PSE PUGET SOUND ENERGY

Implementation of the

Operator Qualification Integrity Process

at Puget Sound Energy

December 23, 2022

Executive Summary

This document reviews the background, implementation methodology and value proposition for Puget Sound Energy's adoption of the Operator Qualification Integrity Process (OQIP).

The history of the OQ Rule created individual operator specific programs without a great deal of prescriptive direction from the federal agencies. This created a difficult situation for contractors to train, qualify and test employees to support operators leading to increased costs for rate payers and companies due to redundant training and qualification requirements.

The OQIP provides an industry consensus process that leads to consistency in three areas: people, process and validation. This consistency raises the integrity of the program leading to reduced risk for operators, improved consistency in training and qualification, increases the potential to reduce cost and improve emergency response capabilities of the industry.

Background

Since the inception of the Operator Qualification regulations by the United States Department of Transportation (USDOT) and their sub-agency the Pipeline and Hazardous Materials Safety Administration (PHMSA) entitled; "*Qualification of Pipeline Personnel (CFR 192)"* commonly referred to as the OQ Rule, pipeline operators have been required to develop standards and programs to address the testing and qualification of pipeline employees.

The regulations were not prescriptive and left it to the operators to develop programs to meet the rule and were developed independently based on the operators' needs and requirements. Operators being held responsible for compliance generally required their contractors to conform to their requirements.

Puget Sound Energy (PSE) took part in several workshops in 2016 with industry partners, Western Energy Institute (WEI) and the Distribution Contractors Association (DCA) regarding contractor training and operator qualification. As a result of the workshops, an industry task force was created to investigate how the various programs and processes could be refined to provide more consistency in compliance with operator OQ programs.

The work of the task force has evolved from a discussion of several OQ-related issues by an ad hoc group of interested stakeholders to a structured and chartered coalition consisting of DCA contractors, OQ service providers, gas operators, regional and national gas associations, industry consulting groups, and subject matter experts who represent various sectors of the gas industry from all areas of the nation. Staff from DCA and the American Gas Association (AGA) supported this effort. This group evolved and built a strong, industry coalition on OQ integrity, establishing high expectations and placing validating measures in place to assure member organizations are performing with "the bar raised higher" than we have often seen in our industry. The efforts of these members of the OQIP coalition have created a fundamentally different, yet sound and robust process that creates a standardized approach to deploying all aspects of qualifying, training, testing, and auditing elements associated with OQ. The deliverables of this OQIP process lays out specific expectations and benchmarks for all who

choose to strive for OQ excellence, and are willing to be audited and held accountable for operating at a higher level of OQ program effectiveness, auditing, and leading the American gas industry in safe, reliable, validating, and credible pipeline personnel qualification.

The OQ integrity coalition realized that a fully consistent and standardized OQ process was not a realistic goal, given the uniqueness and specific requirements of each Operator, there is a strong belief that utilizing consistent approaches to qualify individuals regarding a large majority of common core competencies was realistic, with the understanding there will be certain OQ requirements held by pipeline operators that are appropriate to their unique systems. Therefore, the "end goal" established by the coalition was to develop and promote a more consistent and standardized OQ process. This will understandably derive several positive results associated with credibility and validity to the individual pipeline worker's OQ credentials they obtain.

Methodology

Benefit Discussion

PSE utilizes a service provider model for gas construction, major projects and maintenance. PSE also has major project work that is competitively bid amongst regional contractors. Each contractor has their own OQ plan that needs to be harmonized with the PSE OQ standard and plan. The time and resources to validate and harmonize the plans created delays in projects and qualification of employees. The use of a common process applied to the training, qualification and evaluation of pipeline workers reduces that time and resource impact.

Our participation in the OQIP coalition allowed PSE to present an operators viewpoint to the industry stakeholders particularly in the area of risk mitigation, validation and assessment of programs. We found that absent the OQIP framework, there is not a framework to measure the veracity and integrity of an OQ plan through a risk-based audit tool or assessment. PSE promotes a risk based approach to our continual improvement processes. This allows us to promote the use of the process with our contractors and the ability to measure the contractor programs in a uniform manner for veracity and integrity.

