

NOT MEASUREMENT SENSITIVE

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DOE STANDARD FACILITY REPRESENTATIVES



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FOREWORD

- 1. This Department of Energy (DOE) standard is approved for use by all DOE/National Nuclear Security Administration (NNSA) Components.
- 2. The revision to this DOE standard was developed by a working group consisting of headquarters and field participants. Beneficial comments (recommendations, additions, and deletions), as well as any pertinent data that may be of use in improving this document, should be emailed to nuclearsafety@hg.doe.gov or sent to:

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Additional information on the DOE Facility Representative Program is available on the DOE Facility Representative Powerpedia page at: https://powerpedia.energy.gov/wiki/Facility Representative Program

- 3. DOE technical standards, such as this standard, do not establish requirements. However, all or part of the provisions in a DOE standard can become requirements if they are explicitly stated to be requirements in a DOE requirements document, or if the organization makes a commitment to meet a standard in a contract or in an implementation plan or program plan required by a DOE requirements document.
- 4. Throughout this standard, the word "shall" is used to denote actions that must be performed if the objectives of this standard are to be met. If the provisions in this standard are made requirements through one of the two ways discussed above, then the "shall" statements would become requirements. It is not appropriate to consider that any "should" statements would automatically be converted to "shall" statements, as this action would violate the consensus process used to approve this standard.
- 5. Throughout this standard, any DOE Directive or Standard referenced refers to the latest version of that DOE Directive or Standard.

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Acronyms

CFR Code of Federal Regulations
CSO Cognizant Secretarial Officer
DOE U.S. Department of Energy
DSA Documented Safety Analysis
ES&H Environment, Safety, and Health

FEM Field Element Manager
FR Facility Representative
FTE Full Time Equivalent

HQ Headquarters

ISM Integrated Safety Management

NMMP Nuclear Maintenance Management Program
NNSA National Nuclear Security Administration

O Order Policy

PI Performance Indicator
QS Qualification Standard

RPP Radiation Protection Program

SSC Structures, Systems, and Components

STD Standard

TIM Technical Information Memorandum

TQP Technical Qualification Program
TSR Technical Safety Requirements

1.0 SCOPE

- 1.1 Scope. This Standard (STD), DOE-STD-1063, Facility Representatives, defines the duties, responsibilities and qualifications for U.S. Department of Energy (DOE) Facility Representatives (FRs), based on facility hazard classification; risks to workers, the public, and the environment; and the operational activity level. This standard provides the guidance necessary to ensure that DOE's hazardous nuclear and non-nuclear facilities have sufficient staffing of technically qualified FRs to provide day-to-day oversight of contractor operations. Field Element Managers (FEMs) should incorporate the information contained in this standard, as well as any additional facility-specific requirements, such as radiological training, into site-specific implementation procedures for DOE FRs.
- 1.2 Purpose of Program. The purpose of the DOE FR Program is to ensure that competent DOE staff personnel are assigned to oversee the day-to-day contractor operations at DOE's hazardous nuclear and non-nuclear facilities. Oversight performed by FRs provides DOE Line Managers with accurate, objective information on the effectiveness of contractor work performance and practices, including implementation of the integrated safety management (ISM) system. The DOE's experience has shown that, when personnel are dedicated to this function, the information they provide can be used proactively to ensure that work is completed in a safe and efficient manner.
- 1.3 Purpose of Standard. DOE Order (O) 422.1, Conduct of Operations, states that field organizations must assign DOE FRs to oversee conduct of operations in accordance with DOE-STD-1063-202X, Facility Representatives. Furthermore, DOE O 426.1B, Department of Energy Federal Technical Capabilities, states that designation of final qualification for FRs must include satisfactory completion of final qualification activities identified in this Standard. The purpose of this Standard is to help ensure that DOE FRs are selected based on consistently high standards and from the best-qualified candidates available, that they receive the training required for them to function effectively, and that their expected duties, responsibilities, and authorities are well understood and accurately documented. To this end, this guidance provides the following practical information:
 - a. The duties, responsibilities, and authorities expected of an FR and other personnel relative to the FR Program;
 - b. An approach for use in determining the required facility coverage;
 - c. The training and qualifications expected of an FR; and
 - d. Elements necessary for successful FR Programs.
- 1.4 <u>Applicability</u>. This standard is intended for use by all DOE components in establishing and maintaining FR programs at DOE-owned, contractor-operated facilities. DOE

managers of government-owned, government-operated facilities may apply this guidance to facilities operated exclusively by DOE Federal employees. FEMs and Cognizant Secretarial Officers (CSOs) may develop additional requirements and/or guidance regarding FR programs under their cognizance.

2.0 REFERENCES

- 2.1 Government and Industry Documents.
- 2.1.1 DOE Directives [Policies (P), Orders (O), Guides (G)].
- DOE O 226.1B, Implementation of Department of Energy Oversight Policy
- DOE O 232.2A, Occurrence Reporting and Processing of Operations Information
- DOE O 360.1C, Federal Employee Training
- DOE O 422.1, Conduct of Operations
- DOE O 426.1B, Department of Energy Federal Technical Capabilities
- DOE O 430.1C, Real Property Asset Management

2.1.2 DOE Standards.

- DOE-STD-1027, Hazard Categorization of DOE Nuclear Facilities
- DOE-STD-1146, General Technical Base Qualification Standard
- DOE-STD-1151, Facility Representative Functional Area Qualification Standard
- DOE-STD-3009, Preparation of Nonreactor Nuclear Facility Documented Safety Analysis

2.1.3 Other.

- 10 Code of Federal Regulations (CFR) Part 830, Nuclear Safety Management
- 10 CFR Part 851, Worker Safety and Health Program
- 29 CFR Part 1910, Occupational Safety and Health Standards
- 40 CFR Part 68, Chemical Accident Prevention Provisions
- 40 CFR Part 355, Emergency Planning and Notification

3.0 **DEFINITIONS**

For the purpose of this standard, the following terms are defined:

<u>Activity Level</u>. The term "activity level" in DOE encompasses the work activities of any facility or organization, from building infrastructure to scientific research and nuclear facilities. Examples include, but are not limited to, operating science and technology machines, operating equipment, construction, decontamination and decommissioning, dismantlement, environmental characterization and monitoring activities, waste handling, research and development, maintenance, and laboratory analysis activities.

<u>Cognizant Secretarial Officers</u>. The Secretarial Officers responsible for accomplishing work in a safe and environmentally sound manner at DOE-owned or DOE-leased sites and facilities [other than Headquarters (HQ)]. Cognizant Secretarial Officers (CSOs) are Secretarial Officers with line accountability for a laboratory or a bounded set of facilities. The CSOs provide direction to line organizations in DOE HQ and the field regarding safety management processes and systems. Although the ultimate responsibility for safety rests with the Secretary, the CSOs are responsible for providing direction to the line organizations in their assigned areas and they are accountable for the appropriate and successful implementation of DOE policies and requirements through their line organizations.

<u>Core Qualification</u>. The portion of the qualification program designed to cover the DOE-wide, generic subjects on which all FRs are expected to be knowledgeable. This includes DOE-STD-1146, *DOE General Technical Base Qualification Standard* and DOE-STD-1151, *Facility Representative Functional Area Qualification Standard*.

<u>Contractor</u>. [10 CFR Part 851, *Worker Safety and Health Program*] Any entity, including affiliated entities, such as a parent corporation, under contract with DOE, or a subcontractor at any tier, that has responsibilities for performing work at a DOE site in furtherance of a DOE mission.

<u>Currency</u>. An individual is knowledgeable of current requirements, facility status, facility activities, processes and procedures as applicable to their Technical Qualification Program (TQP) position. Currency is maintained through continuing training on facility changes, including activities, processes, and Documented Safety Analysis/ Technical Safety Requirements (DSA/TSR) revisions as determined by the FR supervisor.

Department or DOE. The U.S. Department of Energy.

<u>DOE Oversight</u>. (DOE O 226.1B, *Department of Energy Oversight Policy*) Encompasses activities performed by DOE organizations to determine whether Federal and contractor programs and management systems, including assurance and oversight systems, are performing effectively and/or complying with DOE requirements. Oversight programs include operational awareness activities, onsite reviews, assessments, self-assessments, performance

evaluations, and other activities that involve evaluation of contractor organizations and Federal organizations that manage or operate DOE sites, facilities, or operations.

<u>Documented Safety Analysis</u>. (10 CFR Part 830, *Nuclear Safety Management*) A documented analysis of the extent to which a nuclear facility can be operated safely with respect to workers, the public, and the environment, including a description of the conditions, safe boundaries, and hazard controls that provide the basis for ensuring safety.

<u>Equivalency</u>. The attainment of a required technical competency through prior training or experience. To grant an equivalency the prior training and /or experience is evaluated by a designated equivalency reviewer (qualification official) to determine if it demonstrates attainment of the related technical competency.

<u>Evaluated Facility Walkthrough</u>. A type of final qualification activity where a designated individual or group of individuals observes an FR candidate performing their duties and responsibilities in their assigned facilities. The evaluated facility walkthrough also includes an oral evaluation component where the FR candidate 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 (See Appendix D).

<u>Facility</u>. (DOE O 430.1B, *Real Property Asset Management*) Land, buildings, and other structures, their functional systems and equipment, and other fixed systems and equipment installed therein, including site development features outside the plant, such as landscaping, roads, walks, parking areas, outside lighting and communication systems, central utility plants, utilities supply and distribution systems, and other physical plant features.

<u>Facility Representative</u>. An individual assigned responsibility by the FEM (or designee) for monitoring the safe and efficient performance of the site/facility and its operations. This individual is the primary point of contact with the contractor for operational and safety oversight and is responsible to the site's/facility's DOE Line Manager.

<u>Facility Representative Coverage</u>. The degree of attention an FR is expected to devote to an assigned site/facility. Coverage is usually expressed in terms of the amount of time, including back shift and weekend time, the FR is expected to routinely spend observing operations in the facility.

<u>Field Element or Organization</u>. A non-Headquarters DOE organization that is geographically distinct. Field elements can be site offices, support offices, operations offices, field offices, regional offices, or offices located at environmental restoration, construction, or termination sites.

Field Element Manager. The DOE employee having overall responsibility for a field element.

<u>Hazard</u>. (10 CFR Part 830) A source of danger (i.e., material, energy source, or operation) with the potential to cause illness, injury, or death to personnel or damage to a facility or to the

environment (without regard to the likelihood or credibility of accident scenarios or consequence mitigation).

<u>Hazard Categories</u>. The consequences of unmitigated releases of radioactive material are evaluated as required by 10 CFR Part 830 and classified by the following Hazard Categories:

Category 1 – The hazard analysis shows the potential for significant off-site consequences;

Category 2 – The hazard analysis shows the potential for significant on-site consequences;

Category 3 – The hazard analysis shows the potential for only significant localized consequences; and

Below Category 3 – Only consequences less than those that provide a basis for categorization as a hazard category 1, 2, or 3 nuclear facility.

DOE-STD-1027, *Hazard Categorization of DOE Nuclear Facilities* contains additional information on methods and criteria for determination of Hazard Categories.

