



SENT VIA E-MAIL ON 6/01/04 TO: records@wutc.wa.gov

June 1, 2004

Carole J. Washburn, Secretary  
Washington Utilities and Transportation Commission  
P.O. Box 47250  
Olympia, WA 98504-7250

**Subject: Docket UG-011073 SBEIS Questionnaire**

Dear Secretary Washburn:

Puget Sound Energy (PSE) is resubmitting our economic impact estimate based on clarifications received through correspondence from WUTC staff on May 10, 2004. PSE's responses were communicated to Staff on May 20, 2004, including the attached table that reflects the updated cost impact.

**480-93-005(17):** Staff expressed their intent to delete the definition of "building or place of public assembly" from the rules and any references associated with it (such as in 480-93-188 and 480-93-100). As such, PSE has removed the related costs from the table.

**480-93-012:** Staff clarified that there is currently no grace period allowed for completion of 5-year leak survey in the federal rules but when one is allowed, Staff will also allow it in the state rule. Subsequently, PSE removed the related costs from the table. PSE also noted there is a federal NPRM dated March 22, 2000 in which RSPA/DOT proposed to revise 192.723 to allow a 3-month grace period. We understand that when this rulemaking is final then Staff will revise the WAC rule accordingly.

**480-93-100:** Staff requested that PSE explain how we arrived at the 32,000 figure for the number of valves that are affected by this rule. WAC 480-93-100 (3) proposes to require certain service line valves to be annually inspected. Currently, PSE's service line valve inspections meet the requirements of section (3)(a) of the proposed rule. In addition, section (3)(c) will be eliminated in conjunction with the deletion of the "building or place of public assembly" definition. What remains is proposed section (3)(b) covering valves on services to commercial buildings within business districts. Here is how PSE arrived at the estimated 32,000 additional valves subject to annual inspection under the proposed WAC rule:

- From a computer download that screens by NAICS code, rate, and meter location, nearly 86,000 valves are listed.

- This number drops to 53,000 when we roll-up like addresses and eliminate residential inside-MSA's. (Note: the roll-up is not a perfect process and many like addresses may indeed have multiple valves.)
- Of this 53,000, 30,000 are confirmed to be in a business district and 6,800 are confirmed NOT to be in a business district (by our current definition). This leaves approximately 16,000 valves that are potentially in business districts, but unconfirmed at this point in time.
- Of the potential 46,000 commercial service valves in a business district (30K confirmed + 16K unconfirmed), 10,000 are to churches, schools, or hospitals or on commercial services to indoor MSA's and we already perform annual inspections.
- Therefore, there are an estimated 36,000 valves that remain as potential "new valves" to inspect - without yet accounting for a change in the definition of business district. (Note: the actual number is probably higher than estimated because some of the valves currently inspected are part of the 6,800 valves not in a business district).
- PSE estimates that 32,000 of these will be in a business district and therefore covered by the new rule. (Note - this number may drop after first year of program once valves are confirmed to be covered by the rule.)

**480-93-110:** Staff clarified that section 7 of proposed 480-93-110 applied to unprotected bare steel that was cathodically protected at locations where external corrosion had occurred. When PSE submitted the original SBEIS questionnaire we were unclear what pipeline segments section 7 covered because the rule language does not refer to pipe that is unprotected, protected or otherwise. Staff also clarified that the intent of section 7 was to have operators place sections less than 100' on a 100% annual survey frequency versus a 10% annual survey frequency. Staff feels that since the pipeline has experienced corrosion and leakage and has never had CP that there are other potential areas of inadequate wall thickness and sampling on a 10% basis was not acceptable.

PSE took this opportunity to re-evaluate the formula used to estimate the cost impact of monitoring short sections of pipe on a 100% annual frequency and this is reflected in the attached table. The formula now accounts for a 90% increase in the cost to do the monitoring and eliminates costs associated with test leads because these are already necessary. We also revised the number of sites requiring monitoring, assuming the annual requirement would not be retroactive. These costs represent only first year costs because the annual number of locations to monitor is partially cumulative (i.e. each year new locations would be added and some would be eliminated due to replacement). It is difficult to estimate this accrual/attrition accurately.

PSE does not agree with the proposal to increase the frequency. Section 192.465(a) was amended in 1979 specifically to allow short sections of cathodically protected pipe (including bare pipe under cp after a repair) to be monitored on a less frequent basis because it was not technically justified and "not warranted on a public safety basis." We look forward to further discussions with Staff regarding the proposed rule.

**480-93-124:** Staff asked PSE to break down the \$36,000 figure originally submitted for the cost impact of this rule change. The unit costs are now shown in the table. The entire cost impact is due entirely to an estimated additional 380 railroad crossing locations. The cost per marker was

derived from actual costs obtained during our pipeline marker program. Since a railroad crossing requires 2 markers, we halved the cost of the marker for the second location.

**480-93-187:** Staff clarified that it was not their intent to change the meaning of the existing rule by omitting the word “repair” from the permanent leak record requirements in the rule. Staff requested that PSE clarify what the \$50,000 and \$10,000 costs represent, whether PSE currently keeps a copy of all leak report forms, repaired or not, and the impact if the word “repair” were place back in the rule language.

The cost impact accounts for \$50,000 to purchase a scanning device, to revise PSE’s leak management system (LMS) to show perimeter sketches and allow for instrument ID, and to revise the leak ticket. An estimated \$10,000 per year is needed for data collection due to requirements of -187(17) and permanent storage of leak evaluation records. If 'repair' were put back in the rule, the cost impact would be limited to the following:

- \$2,000 one time cost to revise leak ticket, add instrument ID field to LMS, and training
- \$5,000/year data gathering and data entry (100 hours/year x \$50/hour)

PSE appreciates Staff’s clarifications and the opportunity to update our cost information as necessary.