PSE is regulated by the Washington Utilities and Transportation Commission (WUTC) and our OQ program specifically by their Office of Pipeline Safety under the state program authorization of PHMSA. Our regulators directed PSE to ensure that our contractors and PSE were working to the same standards and qualifications following an audit of our OQ program. As a participant on the OQIP coalition, PSE reviewed the process and determined that adoption would further that regulatory compact and would provide for uniform OQ processes for our internal and external resources.

PSE is located in seismic zone 4 and is in the region of the Cascadia Subduction Zone. This process and participating companies in the OQIP process will be able to facilitate a rapid response in the event of a major incident or natural disaster in our region and the need for mutual assistance. PSE has chosen to have a two tier training system in support of the process. Tier one training is the generic training that most companies have and require as a basis for OQ qualification. Our tier two training is that training

specific to Puget Sound Energy and our operating standards and specifications. When an event response triggers mutual aid, we can send the necessary tier two training to responding companies to deliver prior to sending resources, thereby speeding response and qualification to support and restore services to our rate payers and customer.

Implementation

The flexibility of the OQIP process allows companies to implement at their own pace with the appropriate organizational change management and integration of the process into existing standards and programs.

The recommended task standard for the OQIP is the American Society of Mechanical Engineers (ASME) Pipeline Personnel Qualification-ASME B31Q, an American National Standard. The process can be used with any underlying program, but PSE chose to move from our existing 192 program to the ASME B31Q to refine and improve our qualification program.

PSE began in 2017 and 2018 to introduce additional requirements and update our definitions in our standards and plan to harmonize with the OQIP. This early work and communication with impacted stakeholders set the stage for transition to ASME B31Q as well as implementing the training requirements, program elements and validation protocols in to our PSE program documentation.

PSE has established a three-year cycle for delivery of most OQ training and requalification including the 4 and 5 year covered tasks. Annual and semi-annual tasks are included each cycle year. The transition plan is outlined in the table below.

2019	2020	2021	2022	2023
Initial planning and roadmap of transition to ASME B31Q was laid out. Training development resources were identified and hired.	Development of Tier 1 and Tier 2 training for A cycle was done with two instructional designers working with SME reviewers.	Delivery of Cycle A training occurred in 2021 Tier 1 and Tier 2 training for B cycle was done with two instructional designers working with SME reviewers.	Delivery of Cycle B training occurred in 2022 Tier 1 and Tier 2 training for C cycle was done with two instructional designers working with SME reviewers.	Delivery of Cycle C begins in 2023. Review and updates to material begins with lessons learned and feedback from delivery.

Standards and operating procedures were updated to include both 192 and ASME B31Q covered tasks and a cross reference to prepare for transition	Cross reference sheets and job task matrix were developed for both 192 and ASME B31Q reference.	Began to phase out deprecated 192 qualifications and updated Field ID cards with new ASME references. Developed additional performance evaluations.	Continued the phase out of deprecated qualifications. Developed additional performance evaluations	Final deprecation of 192 qualifications will be completed following final delivery of Cycle C.

The training outlined was developed in compliance with the OQIP process that spells out the elements required of a systematic approach to training that is used in many regulated programs and mature training programs and organizations. The use of training development professionals partnered with subject matter experts created robust and well received training.

Lessons Learned

The key lesson learned is the value and need for organizational change management. Communicate early and often what changes are coming, what the value of the changes being to the individuals and the organization.

Evaluate your current training system and methodology against the process elements. You can use the suggested “Risk-Based Sample Audit” available from OQIP.org.

Evaluate your OQ standards and plans against the OQIP process framework.

Engage your contract and internal management about the value of the process to the company.

Continuously monitor and improve the processes.

About PSE

PSE is Washington’s largest and oldest utility, serving 1.5 million customers in 10 counties.

Our 3,100+ employees live and work in the communities we serve.

We share our customers’ concern for the environment, balanced with their expectations for uncompromised reliability, affordability and safety.

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