<u>Hazard Classes</u>. For the purpose of staffing FRs, non-nuclear facilities are categorized as high, moderate, or low hazards based on the following:

High – hazards with a potential for on-site and off-site impacts to large numbers of persons or for major impacts to the environment;

Moderate – hazards that present considerable potential on-site impacts to people or the environment, but at most only minor offsite impacts; and

Low – hazards that present minor on-site and negligible off-site impacts to people and the environment.

<u>Hazardous Material</u>. (DOE-STD-3009, *Preparation of Nonreactor Nuclear Facility Safety Analysis*) Any solid, liquid, or gaseous material that is toxic, explosive, flammable, corrosive, or otherwise could adversely affect the health and safety of the public or the workers or harm the environment.

<u>Interim Qualification</u>. Core qualified and any facility/site specific requirements/competencies as determined by the FEM that must be met prior to a FR being assigned to provide limited coverage for a site/facility for which they are not fully qualified.

<u>Line Organization</u>. The unbroken chain of command that extends from the Secretary through the Deputy Secretary (Chief Operating Officer), to the Secretarial Officers who set program policy and plans and develop assigned programs, and to the Program and FEMs who are responsible for execution of these programs. Environment, Safety, and Health (ES&H) are

integral parts of each program. Accordingly, responsibility for ES&H functions resides with the line organizations.

Occurrence Report. (DOE O 232.2A, Occurrence Reporting and Processing of Operations Information) A documented evaluation of an event or condition that is prepared in sufficient detail to enable the reader to assess its significance, consequences, or implications, and to evaluate the actions being proposed or employed to correct the condition or to avoid recurrence.

<u>Operational Awareness</u>. Operational awareness refers to those activities taken by DOE line personnel to maintain cognizance of overall site/facility or activity status, major changes planned, and overall safety posture. Activities include routine day-to-day monitoring of work performance through site/facility tours/walkthroughs, work observation, document reviews, meeting attendance and participation, and ongoing interaction with contractor workers, support staff, and management.

<u>Oral Board</u>. A formal oral evaluation conducted by a group of designated individuals. The organization-specific TQP implementing procedures 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.

<u>Oral Checkout</u>. An examination of a trainee's understanding relative to a specific system or process that constitutes only a portion of the trainee's prospective job.

<u>Oral Examination</u>. An examination of a trainee's knowledge during which a trainee answers oral questions related to a knowledge requirement for the applicable learning objectives, tasks, or qualification standard.

Other Hazardous Facilities. Other hazardous facilities identified by the FEM that could pose a significant risk to the public, workers, or the environment, or are crucial mission facilities that require FR oversight. Consideration could include poor operational or safety performance, special needs, and significant public concern.

<u>Proficiency</u>. The demonstrated ability to perform duties related to a person's current position based on an initial qualification and regular, documented performance of those duties. Proficiency is maintained by performance of FR duties for at least 40 hours per calendar quarter (in one or more facilities) as required by Table 1 of this Standard.

Qualification. The process of verifying attainment of required technical competencies for performing the FR role at a specific site/facility. This process includes verification of attainment of required technical performance competencies in DOE-STD -1151, verification of attainment of required site/facility specific technical competencies identified by the Field Element, and satisfactory completion of final qualification activities identified in this Standard.

<u>Qualifying Official</u>. A designated individual who meets to requirements of DOE O 426.1B and is authorized to verify attainment of specific competencies in technical qualification standards.

<u>Risk</u>. (DOE-STD-3009) The quantitative or qualitative expression of possible loss that considers both the likelihood that an event will occur and the consequences of that event.

Walkthrough. A tour through a site/facility to maintain operational awareness.

4.0 DUTIES, RESPONSIBILITIES, AND AUTHORITIES OF FACILITY REPRESENTATIVES AND OTHER KEY PERSONNEL

- 4.1 Duties, Responsibilities, and Authorities of Facility Representatives. The following paragraphs describe the duties, responsibilities, and authorities of FRs. FEMs shall tailor these and additional duties and responsibilities for FRs to reflect the specific requirements of the site, the facility, the operational activities, and the involved organizations.
- 4.1.1 Operational Awareness. An FR shall be thoroughly familiar with their assigned site/facility, operating procedures, site/facility safety bases, operating organizational structure, and key process control personnel. The FR shall be aware of major work in progress and in planning. The FR shall know which personnel are controlling the work, the hazards and hazard controls associated with the work, what procedures are to be used, and whether training and qualification requirements have been established and are being met. FRs shall verify that work activities are being performed safely and efficiently based on periodic observations and spot-check reviews of frequency commensurate with the hazard and complexity of the work. This knowledge is primarily acquired by walking through the facility, discussions with contractor personnel, observation of work in progress, review of facility records and documentation, and attendance at appropriate planning and management meetings of the operating contractor. FRs should spend a significant amount of their time in their assigned facilities observing operations and assessing operating conditions, consistent with the goals in Appendix A, Facility Representative DOE-Wide Performance Indicators.
- 4.1.2 <u>Communication</u>. The FR shall maintain frequent communication with contractor personnel and field element supervision. The FR shall ensure that DOE Line Management is cognizant of current site/facility conditions.
- 4.1.3 <u>Availability</u>. The FR shall be available to respond to site/facility events and serve as the DOE presence for special operations. The FR shall be readily available to operating contractor personnel to facilitate the notification of occurrences and any safety or operational concerns.
- 4.1.4 <u>Independence</u>. An FR should be in a position to provide information to DOE Line Management independent of programmatic responsibilities. Therefore, FEMs should not make FRs responsible for preparing budgets or schedules for assigned site/facilities. In cases where separating programmatic responsibilities is impractical, the FEM or designee should approve all assignments of programmatic responsibilities to FRs.
- 4.1.5 <u>Scope of Reviews</u>. The FR shall observe, evaluate, and report on the effectiveness of the operating contractor in multiple areas important to safe, efficient operations, such as conduct of operations requirements, operational performance, ISM, quality assurance, management controls, emergency response readiness activities, and assurance of worker health and safety. In facilities where nuclear safeguards and security are a

- concern, FRs may evaluate security issues as they relate to safe operations. Additionally, the FR should evaluate the overall effectiveness of the operating contractor in implementing corrective actions.
- 4.1.6 Oversight Routine. FRs should vary their day-to-day presence in assigned site/facilities to show a degree of unpredictability and spontaneity based on the FR's judgment regarding what is appropriate to observe and assess. Although FRs conduct beneficial oversight by walking through assigned facilities with contractor facility managers, certain benefits are lost when FR presence is 100 percent predictable and always with facility managers.
- 4.1.7 <u>Stop Work Authority</u>. The FR shall "Stop Work" in the following instances, or in accordance with the requirements/guidance provided by the FEM:
 - a. Conditions exist that pose an imminent danger¹ to the health and safety of workers or the public;
 - b. Conditions exist that, if allowed to continue, could adversely affect the safe operation of, or could cause serious damage to, equipment or the facility; or
 - c. Conditions exist that, if allowed to continue, could result in the release, from the facility to the environment, of radiological or chemical effluents that exceed regulatory limits.
- 4.1.8 Relationship of Facility Representative with DOE Managers. FRs should periodically meet with DOE managers and senior managers within the field element to provide information related to the assigned facilities. If safety or operational concerns are not resolved by the contractor to the satisfaction of the FR, the FR should elevate the concerns to DOE Management. If DOE Management is not responsive to FR safety or operational concerns, the FR should elevate the concerns using processes such as the Differing Professional Opinion Process or the Employee Concerns Process.
- 4.1.9 Relationship of Facility Representative with Other DOE Oversight Personnel. FRs shall follow their local procedures regarding their relationship with other DOE oversight personnel.
- 4.1.10 Relationship of Facility Representative with Operating Contractor. FRs occupy a unique position in the transmission of information between DOE and its contractors. FRs should be able to communicate effectively with all levels of the contractor organization. They should be familiar with the contractor chain of command for facility operations. The FR should always strive to work constructively and effectively with contractor personnel to meet the shared goals of safe and efficient facility operations, in accordance with

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¹. Any condition or practice such that a hazard exists that could reasonably be expected to cause death or serious physical harm to employees (permanent or prolonged impairment of the body or temporary disablement or requiring hospitalization), unless immediate actions are taken to mitigate the effects of the hazard and/or remove employees from the hazard.

relevant DOE and contractual expectations. FRs should represent DOE to the contractor and ensure that the contractor carries out DOE operational safety policies in a manner consistent with DOE expectations, relevant contract requirements, and the contractor's Integrated Safety Management System description. In defining the relationship between an FR and contractor, the following points are emphasized:

- a. The FR functions as a part of the DOE Line Management and exercises authority consistent with the requirements/guidance established by the field element.
- b. The FR is the primary point of contact for the contractor to notify DOE of reportable occurrences as required by DOE O 232.2A.
- c. The contractor is responsible for the safe and efficient operation of the site/facility. The contractor is accountable to DOE to perform its operations in a manner that ensures the safety and health of personnel and protection of the environment. No FR activity or inactivity can diminish the contractor's responsibility.
- d. The FR is responsible for determining that the contractor is operating the site/facility in a safe and efficient manner, consistent with the established safety expectations and requirements. FRs fulfill this responsibility by assessing the contractor's performance, evaluating contractor safe configuration and/or corrective actions in response to identified abnormal conditions and/or deficiencies, and via discussions with contractor personnel. FEMs should identify processes or procedures within the field element for FRs to use to track identified issues or discrepancies to satisfactory closure.
- e. Although the FR identifies deficiencies, the ultimate responsibility for identifying and correcting deficiencies rests with the operating contractor. FEMs should ensure that the contractor does not rely solely on the FR to identify deficiencies.
- f. Minor events or problems may indicate more general problems in the contractor's organization, management, personnel abilities, or practices. Therefore, attention to detail in the identification, tracking, trending, collective significance evaluation, and correction of minor problems can result in significant improvements in the contractor's performance. When corrective actions are called for, DOE managers should initiate formal action with the operating contractor. Additionally, the FR should also provide input to formal mechanisms such as confirmation of actions or orders, if necessary.
- g. The FR shall adhere to defined rules of conduct, or protocol, while performing assigned duties. Formal protocols should be established to include the following:
 - 1. The FR should avoid interrupting site/facility personnel in their work. The FR should perform their observations/evaluations in an unobtrusive manner and wait for opportune times to question site/facility operators.

- Site/facility personnel carry responsibility for safety, and a diversion from their duties could adversely affect personnel, site/facility, and environmental safety along with site/facility operations.
- The FR should maintain frequent contact with the appropriate contractor management. When an FR observes something that raises a safety concern, they shall promptly discuss their concerns with the site/facility management. If the contractor response is deemed unsatisfactory, the FR should discuss the concern with DOE Management for appropriate action.
- 3. The FR should use established chains of command for all requests for action, except when exercising "Stop Work" authority.
- 4. The FR shall keep a record of their activities and observations in accordance with local procedures. The FR should periodically review their records to determine if a systemic or recurring problem exists with contractor activities. This record is subject to review in audits or appraisals and may be used by the FEM as a source of information for the contractor evaluation process.
- 4.2 Duties, Responsibilities, and Authorities of Other Key Personnel. Duties, responsibilities, and authorities of other key personnel with respect to the FR program are described below and in DOE O 226.1B, DOE O 232.2A, DOE O 422.1, and DOE O 426.1B, and associated lower-tier functions and responsibilities documents.

