

1 **Q. What is driving the increased demand for natural gas service?**

2 A. There are a number of factors driving the increased demand for natural gas. First,
3 with economic growth in the region, population in PSE's service territory has
4 increased. Most new housing units, especially single family homes, are equipped
5 with natural gas. Second, even with recent increases in the price of gas, the cost
6 of heating with natural gas continues to have an advantage over the cost of
7 heating with electric or oil; hence, conversions from electric and oil to gas
8 furnaces in older housing stock are expected to continue.

9 **Q. How does this increased demand affect the energy delivery system?**

10 A. For both the gas and electric systems, this increased demand results in the need
11 for additional system capacity and maintenance projects, as well as additional
12 resources to meet customer requests. Large capital investments, such as the
13 \$342 million, ~~14~~9 mile, high pressure "Everett Delta" gas main project, are
14 required to provide for growth and to maintain reliable service to existing
15 customers during peak conditions. Benefits from investments of this type were
16 made apparent during the mid-December 2005 "cold snap" when below freezing
17 temperatures were experienced for multiple consecutive days. PSE's need to take
18 cold weather actions (such as curtailing gas deliveries to some customers) were
19 greatly reduced from what had been necessary in previous years with similar
20 system demands.

1 replacements and maintain pole assets at the lowest possible cost. The Company
2 will inspect approximately 35,700 poles each year through this program.

3 **Q. What are the costs associated with pole replacements?**

4 A. In 2005, the Company spent approximately \$4 million in capital and \$~~1.2~~ 0.6
5 million in OMRC on the proactive replacement of transmission and distribution
6 poles. PSE anticipates proactive investments of \$█ million in capital and
7 \$█ million in OMRC for replacement of transmission and distribution poles for
8 the two-year period 2006 and 2007. The Company will likely increase proactive
9 replacements should the results from the new planned distribution pole inspection
10 and treatment program indicate the need to do so based on pole condition.

11 **Q. Please describe PSE's underground cable remediation program.**

12 A. The goal of the Company's underground cable remediation program is to
13 remediate all high molecular weight polyethylene insulated ("HMW") 15kV
14 cables while preventing cable outages from exceeding 1,500 per year. Initially
15 the program entailed either abandonment or direct replacement of HMW cable.
16 Since 1996, PSE has injected some of these cables with silicone fluid rather than
17 abandoning or replacing them. Silicone injection results in restoration of the
18 insulation quality of the cable, extending the life of the cables for up to 20 years
19 or more without the disruption and costs of trenching through established
20 commercial areas or neighborhoods.

**REVISED
SEPTEMBER 15, 2006**

**REDACTED
VERSION**

1 existing overhead line to underground facilities at some expense to the Company
2 under its tariff Schedule 74. PSE anticipates total investments of \$ [REDACTED] million
3 during 2006 and 2007. This represents a [REDACTED] % increase over PSE's 2004 and
4 2005 investments of \$ 2325 million. The anticipated increase is due to expected
5 road and transportation projects, as well as increased requirements during project
6 construction, such as erosion remediation, restrictive work hours for traffic or
7 noise mitigation and increased restoration requirements.

8 **Q. For what new electric transmission reliability measures is the Company**
9 **responsible?**

10 A. PSE's transmission system is planned and operated according to reliability criteria
11 that are established by the North American Electric Reliability Council ("NERC")
12 and the Western Electricity Coordinating Council ("WECC"). These criteria
13 consist of both the NERC/WECC planning/operating standards as well as the
14 WECC Reliability Management Systems ("RMS"). After the August 2003
15 blackout in the Northeastern United States, NERC clarified and consolidated all
16 90 of its standards into a new Version 0, which became effective on April 1,
17 2005. More NERC standards are being developed.

18 In anticipation of these evolving reliability standards, PSE is proactively planning
19 new transmission infrastructure to continue to maintain a reliable system. PSE
20 anticipates ~~average annual expenditures~~ total investments of \$23 million ~~in~~ during
21 2006 and 2007 to meet emerging needs.

**REDACTED
VERSION**