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November 17, 2005

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

Attn: Alan Rathbun, Pipeline Safety Director

**Subject: Docket [REDACTED] and PG-030128 Puget Sound Energy Settlement Agreement SAP Process Improvements**

Dear Mr. Rathbun,

This letter serves as the final report on the SAP Process Improvements which were implemented by Puget Sound Energy (PSE) in accordance with the King/Pierce County Settlement Agreement (Settlement Agreement).

PSE uses the SAP software program for its financial accounting, property accounting, human resources management, and work order management, including aspects of its pipeline safety maintenance programs.

As part of the Settlement Agreement, PSE and the WUTC agreed that PSE would develop and implement SAP process improvements to enhance PSE's ability to identify potential missed inspection intervals before they happen. There were six areas that were specifically identified in the Settlement Agreement that provided opportunities to improve the SAP processes. Attachment A, "SAP Process Improvement Final Report", summarizes each of those areas and describes what has been implemented for each specific improvement.

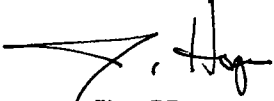
PSE dedicated a project team with members from many areas of the organization to develop and implement the SAP improvements agreed to in the Settlement Agreement. These software enhancements, including full testing, were implemented by September 30, 2005 as agreed to in the Settlement Agreement. These are the same enhancements that I discussed with you and your staff on June 30, 2005.

RMS  
1/17

We believe that PSE has fully met the requirements of the Settlement Agreement with regard to the SAP Process Improvements. PSE continues to look for opportunities to streamline and improve the processes and systems that drive our compliance-related maintenance tasks.

If Staff has any additional questions on these SAP process improvements, please feel free to call me at (425) 462-3957.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Hogan", with a stylized flourish extending to the left.

Jim Hogan

Manager, Standards & Compliance

Attachment: "SAP Process Improvement Status Report"

Cc: Sue McLain  
Booga Gilbertson  
Duane Henderson  
Kimberly Harris  
Karl Karzmar

## **Attachment A – SAP Process Improvement Final Report**

### **1. Identify Equipment and Functional Locations That Are Difficult to Inspect**

This SAP enhancement added a special flag and associated task description field to each equipment and functional location entry to identify inspections that require significant lead time due to municipal requirements, traffic issues, geographic issues, or special equipment (boom truck, etc.) It also added additional sort options and notification options to equipment, functional locations, and maintenance plans to provide supervisors and field personnel the ability to be aware of long lead issues.

The programming to add this functionality to SAP was completed and placed in production on May 23rd. This function provides a checklist of issues that require extra lead-time which are printed on each inspection notification. This checklist indicates if there are any issues for the specific inspection that are already known to require extra lead-time. It also provides an opportunity for the inspector to document any new constraints that did not exist or were not known at the previous inspection. PSE operations personnel have populated the extra lead time tasks for equipment where they had historical knowledge of specific requirements. However, some tasks may not be recalled from historical experience and may not be populated until after the first inspection cycle. Other tasks may be added in the future as new requirements are identified or conditions in the field change. Therefore, this feature will provide ongoing benefit as it is continuously updated to reflect the changes in municipal requirements and field conditions.

To ensure that this new feature is utilized to the greatest extent possible, PSE developed and documented new work flow processes and provided training to users on these processes throughout the summer.

### **2. Equipment Reclassification**

Previously when equipment was re-classified in SAP from a single service Farm Tap to a District Regulator (or vice versa), the associated maintenance plan (which specifies compliance-driven inspection requirements and associated intervals) had to be manually updated.

The “Equipment Reclassification” SAP improvement is designed to ensure that a single service Farm tap that is converted to a DR will have the maintenance plan updated to reduce the inspection interval from 3 years for atmospheric corrosion inspections to 1 year for district regulator inspections. A report has been developed to identify

equipment that does not have the appropriate maintenance plan associated to it. This report was reviewed to ensure any discrepancies between equipment classification and maintenance plans were identified and corrected as necessary. This report will continue to be generated periodically to ensure that any future discrepancies are also identified and corrected.

The original SAP enhancement plan also specified that a new function would be added to ensure that when an equipment record is changed, the record would be saved and the user would be immediately taken to the associated maintenance plan for review and modification as necessary. As indicated in the status update which was provided to the WUTC in a letter dated June 21, 2005, there were technical issues within SAP that made this facet of the enhancement impractical. The alternative solution that was implemented results in a warning message that reminds the user to update the maintenance plan when the equipment classification is changed.

Although the second part of the enhancement was not able to be implemented as originally planned, the discrepancy report that will continue to be generated will ensure that any equipment without the appropriate maintenance plan is proactively identified and corrected in a timely manner thereby ensuring that appropriate inspections are completed.

### **3. Required Retirement Date**

This enhancement was implemented on May 23rd. Prior to this SAP enhancement, equipment could be removed from service without the user having to enter an effective retirement date in the appropriate field. In addition, the associated maintenance plan for the piece of equipment could continue to exist and generate inspection work orders for a piece of equipment that is no longer in service. During audits, this has given the appearance of non-compliance and it has been difficult for PSE to show specifically when the equipment was removed from service.

This SAP enhancement has been implemented and requires the "Retirement Date" field to be completed in order to save a "Removed From Service" change to the equipment record. In addition, SAP can be queried to provide a report of any maintenance plans that are associated with retired equipment.

For the population of retired equipment records in SAP where no retirement date was entered at the time of retirement, PSE populated the "retirement date" field with a default date of "01/01/1911". The use of a default date on previously retired equipment will ensure data field consistency for all equipment records and make it clear where the actual retirement date is truly unknown.

#### **4. Emergency Section Valve Status**

This enhancement was implemented in July and provides better tracking of emergency section valves (ESV) status within SAP by tracking changes to the ESV status field. In addition it creates associated reports that can query and identify valve status as needed.

PSE revises which valves are identified as ESV on a periodic basis as our system grows and changes. A “toggle switch” on the equipment record is used to indicate ESV status. Prior to this enhancement there was not a good method of keeping track of when valves have an ESV designation added or removed. During audit activities, it was sometimes difficult for PSE to show whether a valve was or was not in ESV status during a particular time frame.

#### **5. Work Order Notification Required End Date Monitoring**

This SAP enhancement has been implemented and results in reports being generated for each supervisor to use to flag jobs that will be coming due in the near future. These reports provide the supervisor with additional visibility of inspections and remediations that are nearing their required completion date. While these reports have already proven useful to supervisors to improve our ability to consistently complete inspections and remediation work on time, PSE continues to experience challenges completing certain inspections or CP remediation within the timeframes required. These challenges are the result of the difficulty in obtaining certain long lead permits, increasingly burdensome permit requirements in many municipalities (such as the requirement for site-specific traffic control plans for any activity in the right of way), complex and lengthy CP troubleshooting and remediation, and other issues.

PSE is using these management reports to help identify these issues in advance of missed deadlines and will communicate with Commission Staff when opportunities are identified to work collaboratively to resolve these issues. In cases where PSE has worked diligently and prudently to meet the required inspection and remediation dates and is still at risk of missing deadlines, we are considering the possibility of applying to the WUTC for site-specific and/or event-specific waivers.

#### **6. Gas Facility Audit Reporting**

This SAP enhancement has been implemented and resulted in the creation of an automated report that queries all equipment and functional locations for a variety of issues that can create compliance challenges. These reports are being generated on a regular basis and PSE personnel review the reports to ensure any of the following situations are identified and addressed:

- New equipment is not inadvertently left in “Design” status after construction is complete (“Design” status creates an equipment number in SAP, but is intended for equipment that is in the design phase and does not yet physically exist). Queries are created for facilities that are still in “Design” status after 12 months. These facilities are then researched to confirm whether or not they are still in the design phase and to identify any that need to be moved into “Construct” status (“Construct” status identifies equipment that has been built and placed in service).

Maintenance plans for equipment in “Construct” status are not only created but also activated as required to begin the automatic work order generation that drives compliance-mandated inspections and maintenance (a maintenance plan is an SAP element attached to an equipment record that will generate the inspection work orders).