

U.S. Department of Energy Pacific Northwest Site Office



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Federal Technical Capability & Technical Qualification Program Self-Assessment Report Pacific Northwest Site Office

May 2013

Submitted by:

A handwritten signature in cursive script that reads "Joe Christ".

Joe Christ
Assessment Leader

5/22/2013
Date

EXECUTIVE SUMMARY

During April, a combined self-assessment of the Technical Qualification Program and Federal Technical Capability Program was performed at the Pacific Northwest Site Office. The assessment was led by a staff member from the site office who is assigned for maintaining and implementing the programs. The assessment reviewed implementing procedures and associated records along with interviewing staff who participate in these programs. The assessment identified no non-conformances and 6 areas for improvement. On the whole, the assessor determined that the programs were well understood and implemented within the site office. PNSO has a small number of personnel who are qualified and based on the extent of their involvement results indicate the program is favorably received and supported by senior management.

INTRODUCTION

Under DOE Order 426.1, Change 1, Headquarters and Field elements must conduct a self-assessment of Technical Qualification Program (TQP) and Federal Capability Program (FTCP) implementation within their organization at least every four years. These assessments must be conducted in accordance with the requirements of DOE Order (O) 226.1B, *implementation of Department of Energy Oversight Policy*, dated 4-25-11, and the current objectives and criteria approved by the FTCP Chair and posted on the FTCP Web site at:

<http://www.hss.energy.gov/deprep/ftcp/directives.asp>

SCOPE & METHODOLOGY

This self-assessment evaluated how well the Technical Qualification and Federal Capability Programs were implemented at the Pacific Northwest Site Office. The assessment was conducted in accordance with the SCMS: Quality Assurance and Oversight: Subject Area: Assessments, Procedure 2, *Performing Assessments* and SCMS: Quality Assurance and Oversight: Subject Area: Issues Management, Procedure 1, *Managing Issues Identified in Oversight Activities*. The assessment was conducted during April and was a combination of document reviews and interviews with PNSO staff and management who implement the Qualification and Capability programs. DOE Order 426.1, Change 1, *Federal Technical Capability*, served as the requirements basis for this review along with the current objectives and criteria approved by the FTCP Chair (Appendix A). The results were categorized using the SCMS methodology defined below:

- **Level 1 Finding** – Typically an issue of such significance reflects a gap in addressing requirements or a systemic problem with implementing the requirements,
- **Level 2 Finding** – An issue that represents a non-conformance and/or deviation with implementation of a requirement, and
- **Level 3 Finding** - An issue where it is recognized that improvements can be gained in process, performance, or efficiency already established for meeting a requirement.

Appendix B contains the list of documents reviewed and personnel interviewed (by title).

RESULTS

The results of the assessment are documented in Appendix A – Assessment Criteria and Performance Level. A summary of the findings is listed below. Further explanations are found in Appendix A.

2013-L3-01; Qualification records content was inconsistent with TQM Plan expectations and did not clearly reflect changes made in 2010 version of the FR FAQs.

2013-L3-02; The Facility Representative Program Procedure (PNSO-GUID-012) has not been updated to reflect changes to the Facility Representative Standard (DOE STD-1063-2011).

2013-L3-03; The TQM Plan needs to improve its discussion on the process for requalifying staff and how it accounts for changes made to the GTB, FAQs, and Site Specific competencies.

2013-L3-04; The TQM Plan needs to recognize the need for periodic program assessment.

2013-L3-05; The FR Program Procedure needs to better describe how it meets the FR standard for maintaining a Continuing Training program.

2013-L3-06; The TQM Plan does not address compensatory measures when responsible individuals lack STSM qualifications.

APPENDIXES

Appendix A – Assessment Criteria and Performance Level

Appendix B – Documents Reviewed and Personnel Interviewed

APPENDIX A: ASSESSMENT CRITERIA AND PERFORMANCE LEVEL TABLE

TQP Criteria	Criteria Met?	Comments
TQP-1 Structured Program – The program clearly identifies and documents the process used to demonstrate employee technical competence.		
1.1 Senior management is committed to the TQP 1.2 At a minimum, personnel providing management direction or oversight that could impact the safe operation of a defense nuclear facility have been identified as TQP participants. 1.3 IDPs, training plans, technical qualification records, or other related documents are updated to reflect the activities required for each individual to satisfy competencies. 1.4 A formal evaluation process (e.g. to select and train Qualifying Officials) is in place to objectively measure the technical competency of employees. The rigor of the evaluation process is commensurate with the responsibilities of the position.	Criterion met.	1.1 – Senior management demonstrates commitment by providing resources and setting time limits for getting qualified and then holding staff accountable for meeting the schedule. Performance is monitored through the FTCP quarterly status report. 1.2 - Personnel are identified as TQP participants both in their PDs and tracked in the FTCP quarterly status report sent to HQ. 1.3 – IDPs are update/reviewed biannually during the performance reviews, qualification cards are prepared and approved by senior management. Official copies are maintained electronically, periodically reviewed and updated to address changes to DOE directives or site specific facility/process changes. Qualification records were reviewed and found adequate for demonstrating qualification; however, record quality was inconsistent with the expectations in the TQM Plan. Changes to the FR FAQs were not clearly documented in the qualification records for FRs. (2013-L3-01) 1.4 – Evaluation/training process is documented in TQM Plan. Based on limited staffing needs, the graded process is used and supported by Qualifying Officials brought in from outside the Site Office.
TQP-2 Plans and Procedures – Plans and/or procedures are developed and implemented to govern administration of the program.		
2.1 Written procedures that adequately define the processes and requirements to implement the TQP are in place. 2.2 Roles and responsibilities for implementing the TQP are clearly defined and understood by all involved. 2.3 The procedures that govern implementation of the TQP are understood by all involved and are being implemented as written. 2.4 A training and qualification records development and maintenance process is established for each employee in the TQP.	Criterion met.	2.1 – Program is documented in TQM Plan and in the FR Program Procedure. However, the FR Program Procedure for qualification of FRs has not been revised to reflect changes made to the FR Standard 1063-2011. In several locations mandatory statements were not reflected (i.e., continuing training, proficiency) in the FR Program Procedure. Otherwise the procedure was adequate. (2013-L3-02) 2.2 – R&R are identified in the TQM Plan. There is a basic understanding of the R&R but staff members rely on the program manager to ensure compliance. FRs had a greater awareness due to repeated

		<p>qualification. However, interviews identified that the requalification process needs better definition in the TQM Plan. (2013-L3-03)</p> <p>2.3 – Personnel have a general understanding of the TQM Plan in their area of functionality although it’s not typically referenced for day to day activities. The TQM plan was updated to reflect recent changes to DOE directives and is implemented as written.</p> <p>2.4 – The TQM Plan identifies the requirements for developing and maintaining qualification records for each employee. Qualification records were reviewed and found to not meet the expectations in the TQM Plan. All records contained sufficient information to demonstrate qualification. At the time of this review, site qualification cards were being revised. The quality of the records needs improvement. (Included in 2013-L3-01)</p>
<p>TQP-3 Competency Requirements – Competency requirements are clearly defined and consistent with applicable DOE standards for similar industrial occupations.</p>		
<p>3.1 Competency requirements include clearly defined knowledge, skill, and ability elements. 3.2 Recognized experts help establish competency requirements. 3.3 Related professional accreditation requirements are considered in the program as applicable. 3.4 Competency requirements are identified in the areas listed below. (Note: this does not imply that three separate documents are required.)</p> <ul style="list-style-type: none"> • Basic Technical Knowledge. • Technical Discipline Competency. • Position Knowledge, Skills, and Abilities. 	<p>Criterion met.</p>	<p>3.1 – Confirmed during the hiring process and included in the PD. Completion of the FAQs is basis for selection and retention. 3.2 – PDs are developed based on approved FAQs and used during the hiring process. TQP qualification is indicated as a condition in the PD and in the vacancy announcements. 3.3 – Would be considered, but has not been utilized. Discussed in TQM Plan 3.4 – Documented though completed FAQs and hiring process as described in the TQM Plan</p>
<p>TQP-4 Qualification Tailored to Work Activities – The program identifies unique Department and position-specific work activities and specifies the knowledge, skills, and abilities necessary to accomplish that work.</p>		
<p>4.1 An analysis has been performed to identify the related knowledge, skill, and ability elements to accomplish the duties and responsibilities for each TQP functional area or position. 4.2 The program includes job-specific requirements related to the rules, regulations, codes, standards, and guides necessary to carry out the mission of the office.</p>	<p>Criterion met.</p>	<p>4.1 & 4.2 – Site specific qualification standards are developed and completed for each individual. Content is based on site needs and is approved by the Site Office Manager.</p>
<p>TQP-5 Credit for Existing Technical Qualification Programs</p>		
<p>5.1 Credit (equivalency) is granted for previous training, education, experience, and completion of related technical qualification programs, where applicable. 5.2 Equivalency is granted based upon a review and verification of objective evidence, such as transcripts, course certificates, test scores, or on-the-job experience. Equivalencies are formally validated, approved, and documented.</p>	<p>Criterion met.</p>	<p>5.1 & 5.2 – Methods for granting equivalency are identified and authorized in the TQM Plan.</p>

TQP-6 Transportability – Competency requirements identified as applying throughout the Department are transferable.		
6.1 The program includes all competencies that have been identified as applying throughout the Department. 6.2 Formal documentation of the completion of Department-wide competencies is maintained in a manner that allows for easy transferability. 6.3 TQP is integrated with personnel-related activities, such as position descriptions, vacancy announcements, recruiting, and performance appraisals.	Criterion met.	6.1 – TQM Plan relies on completing DOE approved GTB and FAQ standards. 6.2 – Completion of FAQs are completed in a manner allowing transferability. 6.3 – TQP is integrated with PDs and hiring process, IPPs. Yes, as confirmed during interviews.
TQP-7 Measurable – The program contains sufficient rigor to demonstrate compliance to the requirements.		
7.1 The technical competency of personnel who have completed the requirements of the TQP is adequate and appropriate. 7.2 The program allows for continuous feedback and periodic evaluation to ensure that it meets the needs of the Department and the missions of the office. 7.3 The TQP provides for continuing training.	Criterion met.	7.1 – Technical competency is evaluated during performance reviews. No concerns were identified in this area. Goals are discussed and documented to address areas for improvement. 7.2 – The TQM Plan does not identify the need to perform periodic evaluation. However, the need for periodic assessment was recognized and directed by the FTCP agent as demonstrated by this review. (2013-L3-04) 7.3 – The TQM Plan discusses continuing training, but based on the relatively few TQP qualified staff (6 total), the Site Office does not employ a rigorous continuing training program and instead handles it on an as needed basis. Opportunities for training related to each staff’s position is provided and included in the annual PNSO budget and IDPs are discussed during performance reviews. Specific training needed to maintain facility access is provided through the M&O contractor training program and other required or requested training as identified in each individual’s IDP. (2013-L3-05)

FTC Criteria	Criteria Met?	Results
FTC-1 Executive Commitment and Line Management Ownership. Line management is actively involved in all aspects of technical employee recruitment, retention, development, and deployment.		
1.1 Line managers are aware of the requirements and administrative flexibilities associated with recruiting, hiring, and retaining high-quality technical employees. 1.2 Senior line management supports the continuous technical development and improvement of employees. 1.3 Supporting Departmental organizations (personnel, training, contracts, finance, etc.) recognize line managers as customers and effectively support them in achieving and maintaining technical excellence. 1.4 The applicable Level One or field level Functions, Responsibilities, and Authorities (FRA) Document clearly defines Federal line management responsibilities in the area of technical capability. 1.5 Achieving and maintaining technical competence are reflected in the goals and objectives of the	Criterion met.	1.1 – Demonstrated through interviews with senior line management. 1.2 – Manager support documented in the PNSO Workforce Management Plan, supported through prioritize training and travel resources and opportunities to support offsite projects. It was commented that training support assistance from the ISC is needed. 1.3 – Determined to not be applicable since the organization is small and well integrated. 1.4 – Yes it is clearly stated in PNSO-GUID-05, Rev. 3

<p>organization and the position descriptions and performance evaluation plans of senior managers.</p> <p>1.6 Technical capability programs and processes are institutionalized through Policy, Orders, Standards, and procedures.</p> <p>1.7 Management uses the results of previous FTCP assessments as a tool to improve the program.</p>		<p>1.5 – Yes, documented in the PNSO Annual Performance Plan and the Workforce Management Plan via the PNSO Facility Representative Staffing Analysis and the FTCP Workforce Analysis and Staffing Plan Report. Managers’ PDs and IPPs contain performance criteria to attain and maintain qualifications.</p> <p>1.6 – Program is institutionalized through SCMS Procedures, the ISC Technical Qualification Program Manual, and PNSO TQM Plan.</p> <p>1.7 – Not applicable, this is the first assessment.</p>
<p>FTC-2 Recruiting Technically Capable Personnel. An effective process is implemented to attract highly competent technical personnel to fill key positions in the Department.</p>		
<p>2.1 Excepted Service Authorities are considered as a tool to attract highly competent technical personnel to fill key safety positions.</p> <p>2.2 Intern programs (or Pathway Programs), such as the Departmental Internship Program, Recent Graduates Program, Presidential Management Fellows (PMF) are recognized as an effective method to attract technically competent personnel to the Department consistent with Executive Order 13562, “Recruiting and Hiring Students and Recent Graduates”.</p>	<p>Criterion met.</p>	<p>2.1 – Excepted service is recognized as a tool, but hasn’t been used; seen more in the NNSA community, hasn’t been a need at PNSO.</p> <p>2.2 – Not considered as a viable means due to the senior level and experience needed of staff performing nuclear safety oversight and due to the small size of the Site Office does not lend itself to “raising-your-own” type of training program. Current staffing levels are 100% filled and 100% qualified. The Pathway program, however, is recognized in the Workforce Management Plan.</p>
<p>FTC-3 Staffing and Deployment. Technical staffing plans are developed, maintained, and used as the basis for recruiting, developing, and deploying personnel to ensure that critical safety positions are filled with technically competent people.</p>		
<p>3.1 Technical staffing plans are developed and maintained to identify critical safety positions and other key technical positions within the organization.</p> <p>3.2 Technical staffing plans form the basis for recruiting, developing, and deploying technical personnel in the organization.</p> <p>3.3 Employees in critical safety positions and other key technical positions possess the requisite education, training, experience, and background for their positions.</p> <p>3.4 The STSM Program is effectively implemented in the organization. The STSM Program within the Technical Qualification Program describes how STSM candidates are selected and compensatory measures used when responsible individuals lack STSM qualification.</p>	<p>Criterion met.</p>	<p>3.1 – Staffing plans are in place and current.</p> <p>3.2 – Staffing plans are used for developing organizational needs analysis and is included in the PNSO Workforce Management Plan</p> <p>3.3 – All critical safety positions are filled with personnel qualified in accordance with DOE O 426.1 or arrangements made with the ISC to supply qualified individuals.</p> <p>3.4 – Both positions requiring qualified STSM individuals are currently filled. The TQP plan does not address compensatory measures when responsible individuals lack STSM qualifications; however, this was not an issue since both individuals were qualified. – (2013-L3-06)</p>
<p>FTC-4 Development of Technically Capable Personnel. Programs and processes are effectively implemented to encourage the continuous improvement of technical personnel.</p>		
<p>4.1 The TQP is effectively implemented.</p> <p>4.2 Fellowship programs and other continuing education processes are effectively used to enhance the continuous improvement of technical personnel.</p> <p>4.3 Employees are encouraged to join professional organizations, write professional papers, and pursue professional certifications.</p>	<p>Criterion met.</p>	<p>4.1 – This LOI is evaluated using the above TQP objectives and criteria.</p> <p>4.2 – These methods have not been utilized, but are available.</p> <p>4.3 – This is an area not actively pursued by PNSO. Staff is neither encouraged nor discouraged in this matter.</p>

		<p>PNSO reimburses employees for attaining professional licenses and certifications related to their positions.</p>
<p>FTC-5 Retaining Technically Capable Personnel. DOE is an organization where technically competent personnel are respected and want to work.</p>		
<p>5.1 Technical personnel are assigned positions and responsibilities that allow them to effectively use their education, training, experience, and background in a fulfilling way.</p> <p>5.2 Career path planning and succession planning are effectively used to help retain technically capable personnel.</p> <p>5.3 Technical performance is used as a basis for performance reviews, promotions, recognitions, rewards, etc.</p> <p>5.4 An effective process is in place to preserve critical technical capabilities during Reduction in Force.</p>	<p>Criterion met.</p>	<p>5.1 & 5.2 – To the best extent possible, especially for a small site office, position assignment and career path/succession planning are incorporated into Human Capital Planning. The opportunities for cross assignments and advancement are limited and TQP personnel recognize this. Management has supported advancement to retain quality personnel.</p> <p>5.3 – In general this was true and is a factor considered in performance reviews/recognition.</p> <p>5.4 – No active process is in place, but then again it has not been needed. Key skills are aligned with oversight and since TQP is oversight those positions would be last to leave. TQP positions are filled by senior staff so they are also somewhat protected.</p>

APPENDIX B: LIST OF DOCUMENTS REVIEWED AND PERSONNEL INTERVIEWED

Documents Reviewed:

1. Training and Qualification Management Plan, PNSO-PLAN-03, Rev. 2
2. PNSO R2A2's, PNSO-GUID-03, Rev. 1
3. FRA Document for the DOE PNSO, PNSO-GUID-05, Rev. 3
4. PNSO FY 2013 Annual Performance Plan, PNSO-PLAN-01, Rev. 6
5. PNSO Workforce Management Plan, PNSO-PLAN-04, Rev. 3
6. PNSO Facility Representative Staffing Analysis
7. FTCP Workforce Analysis and Staffing Plan Report, FY 2013
8. SCMS Subject Area on Employee Development, Procedure 5, Implementing Technical Qualification Program
9. SC Technical Qualification Program Manual, A Desktop Reference for Supervisors and Participants
10. Facility Representative, DOE-STD-1063-2011
11. Facility Specific FR Qualification Standard for PNNL, PNSO-GUID-12
12. DOE PNSO Facility-Specific Senior Technical Safety Manager (STSM) Qualification Card, PNSO-GUID-13
13. Qualification Card PNNL Facility Specific NSS, PNSO-GUID-14
14. Safety System Oversight Qualification Card Fire Alarm, Detection and Suppression System, PNSO-GUID-15

Interviews:

1. Site Manager
2. Operations Division Manager (FTCP Agent)
3. Facility Representative (3)
4. Nuclear Safety Specialist