



**U.S. Department of Energy
Office of Science Integrated Support Center**



Technical Qualification Program Manual
A Desktop Reference for Supervisors and Participants

March 2007

Technical Qualification Program Manual
A Desktop Reference for Supervisors and Participants

HOW TO USE THIS MANUAL

The *Technical Qualification Program Manual (A Desktop Reference for Supervisors and Participants)* describes how the Technical Qualification Program is implemented at site offices supported by the Office of Science (SC) Integrated Support Center (ISC).

The significant implementation activities include enrolling in the program, identifying program and individualized competencies, attaining the competencies, completing the program, and maintaining and enhancing proficiency through continuing training and requalification.

Each section of the manual lists the actions required by the participant, his or her supervisor, and the SC ISC.

If there is any question on how or why any activity should be fulfilled, please contact the SC ISC, and you will be referred to an individual who can assist you.

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I. Introduction

Background

In response to the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Programs*, the Department of Energy (DOE) developed a formal qualification program for headquarters and field element technical employees who provide management oversight or technical guidance and whose actions or decisions could impact the safe operations of DOE defense nuclear facilities.

The TQP requirements are now set forth in directives, DOE O 360.1B, *Federal Employee Training*, DOE M 360.1-1B, *Federal Employee Training Manual*, and DOE M 426.1-1A, *Federal Technical Capability Manual*, and are being implemented at defense nuclear, non-defense, and non-nuclear facilities across the DOE Complex. In addition, the TQP is used to fulfill the requirements of DOE O 226.1, *Implementation of the Department of Energy Oversight Policy*, which specifies that Site Managers are responsible to “Maintain appropriate qualification standards for personnel with oversight responsibilities and clear, unambiguous lines of authority and responsibility for oversight.”

Purpose

The TQP establishes and maintains the technical capabilities necessary for technical personnel who oversee nuclear facilities to carry out the mission of each site office while protecting the health and safety of employees and the public. By comparison, the purpose of the individual development plan (IDP) process is to identify, develop, and maintain administrative, technical, and/or professional capabilities for all personnel.

The purpose of the *Technical Qualification Program Manual (A Desktop Reference for Supervisors and Participants)* is to assist supervisors and participants in enrolling in the TQP, completing the TQP requirements, and maintaining their technical capabilities. The TQP Plan, which describes how the SC Integrated Support Center implements the TQP requirements, is attached to this manual.

Scope

The TQP applies to federal technical employees whose positions require them to provide management direction and oversight that could impact the safe operations of a nuclear facility. In addition, Site Managers have the discretion to use this program to meet the requirements of DOE O 226.1 to establish and maintain qualification standards for personnel with oversight responsibilities. Participant selection criteria are provided in Section II, *Selecting Participants and Standards*.

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Integrated Safety Management (ISM)

As described in DOE P 450.4, *Safety Management System Policy*, the ISM principles must be incorporated into all work activities. To this end, ISM practices need to be woven into all training and development activities, as practicable and applicable.

Further, the ISM principle, *Competence Commensurate with Responsibilities*, refers in part to the specific competencies that individuals need to develop and maintain in order to “discharge their responsibilities.” The goal, then, for all qualification and continuing training programs is to ensure that individuals acquire those specific skills and knowledge that are necessary to perform their job safely.

Administrative requirements for TQP implementation

The following administrative requirements for TQP implementation are derived from the Federal Technical Capability Program (FTCP) and its related directives.

1. Supervisors/managers designate the positions in their respective organizations required to participate in the TQP and the applicable qualification standard(s).
2. The Site Manager is responsible for implementation of the TQP. The Site manager may designate a TQP Manager to be responsible for the day-today implementation of the TQP.
3. Employees in the TQP satisfy the competencies contained in the applicable qualification standards assigned to them. These standards encompass the General Technical Base (GTB) Qualification Standard, DOE-wide Functional Area Qualification Standards (FAQSs), and Office/Facility-Specific (OFS) qualification standards. This is a three-tiered qualification process for TQP participants, whereby each participant must fulfill the competencies of the GTB Qualification Standard, the assigned FAQSs, and the assigned OFS qualification standards to successfully complete the program.
4. Equivalencies may be granted to personnel based upon objective evidence of previous education, training, certification, or experience.
5. Personnel are given TQP completion dates commensurate with the complexity of the qualification process, normally within 18 months of their program assignment.