4.2.1 Deputy Secretary.

- a. Establish DOE policy on FRs.
- b. Resolve any cross-organizational disputes regarding FRs.
- c. Ensure the Associate Under Secretary for Environment, Health, Safety and Security and CSOs take actions necessary to consistently meet program goals.

4.2.2 <u>Associate Under Secretary for Environment, Health, Safety and Security</u>.

- a. Guide DOE-wide program implementation and continuous improvement.
- b. Monitor DOE-wide implementation performance and disseminate information to senior DOE and National Nuclear Security Administration (NNSA) managers to promote improved performance.
- c. Sponsor an annual workshop to share lessons learned and promote continued effectiveness of the FR program.

- d. Participate in periodic assessments of site FR programs.
- e. Maintain the DOE FR Powerpedia page.
- f. Host periodic FR Steering Committee meetings.
- g. Designate a Headquarters FR Program Manager to perform one or more of the above functions.

4.2.3 Cognizant Secretarial Officers.

- a. Guide program implementation and continuous improvement at assigned field elements.
- Evaluate overall effectiveness of FR programs at assigned field elements, including on-site assessment and shadowing, performance indicator information sufficiency, and program self-assessments and associated corrective actions adequacy.
- c. Ensure adequate allocation and use of resources for FR programs at assigned field elements.
- d. Assign a Headquarters Program Lead to participate in FR Steering Committee discussions, and assist with the above functions.

4.2.4 Field Element Managers.

- Determine facility coverage needs and make assignments of qualified FRs to maintain day-to-day oversight of applicable site/facilities activities, using Appendix C, Process to Determine Facility Representative Staffing.
- b. Select, train, and qualify FRs so that they are capable of performing their assigned duties.
- c. Clearly define the functions, responsibilities and authorities of the FRs in formal protocol, and ensure that affected DOE and contractor managers understand the role of the FRs and provide the necessary access and support.
- d. Ensure that operating contractors apprise FRs of planning, scheduling, maintenance, operations review, and safety review meetings, contractor-provided training and contractor employee training and qualification boards and facilitate their attendance.
- e. Periodically evaluate the effectiveness of the field element's FR program and pursue changes to improve overall performance and effectiveness, using Appendix A, and Appendix B, Facility Representative Program Assessment Guide.

- f. Provide developmental opportunities for FRs. Examples of such opportunities could include short-duration details to other organizations or specialized training.
- g. Assign an FR Program Sponsor from among the field element's senior managers to guide and direct implementation within the field element.
- h. Establish the authority of the FR to represent DOE Line Management to the contractor regarding operational safety issues except where this would change scope, cost, or schedule.
- i. Interact frequently with FRs and ensure DOE managers take appropriate action to resolve identified operational and safety issues.
- j. Ensure that FRs have the authority to "Stop Work" in the facility. The FEM shall ensure that contractors and subcontractors are aware that FRs have this authority and that this authority covers all facility-related work performed by the contractor and subcontractor.

4.2.5 Facility Representative Program Sponsors.

- a. Serve as a management advocate for FRs within the field element to resolve programmatic issues.
- b. Ensure FEM defined functions, responsibilities and authorities are effectively executed.
- c. Ensure that training materials, qualification cards, qualification standards, and examinations are developed and maintained.
- d. Ensure that DOE line/program managers are effectively using FR oversight results.
- e. Participate in FR Steering Committee activities.
- f. May appoint or secure the appointment of a Site FR Program Manager, Team Leader, or Supervisor to manage day-to-day implementation issues for the field element and participate in FR Steering Committee discussions.

4.2.6 Office of Enterprise Assessments.

a. The Office of Enterprise Assessments, through the National Training Center, is responsible for developing and maintaining initial training to support attainment of the technical competencies in DOE-STD -1151.

5. FACILITY REPRESENTATIVE PROGRAM REQUIREMENTS

- 5.1 <u>Facility Coverage and Staffing</u>. FEMs, or their designee, shall evaluate each hazardous facility to determine an appropriate level of FR coverage. Appendix C provides a detailed process to determine appropriate facility coverage and assignment and is the methodology to be used.
 - a. FEMs shall assign one or more full-time FRs to each nuclear hazard category 1 facility, unless the FEM and CSO agree that less coverage is necessary. For nuclear hazard category 2 or 3 site/facilities, radiological facilities, and hazardous non-nuclear facilities, Field Element Managers may assign a qualified FR to two or more facilities unless the FEM or Cognizant Secretarial Office determine that such a site/facility warrants full-time coverage by one or more FRs. When assigning a sufficient number of facilities to occupy a person full time is impractical, the Field Element Manager may assign the duties of an FR to be performed part time as a collateral function.
 - b. An FR's primary duty of providing DOE an on-site presence is very important and must not be diminished. FEMs should make assignments so that FRs spend a significant portion of their time in their assigned site/facility(s). Location of FR offices near or within the facility of primary responsibility is preferable. FEMs should make assignments so that administrative work does not prevent FRs from performing their primary function of monitoring the performance of the site/facility and its operations as described in Section 5.2.
 - c. To the degree that FRs are transferred or otherwise lost from the program, FEMs should take necessary steps to ensure that departing FRs are replaced in a timely manner. The goal of the FEM should be to recruit and hire technically capable personnel to fill FR vacancies in an expeditious manner. Recognizing the lengthy average time for a new FR candidate to achieve full qualifications (i.e., approximately 18 months), FEMs should strive to recruit experienced candidates from technically rigorous programs, both from within DOE and from external sources, to minimize time in qualification. Such potential sources include DOE Safety System Oversight personnel, DOE Subject Matter Expert personnel, and personnel from directly related fields such as naval nuclear power, commercial nuclear power, radioactive waste management, nuclear weapons, nuclear research, industrial safety, chemical safety, or accelerator facility programs. Section 5.6 contains additional guidance.
 - d. As part of the overall staffing strategy, FEMs should also consider making use of existing DOE and NNSA technical intern programs to provide a source of prospective FR candidates, especially for sites that have experienced historically high attrition rates.

- e. FEMs shall review staffing plans and assignments of FRs at least annually to ensure that coverage assignments and responsibilities are appropriate to the hazards and level of activity involved. Additionally, FEMs shall reevaluate each hazardous facility on a biennial basis to determine an appropriate level of FR coverage.
- f. FEMs may also establish provisions for changing coverage. For example, as the degree of hazard, complexity, or other governing factors is increased, the FEMs may decrease the number of processes, facilities, buildings or areas covered by a single FR. FEMs may use special coverage assignments for a facility that operates only intermittently. Also, FEMs should consider periodically rotating FRs to different facilities to maintain objective oversight, broaden FRs' experience bases, and provide flexibility for backup coverage during periods when FRs are absent.
- h. FEMs shall ensure that adequate facility coverage is maintained by qualified FRs during any period the assigned FR has extended absence.
- 5.2 <u>Facility Assessment Plans and Reports.</u> FEMs shall develop facility assessment plans consistent with the requirements in DOE O 226.1B. Assessment plans may review compliance with the safety directives and standards listed in DOE O 226.1B. FEMs shall ensure that reporting does not become an onerous task that unduly limits the oversight activities of the FR. In order to facilitate a direct communication link with senior contractor management, the FR should meet with senior contractor managers on a periodic basis to discuss the results of and contractor responses to FR oversight activities, forthcoming activities, and assessments and to discuss trends and systemic issues and overall site/facility health.
- 5.3 <u>Unencumbered Access</u>. FEMs shall ensure that FRs have independent, direct, and immediate access to contractor personnel, facilities, and records, as necessary and allowable, to carry out their assigned responsibilities. Unencumbered access does not preclude an FR maintaining the proper clearances or from following industrial safety, emergency action, radiation protection, safeguards and security, or operational requirements and controls of the facility. FRs shall adhere to these requirements and controls when discharging their duties.
- Training and Qualification. The FEM shall develop the overall qualification program in accordance with DOE O 426.1B, DOE O 360.1C, Federal Employee Training, and any additional elements defined in this standard. This program shall include the formal and on-the-job training elements specific to the assigned site/facilities. FR supervisors should ensure that site/facility training materials, qualification cards, qualification standards, and examinations are periodically updated to reflect changing facility conditions (e.g., DSA/TSR changes, Structures, Systems, and Components (SSC) modifications, significant mission activity changes, changes in contractor processes/procedures impacting the safe and efficient performance of site/facility

- operations) and new or updated DOE directives, standards, or regulations. The steps involved in the various levels of qualifications are described below and in Table 1: Facility Representative Qualification.
- 5.4.1 <u>Formal Training</u>. FEMs shall ensure that FRs receive the training necessary for the position.
- 5.4.2 Continuing Training. FEMs shall ensure that FRs participate in a continuing training program to maintain qualifications as required by DOE O 426.1B. Recommendations for continuing training related to the core FR competencies are included in Appendix C of DOE-STD-1151. The FEM shall ensure that FRs are also provided continuing training to make sure that they are aware of an understand significant site/facility/activity changes such as safety basis and activity level hazard control changes, changes in contractor processes/procedures with the potential to impact the safe and effective execution of site/facility operations, and to provide a mechanism for sharing lessons learned across the site and DOE complex. Continuing training should also be provided to help FRs stay abreast of changing technologies, enhance skills, improve performance and proficiency, and review new requirements.
- 5.4.3 Qualification Standard. FEMs shall establish the site/facility specific technical competencies that FRs must attain and document these in a local qualification standard (QS). The FR site/facility specific QS may be a separate stand-alone qualification standard or it may be incorporated into the organization specific qualification standard required in DOE O 426.1B. The site/facility specific QS must be assigned using the eTQP system. The competencies in the QS are attained by the FR candidate and verified by a designated QO in the same manner as all other QSs in the TQP, such as GTB Parts A and B and the FR FAQS, DOE STD-1151.
- 5.4.4 <u>Final Qualification Activities</u>. FEMs shall ensure that FRs complete the final qualification activities identified in Table 1 prior to designating final qualification.
- 5.4.5 <u>Competency Equivalencies</u>. Equivalencies for competencies identified in assigned Qualifications Standards are evaluated and approved by designated equivalency reviewers (qualification officials) per the requirements of DOE O 426.1B. The documentation of the approved equivalency is maintained in the eTQP system.
- 5.4.6 <u>Core Qualification</u>. Core qualification requirements are presented in Table 1. Having one qualification card that covers both core and site/facility-specific requirements is acceptable.
- 5.4.7 <u>Interim Qualification</u>. In addition to the requirements listed in Table 1, DOE FEMs shall establish and document the process and the specific requirements to be met prior to an FR candidate being assigned to provide limited coverage in a facility for which he or she is not fully qualified. FEMs shall formally define and document the duties and authorities that may be assigned to an Interim Qualified FR. FEMs should minimize the time FRs

spend under Interim Qualification. FEMs should also determine and document the compensatory measures to be implemented during periods while no fully qualified FR is assigned to a given facility. In addition, some FEMs may designate FRs, as described in Section 5.5, *Designated Facility Representatives*, at the completion of interim qualifications.

