

Alarm Management 1: Developing the Plan

Carol Wallace

Manager Gas System Operations



PUGET SOUND ENERGY

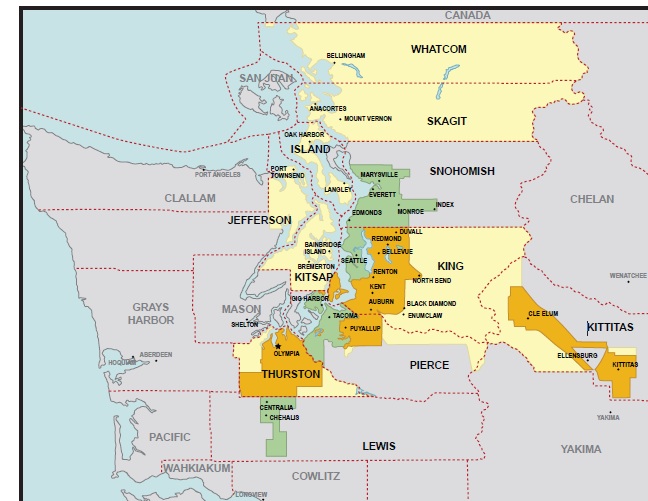
The Energy To Do Great Things

April 21, 2010

- Company Information
- Steps to Develop an Alarm Management Plan
- Things to Consider
- Moving Forward

- Puget Sound Energy is the oldest and largest utility in Washington State.
 - Combined Natural Gas and Electric Utility
 - Over 750,000 natural gas customers
 - Covers ~6000 square miles
 - ~12,000 miles of main
 - 40 Gate Stations
 - 350 RTUs
 - ~12,000 SCADA Points

PUGET SOUND ENERGY SERVICE AREA



Steps to Creating an Alarm Management Plan

- Research
- Build Your Team
- Define Roles and Responsibilities
- Create a Road Map
 - Document the Purpose of the Alarm System
 - Review Existing Alarm Handling Procedures
 - Benchmark Existing Alarm System
 - Develop Written Alarm Management Procedures

Key Elements of an Alarm Philosophy

- Purpose of the Alarm System
- Alarm design and presentation
- Alarm Priority
- Controller Roles
- Processes and Procedures
- Training
- Maintenance of the Alarm System
- Management of Change
- Reporting
- Documentation

- Finalize Alarm Management Plan
- Merge Existing and Revised Procedural Documents
 - Operating Standards
 - Gas Control Procedures Manual
 - Alarm Philosophy
 - Training for Controllers
 - Testing of the Alarm System
 - Monitoring Performance
 - Review Process



- Questions?