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6. Extensions to the qualification period may be granted by the Site Manager (or the local FTCP Panel), provided that the supervisor submits a request (nominally three months prior to the due date) with justification for the extension. The request must include an explanation of the circumstances that prevented the participant from completing the program, and a plan for how the participant will complete the program in the proposed extended period.
 7. The supervisor may request a subject matter expert (SME) to serve as a qualifying official to assist in the review and evaluation of TQP documents and competencies. As such, qualifying officials and/or supervisors verify and document participants' completion of competencies.
 8. Personnel who have completed applicable qualification requirements must maintain their proficiency and continue their professional development through ongoing participation in additional, relevant training, education, and developmental activities.
 9. Each organization's designated TQP Manager assists with the implementation of the TQP. The TQP Manager duties include assisting in the identification of individual and organizational training, education, and development needs; tracking qualification expirations and reminding individuals of upcoming expirations and available training offerings; and assisting line managers in ensuring that personnel attend required training or participate in timely makeup training.
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II. Selecting Participants and Standards

Preparing the organization for participation in the TQP

1. The division, group and/or site office identifies safety hazard-related and/or defense nuclear functions.
2. The division, group and/or site office identifies the positions responsible for these functions.
3. The division, group and/or site office matches individual job tasks to the DOE qualification standards and competencies.
4. The division, group and/or site office will develop an Office/Facility-Specific (OFS) qualification standard that incorporates the activities and functions unique to the setting, type of work, facility, site, or organization.
5. The division, group and/or site office matches the identified standards and competencies with the position descriptions. Note: All position descriptions for TQP positions are required to contain a statement that indicates that the person holding that position must participate in the TQP.

Identifying employees as TQP participants and getting started

The Technical Qualification Program applies to federal technical employees whose positions require them to provide management direction and oversight that could impact the safe operations of a nuclear facility. As appropriate, Site Managers who do not oversee nuclear facilities may designate technical personnel to participate in the TQP, in order to comply with DOE O 226.1. The following steps assist management and employees in determining participation in the TQP by providing consistent interpretation of the above definition.

Step 1: Do you oversee work that involves a nuclear facility?

If **YES**, go to Step 2. If **NO**, then you are not required to be in the TQP, unless so designated.

Step 2: Are you a GS-11 or above (including Senior Executive Service)?

If **YES**, go to Step 3. If **NO**, contact the TQP Manager to discuss participation in the TQP.

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Step 3: Do you perform any of the following activities?

- Review of authorization basis documents
- Participation in operational readiness reviews and readiness assessments
- Implementation of regulatory agreements
- ES&H, quality assurance, appraisals, or oversight
- Other activities that could impact safe operation of a nuclear facility.

If **YES**, then you meet the requirement of the above definition and are required to be in the TQP. If **NO**, then you are not required to be in the TQP unless your Site Manager determines that you are required to participate in the program.

Optional participation

The participant requests inclusion in the TQP as part of career development. The participant must still complete all requirements of the TQP as stated in this Manual.

The supervisor and Site Manager approve the employee's request for participation.

General Technical Base Qualification Standard

All participants are expected to fulfill the competencies of the General Technical Base (GTB) Qualification Standard via the online course located at the DOE Online Learning Center 2 (OLC²) at <https://olc2.energy.gov/elms/learner/login.jsp>, but please note that Competency 15 of this Standard regarding Conduct of Operations designates a working level knowledge and requires work experience for completion. A justification should be written for this competency in addition to completion of the online course.

Selecting Functional Area Qualification Standards that match the participant's job

The supervisor and the participant review the DOE Functional Area Qualification Standards (FAQSs) and determine which best suits the participant's job position and duties. The participants are expected to fulfill every competency statement in their FAQSs, unless the FAQS specifically allows exemptions. The FAQSs can be accessed from the DOE Federal Technical Capability Program web site at <http://www.ftcp.org/> (Directives & Standards Section).

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Also, the supervisor and participant determine if a secondary functional area is necessary. A participant may choose a secondary FAQS if his/her job tasks involve more than one functional area or if the primary FAQS is a generic job description (e.g., STSM) and the participant has expertise in a particular functional area (e.g., Chemical Processing). The participant can choose only those competencies from the secondary FAQS that pertain to his/her job, deleting those that do not apply. (Note: Deletion is an option for secondary FAQS and OFS qualification standard areas, but only if specified in the standard. Competencies cannot be deleted from the GTB or primary FAQS.)

**Selecting or creating
Office/Facility-Specific
Standards**

1. The supervisor and participant must then select an existing Office/Facility Specific (OFS) qualification standard or create a new one. The OFS is made up of competencies that are required for the activities and functions unique to the setting, type of work, facility, site, or organization and are not covered in the GTB, primary or secondary FAQS.
2. Many organizations have developed OFS qualification standards for their organization. The participant can choose from the organization's qualification standards the competencies that apply to his/her job. A custom OFS qualification standard can be developed by choosing pertinent competencies from other TQP or professional qualification standards. If the participant's organization does not have an OFS standard or if the organization OFS standard does not cover the competencies required for a particular participant's job, an individualized OFS qualification standard must be developed.
3. The supervisor and participant should call upon the TQP Manager for guidance and assistance in developing an OFS standard.