- 5.4.8 <u>Full Qualification</u>. Full qualification occurs when all core and facility-specific qualification requirements have been completed. Designated management within the field element shall review and confirm satisfactory completion of the training and qualification requirements. Qualification is granted by the FEM or designee.
- 5.4.9 Qualification on Additional Facilities After Full Qualification. Upon assignment of fully qualified FRs to a different or additional facility or site, FEMs or their designees should identify any additional qualification requirements that are necessary for an FR to complete for that facility or site.
- 5.4.10 <u>Proficiency</u>. FEMs shall formally define proficiency requirements.² These requirements shall include actions required to maintain proficiency and those required to regain proficiency following periods of inactivity as an FR, and the length of time which initiates a need for proficiency training. For example, if an FR is no longer assigned to a facility but wishes to maintain proficiency, the FR should periodically participate, either in the normal role or as an observer, in in-plant drills. The process to regain proficiency after inactivity as an FR is shown in Table 1. DOE FEMs shall document the actions required to regain proficiency following periods of inactivity as an FR, which shall as a minimum include the following information.
- a. Demonstration of knowledge of any facility modifications since the FR last served in that capacity.
- b. Demonstration of knowledge of revisions to the Documented Safety Analysis and Technical Safety Requirements since the FR last served in that capacity.
- c. Demonstration of knowledge of mission changes in the facility since the FR last served in that capacity.
- d. Demonstration of knowledge of changes to the contractor organization, processes, and procedures since the FR last served in that capacity.
- 5.4.11 <u>Maintaining Qualification.</u> FEMs shall ensure that the incumbent FR maintains the knowledge and skills necessary to properly perform FR duties at the assigned facilities. For the purpose of maintaining qualification, FEMs shall implement one of the options below.

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² FR Programs which select Option B: Continuous Qualification must ensure that FRs perform FR duties at a minimum of 40 hours per calendar quarter at the facilities which they are qualified to maintain proficiency.

- a. <u>Periodic Requalification</u>. FRs shall requalify at a minimum of every five years. The FEM shall establish processes or procedures to ensure that FRs do not exceed the five-year time limit for requalification. At the time of requalification, the FR will be currently fully qualified and meet proficiency requirements at the assigned facility or facilities, and will exhibit satisfactory performance as documented by past performance appraisals. FEMs shall document the requalification process, which shall as a minimum include the items listed in Table 1. Certification of requalification shall be granted by the DOE FEM or designee.
- b. <u>Continuous Qualification</u>. FRs shall maintain their qualification at the assigned facility on a continuous basis. The FEMs shall establish processes or procedures to ensure that continuous qualification is met and that FRs exhibit satisfactory performance as documented by past performance appraisals. Additional requirements to maintain continuous qualification are listed in Table 1.
- 5.4.12 <u>Examinations</u>. The FEM, or designee, shall develop formal procedures for the administration of facility evaluated walkthrough examinations, written examinations, oral examinations, and failure of written or oral examinations. Additional information on examinations is available on the DOE FR Powerpedia Page.
- a. <u>Evaluated Facility Walkthrough</u>. FEMs shall establish requirements for an Evaluated Facility Walkthrough of assigned facilities in the FR qualification process for demonstrating to a qualifying official practical skills and knowledge of selected key elements, including safety systems, structures, and components of the facility. Additional guidance can be found in Appendix D.
- b. <u>Written Examinations</u>. During Full Qualification, the FEM or designee shall administer a written examination to the FR candidate as listed in Table 1. The examination should include only subjects on the FR core and facility-specific qual cards. The minimum passing grade shall be 80%.
- c. <u>Oral Examinations</u>. Oral examinations (e.g., oral check-outs) may be used in FR qualification as shown in Table 1. Oral Boards, which are only required for FR candidates undergoing their initial Full Qualification, are described below.
- d. Oral Board. For an FR to achieve initial Full Qualification, the FEM or designee shall convene and administer an Oral Board of the FR candidate. The FEM or designee shall determine the composition of the Board. Board members should ask critical questions intended to integrate qualification learning objectives. Additionally, the Board members may ask follow-up questions to help the Board determine how the candidates "think on their feet." FEMs or designees should develop formal guidance for the Oral Board; this guidance includes: standards for qualification, use of technical advisors by the Board, questioning procedures or protocol, pass/fail criteria, voting authorization and procedures, and the Board deliberation and documentation process. The Board may

- conduct the Oral Board as a group or individually. The Board should document explicitly any questions and answers that result in an Oral Board failure.
- e. <u>Failure of Written or Oral Examinations</u>. FEMs or their designees may require FR candidates who fail a written or oral examination to undertake a special study program designed to strengthen each area of weakness revealed in the examination. FEMs or their designees may direct candidate reexaminations, with concentration in the identified weak areas. FEMs should consider reassigning FR candidates who repeatedly fail examinations to a non-FR position. In rendering a final decision on reassignment, the FEM should consider any extenuating circumstances.

Table 1: Facility Representative Qualification

Qualification Process	DOE-STD- 1146, General Technical Base Qualification Standard	DOE-STD- 1151, FR Functional Area Qualification Standard	Site-/Facility- Specific Competencies	Examination Type and Additional Requirements	
Core Qualification [Note 1]	Х	Х	N/A	Written Exam [Note 2]	
Interim Qualification	x x		FEM determines the competencies and examination requirements so that an FR could provide interim coverage in a facility for which he/she is not fully qualified.		
Initial Full Qualification	Х	Х	Х	Written Exam [Note2]Evaluated Facility WalkthroughOral Board [Note 3]	
Qualification on Additional Facilities after Full Qualification	Would be core qu	ualified.	X	 Evaluated Facility Walkthrough and/or Written Exam and/or Oral Checkout [Note 4] 	
To Regain Proficiency after Inactivity as an FR	As determined by Element: Items added and or fundamentals. Changes to systefacility document	areas of theory em, process, and	X	 Evaluated Facility Walkthrough and/or Written Exam and/or Oral Checkout [Note 4] 	
Maintaining Qualification: Periodic Requalification	 Evaluated Facility Walkthrough and/or Written Exams and/or Oral Checkout [Note 4] 				
Maintaining Qualification: Continuous Qualification	As determined by each local DOE site office, currency as an FR should be verified on a biennial basis [Note 5]. Documentation of currency can be tailored by each site office as appropriate to suit its needs [Note 6].			Maintain continuous proficiency by performing FR duties 40 hours per calendar quarter [Note 7].	

Notes:

- 1. Core qualification needs to be conducted only once.
- 2. The written exam for core qualification may be combined with full qualification written exam.
- 3. An Oral Board only needs to be conducted for an FR's initial full qualification. At their discretion, an FEM may require an oral board for a previous qualified FR transferring from

- another site Additional Information for Oral Boards are included on the DOE FR Powerpedia Page.
- 4. Additional information for oral check-outs are included on the DOE FR Powerpedia Page. At the Supervisor's discretion, the Oral Checkout may be combined with the Evaluated Facility Walkthrough.
- 5. The following items should be considered in determining currency as an FR:
 - a. Knowledge of up-to-date applicable DOE directives (e.g. Rules, Orders, Guides, Standards, Manuals, Handbooks, etc.);
 - b. Knowledge of up-to-date facility documentation (e.g. DSAs, TSRs, TIM, NMMP, RPP, etc.);
 - c. Knowledge of up-to-date Local Site Office SOPs or DOE Program Office procedures;
 - d. Knowledge of up-to-date relevant lessons learned across the DOE complex;
 - e. Continued professional training within applicable ES&H discipline (e.g. nuclear safety, accelerator safety, etc.);
 - f. Completion of required local site ES&H training;
- 6. Consideration should be given to demonstrating currency through documenting, in a checklist format, a combination of required reading; computer based training; attendance at classroom training; and/or evidence of participation in the criteria listed.
- 7. If an FR fails to maintain proficiency by performing FR duties 40 hours per calendar quarter, proficiency must be regained by completing the requirements in Table 1, "To Regain Proficiency after Inactivity as an FR".
- 5.5 Recruitment, Selection, Retention, and Advancement Considerations. As qualified FRs gain experience, they become a valuable resource of DOE. FEMs should take necessary steps to ensure that FR positions are career enhancing and remain desirable to FR candidates. This includes incentives to maintain qualification and encouragement of skills enhancement through continuing training, graduate study, and professional certifications. In addition, FEMs should provide opportunities for FRs to develop management skills. This experience and training can make FRs with solid technical and management skills into prime candidates for positions of higher responsibility both in the field and at DOE Headquarters. FEMs should identify these developmental experiences and training opportunities in the personnel development plans for their organizations, and in FRs' Individual Development Plans. DOE O 426.1B provides various mechanisms that can be used to retain these valuable resources.
- 5.5.1 <u>Retention and Advancement</u>. Several mechanisms may be available to assist field elements in the retention of high-quality personnel necessary for their program. FEMs should seek to understand reasons for unusually high FR attrition rates and counter those reasons using appropriate mechanisms. These mechanisms may include:
 - a. Recognition and real-time management acknowledgement;
 - b. Mentoring from senior DOE and Facility Managers;

- c. Educational reimbursement incentives:
- d. Quality Step Increases based on experience and performance;
- e. Higher Pay Grade or Band based on higher facility hazard category;
- f. Higher Pay Grade or Band based on scope of facility assignments;
- g. Higher Pay Grade or Band for FR Program Managers, Supervisors, Work Leads, and Team Leads;
- h. Promotions based on knowledge and experience;
- i. Reimbursement incentives for obtaining and maintaining professional certifications; and
- j. Use of government vehicles for transportation between Site Headquarters and assigned facilities.
- 5.6 <u>Facility Representative Program Performance Assessment and Feedback</u>. FEMs shall periodically evaluate and adjust their FR programs as necessary to ensure a high and continuously improving level of performance. Methods to be used include the following:
- 5.6.1 Performance Indicators (PIs). Carefully chosen PIs can provide valuable measures of the effectiveness of FR programs. DOE-wide Performance Indicators that address staffing and qualification levels and fulfilling FR roles, along with their reporting requirements are included in Appendix A. Field elements may provide additional site-specific performance indicators. The DOE FR Program Manager shall use these PIs to evaluate DOE-wide program performance and compile a DOE-wide performance indicator (PI) report for dissemination to applicable field elements and program offices. The DOE FR Program Manager will post the reports to the DOE FR Powerpedia page.
- 5.6.2 Field Element Self-Assessments. FEMs shall ensure that their FR Programs are evaluated periodically (not to exceed three years) relative to the requirements of this standard. FEMs shall provide the results of these self-assessments to the responsible Program Office at DOE Headquarters, with a copy to the DOE FR Program Manager. When possible, FEMs or designees should invite FRs and/or FR management from other sites to participate in these self-assessments. Guidance for the performance of these assessments is provided in Appendix B, "Facility Representative Program Assessment Guide."
- 5.6.3 <u>Nuclear and Facility Safety Programs Workshop</u>. FEMs should encourage as many FRs, FR Managers, and FR support personnel as possible to attend the annual Workshops to share information with other sites and identify potential improvements for use in their own FR and Safety Management programs.

Appendix A. Facility Representative DOE-Wide Performance Indicators

<u>Scope</u>: Carefully chosen Performance Indicators (PIs) can provide valuable measures of the effectiveness of FR Programs. These PIs are DOE-wide and will be used by FEMs and DOE-HQ personnel to evaluate program effectiveness with regards to staffing and qualification levels and fulfilling the FR role. Other PIs may be useful at local and HQ levels to determine the need for local program changes, depending on circumstances that may be unique to a site. DOE-wide FR PIs are relatively few in number, easy to measure and report, applicable to all FR Programs, and resistant to misinterpretation.

General Points:

- 1. The Performance Indicators listed in A-1 shall be used DOE-wide as a minimum. Field elements may use additional, local PIs that suit their own needs.
- 2. Pls for DOE-wide use measure FR staffing, FR qualification, and fulfilling the FR role.
- 3. Pls that measure contractor performance have been avoided as measures of FR program effectiveness.
- 4. Pls shall be reported quarterly by FEMs to their Headquarters Program Lead, with a copy sent to the DOE FR Program Manager. At the close of a given quarter, one month is allocated to assemble PI reports, which are then due on the first working day of the months of February, May, August, and November.
- 5. The Performance Indicators methods of determination and goals are provided in Tables A-2 and A-3.

A-1. Quarterly Reporting Elements – What to Report

FR Programs shall report the following DOE-Wide Performance Indicators each Quarter:

- Analysis full time equivalent (FTE): The number of FR FTEs needed per the DOE-STD-1063 Staffing Analysis (Appendix C);
- Approved FTE: The number of FR FTEs approved for the Program to staff;
- Actual Staff: The number of FRs staffed during the reporting period;
- % Staffed: Calculated as described in Table A-2;
- Gains/Losses: Both the number of FR gains and losses during the reporting period.
 Programs must report the reason for each gain and loss. Definitions are provided in Table A-2:
- No. of FRs Core Qualified: The number of FRs that were core qualified at the end of the reporting period. See Section 3 for the definition of core qualification;
- No. of FRs Fully Qualified: The number of FRs that were fully qualified at the end of the reporting period;
- % Fully Qualified: Calculated as described in Table A-2; and
- % Oversight Time: Calculated as described in Tables A-2 and A-3.

The Performance Indicators should be reported in table format. An example is provided below in Table A-1, and a table template is provided on the DOE FR Powerpedia page at https://powerpedia.energy.gov/wiki/FacilityRepresentativeProgram.

Table A-1: Example Report – Red Run Site

Performance Indicators for First Quarter CY2016 (January 2016 through March 2016) Submitted May 2, 2016

Site	Analysis FTE	Approved FTE	Actual Staff	% Staffed	Gains/ Loses¹	No. of FRs Core Qualified	No. of FRs Fully Qualified	% Fully Qualified	% Oversight Time
RR	10	9	8	80	+1, -1	7	5	50	75

Notes:

1. Red Run Site hired one FR and lost one FR due to retirement during this reporting period.

Table A-2: Quarterly Reporting Requirements – How to Determine

Indicator Name	How to Determine	Goal
Staffing level (%)	Number of FR positions filled Divided by Number of FR positions per Appendix C	100% of [#FRs]
Gains/Losses	Number of FRs starting or leaving the program this quarter. Provide reason for attrition using the options below. Gains:	N/A
	 Industry: Hired from the private industry. Government: Hired from another government 	
	 agency. Lateral: Hired from a DOE non-FR position Transfer: Hired from another FR position. 	
	Developmental: Hired from DOE technical intern program.	
	 Losses: Transfer: Takes an FR job at different site. Promotion: Takes non-FR position at higher GS or ES level or a supervisory position. Lateral: Takes non-FR position at same pay grade. 	
	 Retirement: Leaves DOE for retirement. Resignation: Leaves DOE other than retirement. 	
% of FRs Fully Qualified		
% Oversight Time	% Oversight Time Total number of work hours this quarter (Note 1) minuse the hours worked performing Non-FR duties (Note 2) Divided by Number of work hours in the quarter (Typically 520)	

Notes:

- 1. Total number of work hours this quarter equals the total number of hours per calendar quarter (typically 520) plus any overtime worked minus any leave taken (annual, sick, holiday, or other).
- 2. Activities that count as time performing FR Duties are included in Column 1 of Table A-3 while activities that should be considered Non-FR Duties are included in Column 2 of Table A-3.

Table A-3: Additional Guidance on Computing Facility Representative Percentage of Oversight Time

COL Activities that Count as Tim Goal: Grea	COLUMN 2 Activities That Should Not Be Counted in Numerator	
Plant walkthroughs/walkdowns	Emergency Operations Center assignments	Training (mandatory refresher, etc.) not related to
Surveillances	Performing facility review activities (e.g., ISMS verification, ORR, RA) in a facility at the Facility Rep's site	an FR's abilities to perform oversight.
Assessments of the contractor	Researching requirements	
Observing & participating in critiques	Occurrence report reviews	
Verifying completion of corrective actions in the field or with the contractor	Issues tracking and trending	
Observing operator activities and maintenance actions	Supporting facility-related programmatic needs and special projects	
Reviewing contractor documents and procedures at the job site	Reviewing DSAs, SERs, ABs, and other safety documentation at desk	Non facility-related special projects
Facility grounds and property tours	Reviewing contractor documents and procedures at desk	Administrative/Collateral duties
Completing facility condition assessments	Attending facility meetings	Non oversight commute time
Commute time between facilities or driving tours within facility and between oversight activities	Communications involving issues requiring DOE oversight	Meetings not related to the FR's facilities/duties
Attending contractor pre-job briefings or other facility activity briefings	Discussions of actions required for addressing issues	
Plan of the day/Plan of the week meetings	Training and qualification related to an FR's abilities to perform oversight	
Shift turnovers	Briefing Management on facility issues	
Response to facility/lab events	Providing feedback to the contractor	
Observing or participating in facility drills or lab exercises	PAAA corrective action validations	

Appendix B. Facility Representative Program Assessment Guide

The DOE has implemented its FR Program and is looking to continuously improve the program's effectiveness DOE-wide. An effective FR Program has many elements, as described in this Standard. These elements are intended to yield a program that provides DOE facilities with well-trained FRs who spend appropriate amounts of time in their facilities and can work effectively with their contractor management counterparts. The program, to be effective, needs the functional support of management. To maintain the continued support of DOE management, the FR program needs to demonstrate its continued performance and effectiveness, which is to be assessed periodically using this guide. Any assessment of an FR Program should determine the extent to which management expectations and the objectives below are being met and provide recommendations on improving the program's effectiveness.

Objectives:

- 1. Well-trained, qualified FRs.
- 2. Adequate coverage for DOE facilities.
- 3. FRs provide effective oversight of facilities.
- 4. Adequate functional support from the Field Element Management.
- 5. Performance assessment and feedback program in place.

NOTE: At the discretion of Field Element management, additional Objectives can be assessed.

Purpose:

The purpose of this guide is to provide the DOE with a consistent set of guidelines to assess the effectiveness of FR Programs. A template that should be used to perform the FR Program assessment is provided starting on page B-3 and is available at https://powerpedia.energy.gov/wiki/Facility_Representative_Program. The template includes the appropriate Criteria, Review and Approach Document and Report format.

Scope:

This guide is provided for use by DOE HQ and Field Elements to assess the effectiveness of their FR Programs as described in DOE STD-1063.

References:

The following references should be used in conjunction with this guide:

- DOE-STD-1146, General Technical Base Qualification Standard
- DOE-STD-1151, Facility Representative Functional Area Qualification Standard

- Applicable Field Element site and facility-specific qualification standards
- Applicable Field Element site and facility-specific program implementing documents
- Applicable Field Element FR Program Performance Indicators

FACILITY REPRESENTATIVE PROGRAM TEMPLATE

Facility Representative Program Assessment for DOE Site or Field Office Title



(Report Date)

U.S. Department of Energy, Office or Site (DOE-XXX)

DOE (state the organization	Facility	Dates of Assessment:
title):	Representative Program Assessment	Report Date:
	i rogram Accessment	

Part 1 – FACILITY REPRESENTATIVE PROGRAM ASSESSMENT PLAN OF ACTION (POA)

Scope:

The U.S. Department of Energy (DOE) continues to assess and improve its Facility Representative (FR) Program at sites with hazardous facilities. Field Element Managers (FEMs) are required in DOE-STD-1063-2021, *Facility Representatives*, to periodically (not to exceed three years) evaluate their FR Programs relative to the Standard.

An effective FR Program contains many elements, which are described in DOE-STD-1063-2021. These elements are intended to implement a program which provides DOE facilities with well-trained FRs that spend appropriate amounts of time in their facilities and can work effectively with their contractor management counterparts.

Purpose and Objectives.

This self-assessment was performed to provide assistance to the DOE-XX Manager in systematically assessing the current status of the DOE- XX FR Program. The focus of the self-assessment was evaluation of the DOE- XX FR Program performance level for the following objectives:

- 1. The Facility Representative training and qualification program that is in place results in well-trained, qualified Facility Representatives.
- 2. The Facility Representative Program provides adequate coverage for DOE facilities.
- 3. Facility Representatives provide effective oversight of facilities.
- 4. Management provides adequate functional support for Facility Representatives.
- 5. An adequate performance assessment and feedback program is in place to assess the effective implementation of the Facility Representative Program.

NOTE: At the discretion of Field Element management, additional Objectives can be assessed. If additional items are to be assessed, they must be listed above in addition to the five required Objectives

Proposed Team Leader	
Team Member	
Team Member	
Team Member	

Part 2 – Facility Representative Assessment Implementation Plan (IP) and Report

CRITERIA

_		
FR-1	The Facility Representative training and qualification program that is in place results in well-trained, qualified Facility Representatives.	Criteria Met: YES
	a) Training records demonstrate that:	PARTIAL
	 Qualified FRs completed all qualification requirements as specified in DOE-STD-1146, DOE General Technical Base Qualification Standard, DOE-STD-1151, Facility Representative Functional Area Qualification Standard, and local directives; 	NO
	 The examination process demonstrates that the FR has the proper level of knowledge of all qualification areas and facilities including technical understanding of facility processes, judgment and decision-making abilities, and ability to communicate expectations to the contractor; 	
	FRs are qualified by the FEMs or designee(s); and	
	 Appropriate action is taken for personnel failing to qualify within the time allowed. 	
	b) The continuing training program is documented and meets the needs of the FRs by ensuring that:	
	 FRs maintain awareness of significant new hazards, activities, facility modifications and/or operating practices at their assigned facility(s); 	
	 Lessons learned from facilities, the site and across the complex are shared; 	
	FRs stay abreast of changing technologies;	
	FR skills are enhanced;	
	FR performance and proficiency is improved;	
	New requirements are reviewed; and	
	Maintenance of FR qualifications is supported.	
	c) A process is defined and used effectively to maintain qualification(s).	
	d) A process is defined and used effectively to ensure that qualified FRs maintain or regain proficiency.	
	Review and Approach	
	a) Review FR training documentation (e.g. training implementation documents, training plans, job task analysis, training needs analysis, qualification and/or certification records, training completion records, etc.) and verify that the FRs are properly qualified and the continuing training program is effective in meeting FR program needs.	
	b) Review the applicable documentation that defines the maintenance of FR qualifications and determine the effectiveness of the process.	
	c) Review the applicable documentation that defines the FR proficiency process and determine the effectiveness of the process.	
	d) As needed, interview the FR Program Sponsor, FR Program Manager, FR supervisors, FRs, and Field Element management to evaluate their understanding of the current FR training program and qualification process(es).	

Evaluation:

The review should include sufficient discussion to justify the conclusion drawn – may be a few lines or a full page – whatever is necessary. Include Documents reviewed, personnel interviewed and activities observed if appropriate. A simple SAT/UNSAT is not sufficient.

Reviewers: Last Name

1. Documents reviewed.

Consider reviewing the following types of documents: Program directive(s) and procedure(s), Performance Indicators (DOE-wide and locally generated), Qualification tracking data, Performance Assessments including the FR Program Self-Assessment, Training records (including continuing training), Qualification records, FR logs, FR reports, Management tracking system for FR reported issues, Written and Oral examination question banks, Significant Occurrence Reports, etc.)

- 2. Personnel interviewed (use job titles).
- Activities observed.

The observation of activities can provide indication of: Level of FR facility knowledge, actual practices of the facility, interactions with DOE and contractor personnel, log-keeping and reporting practices, corrective action verification, etc.

Discussion:

Criteria met/partially met/not met with x Findings, x Observations and x Noteworthy Practices - or - no deficiencies noted.

FR-2	The Facility Representative Program provides adequate coverage for DOE facilities.	Criteria Met: YES	
	A current FR staffing analysis has been performed in accordance with the Facility Representative Standard and FRs are staffed to the indicated level including:	PARTIAL NO	
	 A sufficient numbers of FR candidates are undergoing qualification to fill known or projected FR vacancies; and 		
	 If FR vacancies exist, appropriate action(s) are being taken to address the vacancies. 		
	 Performance Indicator data is used to provide indication of the FR program status. Tracking and trending is performed and used to drive program improvements 		
	c) FRs metrics demonstrate adequate time spent performing Operational Awareness activities; and		
	 A process is defined and established to ensure that adequate facility coverage is maintained by qualified FRs during periods of absence. 		
	Review and Approach		
	a) Review the applicable documentation (e.g. most recent FR staffing analysis, staffing plans, performance metrics, applicable office documents, assessments, etc.) to determine if the FR Program is appropriately staffed to provide adequate coverage and oversight of DOE facilities and/or activities.		
	b) As needed, interview the FR Program Sponsor, FR Program Manager, FR supervisors, FRs, and Field Element management to evaluate their understanding of the current FR staffing and if effective coverage of DOE facilities and/or activities is being accomplished.		
	 Observe selected FR activities and records to evaluate the effectiveness of FR coverage and oversight of assigned DOE facilities and/or activities. 		
Evaluatio	n:	Reviewers:	
The review be a few lipersonnel	The review should include sufficient discussion to justify the conclusion drawn - may be a few lines or a full page - whatever is necessary. Include documents reviewed, personnel interviewed and activities observed if appropriate. A simple SAT/UNSAT is not sufficient.		
1. Documents reviewed:			
(Consider reviewing the following types of documents: Program directive(s) and procedure(s), Performance Indicators (DOE-wide and locally generated), Qualification tracking data, Performance Assessments including the FR Program Self-Assessment, Training records (including continuing training), Qualification records, FR logs, FR reports, Management tracking system for FR reported issues, Written and Oral examination question banks, Significant Occurrence Reports, etc.)			
2. Personnel interviewed (use job titles):			
3. Activ	ities observed:		

The observation of activities can provide indication of: Level of FR facility knowledge, actual practices of the facility, interactions with DOE and contractor personnel, log-keeping and reporting practices, corrective action verification, etc.	
<u>Discussion</u> :	
Criteria met/partially met/not met with x Findings, x Observations and x Noteworthy Practices - or - no deficiencies noted.	

FR-3 Facility Representatives provide effective oversight of facilities.

- a) FR unencumbered access and "Stop Work" authority in their assigned facilities has been effectively implemented and used appropriately.
- b) FR review of occurrence reports are accomplished as specified in DOE O 232.2A, Occurrence Reporting and Processing of Operations Information.
- A formal process is documented and is effective in ensuring FR availability and response to facility events.
- d) FRs activities (e.g. operational awareness activities, facility assessments, audits, surveillances, etc.) are adequately documented, completed as scheduled and provides an evaluation of the overall effectiveness of the operating contractor.
- e) The process for reporting issues (formally and informally) to the contractor and DOE management are defined, effective and ensures consistency between the information captured and that reported.
- f) Processes have been established that promote effective FR communications and interaction with DOE Line Management, other oversight personnel, and with contractors to provide information related to their assigned facilities.
- g) Verify the effectiveness of the FRs by observing selected qualified personnel who are monitoring training, operations, or maintenance evolutions.

Review and Approach

- Review the applicable documentation that implements Stop Work Authority and unencumbered access to FRs. Determine if these processes are effectively implemented.
- b) Determine if FRs have exercised "stop work" authority. If stop work authority was exercised, interview the personnel involved and determine if the action was appropriate and effective.
- c) Determine if there were any occasions when it was appropriate for FRs to exercise "Stop Work" authority, but it was not used. If instances are identified, determine why it was not used.
- d) Review a representative sample of final occurrence reports and verify that the DOE 232.2A required reviews were completed within the required periodicity, that the root cause(s) were identified and appropriate corrective action(s) were identified.
- Review the applicable documentation that specifies expectations for FR availability and response to facility events and determine if it is effectively implemented.
- f) Review applicable FR documentation (e.g. operational awareness activities, assessments, surveillances, audits, etc.) and determine if they effectively demonstrate that assigned activities were completed as scheduled, adequately document the activity and evaluate the overall effectiveness of the contractor.
- g) Review the applicable documentation that specifies how issues are reported and determine if the process is effective.
- h) Review the processes in place to facilitate communications between the FRs, Field Element management and contractor management and determine if they are effective.

Criteria Met:

YES PARTIAL NO

- Interview FR Program Sponsor, FR Program Manager, FR supervisors, FRs, Field Element management, Contractor management, Technical Expertise support (e.g. Radiological Controls, Training, Industrial Safety, Quality Assurance, etc.) to evaluate the effectiveness of the FR oversight for their assigned facility(s) and/or activities.
- j) Observe selected FR activities and evaluate the experience and knowledge of Operations personnel, including line management personnel, who will operate and control the facility(s)/activity(s).

Evaluation:

The review should include sufficient discussion to justify the conclusion drawn – may be a few lines or a full page – whatever is necessary. Include Documents reviewed, personnel interviewed and activities observed if appropriate. A simple SAT/UNSAT is not sufficient.

1. Documents reviewed.

Consider reviewing the following types of documents: Program directive(s) and procedure(s), Performance Indicators (DOE-wide and locally generated), Qualification tracking data, Performance Assessments including the FR Program Self-Assessment, Training records (including continuing training), Qualification records, FR logs, FR reports, Management tracking system for FR reported issues, Written and Oral examination question banks, Significant Occurrence Reports, etc.

- 2. Personnel interviewed (use job titles).
- 3. Activities observed.

The observation of activities can provide indication of: Level of FR facility knowledge, actual practices of the facility, interactions with DOE and contractor personnel, log-keeping and reporting practices, corrective action verification, etc.

Discussion:

Criteria met/partially met/not met with x Findings, x Observations and x Noteworthy Practices - or - no deficiencies noted.

Reviewers: Last Name

	1		T
FR-4		nagement provides adequate functional support for Facility presentatives.	Criteria Met: YES
	a)	The reasons for any FR attrition are known (e.g. promotions, laterals, downsizing, etc.) and steps have been taken to counter excessive attrition.	PARTIAL NO
	b)	Field element management ensures that FR positions are career enhancing.	
	c)	The process for addressing differing professional opinions is documented and effective.	
	Re	view and Approach	
	a)	Review any applicable FR attrition documentation and determine if the reason(s) for attrition are understood, and effective steps have been taken to address excessive attrition.	
	b)	Interview Field Element management, FR Program Sponsor, FR Program Manager and FR Supervisor(s) concerning methods that are used to ensure FR positions are career enhancing. Determine if the methods are effective.	
	c)	Review the applicable documents that implement the differing professional opinion process and determine if the process is implemented effectively.	
	d)	Determine if any FRs have used the differing professional opinion process. It the process was used, interview the personnel involved and determine the effectiveness of the differing professional opinion process.	
Evaluation	n:		Reviewers:
The review be a few I personnel	The review should include sufficient discussion to justify the conclusion drawn – may be a few lines or a full page – whatever is necessary. Include Documents reviewed, personnel interviewed and activities observed if appropriate. A simple SAT/UNSAT is not sufficient.		Last Name
Consider procedure tracking d Training reports, M	Consider reviewing the following types of documents: Program directive(s) and procedure(s), Performance Indicators (DOE-wide and locally generated), Qualification tracking data, Performance Assessments including the FR Program Self-Assessment, Training records (including continuing training), Qualification records, FR logs, FR reports, Management tracking system for FR reported issues, Written and Oral examination question banks, Significant Occurrence Reports, etc.		
2. Perso	2. Personnel interviewed (use job titles).		
Discussion	<u>on</u> :		
Crite	eria r	met/partially met/not met with x Findings, x Observations and x Noteworthy Practices - or - no deficiencies noted.	

FR-5		adequate performance assessment and feedback program is in place to sess the effective implementation of the Facility Representative Program.	Criteria Met: YES
	a)	The field element periodically conducts self-assessments of the entire FR program.	PARTIAL
	b)	The FEM has pursued improvements to the FR program resulting from self-assessments of the program.	NO
	Rev	view and Approach	
	a)	Review applicable documentation (e.g. self-assessment reports, assessment reports, feedback reports, corrective action database, etc.) to determine if self-assessments have been performed, have resulted in FR Program improvements and have included peer reviews.	
	b)	Interview the FR Program Sponsor, FR Program Manager, FR Supervisors, FRs, and Field Element management to assess their knowledge of self-assessment results and of any process improvements that have resulted from the self-assessment program.	
Evaluatio	n:		Reviewers:
The Review should include sufficient discussion to justify the conclusion drawn – may be a few lines or a full page – whatever is necessary. Include Documents reviewed, personnel interviewed and activities observed if appropriate. A simple SAT/UNSAT is not sufficient.		Last Name	
1. Docur	nents	s reviewed.	
(Consider reviewing the following types of documents: Program directive(s) and procedure(s), Performance Indicators (DOE-wide and locally generated), Qualification tracking data, Performance Assessments including the FR Program Self-Assessment, Training records (including continuing training), Qualification records, FR logs, FR reports, Management tracking system for FR reported issues, Written and Oral examination question banks, Significant Occurrence Reports, etc.)			
2. Perso	2. Personnel interviewed (use job titles).		
Discussion	<u>on</u> :		
Crite	eria r	net/partially met/not met with x Findings, x Observations and x Noteworthy Practices - or - no deficiencies noted.	

List any additional items to be assessed as directed by Field Element management)

FR-XX	List any additional items to be assessed as directed by Field Element management	Criteria Met: YES	
	NOTE: This section may be copied and pasted to the assessment report as often as needed to cover any additional self-assessment requirements as directed by Field Element management. If no additional self-assessment items are directed by Field Element management, delete this section from the final report		
	Review and Approach		
	 a) Review applicable documentation (e.g. self-assessment reports, assessment reports, feedback reports, corrective action database, etc.) to determine if self-assessments have been performed, have resulted in FR Program improvements and have included peer reviews. 		
	b) Interview the FR Program Sponsor, FR Program Manager, FR Supervisors, FRs, and Field Element management to assess their knowledge of self-assessment results and of any process improvements that have resulted from the self-assessment program.		
Evaluatio	n:	Reviewers:	
(The Review should include sufficient discussion to justify the conclusion drawn – may be a few lines or a full page – whatever is necessary. Include Documents reviewed, personnel interviewed and activities observed if appropriate. A simple SAT/UNSAT is not sufficient.)		Last Name	
1. Documents reviewed.			
Consider reviewing the following types of documents: Program directive(s) and procedure(s), Performance Indicators (DOE-wide and locally generated), Qualification tracking data, Performance Assessments including the FR Program Self-Assessment, Training records (including continuing training), Qualification records, FR logs, FR reports, Management tracking system for FR reported issues, Written and Oral examination question banks, Significant Occurrence Reports, etc.			
2. Perso	2. Personnel interviewed (use job titles).		
Discussion	<u>Discussion</u> :		
Criteria met/partially met/not met with x Findings, x Observations and x Noteworthy Practices - or - no deficiencies noted.			

Facility Representative Program Assessment Implementation Plan Approval

	Signature	Printed/Typed Name, Position
Team Leader*		

^{*} Upon completion of the Implementation Plan, the Team Leader will enter this report into applicable database and should forward this report to the appropriate DOE line management personnel for information.

Part 3 – Facility Representative Program Assessment Report

The completed Assessment, Part 2 constitutes the body of the FR Program Assessment Report. Assessment Findings, Lessons Learned, and a Conclusion follows:

Facility Representative Program Assessment Findings

All Findings must be entered into the applicable database for appropriate issues management and corrective action tracking. The findings are summarized below. Tracking, Corrective Action Planning and Execution, Closure, and Verification of Closure are conducted in accordance with the applicable DOE Office procedures/processes.

Tracking #	Summary of Finding
	Provide a summary of the finding in sufficient detail to provide a reader with an understanding as to how the finding relates to the objective of the FR Program reviewed.

Lessons Learned

All Lessons Learned must be entered into the applicable Lessons Learned database. The Lessons Learned are summarized below.

Tracking #	Summary of Lessons Learned	
	List any Lessons Learned about either the Assessment Process, interface with the Facility or other information that will improve the FR Program and/or Assessment process.	

Conclusion

Based on the completion of this Assessment and the results documented in the preceding Part 2 the team concludes – provide a brief summary of the conclusion as to whether or not the objective of the FR Program was met. Indicate the number of Findings written.

Facility Representative Program Assessment Report Approval

	Signature/Date	Printed/Typed Name, Position
Team Leader		
Team Member		
Team Member		

^{*} Upon completion of the Report, the Team Leader will ensure that this report is entered into the applicable database and should forward this report to the responsible FEM and appropriate DOE FR Program personnel for information.

Assessment Team Biographies

Include a short biography (a short summary paragraph that demonstrates competence commensurate with the responsibility) of the Team Leader and Team Members. The biography must summarize how each team member met the following requirements:

- 1. technical knowledge of the area assigned for evaluation, including experience working in the technical area;
- 2. knowledge of performance-based assessment processes and methods; and
- 3. knowledge of facility, activity, or operation-specific information.

Assessment Team Independence

Include a short statement that demonstrates that the Team Leader and each Team Member is independent and did not review any activity for which they are directly responsible.

I, (insert Team Leader Name), have verified that each member of the Assessment Team did not review any work and/or activity for which they are directly responsible.

	Signature/Date	Printed/Typed Name
Team Leader		

Dissenting Professional Opinion(s)

If there is a dissenting professional opinion, capture the facts and resolution in this space. If there is no dissenting professional opinions, then state so in this space.

Appendix C. Process to Determine Facility Representative Staffing

Overview:

The steps below describe an analytical process to determine FR staffing for all hazardous facilities at a site. This method provides a technical approach to determine the appropriate amount of FR oversight necessary for a facility given its hazard level, operational activity and complexity, and programmatic importance. This staffing approach is also designed to provide DOE with a common human capital strategy approach such that the DOE can objectively analyze, allocate, budget, and justify FR resources throughout the DOE Complex.

Methodology:

The following elements shall be included in each site analysis:

- 1. An analysis of facilities based on hazards or risks present to the public, worker, and/or environment;
- 2. A method for determining FR coverage (e.g., continual, frequent, occasional, etc.) based on facility categorization and adjusted for other factors identified in this Appendix such as facility size, operations complexity, hazards and risks, etc.;
- 3. A determination of FR Full Time Equivalent (FTE) requirements based on coverage assigned and adjusted to address factors considered in Step 2 above; and
- 4. A determination of actual staffing based on FR FTE requirements adjusted to account for actual staff time available to support the FR function when competing activities such as collateral duties, leave, training, etc. are considered.

Process:

The process for conducting an FR staffing analysis involves generating and analyzing the data necessary to complete Table C-1: Determination of FR Coverage.

Column A lists the name of the facility or group of facilities.

Column B lists the Facility Hazard Categorization, which is predetermined for Categorized (Nuclear, Biosafety, and some Chemical) facilities, and is determined for non-categorized by completing a worksheet.

Column C lists the Facility Activity Level.

Column D lists a Base FR Facility Coverage Level.

Column E lists Base FR FTE Level.

Column F lists Adjusted FR FTE Coverage Level based on facility operational and programmatic conditions and situations.

Column G lists the Percentage of Time FR is Available to Provide Coverage utilizing historical FR Performance Indicator data.

Column H lists the Final FR FTE Coverage Level for each facility or group of facilities, which is obtained by dividing the Adjusted FR FTE Coverage Level by the Percentage of Time FR is Available to Provide Coverage.

Total FR FTEs Required is determined by summing the facility values listed in Column H.

Total FR FTEs Onboard is listed to provide a reference for determining if sufficient FR FTEs are currently available.

Table C-1: Determination of Facility Representative Coverage

(Facility X, Y, and Z provided as examples)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H				
Facility or Groups of Facilities	Facility Hazard Categorization	Facility Activity Level	Base FR Facility Coverage Level	Base FR FTE Level	Adjusted FR FTE Coverage Level	Percentage of Time FR is Available to Provide Coverage	Final FR FTE Coverage Level				
Nuclear Facility X	Nuclear HazCat 2	High	Frequent	0.50 – 1.00	1.50	0.73	2.05				
Biosafety Facility Y	Biosafety Level	Medium	Intermittent	0.25 - 0.50	0.25	0.73	0.34				
Other Hazardous Facility Z	Other Hazardous High	Medium	Intermittent	0.25 – 0.50	0.50	0.73	0.68				
	Total FR FTEs Required										
	Total FR FTEs Onboard										
Explanation	n of Difference	Hiring action in progress to add 1 FR									

Procedure for Completing Table C-1: Determination of Facility Representative Coverage

1. Column A – Facility or Groups of Facilities

Determine all hazardous facilities, or groups of hazardous facilities, and list them in Column A.

2. Column B – Facility Hazard Categorization

Determine the Facility Hazard Categorization and list that categorization in Column B.

For Nuclear Hazard, Biological Hazard, and Chemical Hazard facilities, enter the categorization determined by regulatory requirements.

- a. Nuclear hazard categorization is from DOE-STD-1027. The staffing analysis shall include at least one FR for a hazard category 1 nuclear facility.
- b. Biological hazard levels are defined in Biosafety in Microbiological and Biomedical Laboratories, U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes of Health Fifth Edition, May 2009.
- c. Chemical hazard classes are established by OSHA and EPA. Regulated Toxic and Regulated Flammable Substances and their Threshold Quantities are listed in 40 CFR Part 68.130, Chemical Accident Prevention Provisions. Extremely Hazardous Substances and Threshold Planning Quantities are listed in Appendices A and B of 40 CFR Part 355, Emergency Planning and Notification. Process Safety Management chemicals are listed in Appendix A of 29 CFR Section 1910.119, Occupational Safety and Health Standards, "Process Safety Management of Highly Hazardous Chemicals."

The FEM identifies Other Hazardous Facilities that could pose a significant risk to the public, workers, or the environment, or are crucial mission facilities that require FR oversight. Consideration could include poor operational or safety performance, special needs, and significant public concern.

For Other Hazardous Facilities, complete the following worksheet. Evaluate each hazard at each facility based on the relative magnitude of the hazard to the public, workers, and the environment. The evaluation should include the complete spectrum of hazards in the facility that could expose members of the public, onsite co-located workers, facility workers and the environment to hazardous materials or energy. The highest resulting hazard associated with the facility is the overall Facility Hazard Categorization for Table C-1, Column B.

The ranking system used in this process is:

- High Hazard 3 Potential for major impact to the public, workers, or the environment;
- Moderate Hazard 2 Potential for moderate impact to the public, workers, or the environment; and
- Low Hazard 1 Potential for minor impact to the public, workers, or the environment.

(Facility Z is provided as an example)

	Worksheet for Determining the Facility Hazard Categorization for Other Hazardous Facilities																											
	Bio	logi	ical		azaı hen			Fire)	_	ctri ase		Cry	yog	ens		High ess			oisti and iggi		Ex	plos	sive	(Othe	r	
Facility or Group of Facilities	Public	Worker	Environment	Public	Worker	Environment	Public	Worker	Environment	Public	Worker	Environment	Public	Worker	Environment	Public	Worker	Environment	Public	Worker	Environment	Public	Worker	Environment	Public	Worker	Environment	Facility Hazard Categorization
Facility Z				1	2	1	1	3			2			1			1			2		1	3					High

3. Column C – Facility Activity Level

Determine the Facility Activity Level and list the result in Column C. The activity level definitions are:

- High Activity Level Facilities that daily to weekly involve activities with one or more hazards.
- Medium Activity Level Facilities that weekly to monthly involve activities with one or more hazards.
- Low Activity Level Facilities that monthly to quarterly involve activities with one or more hazards.

4. Column D – Base FR Facility Coverage Level

Determine the recommended Base Coverage Level using the guide in Table C-2 and list in Column D.

