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DOE STANDARD

FACILITY REPRESENTATIVES



U.S. Department of Energy
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Table of Changes

Page/Section	Change
Foreword	Update contact information and internet address.
Page 20/ Section 5.4.8	Edited the discussion of Interim Qualification to match the language in the Definition section and deleted a redundant word.
Page 20/ Section 5.4.10	Clarified qualification requirements for temporary assignments.

Available on the Department of Energy
Technical Standards Program Web site at
<http://www.hss.doe.gov/nuclearsafety/ns/techstds/>

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, deletions) and any pertinent data that may improve this document should be sent to:

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Additional information on the DOE Facility Representative Program is available on the DOE Facility Representative Web site at:

<http://www.hss.energy.gov/nuclearsafety/nfsp/facrep/>

Comments regarding this standard or the DOE Facility Representative Program can be submitted electronically from the Web site.

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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1. SCOPE

- 1.1 Scope. This standard, DOE-STD-1063, *Facility Representatives*, defines the duties, responsibilities and qualifications for Department of Energy (DOE) Facility Representatives, 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 facility representatives (FRs) to provide day-to-day oversight of contractor operations. Field Element Managers 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 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 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, *Facility Representatives*. Furthermore, DOE O 426.1, *Federal Technical Capability*, states that the selection, staffing, training, qualification, and maintenance of qualification of FRs must be consistent with DOE-STD-1063, *Facility Representatives*. 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
 - d. Elements necessary for successful FR Programs at DOE Field Offices

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- 1.4 Applicability. 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. Field Element Managers and Secretarial Officers may develop additional guidance regarding FR requirements.

2. REFERENCES

2.1 Government and Industry Documents.

2.1.1 DOE Directives (Policies, Orders, Manuals, Guides).

- DOE O 151.1C, *Comprehensive Emergency Management System*
- DOE P 226.1A, *Department of Energy Oversight Policy*
- DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*
- DOE O 231.1A, *Environment, Safety and Health Reporting*
- DOE M 231.1-2, *Occurrence Reporting and Processing of Operations Information*
- DOE O 360.1B, *Federal Employee Training*
- DOE M 360.1-1B, *Federal Employee Training Manual*
- DOE M 411.1-1C, *Safety Management Functions, Responsibilities, and Authorities Manual* [including the functions, responsibilities and authorities documents specific to program offices and field elements]
- DOE O 414.1C, *Quality Assurance*
- DOE O 420.1B, *Facility Safety*
- DOE O 422.1, *Conduct of Operations*
- DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*
- DOE P 426.1, *Federal Technical Capability Policy for Defense Nuclear Facilities*
- DOE O 426.1, *Federal Technical Capability*
- DOE O 430.1B, *Real Property Asset Management*
- DOE O 440.1B, *Worker Protection Program for DOE (Including the National Nuclear Security Administration) Federal Employees*
- DOE O 442.1A, *Department of Energy Employee Concerns Program*
- DOE M 442.1-1, *Differing Professional Opinions Manual for Technical Issues Involving Environment, Safety, and Health*
- DOE P 442.1, *Differing Professional Opinions on Technical Issues*
- DOE P 450.4, *Safety Management System Policy*
- DOE M 450.4-1, *Integrated Safety Management System Manual*
- DOE G 450.4-1B, *Integrated Safety Management System Guide*
- DOE P 450.7, *Environment, Safety and Health (ESH) Goals*
- DOE O 470.4A, *Safeguards and Security Program*

2.1.2 DOE Standards.

- DOE-HDBK-1080, *Guide to Good Practices for Oral Examinations*
- DOE-HDBK-1118, *Guide to Good Practices for Continuing Training*
- DOE-HDBK-1204, *Guide to Good Practices for the Development of Test Items*

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- DOE-HDBK-1205, *Guide to Good Practices for the Design, Development, and Implementation of Examinations*
- DOE-STD-1027, *Hazard Classification and Accident Analysis Techniques for Compliance with DOE O 5480.23, Nuclear Safety Analysis Reports*
- DOE-STD-1146, *DOE General Technical Base Qualification Standard*
- DOE-STD-1151, *Facility Representative Functional Area Qualification Standard*
- DOE-STD-3006, *Planning and Conduct of Operational Readiness Reviews*
- DOE-STD-3009, *Preparation Guide for U.S. DOE Nonreactor Nuclear Facility Safety Analysis Reports*