**Approval of OFS
Qualification Standards**

All OFS qualification standards must be approved by the Site Manager (or the local FTCP Panel).

Facility Representatives

Facility representatives must comply with both the Site Facility Representative Program Manual and this TQP Manual. While the facility representatives must complete the DOE Facility Representative (FR) FAQS, each site supplements the requirements of TQP and the DOE FR FAQS with office and facility qualification standards and procedures. Satisfying all local and DOE requirements will allow the prospective facility representative to receive a site TQP certification. All completion documentation must be submitted to the site TQP Manager for record keeping.

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STSM Program

Only employees occupying positions designated by management as Senior Technical Safety Manager (STSM) positions complete the DOE and Site STSM standards. Exception to this policy must be approved by the Site Manager (or the local FTCP Panel). Refer to DOE M 426.1-1A, *Federal Technical Capability Manual*, for guidance on STSM selection and qualification which can be found at the following address:

<http://www.ftcp.org/directives/Directives.asp>

Enrollment

1. The employee, in conjunction with the supervisor, completes a TQP assignment memorandum, a sample of which can be found at <http://www.ornl.gov/tdd/QualPrgm/qualprgm.htm>.
 2. The participant, Division Director (or equivalent), and Assistant Manager or Site Manager sign the memo.
 3. The supervisor retains a copy for the organization's file and the participant, and submits the original to the TQP Manager.
 4. The TQP Manager prepares the participant's TQP start and due date memorandum, which establishes the participant's start date and completion due date, and provides to the employee.
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III. Completing the TQP

Using Employee Self Service (ESS), as applicable

TQP participants can enter, track and generate completion reports on technical qualification competency information through DOE's web-based Employee Self Service (ESS) portal. The completion reports, and supporting evidence, are sent to the TQP Manager for input into a centralized database. Use of ESS for the TQP is described in this Manual and in detail in the ESS/TQP Competency Data Entry Guidance located at the following address:

<http://www.ornl.gov/tdd/QualPrgm/qualprgm.htm>

Choosing a fulfillment option

The participant should first go through every applicable competency in each selected qualification standard and determine the way the competency will be fulfilled. For each competency, the participant has a choice of three fulfillment options:

- (1) Exemption
- (2) Equivalency
- (3) Developmental Activity

Only one option can be selected for each competency.

Note: Once the fulfillment options are approved by the supervisor, changing a developmental activity designation to an equivalency or exemption requires review and approval by the Site Manager (or the local FTCP Panel).

Exemption

If the participant does not possess the requisite skills and knowledge in this area, **and** the competency is not part of the job tasks, then the participant requests an exemption. (If the competency is not part of job tasks but the participant does possess the knowledge and/or skills, it should be claimed as equivalency.) Participants may not choose exemptions to any of the GTB Qualification Standard or FAQs competencies, unless the FAQs specifically allows exemptions.

Equivalency

If the participant possesses the necessary skills and knowledge for competency in the area, the participant requests an equivalency and submits evidence of previously completed education, training, and/or experience. These activities and knowledge and/or skills acquired should be equivalent to developmental activities currently available.

Developmental activity

The participant does not currently possess an acceptable level of the knowledge and/or skills required for this position. The participant identifies the developmental activity(ies) to acquire the required knowledge and skill level.

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Deadline for completion of exemption/ equivalency justifications and identification of planned developmental activities

The participant has six months from his/her entry date in the TQP to complete the Exemptions and Equivalencies documentation of the TQP and to identify planned developmental activities. The following elements must be in place:

- All exemption and equivalency justifications are written and approved, as evidenced by signature of the supervisor or qualifying official. See Appendix A for examples of acceptable exemption and equivalency justifications*.
- All developmental activities are identified, and approved, as evidenced by the signature of the supervisor or qualifying official.
- All supporting documentation is compiled, reviewed, and approved, as evidenced by signature of the supervisor or qualifying official.
- Exemption and/or equivalency information and documentation have been turned in to the TQP Manager.
- Planned developmental activities information has been turned in to the TQP Manager.
- The TQP Manager approves the exemption and/or equivalency information and the planned developmental activities documentation before the participant can proceed.