Table C-2: Recommended Base Coverage Level

Nuclear Hazard	Biosafety	Chemical Hazard	Other Hazardous	Facility Activity Level							
Category	Level	Classification	Facilities	High	Medium	Low					
Hazard Category 1	Biosafety Level 4			Continual	Frequent	Intermittent					
Hazard Category 2	Biosafety Level 3	Facilities with regulated hazardous material requiring a Risk Management Plan AND The potential for ERPG-2 levels or TEEL-2 for off-site	High Hazard	Frequent	Intermittent	Occasional					
Hazard Category3	Biosafety Level 2	Facilities with regulated hazardous material requiring a Risk Management Plan OR The potential for ERPG-2 levels or TEEL-2 for collocated worker (100M)	Moderate Hazard	Intermittent	Occasional	Seldom					
Radiological		Inventories of flammable materials and reactive compounds exceeding threshold quantities in 29 CFR 1910.119	Low Hazard	Occasional	Seldom						

The coverage levels are:

- Continual The FR is present daily. This coverage may require the complete attention
 of one or more individuals and may require backshift, weekend, or 24-hour coverage. If
 the normally-assigned FR is gone for one week or longer, the FEM should name a
 temporary replacement and establish an appropriate coverage schedule.
- Frequent The FR is present approximately half of the time (i.e., about 2-4 days per week). One person can cover multiple facilities. If the normally-assigned FR is gone for two weeks or longer, the FEM should name a temporary replacement and establish an appropriate coverage schedule.
- Intermittent The FR is present at least one day per week. One person can cover several such facilities.
- Occasional The FR visits the facility 12-24 days a year.
- Seldom The FR visits the facility 6-12 days a year.

5. Column E – Base FR FTE Level

Determine the recommended Base FTE Level using the Table C-3 guide and list in Column E.

Table C-3. Recommended Base FTE Level

Base FR Coverage Level	Base FR FTE Level
Continual	> 1.00 FTE
Frequent	0.50 – 1.00 FTE
Intermittent	0.25 – 0.50 FTE
Occasional	0.10 – 0.25 FTE
Seldom	< 0.10 FTE

6. Column F – Adjusted FR FTE Coverage Level

Following establishment of the Base FR FTE Level for each facility, the FEM may further adjust the level of coverage. This adjustment should take into consideration factors such as those listed below, and be based on the FEM's judgment of the contractor's operational performance and the priority for providing FR oversight. FR coverage for "Other Hazardous Facilities" with a "Low" hazard category is optional.

- Complexity of the facility and facility operations and facility operations involving multiple shifts
- Status of operational rigor; history of Contractor performance for similar activities
- History of significant events/incidents at the facility
- Facility size, age, and material condition
- Programmatic importance and risk associated with successful accomplishment of mission
- Potential for DOE or public interest
- Anticipated changes in the operational status of facility
- Facility configuration changes (like test facilities, for example)
- Availability of other DOE technical oversight

Determine the Adjusted FTE Coverage Level and list in Column F.

7. Column G – Percentage of Time FR is Available to Provide Coverage

Utilizing Quarterly FR Performance Indicator data for the last four calendar quarters, determine the average percentage of time FRs spent performing Contractor oversight (DOE goal is 65%), and list that value in Column G.

8. Column H – Final FR FTE Coverage Level

Calculate Final FR FTE Coverage for each hazardous facility by dividing the Adjusted FR FTE Coverage Level in Column F by the Percentage of Time Available to Provide FR Coverage in Column G. Enter the result in Column H.

9. Total Number of FR FTEs Required

Sum the values in Column H, Final FR FTE Coverage Level, to obtain the Total Number FR FTEs Required, and place that total in the space provided.

10. Total FR FTEs Onboard

Enter the number of FR FTEs currently available to perform oversight at the facilities or groups of facilities included in the analysis.

11. Explanation of Difference

Provide a brief explanation of what action is planned to resolve any difference between Total FR FTEs Required and the Total FR FTEs Onboard.

Appendix D. Evaluated Facility Walkthrough

<u>1.0 Background</u>: An Evaluated Facility Walkthrough is a type of final qualification practical examination where a designated individual or group of individuals observes a FR candidate performing their duties and responsibilities in their assigned facilities. The Evaluated Facility Walkthrough includes a qualifying official observing an FR candidate performing a facility walkthrough and also includes an oral evaluation component (i.e. during the walkthrough) where the FR candidate 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.

The Evaluated Facility Walkthrough verifies the adequacy of the FR candidate's technical knowledge in the actual facility for which they will be responsible. This examination is part of the FR qualification process that follows successful completion of the written examination but precedes the final oral board examination. It ensures that the candidate has gained the necessary level of knowledge; and that the candidate can satisfactorily represent the interests of DOE; monitor contractor performance; and ensure implementation of significant environmental, safety, and health requirements. The Evaluated Facility Walkthrough is evaluated by an examiner (e.g. FR Program Manager (FRPM), Operations Manager, qualified FR) assigned by DOE Management (i.e. responsible for qualifying FRs) and may include an evaluation team.

<u>2.0 Purpose</u>: The purpose of this Appendix is to document guidance for the methodology and process of conducting an Evaluated Facility Walkthrough for the qualification of an FR.

3.0 Methodology

The general methodology for completion of the Evaluated Facility Walkthrough includes the Field Element Management (i.e. the DOE Management responsible for the respective FR program) appointing an examiner that will conduct the Evaluated Facility Walkthrough; Identifying questions to be asked during the walkthrough; Documenting the questions on an evaluation form; Evaluating the conduct of the walkthrough; Documenting and Grading the walkthrough followed by feedback to the FR candidate. These steps are outlined in more detail below.

- 3.1 The DOE Manager responsible for qualification of FRs should identify a DOE Examiner(s) (e.g. Facility Rep Program Manager (FRPM), ESH Supervisor, Operations Supervisor, etc.) that is responsible for evaluating the Facility Walkthrough. The DOE Manager may appoint an Evaluation Team; however, the evaluation team should be kept small to ensure adequate dialogue/evaluation and minimal impact on ongoing facility operations. Consideration should be given to including a qualified FR on the Evaluation Team.
- 3.2 The Evaluation Team should draft questions to be asked of the FR candidate during the walkthrough. The content of the questions should be tailored according to the areas listed below.

- Weak functional areas identified on the written test;
- Hazards (e.g. form/quantity of radiological or fissile material in facility) and credited controls existing in the facility (e.g. SACs, LCOs, SLs, etc.);
- Facility System Components including credited SS and SC SSCs;
 - General Technical Knowledge;
 - Emergency Preparedness;
 - Safety Management Programs (Maintenance, Conduct of Operations, Training, Radiation Safety, Fire Protection Program, Criticality Safety, etc.);
 - Scenario Based questions (e.g. What happens if...). Examples of scenariobased questions include the following:
 - You walk up to a fire door and notice a crack in the window of a fire door that is part of a 2 hour fire barrier. What would you do and what would you expect the contactor to do?
 - You are with a technician who is performing morning rounds and walk through a 2 hour fire door and notice that the door does not close on its own behind. What do you do?
 - You are walking through a waste storage facility and notice that a drum is bulging. What do you do?
 - You are walking through a facility and notice that the radiation survey map is several months old and contact information includes a HP that recently separated from the lab several weeks ago.
 - You are walking through the facility and notice that several operator aids do not have a number identifier/approval signature/ or date. The Operator Log shows that monthly audits have been performed on a monthly basis. What do you do?

The questions, criteria for passing each question, and results (i.e. pass or fail) should be documented on an Evaluated Facility Walkthrough Documentation Form (See example below).

3.3 The FR Candidate should schedule and conduct the walkthrough of the facility with the Evaluation Team while describing items such as the following: mission of the facility; hazard category, hazards and credited SSCs, support equipment; program work; aspects of radiological safety; industrial safety; Safety Management programs; open

- work permits in the facility; aspects of maintaining operational awareness (routine meetings, walkthroughs, surveillances, interactions with facility management); etc.
- 3.3.1 During the conduct of the walkthrough, the Evaluation Team should ask the predetermined questions that are documented on the Evaluated Facility Walkthrough Documentation Form to evaluate the FR candidate's knowledge. The results of the walkdown should be documented by the examiners on the same form. All primary questions in an area should be listed along with an evaluation of each response (Satisfactory or Unsatisfactory). Any follow-up or secondary questions that show a weakness should be recorded with an explanation as to the nature of the weakness.
- 3.3.2 Following completion of the Evaluated Facility Walkthrough and after the Evaluation Team completes evaluation of the FR candidate, they should discuss overall and area grades and document the results on the Evaluated Facility Walkthrough Documentation Form. If any examiner assigns the candidate an overall grade of "Unsatisfactory," the consolidated overall grade should be "Unsatisfactory." The overall grade should be documented on the Evaluated Facility Walkthrough Documentation Form and signed by all examiners.
- 3.4 Following the grading of the exam, the results should be discussed with the FR candidate. If there are areas that are unsatisfactory, remedial training should be conducted followed by an abbreviated Evaluated Facility Walkthrough to test on deficient areas.
- 3.5 Successful completion of the Evaluated Facility Walkthrough should be documented in accordance with Site TQP requirements.

EVALUATED FACILITY WALKTHROUGH DOCUMENTATION FORM (EXAMPLE)

CANDIDATE:	DATE:	
POSITION or FACILITY for QUALIFICATION:		
AREA #1: Facility SC/SS SSCs		
Primary Question 1: (Correct Response)		
Drive and Occasion Oc		
Primary Question 2:		
AREA GRADE (Satisfactory/Unsatisfactory):		
AREA #2 General Technical		
Primary Question 1: (Correct Response)		
Primary Question 2:		
AREA GRADE (Satisfactory/Unsatisfactory):		

WALKDOWN DOCUMENTATION FORM - continued

CANDIDATE:	DATE:	
POSITION or FACILITY for QUALIFICATION: _		
AREA #3: Functional Area Specific		
Primary Question 1: (Correct Response)		
Primary Question 2:		
AREA GRADE (Satisfactory/Unsatisfactory):		
AREA #4 Emergency Response		
Primary Question 1: (Correct Response)		
Primary Question 2:		
AREA GRADE (Satisfactory/Unsatisfactory):		

WALKDOWN DOCUMENTATION FORM - continued CANDIDATE: ______ DATE: _____ POSITION or FACILITY for QUALIFICATION: **AREA #5: Environment Safety and Health (ES&H)** Primary Question 1: (Correct Response) Primary Question 2: AREA GRADE (Satisfactory/Unsatisfactory): AREA #6 Title of Area: Primary Question 1: (Correct Response) Primary Question 2:

AREA GRADE (Satisfactory/Unsatisfactory):

WALKDOWN DOCUMENTATION FORM - continued

CANDIDATE:	DATE:
POSITION or FACILITY for QUALIFICATION:	
AREA #7: Title of Area:	
Primary Question 1: (Correct Response)	
Primary Question 2:	
AREA GRADE (Satisfactory/Unsatisfactory):	
OVERALL GRADE (Satisfactory/Unsatisfactory):	
Remediation Plan Required? Yes / No	
Continuation page(s) attached? Yes / No	
Date:	
Examiner's Signature and Title	Date:
	Date:
Examiner's Signature and Title	
	_ Date: _
Examiner's Signature and Title	
	Date:
Candidate's Signature and Title	