Sincerely,

Kaaren Daugherty, PE  
Consulting Engineer, Standards and Compliance

Cc: Kimberly Harris  
Sue McLain  
Booga Gilbertson  
Greg Zeller  
Jim Hogan

Enclosure

Rule Number	Rule Change	Basis for Cost Impact	Cost analysis/estimate	Total Cost
480-93-005 (3) "Business District"	New Definition	Definition increases number of business districts by estimated 1,200. This increases: a) required valve inspections by an estimated 10,000 valves; and b) Increases leak survey frequency of the mains and services in these additional 'business districts'.	<ol style="list-style-type: none"> <li>1. 10,000 valves x \$42/valve inspection = \$420,000/yr</li> <li>2. 10,000 valves x 15% remediation x \$290/valve = \$435,000/yr</li> <li>3. 400 mi. main x 5280ft/mi x \$0.02042/ft = \$43,000/yr</li> <li>4. 400 mi. main x 5 svcs/mi x 87 ft/svc x \$0.02042/ft = \$3,500/yr</li> <li>5. 5 hrs/wk field assessments and documentation x 50 wks x 36.52/hr = \$9,000/yr</li> </ol>	<b>\$910,500/year</b>
480-93-080 Welder and plastic joiner identification and qualification	Revised rule includes a new requirement to requalify Oxyacetylene welders twice annually.	19 PSE Fitters would be impacted.	19 fitters x 4.5 hrs/test x \$50/hr = \$4,275/year (Costs do not include recordkeeping, testing personnel, material, use of facility)	<b>\$4,275/year</b>
480-93-100 Valves	Revised rule requires maintenance of additional service line valves by incorporating new definitions for business district and length of service restrictions.	Rule increases valve maint. by an estimated 32,000 additional service valves (not including additional valves identified under item 480-93-005(3) above) and increases installation and maintenance of valves on services that currently do not require valves.	<ol style="list-style-type: none"> <li>1. 32,000 valves x \$42/valve inspection = \$1,344,000/yr</li> <li>2. 32,000 valves x 15% remediation x \$290/valve = \$1,392,000/yr</li> </ol>	<b>\$2,736,000</b>
480-93-110 Corrosion control	Major rule revision	Section 7 implies operators must monitor sections of bare steel pipe under "hot spot" protection.	$(0.9) \times 50 \text{ leaks/yr} \times \$40/\text{test site} + (0.1) \times 50 \text{ leaks/yr} \times \$2,000/\text{remediation} \times 1 \text{ yr} = \$11,800/\text{yr}$ [assumes rule is NOT retroactive]	<b>\$11,800/year</b>
480-93-124 Pipeline Markers	Rule revision requires additional valve markers.	Additional markers on pipelines operating above 250 psig and at all RR crossings.	<ol style="list-style-type: none"> <li>1. 380 RR xings x (\$54 for first marker + \$27 for second marker) + \$5,200 admin = \$36,000/year</li> <li>2. Estimated one-time mapping expense of \$2,500</li> </ol>	<b>\$36,000/year</b> <b>\$2,500 one-time cost</b>
480-93-140 Service Regulators	Rule completely revised	Requirement to inspect and test service regulators and associated safety devices	<ol style="list-style-type: none"> <li>1. Labor: 19,000 svcs x 10 min/svc x \$50/hr = \$158,300/year</li> <li>2. Tools: \$50 x 100 technicians = \$5,000 one</li> </ol>	<b>\$718,300/year</b> <b>\$5,000 one-time cost</b>

		during the initial turn-on.	<p>time cost</p> <ol style="list-style-type: none"> <li>3. Fittings, new: 19,000 new svcs x \$15/svc = \$285,000/year</li> <li>4. Fittings, retrofit: 10,000 meter changeouts x \$15/svc = \$150,000/year</li> <li>5. Labor, retrofit: 10,000 x 15 min/svc x \$50/hr = \$125,000/year</li> </ol>	
480-93-178 Protection of Plastic Pipe	New Rule	Plastic pipe monitoring programs required under section 6(a) and (b).	<ol style="list-style-type: none"> <li>1. Process and procedures development: \$5,000</li> <li>2. Monitoring: \$2,500/year</li> </ol>	<b>\$5,000 one-time cost</b> <b>\$2,500/year</b>
480-93-186 Leakage classification and action criteria	Rule revised	Follow-up inspections required for all leaks with residual gas [section (3)] increases the number of leaks requiring follow-up inspections. Restrictions on downgrading of leaks and time limitations for repairs of downgraded leaks increases leak repair requirements [Section 4(d)].	<ol style="list-style-type: none"> <li>1. Follow-up inspections: 75/year x \$100/unit = \$7,500/year</li> <li>2. Repair of downgraded leaks: 78 leaks/year x \$2000/leak = \$156,000/year</li> </ol>	<b>\$163,500</b>
480-93-187 Gas leak records	Rule revised	Language changed from “. . .maintain permanent gas leak repair records.” to “maintain permanent gas leak records”. To maintain all the information on leak evaluation and leak perimeter sketches after the leak has been repaired is significant and burdensome.”	Retrofit systems and processes: \$50,000 Annual data entry and storage: \$10,000	<b>\$50,000 initial</b> <b>\$10,000/year</b>