* Assemble the documentation that supports your justification statement(s) matching the evidence to the competency as much as possible. This could include such physical evidence as transcripts, course certificates, attendance sheets, supervisors' testimonials, or project logs. More specifically, examples of evidence for the following are:

- Education courses – provide the title of the course, the institution attended, the dates of attendance and/or the course taken, and a description of how the specific course content has fulfilled the competency knowledge and skill.
- Training courses or activities – provide the title of the course, the vendor, the dates of attendance, the results of the course exam or evaluation, and a description of how the specific course content has fulfilled the competency knowledge and skill.
- Work experience – provide job title, position description, dates of employment, name of the employer and the organization, and a description of how the specific job tasks have fulfilled the competency knowledge and skill.

Completing exemption and equivalency justifications and documentation

1. Once all justifications have been written and supporting evidence gathered for each competency, the participant creates a packet.

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2. The participant forwards the packet to the Division Director (or equivalent) to review, and concur that stated justifications adequately describe how the participant gained the acceptable level of competency and that the supporting evidence is complete.
3. The supervisor may request a subject matter expert (SME) to review and validate the exemption/equivalency justification.
4. Once the Division Director (or equivalent) and/or qualifying official have signed off on all exemptions and equivalencies, they forward the approved packet to the Assistant Manager or Site Manager or returns the disapproved (with an explanation) packet to the participant.
5. The Assistant Manager or Site Manager returns the approved, signed or disapproved (with an explanation) packet to the participant.
6. If the packet is disapproved, the participant consults with the supervisor and/or the TQP Manager to determine the necessary corrective actions.
7. If the packet is approved, the participant makes copies of the signed reports and supporting evidence.
8. The participant sends the original signed reports and copies of supporting evidence to the TQP Manager.
9. The TQP Manager reviews the documentation for accuracy and completeness prior to filing it in the individual's official technical qualification record (TQR).
10. The participant submits all exemption and equivalency information within six months of the start date.

Selecting the type of developmental activity

1. The participant reviews the knowledge and skills required for the qualification standard to determine those to be acquired.
2. The participant researches and determines a training (developmental) activity that will result in gaining the required level of knowledge or skill for meeting the competency. Example types of developmental activities include:
 - on-the-job training
 - self-study
 - training course
 - mentoring
 - college course

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3. The participant repeats this process for each competency when the participant does not possess the required skills and knowledge.
4. Once all developmental activities have been identified, the participant submits them along with the Exemptions/Equivalencies packet to the immediate supervisor within six months of the start date.
6. The supervisor initials each activity indicating approval and support of the planned activity. The supervisor may request an SME to assist in this process.

Completing the developmental activities

The participant is expected to complete the assigned/selected developmental activities within 18 months of starting the TQP.

1. As each developmental activity is completed, the participant assembles and retains the documentation of completion (e.g., training certificate, signed self-certification form, supervisor's confirmation of on-the-job training).
2. Once all developmental activities are completed, the participant meets with the supervisor to be evaluated on the acquired competency. The supervisor may request an SME to serve as a qualifying official to assist in this evaluation process.
3. The supervisor/qualifying official signs the evaluation form confirming successful completion of developmental activities (including evaluation) and returns the packet to the participant.
4. The participant makes copies of all signed pages and supporting documentation and sends original signed pages and supporting documentation copies to the TQP Manager.
5. The TQP Manager reviews the documentation for accuracy and completeness prior to filing in the individual's TQR.

NOTE: If an extension to the target completion date is needed, a request for an extension is submitted by the participant's supervisor to the Site Manager (or the local FTCP Panel) for approval. The supervisor submits a request (nominally three months prior to the due date) with justification for the extension. The request must include an explanation of the circumstances that prevented the participant from completing the program, and a plan that states how the participant will complete the program in the proposed extended period; for example, the plan should list the dates of training to be completed.

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Evaluating the participant's completed competency – the general approach

1. The supervisor or the delegated qualifying official is responsible for evaluating the individual's knowledge or performance upon completion of developmental activities for a competency, particularly if the competency fulfillment had not been formally evaluated (e.g., by passing a course examination).
2. The supervisor or a qualifying official will evaluate the participant using any of the following:
 - Oral evaluation (e.g., discussion, questioning, and walk-through)
 - Performance demonstration
 - Written examination
 - Verification of successful course completion
3. The person conducting the evaluation should refer to the supporting knowledge and skills listed for each competency in the qualification standards. These knowledge and skill statements can easily be converted to a question or performance activity. The qualification standards are located on the DOE FTCP web site at <http://www.ftcp.org> (Directives & Standards Section).
4. The TQP Manager can assist the supervisor, if needed, in determining and implementing an appropriate evaluation method for each competency.

Evaluating the participant's completed competency – the specific approach

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1. Upon notification and receipt of a participant's developmental activity completion package, the supervisor reviews the package to determine the appropriate method of evaluation (e.g., acceptance of course exam; oral evaluation, performance demonstration, or written examination of participant's acquired knowledge or skill). The supervisor may request an SME to serve as a qualifying official to evaluate the participant's attained knowledge and/or skill. The supervisor or qualifying official signs off on those competencies for which he or she is qualified or knowledgeable.
 2. The participant prepares for the evaluation for the completed competency.
 3. The supervisor or qualifying official schedules a meeting with the participant to conduct the evaluation.
 4. The supervisor and/or qualifying official evaluate the participant, using one of the prescribed methods.
 5. If a participant does not satisfactorily complete a course, examination, evaluation, or other activity, the supervisor or qualifying official identifies, administers, and documents appropriate remedial activities.
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6. As necessary, the participant completes appropriate remedial activities.
7. When the participant successfully completes the evaluation, the supervisor or qualifying official documents the evaluation method, provides notes regarding the evaluation, documents the evaluation date, and signs on the Qualifying Official Signature line for each competency.
8. The supervisor forwards the original evaluation documentation (with supporting evidence, e.g., course completion certificates, exams, etc.) to the TQP Manager and returns a copy to the participant.

Completing the TQP documentation

1. Once all records have been received by the TQP Manager, the TQP Manager reviews the participant's completed packet.
2. If everything is fully documented, the TQP Manager will prepare a TQP Completion Certificate for signature.
3. The certificate goes to the participant's Assistant Manager (or equivalent) and Site Manager for signature.
4. The participant's supervisor presents the TQP Completion Certificate to the participant.
5. The participant or supervisor sends a copy to the TQP Manager.
6. The TQP Manager files the copy of the certificate of completion in the participant's TQR.

Changes in the participant's job, duties, or facilities

1. If the participant's job changes, the supervisor submits another TQP assignment memo.
 2. The participant and supervisor should consult with the TQP Manager to ensure appropriate functional area and OFS qualification standards match the participant's new job or job duties. Note that previously approved competency exemptions may be voided as a result of position changes.
 3. For new or revised competencies, the participant and supervisor will complete the TQP qualification processes as described in this Manual.
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IV. Continuing Training and Requalification

Continuing training

Participants who have completed applicable qualification requirements must maintain their proficiency and continue their professional development through ongoing participation in additional, relevant training, education, and developmental activities. Refer to Appendix C for a typical statement of management's support for employee involvement in professional organizations and societies.

Continuing training activities can address new competencies, competencies in revised standards, inter-and intra-disciplinary competencies, and routine and refresher topics.

The participant and supervisor use the IDP (and annual performance appraisal) as the vehicle to define and implement continuing training and development. They should use DOE-HDBK-1118-99, *Guide to Good Practices for Continuing Training*, for guidance.

Supervisors and Assistant Managers may require the completion of additional competencies due to changes in organizational mission, reorganizations, new requirements, or mandates from DOE Headquarters. Deadlines for these additional competencies will be determined as competencies are assigned.

The participant completes and documents appropriately all assigned continuing training and development activities.

The completed continuing training activity should be identified as a TQP continuing training activity by the employee and maintained in the participant's TQR.

Requalification

Requalification is applicable to Facility Representatives (FRs). The supervisor and participant should refer to the DOE FR FAQs, DOE-STD-1063, *Facility Representatives*. Their requalification period is three years.

Requalification is also applicable to Senior Technical Safety Managers (STSMs). The supervisor and participant should refer to the DOE STSM FAQs and DOE M 426.1-1A, *Federal Technical Capability Manual*, for additional information. Their requalification period is five years, and the initial requalification period commenced upon the issuance date (October 2006) of DOE-STD-1175-2006, *Senior Technical Safety Manager Functional Area Qualification Standard*.

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V. TQP Records and Reporting

Record keeping	<p>The TQP participants are responsible for ensuring their TQP records are current.</p> <p>The TQP Manager accesses, controls, and maintains the official training and qualification records in accordance with standard DOE practices.</p> <hr/>
Tracking	<p>Participants transmit to the TQP Manager the completed portions of their TQRs and any accompanying documentation to support the completion of the associated competencies.</p>
Reporting	<p>The TQP Manager is required to periodically report on qualification progress and program status to the DOE FTCP Panel. In addition, the TQP Manager reports to the local management as needed to allow its monitoring of participant progress.</p> <hr/>
Requests for records	<p>The TQP Manager makes employee TQP training and qualification records available to the employee at any time.</p> <p>Upon an employee's reassignment, transfer, or separation, the TQP Manager provides to the employee, on request, a copy of the training record, including the technical qualification record.</p> <hr/>

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VI. References

1. DOE O 226.1, *Implementation of Department of Energy Oversight Policy*
2. DOE P 226.1, *Department of Energy Oversight Policy*
3. DOE O 360.1B, *Federal Employee Training*
4. DOE M 360.1-1B, *Federal Employee Training Manual*
5. DOE M 426.1-1A, *Federal Technical Capability Manual*
6. DOE P 426.1, *Federal Technical Capability Policy for Defense Nuclear Facilities*
7. DOE P 450.4, *Safety Management System Policy*
8. DOE-STD-1063, *Facility Representatives*
9. DOE-HDBK-1118-99, *Guide to Good Practices for Continuing Training*
10. DOE-STD-1151, *Facility Representative Functional Area Qualification Standard*
11. DOE-STD-1175, *Senior Technical Safety Manager Functional Area Qualification Standard*

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Appendix A

Example Exemption and Equivalency Justifications

Example Competency and **Exemption Justification Statement**

Environmental Compliance, Office/Facility-Specific Competency

Competency Statement: Environmental compliance personnel shall demonstrate a working level knowledge of the implementation of the regulations and requirements of the National Environmental Policy Act (NEPA).

Exemption Justification: *Work with NEPA documents is performed by a specific group within the Environmental Management organization and is not the responsibility of the participant.*

Example Competency and **Equivalency Justification Statement**

General Technical Base, Competency 15

Competency Statement: Personnel shall demonstrate a working level knowledge of the principles of Conduct of Operations and relate these principles to an operational environment.

Equivalency Justification: *I have acquired a working level of knowledge of the principles of Conduct of Operations, as evidenced by the following:*

Education: None

Training: *Completion of the DOE Online Learning Center General Technical Base Course.*

Experience: *I have planned and implemented startup, power ascension, maintenance, operations, and outage work for both Comanche Peak and Watts Bar Nuclear Power Plants. During 15 years of working with nuclear power operations, I have been part of the project team that, on a daily basis, was committed to the safe operation of a nuclear power facility. This involved coordination with operations for construction, maintenance, outage and power operations activities on a daily basis. Participated on a DOE Type A investigation team analyzing the hazardous material release at XYZ facility, October 2006 (see the evidence file). Conducted a review of the contractor's electrical maintenance surveillance program July 2004 (see the evidence file).*

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Appendix B

Abbreviations and Acronyms

DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
ES&H	Environment, Safety, and Health
ESS	Employee Self Service
FAQS	Functional Area Qualification Standard
FR	Facility Representative
FTCP	Federal Technical Capability Program
GTB	General Technical Base
HR	Human Resources (Division)
IDP	Individual Development Plan
ISC	Integrated Support Center
ISM	Integrated Safety Management
OFS	Office/Facility-Specific (Qualification Standard)
SC	Office of Science
STSM	Senior Technical Safety Manager
SME	Subject Matter Expert
TQP	Technical Qualification Program
TQR	Technical Qualification Record

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Appendix C

**Statement on Staff Involvement with
Technical Organizations and Societies**

Management actively supports employee participation in preparing and presenting technical papers and related materials at technical conferences and meetings, within the limitations of available resources. Further, this participation will be factored into employee development plans and other personal development activities, as appropriate. Participation can cover such activities as attendance of selected technical conferences, presentations of technical papers (including preparation time for these papers), serving on professional and technical committees, or contributing in some other manner to national technical organizations.

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Attachment

Office of Science Integrated Support Center
Technical Qualification Program Plan

A. General

1. The Site Manager is responsible for implementation of the Technical Qualification Program (TQP) and may designate a TQP Manager for day-to-day implementation.
2. The TQP Manager provides reports on TQP status to management, the local Federal Technical Capability Program (FTCP) Panel (if applicable) and, as necessary, to the DOE FTCP Panel.
3. The TQP Manager supports and assists line management in identifying training courses for meeting qualification requirements. The TQP Manager arranges for technical training based on training needs survey and requests from employees.
4. The TQP Manager assists line managers in development of office/facility-specific (OFS) qualification standards that build upon the requirements of the General Technical Base (GTB) Qualification Standard and functional area qualification standards (FAQSs).
5. Employees participating in the TQP are expected to make steady progress toward qualification and complete the program within 18 months.

B. Identifying personnel and positions required to participate in the Technical Qualification Program

1. Managers select program participants and submit a TQP assignment and due date memo to the TQP Manager that includes each participant's name, primary and secondary functional areas, and applicable OFS qualification standards.
2. Based on this information from senior line management, the TQP Manager provides instructions to the participants for the development of a technical qualification record (TQR) that documents the competency exemptions, equivalencies, developmental activities, and completion.
3. Supervisors notify the TQP Manager of changes in staff participation and FAQS assignment changes.
4. At the Site Manager's discretion, the TQP can be used to establish and maintain qualification standards for personnel with oversight responsibilities.

C. Identifying and maintaining technical qualification standards

1. Identification and Maintenance of Standards

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- a. Management appoints subject matter experts to participate in the development or revision of DOE-wide general and functional area qualification standards.
- b. Management, with local subject matter experts, develops and revises the OFS qualification standards. These standards are established using the systematic approach to training methodology and include the necessary basic technical knowledge; technical discipline competency requirements; and position-specific knowledge, skills, and abilities. All OFS qualification standards are approved by the local FTCP Panel or Site Manager.
- c. Qualification standards must contain the following:
 - general duties and responsibilities associated with the position,
 - background and experience in terms of preferred education and experience,
 - a list of the technical competencies that define the level of expected performance, with supporting knowledge and/or skill statements provided as guidance to describe the intent of the competency statements, and
 - continuing training and proficiency requirements.

2. Using the Standards

- a. The GTB Qualification Standard is required of all participants. Participants complete all GTB Qualification Standard competencies. This way, the technical staff have a common base of skills and knowledge.
- b. An FAQs must be selected by the participant as a primary functional area. Although optional, a secondary functional area may be appropriate for many participants.
- c. OFS qualification standards are required for all participants. The following aspects apply to the development of these standards:
 - Operations/program offices develop.
 - Competencies that build upon the department qualification standards.
 - Competencies not covered by the GTB Qualification Standard and FAQs.
 - May be considered unique for a participant's job assignment at his/her facility/office.
- d. Other professional standards, such as American Nuclear Society and American Society of Mechanical Engineers standards, may be used to tailor office or job position standards. The resulting standards must be formatted consistent with existing TQP standards.

D. Evaluating employees against qualification standards and fulfillment options

For each selected competency, the supervisor and the participant determine how that competency will be fulfilled. If the competency is not applicable to the position, then an exemption is requested (if allowable). If the competency has already been fulfilled by experience or previous training, for example, then the documentation to support that equivalency must be assembled and submitted for approval. All other selected competencies must be fulfilled with a developmental activity. The following information describes these three fulfillment options, in addition to requests for extensions of qualification period.

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1. Exemptions (applicable only to FAQs which specifically allow exemptions or to OFS qualification standard competencies)
 - a. Exemptions are based on the individual's job assignment and whether overall development would be enhanced by completing the competency.
 - b. Typically, exemptions are given for competencies that do not apply to one's job assignment.
 - c. Exemptions require a justification statement (see Appendix A of the *SC Integrated Support Center Technical Qualification Program Manual* for an example of an acceptable justification). Exemptions shall be documented and approved one level above the individual's immediate supervisor or by the Site Manager.

 2. Equivalencies
 - a. Equivalencies are approved only after the individual has produced satisfactory, objective evidence of having met the competency through previous training, education, or experience.
 - b. The participant assembles and compiles an evidence file for review by the supervisors approving the equivalencies.
 - c. The equivalency shall be documented and approved one level above the individual's immediate supervisor or by the Site Manager. The equivalency shall be approved based only on justifications (see Appendix A of the *SC Integrated Support Center Technical Qualification Program Manual* for an example of an acceptable justification) supported by objective evidence. Objective evidence for justifying equivalencies could include:
 - Formal training documentation/records
 - Course completion certificates
 - University/college transcripts or grade reports
 - Professional licenses/certificates/registrations
 - Examination results
 - Performance appraisals
 - Work products
 - Position descriptions
 - Course syllabus for completed courses
 - In-depth interviews
 - Attestations
 - Performance appraisals
 - Walk-throughs/walkdowns
 - Position description and statement of time on the job
 - Publications authored
 - Feedback from customers
 - Work products
 - d. Formal documentation of equivalencies shall be included as part of the individual's training and qualification record.
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3. Developmental Activities

- a. Activities that will lead to the completion of the competency include, for example:
 - on-the-job training
 - self-study
 - training course
 - mentoring
 - college course
- b. Participants and supervisors should consult with the TQP Manager during the selection of developmental activities.
- c. Restrictions

It is very important that the supervisor and participant select the appropriate fulfillment activities for the competencies associated with the participant's position. Once developmental activities are selected and a schedule for completion determined, changing a developmental activity designation to an equivalency or exemption requires review and approval by the Site Manager (or the local FTCP Panel).

4. Evidence

The evidence file is forwarded to the TQP Manager for tracking and filing in the individual's training file.

5. Process for Extensions of Qualification Periods

- a. Nominal Qualification Period
 - Everyone is expected to complete qualifications within 18 months.
 - The TQP Manager tracks status and notifies the Site Manager, manager/supervisor, and local FTCP Panel (if applicable).
- b. 90 Days Before Qualification Period Expires
 - If an extension is needed, the Assistant Manager (or equivalent) must provide a justification to the local FTCP Panel or Site Manager for an automatic 30-day extension.
 - The justification must explain why the Approving Authority has confidence in the new completion date.
 - The TQP Manager tracks and reports status to the local FTCP Panel or Site Manager.

E. Establishing and updating individual development plans, training plans, qualification cards, or related records to document learning activities

1. Documentation

- a. As applicable, participants enter equivalency, exemption, developmental activity

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justifications and other information in the Employee Self Service (ESS) web application.

- b. Qualification materials are sent to the participant's supervisor. The supervisor reviews the qualification materials and, by signature, concurs that equivalencies and exemptions are adequately justified for competency and that developmental activities are approved. The supervisor may request an SME to serve as a qualifying official to assist in this evaluation process.
- c. The signed qualification materials are sent to the TQP Manager for filing in the participant's official technical qualification record.
- d. After review of the qualification records, the TQP Manager prepares a certificate of completion for the participant. The certificate is signed by the Assistant Manager (if applicable) and the Site Manager and presented to the participant by his or her supervisor.

2. Continuing Training

- a. TQP continuing training activities are documented annually in the Individual Development Plan (IDP).
- b. Supervisors or qualifying officials review and approve planned continuing education on activities and the successful completion of activities.

3. Requalification or Change in Qualification Status

- a. Requalification – Only Facility Representatives and Senior Technical Safety Managers are required to requalify.
- b. Change in qualification status – A change in qualification status may be the result of:
 - New job responsibilities that were not covered in initial qualification.
 - New position assignment.
 - Transfer to another site or detail over 90 days.
 - New requirements for qualification.

4. Tracking and Reporting

- a. As participants complete their competencies, they transmit to the TQP Manager the documentation to support the completion of the associated competencies.
- b. The TQP Manager files the information in the individuals' TQRs.

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- c. The TQP Manager is required to report periodically on participants' qualification progress and program status to the DOE FTCP Panel and local management as needed to allow monitoring of each organization's progress.

F. Applying evaluation requirements for completing the technical qualification standard, e.g., written or oral examinations

1. Evaluation of Competency Completion

- a. The supervisor is responsible for evaluating the individual's knowledge or performance for a competency, particularly if the competency fulfillment had not been formally evaluated (e.g., by passing a course examination).
- b. Supervisors may delegate subject matter experts to be used as qualifying officials to evaluate an individual for completion of competencies.

2. Evaluation Methods

- a. The supervisor, or another individual (such as a qualifying official) designated by the supervisor, will evaluate an employee using any of the following:
 - Oral evaluation (e.g., discussion, questioning, and walk-through)
 - Performance demonstration
 - Written examination
- b. The person conducting the evaluation should refer to the supporting knowledge and skills listed for each competency in the qualification standards. These knowledge and skill statements can easily be converted to a question or performance activity.
- c. The TQP Manager will assist the supervisor in selecting, implementing, and documenting the appropriate evaluation method.

3. Remedial Activities

- a. If a participant does not satisfactorily complete a course, examination, evaluation, or other activity, remedial activities should be completed and documented.
- b. The TQP Manager will assist the supervisor in selecting, implementing, and documenting the appropriate remediation activity.

G. Implementing continuing training and requalification programs

1. Continuing Training and Maintenance of Proficiency

- a. Personnel who complete applicable qualification requirements must continue their professional development and maintain proficiency through participation in continuing training, education, job rotations, and other similar activities.

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- b. Continuing training activities specified in the FAQss, as well as any required by OFS qualification standards, can be identified in the Individual Development Plan (IDP). Further, revisions to FAQss will likely yield new or updated competencies that should be added to a participant's continuing training plan.
- c. Completion of these new competencies follows the same process used for original competencies.

2. Requalification

Facility Representatives and Senior Technical Safety Managers are required to requalify. Facility Representative program procedures, standards, and manuals contain the requalification requirements and activities for Facility Representatives. Senior Technical Safety Manager requalification guidance is contained in the DOE Senior Technical Safety Manager Functional Area Qualification Standard and DOE M 426.1-1A, *Federal Technical Capability Manual*, and the initial requalification period commenced upon the issuance date of DOE-STD-1175-2006, *Senior Technical Safety Manager Functional Area Qualification Standard*.