between the utility providers and the lead agencies.

B-001-010

Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-011

Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-012

This error has been corrected in the Final EIS.

Viaduct Replacement Project Supplemental Environmental Impact Statement Comments:

B-001-013

1) Page 131 Chapter 6, Construction
Please note that the area between S. Main and S. Washington Streets, where no soil improvements are planned, is also the location where one of PSE's most significant facilities – the 12-inch high pressure gas line – is impacted by construction.

B-001-014

2) Page 199, Chapter 8, Comparison of Alternatives – Bored Tunnel Alternative, Utilities
It should be noted that the Bored Tunnel Alternative presents unique challenges to PSE facilities due to the potential for stress on the pipe resulting from settlement. There will still be additional utility relocations for the seawall and Alaskan Way surface street projects, potentially causing relocation of the same facility more than once.

Thank you again for the opportunity to provide input on the Viaduct Replacement Project. If you have any questions concerning these comments please contact our Project Manager, Julie Kelly, at (425) 462-3919.

Sincerely,

Elaine M. Babby
Senior Land Planner

B-001-013

The contractor's use of "tunnel-in-a-box" has changed the construction approach in this area. As would be done elsewhere in the construction area, natural gas facilities in this area will be monitored and will be either protected in place or relocated, as determined through ongoing coordination between WSDOT and PSE. The lead agencies will continue to coordinate with PSE as the project progresses. Several major construction activities could cause temporary disruptions to utility service customers within the project areas; however, these outages would be planned in advance and affected customers would be notified. Please refer to Final EIS Appendix K, Public Services and Utilities for the discussion of mitigation during construction.

B-001-014

The construction process includes extensive monitoring before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. Potential settlement issues are discussed in the 2010 Supplemental Draft EIS. Chapter 6, page 131, discusses the soil improvements and stabilization measures that are necessary along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction.