

SUBJECT: DEPARTMENT OF ENERGY FEDERAL TECHNICAL CAPABILITIES

1. PURPOSE. To define requirements and responsibilities for implementing the Department of Energy (DOE) Technical Qualification Program (TQP). The TQP, in concert with existing DOE Human Capital and Line Management processes, supports DOE's commitment to recruiting, deploying, developing, and retaining a technically competent workforce that will accomplish DOE missions in a safe and efficient manner. The Federal Technical Capabilities Panel (FTCP) provides support and strategic vision for implementation of the TQP, and supports DOE Line Management in identifying and addressing department-wide issues that may adversely impact the objectives of this Order.
2. CANCELS/SUPERSEDES. DOE O 426.1A Chg 1, *Federal Technical Capability Program*, dated 10-4-2019.
3. APPLICABILITY.
 - a. Departmental Applicability. This Order applies to any DOE organization, including National Nuclear Security Administration (NNSA) that performs functions related to the safe operation of defense nuclear facilities. This Order does not apply to other DOE formal qualification program requirements, such as the Project Management Career Development Program. DOE employees whose duties and responsibilities could affect the safe operation of defense nuclear facilities are required to participate in the DOE TQP.
 - (2) The Administrator of NNSA must assure that NNSA employees comply with their respective responsibilities under this Order. Nothing in this directive will be construed to interfere with the NNSA Administrator's authority under section 3212(d) of Public Law (P.L.) 106-65 to establish Administration-specific policies, unless disapproved by the Secretary.
 - (3) Additional positions may be designated as TQP positions at the discretion of the Headquarters (HQ) or Field Element Managers (FEM). This could include positions that involve oversight of non-defense nuclear facilities, other high hazard non-nuclear facilities, or other positions important to the mission of DOE as determined by the HQ or FEM.
 - b. DOE Contractors. This Order does not apply to contractors.
 - c. Equivalencies/Exemptions for DOE O 426.1B.
 - (1) Equivalency. In accordance with the responsibilities and authorities assigned by Executive Order 12344, codified at

title 50, United States Code (U.S.C.), sections 2406 and 2511, and to ensure consistency throughout the joint Navy/DOE Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) will implement and oversee requirements and practices pertaining to this directive for activities under the Director's cognizance, as deemed appropriate.

- (2) Exemption. This Order does not apply to DOE organizations, including NNSA, that do not perform functions related to the safe operation of defense nuclear facilities.

4. REQUIREMENTS.

a. DOE Federal Technical Capabilities Principles.

- (1) Consistent with the Department's Integrated Safety Management Guiding Principles and safety culture attributes DOE Organizations and Line Managers:
 - (a) Ensure Federal personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their safety responsibilities;
 - (b) Value and practice continuous learning require employees to participate in recurrent and relevant training and mandatory performance activities and encourage educational experience, training, and application to improve knowledge, skills, and abilities and implementation of the TQP; and
 - (c) Have the responsibility and authority and are accountable to achieve and maintain organizational technical excellence.
- (2) The competence, rigor, and integrity of designated qualifying officials and first line supervisors in carrying out their assigned roles and responsibilities are foundational to the integrity and overall effectiveness of the TQP.
- (3) Supporting organizations recognize line managers as customers and effectively support them in achieving and maintaining technical capabilities.
- (4) An integrated corporate approach is required to assure that necessary technical capabilities and resources are available to meet the overall needs of the Department's defense nuclear facility missions. An essential element of this corporate approach is support from Human Capital organizations in recruiting, hiring, and retaining critical technical capabilities

- b. Federal Technical Capabilities Panel. The FTC Panel (*referred to as the FTCP or Panel*) provides strategic vision and senior-level line management guidance to implement and improve the DOE TQP. The Panel also supports HQ and FEM in addressing DOE-wide issues related to the recruiting, hiring, and retaining the necessary technical capabilities and resources to support the Department's defense nuclear facility missions
- (1) The Panel is chaired by the Director of the DOE National Training Center (NTC). Membership of the Panel consists of Agents who are senior-level managers designated by each HQ and Field Element responsible for defense nuclear facilities. The Chair of the Panel and the FTCP Agents must be qualified Senior Technical Safety Managers (STSM).
 - (2) The Panel must develop and maintain a Charter that describes business operations and processes.
 - (3) The Panel will document its processes on the FTCP website. Processes will be approved by the FTCP and signed by the Panel Chair. FTCP processes may be used by other DOE programs or elements to develop and maintain qualification programs. The Panel may establish sub-groups to facilitate these programs.
 - (4) The Panel will identify, track, and support the completion of major initiatives to improve implementation of the DOE TQP, such as management of Technical Qualification Standards and accreditation reviews.
 - (5) The Charter and approved processes and additional information is located on the FTCP website.
- c. Technical Qualification Program (TQP). The primary purpose of a TQP is to ensure employees have the technical competencies needed to support the mission of the DOE. The TQP forms the basis for the development and assignment of DOE personnel responsible for ensuring the safe operation of defense nuclear facilities.

Each HQ and Field Element with defense nuclear facilities responsibility must define and implement a TQP for its organization. The organization-specific TQP must include the following elements:

- (1) Plans and Procedures. Plans and procedures must be developed and implemented to govern the administration of the program. The procedures must include specific roles and responsibilities for line management, qualifying officials, and participants. The FTCP Agent must be designated as responsible for overall TQP guidance and performance monitoring.
- (2) Identification of Required Technical Capabilities. Senior managers with support of the local FTCP Agent identify critical technical capabilities and

positions that must be maintained to ensure safe operations of defense nuclear facilities. The identified technical capabilities are incorporated into organization-specific staffing plans that are used to inform and support priority recruitment and hiring actions through established DOE Human Capital and Line Management processes.

- (3) Identify TQP Participants. The program must establish the process for identifying positions required to participate in the TQP based on nuclear safety responsibilities, which include DOE personnel who provide assistance, direction, guidance, oversight, or evaluation of contractor technical activities that could impact the safe operation of DOE's defense nuclear facilities. This typically includes personnel who provide oversight and evaluation of contractor performance in nuclear facility core and crosscutting performance areas.
 - (a) The requirement for TQP participation must be documented in the participant's Position Description.
 - (b) Any position that is technical in nature and includes duties and responsibilities related to the safe operation of defense nuclear facilities must be included in the TQP. This typically includes positions that have duties and responsibilities that closely align with the duties and responsibilities specified in a Functional Area Qualification Standard (FAQS).
 - (c) A position is considered technical in nature if the competencies associated with the position could not be obtained in 90 days using formal training and the loss of the competencies associated with the position could jeopardize the Department's ability to meet safety or regulatory requirements.
 - (d) Additional positions may be designated as TQP positions at the discretion of the HQ or FEM. This could include positions that involve oversight of non-defense nuclear facilities, other high hazard non-nuclear facilities, or other positions important to the mission of DOE as determined by the HQ or FEM. All TQP requirements will apply to any additional designated positions.
 - (e) The program must identify roles and responsibilities for evaluating the need for, and implementing as appropriate, compensatory measures for personnel who are assigned details or temporary assignments in a TQP- designated position.
- (4) Qualification Process. The program must clearly identify and document the organization's process and specific roles and responsibilities for the following:

- (a) Formal Assignment of required qualification standards (typically within 90 days);
 - (b) Development and maintenance of organization-specific and any job-specific qualification standards;
 - (c) Timelines for completion of qualification (typically 18 months) and identification of any compensatory measures while completing qualifications;
 - (d) Assignment of designated Qualifying Officials; and
 - (e) Designating Final Qualification upon completion of all Technical Qualification Standards.
- (5) Continuing Training Program Requirements. The program must describe the organizations continuing training program (CTP) and include, as a minimum, the following:
- (a) Expectations for implementing the applicable elements and requirements of a CTP included in section 4.f.(4) of this Order;
 - (b) Expectations for how required continuing training (CT) is documented and how CT hours are tracked during the nominal five (5) year CT cycle; and
 - (c) Expectations for implementing compensatory measures or other appropriate actions for personnel who do not maintain qualifications by completing the required CT hours during the nominal 5-year CT cycle.
- (6) Periodic Evaluation. Headquarters and field elements must conduct a periodic self-assessment of their TQP using, as a minimum, the FTCP-approved TQP objectives and criteria posted on the FTCP website. The program must establish expectations for the frequency of these self-assessments.
- d. DOE Technical Qualification Standards. The TQP includes three (3) levels of qualification standards. The first level is the General Technical Base (GTB) Qualification Standard. Completion of the GTB ensures that designated personnel in the TQP have a base level of knowledge related to the unique hazards and associated requirements for nuclear operations and the fundamental skills to perform common oversight duties. The second level is completion of a functional area, program-specific, or job-specific qualification standard. This ensures personnel have the competencies to perform a set of functional, program, or job-specific duties and responsibilities defined in the applicable technical qualification standards. The third level is completion of an organization-specific qualification standard (OSQS). This level defines any organization unique

competencies (e.g., facility, office, site) associated with performing the duties and responsibilities included in the second-level (functional, program, or job-specific) qualification standard.

(1) General Technical Base Qualification Standard¹.

- (a) TQP participants who are assigned an FAQS or Job-Specific Qualification Standard (JSQS) must complete the GTB Qualification Standard (QS), including both Parts A, Knowledge Base, and Part B, Oversight Performance.
- (b) TQP participants who are assigned a Program-Specific Qualification Standard (PSQS) must complete GTB Part B, Oversight Performance.
- (c) The determination as to whether GTB Part A is required for a PSQS will be evaluated during the development of the PSQS. The final determination as to whether GTB Part A is required will be documented in the approved PSQS.

(2) Functional Area, Program-Specific, or Job-Specific Qualification Standards.

- (a) Functional Area Qualification Standards (FAQS). FAQS establish common performance competencies in key nuclear facility functional areas for DOE personnel who provide assistance, direction, guidance, oversight, or evaluation of contractor technical activities that could impact the safe operation of DOE's defense nuclear facilities. This typically includes personnel who provide oversight and evaluation of contractor performance in nuclear facility core and crosscutting performance areas².

Satisfactory and documented attainment of the performance competencies contained in an FAQS ensures personnel possess the minimum requisite knowledge and skills to fulfill functional area duties and responsibilities common across the DOE enterprise. FAQS must be used without modification or addition to performance competency knowledge requirements to promote transportability of qualifications between DOE elements.

FAQS are developed by the FTCP as a tool to assist DOE HQ and field elements in the development and implementation of their TQP. A TQP participant should be assigned an FAQS if a majority of the duties and responsibilities identified in the FAQS are

¹ The requirement for completing GTB (both Parts A and B) in this section applies only to new TQP participants.

² See definition.

assigned to the participant. FAQs are approved by the Panel and signed by the FTCP Chair. Since an FAQS is transportable and does not include program and site variations, an OSQS is required for personnel assigned an FAQS.

Examples of functional areas that have associated FAQs include:

- 1 Senior Technical Safety Manager (STSM). An STSM must integrate safety into management and work practices to accomplish DOE mission objectives while ensuring worker and public health and safety and the protection of the environment. The STSM qualification requires a broad range of knowledge related to ensuring the safety of nuclear facility operations and sound decision making related to nuclear safety.

All HQ elements with responsibility for defense nuclear facilities must ensure that positions with decision authority that could impact safety of defense nuclear facilities are staffed by qualified STSMs. The positions that are typically designated as requiring STSM qualification are in the line management chain as a supervisor or manager, although some may be advisors to line managers. Line management must ensure that qualified STSMs are in place to maintain adequate technical competence in the reporting structure of positions of authority for defense nuclear facilities.

At a minimum, the following positions must be STSM qualified:

- a Central Technical Authorities (CTA).
 - b Field Element Manager or Deputy Field Element Manager with oversight responsibilities of defense nuclear facilities. Also, at least one of the individuals in these positions should meet the preferred education and experience identified in the STSM FAQs.
 - c Any other positions required by DOE Orders.
- 2 Facility Representative (FR). An FR is responsible for monitoring the safety performance of DOE defense nuclear facilities and day-to-day operational status. The background and experience criteria for entry into the FR Program are found in DOE-Standard (STD)-1063.

- 3 Safety System Oversight (SSO) Specialist.³ SSO personnel oversee contractor management of safety systems at DOE defense nuclear facilities. An SSO Specialist is responsible for overseeing assigned systems to ensure they will perform as required by the safety basis and other applicable requirements.
 - 4 Nuclear Safety Specialist (NSS). The NSS personnel perform the technical reviews of DOE nuclear safety documents and provide recommendations for approval or disapproval to the designated safety-basis approval authority.
 - 5 Safety Management Program (SMP) and Safety Management System Oversight. This includes oversight of key nuclear facility SMPs and Safety Management Systems, such as Radiation Protection, Fire Protection, Emergency Management, Criticality Safety, Quality Assurance, and others as designated by the Panel.
- (b) Program-Specific Qualification Standards (PSQS). PSQS establish common performance competencies in key programmatic areas for DOE personnel who provide assistance, direction, guidance, oversight, or evaluation of contractor technical activities that could impact the safe operation of DOE's defense nuclear facilities. A PSQS may also be applied in areas where a defined and consistent qualification program is needed to ensure personnel have the technical competence commensurate with their oversight responsibilities. This includes programs, such as Aviation Safety, Safeguards and Security, Weapon Quality, Nuclear Explosive Safety, and others as designated by the Panel.

PSQS are developed by the respective program, reviewed by the Panel, and signed by the program sponsor and FTCP Chair. For ease of transportability of qualifications between DOE elements, PSQS must be used without modification or addition to performance competency knowledge requirements. Satisfactory and documented attainment of the performance competencies contained in a PSQS ensures personnel possess the minimum requisite knowledge and skills to fulfill program area duties and responsibilities.

³ The Panel has approved the development of a new SSO Specialist FAQs.

The need for an organization-specific qualification standard should be evaluated and assigned to supplement a PSQS if necessary to define any organization unique performance competencies.

- (c) Job-Specific Qualification Standards (JSQS). JSQS establish performance competencies specific to a particular job function for DOE personnel who provide assistance, direction, guidance, oversight, or evaluation of contractor technical activities that could impact the safe operation of DOE's defense nuclear facilities. A JSQS may also be assigned to personnel performing oversight of multiple topical areas or job functions unique to a specific mission at a particular site or office. A JSQS should only be assigned to participants whose job functions do not closely align with the duties and responsibilities and associated performance competencies in any one FAQS or PSQS. When identifying performance competencies for a JSQS, supervisors should consider selecting appropriate performance competencies from existing FAQS and/or PSQS that align to the specific job being evaluated to further transferability of technical competencies.

JSQS are developed and approved by the respective organization with review and comment by the local Agent. An organization-specific qualification standard should be evaluated and assigned to supplement a JSQS if necessary to define any organization unique performance competencies.

- (3) Organization-Specific Qualification Standards (OSQS). OSQS establish common performance competencies in key areas at the office, site, and/or facility level for DOE personnel who provide assistance, direction, guidance, oversight, or evaluation of contractor technical activities that could impact the safe operation of DOE's defense nuclear facilities. OSQS are developed and approved by the respective organization with review and comment by the Agent.

An OSQS is required for personnel assigned an FAQS. For personnel assigned a PSQS or JSQS, Line Management should evaluate the need for and develop an OSQS, if necessary, to define any unique performance competencies. The organization-specific TQP plan must include expectations for evaluating the need for an OSQS.

e. Technical Qualification Standards Content, Development, and Maintenance.

- (1) The Technical Qualification Standards Development and Maintenance Process will be maintained on the FTCP website. The DOE NTC must support the overall Technical Qualification Standards Development and Maintenance Process by facilitating the development or update of job task analyses and FAQS evaluation guides, which are maintained by the NTC

and modified with subject-matter expert review. The NTC must also ensure the development and maintenance of training that supports the obtainment of FAQs performance competencies as determined by the Panel. The NTC may support the development of other Technical Qualification Standards and training as requested.

- (2) The FTCP Technical Qualification Standards Review Process will be maintained on the FTCP website. FAQs and PSQS must be reviewed and approved per this process. Updates to an FAQS or PSQS must include a gap analysis, or a summary of changes to the Standard, to aid continuing training and maintenance of the associated performance competencies as applicable.
 - (3) The organization-specific TQP plan must include expectations for the development, including format and content, and the approval and updating of any JSQS and OSQS.
 - (4) Approved FAQs and PSQS, along with any gap analyses, will be maintained on the FTCP website.
 - (5) At a minimum, FAQs and PSQS Technical Qualification Standards must address the following:
 - (a) Duties and Responsibilities associated with the position;
 - (b) Preferred education and experience for the position;
 - (c) Technical performance competencies required to perform as a qualified individual in the subject matter area;
 - (d) Knowledge requirements associated with the technical performance competencies;
 - (e) Any mandatory performance activities (MPA) for tasks considered as critical for demonstrating proficiency in a technical performance competency; and
 - (f) Applicable continuing training and/or proficiency requirements.
- f. Qualification. The purpose of qualification is to validate that a TQP participant has attained the performance competencies in their assigned Technical Qualification Standards. The qualification process must include the following elements:
- (1) Documentation. The Electronic Technical Qualification Program (eTQP) is the current System of Record for TQP records as designated under Federal Register, DOE-28, General Training Records. All records entered into the eTQP are the responsibility of each HQ or Field Element.

Hardcopies are maintained at the discretion of the organization. The NTC must maintain the eTQP system and post a user guide on the FTCP website.

At a minimum, the following must be included in eTQP for each TQP participant:

- (a) Supervisor;
- (b) Qualifying Officials (QO);
- (c) Technical Qualifications Standards assigned;
- (d) Supporting Objective Evidence and Documentation for verification or all performance competencies in assigned Technical Qualification Standards and required final qualification activities;
- (e) Completed qualification cards for all assigned Technical Qualification Standards; and
- (f) Designation of Final Qualification.

(2) Performance Competency Evaluations.

- (a) Knowledge Requirements. Attainment of performance competency knowledge requirements in assigned Technical Qualification Standards must be evaluated and documented by a designated QO using one or a combination of the following methods:
 - 1 Satisfactory completion of a written examination.
 - 2 Satisfactory completion of an oral evaluation.
 - 3 Documented evaluation of equivalencies.
 - 4 Completion of approved training courses that confirm attainment of specific knowledge requirements.
- (b) Mandatory Performance Activities (MPA). Satisfactory completion of any MPAs associated with performance competencies must also be evaluated and documented by a designated QO. The QO must verify that the evaluation criteria specified in the Technical Qualification Standard, including any organization-specific requirements, are met based on objective evidence. This typically includes direct observation of the activity such as during a facility walkthrough and/or evaluation of completed work products.

- (c) Equivalencies. Equivalencies may be granted to employees who satisfy performance competencies indicated in Technical Qualification Standards. Equivalencies must be based upon objective evidence of previous education, training, certification, or experience. Objective evidence includes any combination of transcripts, certifications, or completed work products. Equivalencies must be used with the utmost rigor and scrutiny to maintain the spirit and intent of the TQP.

(3) Designation of Final Qualification.

- (a) FEMs or designees must develop formal guidance and expectations, as part of their documented TQP, for designating Final Qualification of personnel completing assigned technical qualification standards. This must include expectations for what type of final qualification activity or activities should be selected for the various types of technical qualification standards and the roles and responsibilities for conducting the following types of final qualification activities:
- 1 Verifying completion of technical qualification standard knowledge requirements and any associated MPAs;
 - 2 Developing and administering written examinations;
 - 3 Conducting oral evaluations;
 - 4 Conducting oral boards;
 - 5 Conducting evaluated facility walkthroughs; and
 - 6 Evaluation of completed work products.
- (b) Designation of final qualification must include, as a minimum, the activities listed for each of the following types of technical qualification standards:
- 1 All TQP Qualification Standards:
 - a First level supervisor review and verification that the participant has obtained all assigned technical qualification standard performance competency knowledge requirements, and that any MPAs have been satisfactorily performed with appropriate objective evidence signed by a designated QO.

Note: This review may also include a final interview or review of completed work products to

provide reasonable assurance that the TQP participant can independently perform the duties and responsibilities in the assigned technical qualification standards.

2 Senior Technical Safety Manager (STSM):

- a Satisfactory completion of a comprehensive written examination with a minimum passing score of 80 percent; and
- b Satisfactory completion of an oral evaluation administered by a qualified STSM or satisfactory completion of an oral board consisting of technically qualified personnel that includes at least one STSM.

Note: All or a portion of the oral evaluation may be conducted during an evaluated facility walkthrough.

3 Facility Representative: Satisfactory completion of final qualification activities identified in DOE STD-1063, *Facility Representatives*.

4 Safety System Oversight Specialist: Satisfactory completion of an evaluated facility walkthrough.

5 Nuclear Safety Specialist: First-level supervisor evaluation of recently assigned safety basis review final work product (e.g., safety evaluation report or review input).

(4) Maintenance of Qualifications.

- (a) TQP participants who complete applicable qualification requirements must maintain proficiency through participation in a continuing training program (CTP).
- (b) The CTP must be included in the organization's TQP implementing procedures. The CTP should contain the following elements as applicable:
 - 1 Awareness and understanding of changes to applicable directives;
 - 2 Review of significant operating experience/lessons learned in functional areas;

- 3 Completion of applicable Gap Cards for revisions to FAQs, including any new MPAs;
 - 4 Classroom or online course training covering the knowledge and activities in the assigned technical qualification standards (required for all TQP participants);
 - 5 Organization-specific training related to assigned technical qualification standard areas; and
 - 6 Completion of selected performance activities included in technical qualification standard areas.
- (c) All TQP participants assigned one or more FAQs must complete a minimum of 80 hours of continuing training activities in a nominal 5-year continuing training (CT) cycle. About 50 percent of the required 80 hours should be selected from the recommended list of CT activities included in the assigned FAQs. For CT activities not identified in an FAQ, such as other formal training courses or attendance at professional conferences, the FTCP Agent must concur on applicability of the proposed training activity to meeting the 80-hour CT requirement.
- (d) The organization-specific CTP should define the minimum number of continuing training hours that TQP participants who are not assigned FAQs are expected to complete over a nominal 5-year CT cycle.
- (e) TQP participants maintain proficiency in the performance of any MPAs identified in their assigned technical qualification standard(s) through satisfactory performance of normally assigned job tasks. For tasks that are infrequently performed or where there are no site-specific opportunities for actual performance, TQP participants may use exercises conducted during formal classroom training or use locally developed exercises as part of an assigned, continuing training program to maintain proficiency.
- (f) The organization-specific CTP should address expectations, if applicable, for documenting satisfactory completion of performance activities identified in technical qualification standards (e.g., mandatory performance activities) during the nominal 5-year CT cycle. The program should also address the minimum number of performance activities expected to be completed, if applicable, during the nominal 5-year CT cycle.
- g. Accreditation. Organizations may accredit their TQPs by following the TQP Accreditation Process, which is maintained on the FTCP website. For organizations that have received accreditation, internal departmental oversight

activities must credit that organization's TQP for being properly implemented during the period of time the accreditation is current.

5. RESPONSIBILITIES.

a. Deputy Secretary.

- (1) Provides leadership, direction, and resources to recruit, deploy, develop, and retain a workforce to accomplish DOE's missions in a safe and efficient manner;
- (2) Resolves key FTCP issues, which require the authority of the Deputy Secretary;
- (3) Approves the FTCP Charter; and
- (4) Approves TQP Accreditations.

b. Headquarters and Field Element Managers.

- (1) Approve organization TQP implementing procedures;
- (2) Appoint an FTCP Agent, who is qualified as an STSM and has ready access to the Head of the element; and
- (3) Ensure the following:
 - (a) Organization-specific staffing plans are developed to identify priority TQP recruitment and hiring actions.
 - (b) TQP reports are reviewed to identify potential issues and develop corrective actions that ensure organization attracts and maintains the resources necessary to perform the Department's missions.
 - (c) Metrics are established to monitor the qualification progress of TQP participants.
 - (d) Facilitation of recruitment activities to fill open TQP positions with technically competent individuals.
 - (e) Periodic self-evaluations are conducted to evaluate the effectiveness of their organizations' TQP.
 - (f) Resolution of issues identified in their TQP organizations through internal and external assessments.
 - (g) Qualified STSMs are in place, or compensatory measures are established, to maintain adequate technical competence in the

reporting structure of positions of authority for defense nuclear facilities.

- (h) Designation of positions and/or individuals in their respective organizations that provide oversight of safety management programs identified in the respective safety basis documents.
- (i) Assignment of QOs to verify that TQP participants have obtained the technical competencies in assigned technical qualification standards.
- (j) Required final qualification activities are conducted prior to designating qualification of TQP participants.
- (k) Personnel who are TQP-qualified oversee the work of any contractors who support DOE/NNSA oversight of defense nuclear facilities.
- (l) OSQS are developed and assigned as needed.
- (m) Local training is available for personnel to support obtainment of technical competencies in any assigned Job-Specific and/or OSQS.

c. Director, National Training Center (NTC).

- (1) Serves as the Chair of the FTCP.
- (2) Facilitates the resolution of issues affecting the TQP.
- (3) Oversees the development and implementation of the FTCP Charter.
- (4) Signs FAQs and PSQS approved by the Panel for use throughout the Department.
- (5) Provides NTC support in the development and maintenance of FTCP-approved processes.
- (6) Provides recommendations to senior departmental officials regarding the improvement of DOE technical capability.
- (7) May appoint a Vice Chair from the FTCP membership.

d. FTCP Agents.

- (1) Maintain STSM qualification.
- (2) Oversee implementation of organization's TQP and ensure the rigor of the qualification process.

- (3) Solicit information and feedback from organization's TQP participants regarding opportunities to improve the technical capability of the Department's workforce.
 - (4) Lead, participate in, or oversee TQP assessments within their organizations.
 - (5) Ensure a CTP is established and maintained for their organizations.
 - (6) Verify applicable TQP requirements are included in TQP position vacancy announcements.
 - (7) Keep organizations informed of the progress/problems associated with execution of their TQP and seek support from senior officials to assure successful implementation.
 - (8) Concur on the assignment of a JSQS for any TQP participant.
 - (9) Provide review and comments on FAQs and PSQS per the FTCP Technical Qualifications Standards Process.
 - (10) Review and comment on any OSQS or JSQS.
 - (11) Review and approve minor changes to MPAs for TQP participants assigned an FAQs or PSQS, such as changes in the method of performance or evaluation criteria to fit unanticipated or unique organization-specific conditions.
 - (12) Participate in activities identified in the FTCP charter, such as periodic conference calls and face-to-face meetings.
- e. Headquarters FTCP Agents. In addition to the above requirements for all FTCP Agents, HQ Agents within their program line management will:
- (1) Support Field Element Agents to identify and resolve TQP and technical staffing issues;
 - (2) Support obtainment of CTA concurrence if required on new or revised FAQs; and
 - (3) Serve as HQ management advocate to identify and resolve FTCP or TQP programmatic issues and facilitate communication of FTCP-related initiatives within their respective program offices.
- f. Associate Under Secretary for Environment, Health, Safety and Security (AU).
- (1) Serves as the Office of Primary Interest for this Order.
 - (2) Coordinates accreditation of TQPs.

- (3) Maintains the FTCP website in coordination with FTCP Chair.
- g. Director, Office of Enterprise Assessments.
- (1) Ensures NTC support for the FTCP and approved processes.
 - (2) Ensures NTC support of the eTQP or successor designated system of record.
- h. Chief, Human Capital Officer.
- (1) Ensures DOE Human Capital processes related to recruitment, hiring, and retention of TQP-identified positions support the overall objectives of this Order.
 - (2) Designates a representative to participate in FTCP activities to maintain cognizance of TQP-related human resources issues, such as recruitment, hiring, and retention of TQP participants.
- i. Supervisors with Responsibilities for TQP Personnel.
- (1) Complete FTCP-approved TQP Overview Training.
 - (2) Develop JSQS as needed and obtain review and comment of the FTCP Agent on the JSQS.
 - (3) Ensure TQP personnel qualification schedules are established and tracked.
 - (4) Implement compensatory measures to either restrict an individual without adequate knowledge or skill, or identify those activities that must be performed under supervision of a qualified individual.
 - (5) Facilitate initial TQP qualification by ensuring sufficient time and training is provided to complete qualification tasks.
 - (6) Ensure that TQP participants are trained and qualified so that they are capable of performing assigned duties.
 - (7) Ensure TQP participant responsibilities are maintained in Individual Development and Performance Plans.
 - (8) Evaluate and concur on identified continuing training activities.
 - (9) Determine, based on job performance or newly assigned job duties, whether personnel currently qualified in a TQP position should be required to complete any portion of GTB Part B or any of the associated training as part of continuing training.

- j. Qualifying Official.
 - (1) Complete FTCP-approved Qualifying Official Training.
 - (2) Maintain proficiency in assigned qualification area(s).
 - (3) Perform review of performance competency knowledge requirements and MPAs and document results in eTQP or successor TQP system of record.
 - k. TQP Participants.
 - (1) Request and attend approved training to support completion of assigned qualification standards.
 - (2) Complete assigned technical qualification standard requirements within established timeframes and adhere to any established compensatory measures while completing qualifications.
 - (3) Maintain qualification by completing required continuing training hours.
6. INVOKED STANDARDS. This Order does not invoke any DOE technical standards or industry standards as required methods. Any technical standard or industry standard that is mentioned in or referenced by this Order is not invoked by this Order. Technical Qualification Standards identified in this Order are qualification standards that apply only to Federal personnel included in the DOE TQP, and, therefore, do not meet the definition of Invoked Technical Standards. Note: DOE O 251.1D, Appendix J provides a definition for “invoked technical standard.”
7. REFERENCES. Find DOE directives online at www.directives.doe.gov.
- a. DOE O 226.1, *Implementation of Department of Energy Oversight Policy*, current version.
 - b. DOE O 360.1, *Federal Employee Training*, current version.
 - c. DOE G 226.1-2, *Federal Line Management Oversight of Department of Energy Nuclear Facilities*, current version.
 - d. DOE-STD-1063-2017, *Facility Representatives*.
8. DEFINITIONS.
- a. Accreditation. A process that demonstrates that a specific DOE organization has an effective program in place to validate the technical competence of employees in the DOE TQP.
 - b. Competence. The ability to do something well or efficiently. A range of skill or ability.

- c. Competency. The quality or state of being competent, such as the quality or state of having sufficient knowledge, judgment, skill, or strength (as for a particular duty or in a particular respect).
- d. Competency Verification. The process used to confirm that a TQP participant has obtained the knowledge associated with a specific competency or competencies in a technical qualification standard through one or more of the following techniques: oral evaluation, written examination, documented equivalences, or completion of approved training courses that confirm attainment of specific knowledge requirements. The depth and breadth of the competency verification activity may be tailored based on a review of work products and the experience of the TQP participant being evaluated. Competency verification activities are done by designated qualification officials and the results of the selected verification techniques are documented in the eTQP or subsequent system.
- e. Compensatory Measures. The extent to which, or whether, a TQP participant can provide direction to, or oversight of contractor technical activities that could affect the safe operations of defense nuclear facilities. The identification and documentation of any limitations on the TQP participant's job duties related to the safe operation of defense nuclear facilities are typically referred to as compensatory measures.
- f. Continuing Training. Prescribed training that must be completed on a defined periodicity to maintain qualification after initial qualification.
- g. Evaluated Facility Walkthrough. A type of final qualification activity where a designated individual or group of individuals observes a TQP participant performing their duties and responsibilities in their assigned facilities. The evaluated facility walkthrough also includes an oral evaluation component where a TQP participant is asked questions regarding procedures, safety implications, safety systems, and other topics to determine whether they have obtained a sufficient level of competency to independently perform their assigned duties and responsibilities.
- h. Field Element Manager. DOE officials who are responsible for execution of oversight policy implementation.
- i. Final Qualification Activity. A specific activity or activities that provide an additional level of assurance that a TQP participant completing all technical qualification standards has obtained a sufficient level of competency to independently perform their assigned duties and responsibilities. Final qualification activities include one or more of the following: Supervisory verification of the completion of technical qualification standard requirements, written examination, oral evaluation, evaluated facility walkthrough, and evaluation of completed work products.

- j. Headquarters Element. For the purposes of this Order, Headquarters Elements include the Assistant Secretaries and Program Office Directors reporting to the Secretary either directly or through the Deputy Secretary or Under Secretaries. The NNSA Administrator is the only NNSA Head of the Departmental Element.
- k. Job Task Analysis. A systematic method used in obtaining a detailed listing of the tasks of a specific job.
- l. Mandatory Performance Activities (MPA). A set of activities derived from a Job Task Analysis (or equivalent type of analysis) that require TQP participants to apply related knowledge to complete the particular activity to a defined level of performance. The expected level of performance for MPAs is typically defined by a set of evaluation criteria. MPAs are selected only for those job tasks that are commonly performed across DOE in specific functional or program area and whose performance is key to demonstrating that the associated performance competency statement has been met.
- m. Nuclear Facility Core and Crosscutting Performance Areas. Framework for providing oversight of DOE nuclear facilities defined in DOE Guide 226.1-2A. Core performance areas include Safety System Operability, Technical Safety Requirement Implementation, Safety Management Program Effectiveness, Work Planning and Control, Safety Management System Effectiveness, and Emergency Preparedness. Crosscutting Performance Areas include Formality of Operations, Safety Culture, and Issue Identification and Resolution.
- n. Organization-Specific Qualification Standard. Generic term for site, office, facility, or system-specific technical qualification standards. The OSQS includes competencies that are required to perform a unit of work that is included within the duties and responsibilities of a specific job. An OSQS may contain one or more levels (e.g., site, office, facility, system) depending on specific job duties and responsibilities.
- o. Oral Board. A formal oral evaluation conducted by a group of designated individuals. The organization-specific TQP implementing procedures must specify specific membership and qualifications of oral board members, expectations for oral board questions and answers, and criteria for passing the oral board or requiring any remediation.
- p. Oral Evaluation. A competency verification technique where a designated qualification official verifies that a TQP participant has obtained the knowledge associated with a specific competency or competencies in a technical qualification standard by asking verbal questions and verifying that the participant provides an acceptable answer. The questions and acceptable answers are found in the technical qualification standards and any associated evaluation guides. The oral evaluation is commonly used for knowledge requirements that require the individual to “describe” or “discuss” a particular topic. An oral evaluation also can be an approved, final qualification activity where a designated person,

typically the first level supervisor, asks a set of verbal questions to evaluate whether the TQP participant has obtained a sufficient level of competency to independently perform their assigned duties and responsibilities.

- q. Performance Competency. A statement of expected level of performance of a specific job duty or group of tasks. Performance competencies include the knowledge required to perform the related duties and tasks and may include mandatory performance activities.
 - r. TQP Participant. An individual whose duties and responsibilities meet the criteria in this Order or organization-specific criteria to be included in the DOE TQP.
 - s. Technical Qualification Standards. Broad term for all qualification standards assigned to TQP participants. Includes Functional Area Qualification Standards, Program-Specific Qualification Standards, Job-Specific Qualification Standards, and Organization-Specific Qualification Standards.
 - t. Transportability. The ability of TQP participants to transfer obtainment of an entire set of performance competencies or a smaller group of individual performance competencies from one DOE organization to another DOE organization. Performance Competencies in FAQS and PSQS are common across DOE organizations and, as a result, completed qualifications in these technical standards is transportable. Individual performance competencies in JSQS and OSQS may be transportable depending on job-specific duties and responsibilities.
9. CONTACT. Questions concerning this Order should be addressed to the Office of Environment, Health, Safety and Security, Office of Health and Safety, at (301)903-7030.



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Secretary of Energy