2.1.3 Other.

- 10 Code of Federal Regulations (CFR) Part 820, *Procedural Rules for DOE Nuclear Activities*
- 10 Code of Federal Regulations (CFR) Part 830, *Nuclear Safety Management*
- 10 Code of Federal Regulations (CFR) Part 835, *Occupational Radiation Protection*
- 10 Code of Federal Regulations (CFR) Part 850, *Chronic Beryllium Disease Prevention*
- 10 Code of Federal Regulations (CFR) Part 851, *Worker Safety and Health Program*
- DOE Implementation Plan for DNFSB Recommendation 92-2, *DOE's Facility Representative Program at Defense Nuclear Facilities*, November 5, 1992
- DOE Implementation Plan for DNFSB Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Programs*, May 5, 1998
- *Principles for a Strong Nuclear Safety Culture*. Institute of Nuclear Power Operations, November 2004
- *Effective Engineering Work Management*, INPO 04-002. Institute of Nuclear Power Operations, December 2004
- *Guidelines for Effective Nuclear Supervisor Performance*, INPO 04-003, November 2004

2.2 Order of Precedence. In the event of conflict between the text of this document and DOE Order, the DOE Order takes precedence. Nothing in this document supersedes applicable laws and regulations.

3. DEFINITIONS

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

Activity Level. The frequency of handling or moving hazardous material, or the frequency of activities involving one or more hazards creating an opportunity for the occurrence of a reportable event (consider Appendix C, PROCESS TO DETERMINE FACILITY REPRESENTATIVE STAFFING, for activity level determination).

Cognizant Secretarial Officer. (DOE M 411.1-1C) 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). 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.

Core Qualification. 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 and DOE-STD-1151.

Contractor. Any person or organization under contract with the DOE, or under sub-contract with a DOE contractor, with the responsibility to perform activities in connection with any facility, laboratory, or program at a DOE-owned or leased facility.

Department or DOE. The Department of Energy.

DOE Oversight. (DOE O 226.1A) 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.

Documented Safety Analysis. (10 CFR 830.204) 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.

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Facility. (DOE O 430.1B) 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.

Facility Evaluated Walkthrough Examination. A tour through a facility with a qualifying official for the purpose of verifying an FR candidate's knowledge of the facility.

Facility Representative. An individual assigned responsibility by the Field Element Manager (or designee) for monitoring the safe and efficient performance of the 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 facility's DOE Line Manager.

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

Field Element or Organization. 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.

Hazard. (10CFR830.3) 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).

Hazard Categories. The consequences of unmitigated releases of radioactive material are evaluated as required by 10CFR830, *Nuclear Safety Management*, 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.

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

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DOE-STD-1027 contains additional information on methods and criteria for determination of Hazard Categories.

Hazard Classes. 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.

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

Hazardous Material. (DOE-STD-3009) Any solid, liquid, or gaseous material that is toxic, explosive, flammable, corrosive, or otherwise physically or biologically threatening to health. Candidate hazards include radioactive materials, hazardous chemicals as defined by OSHA in 29 CFR 1910.1200 and 29 CFR 1910.1450; any material assigned a reportable quantity value in 40 CFR 302, Table 302.4; threshold planning quantities in 40 CFR 355 Appendix A; threshold planning quantities in 29 CFR 1910.119; level of concern quantities in EPA's *Technical Guidance for Hazard Analysis—Emergency Planning for Extremely Hazardous Substances*; or materials rated as 3 or 4 in National Fire Protection Association 704, *Identification of the Fire Hazards of Materials*. (Another definition of hazardous material in 49 CFR 172 applies to hazardous material that is to be transported in commerce.)

Interim Qualification. Specific requirements that must be met prior to an FR being assigned to provide limited coverage in a facility for which he or she is not fully qualified.

Line Organization. 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 Field Element Managers 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.

Non-Categorized Facilities. Other hazardous facilities identified by the Field Element Manager 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.

Occurrence Report. (DOE M 231.1-2) A documented evaluation of an event or condition that is prepared in sufficient detail to enable the reader to assess its

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significance, consequences, or implications and to evaluate the actions being proposed or employed to correct the condition or to avoid recurrence.

Operational Awareness. (DOE O 226.1A) Operational awareness refers to those activities taken by DOE line personnel to maintain cognizance of overall facility or activity status, major changes planned, and overall safety posture. Activities include routine day-to-day monitoring of work performance through facility tours/walkthroughs, work observation, document reviews, meeting attendance and participation, and ongoing interaction with contractor workers, support staff, and management.

Oral Board. An oral examination covering a broad area of knowledge (at the job level vs. task or duty area) involving the questioning of one trainee/job candidate by one or more examiners.

Oral Checkout. 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.

Oral Examination. 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.

Proficiency. The level to which a qualified FR is current on technical knowledge, assigned facilities, procedures, etc. Regaining proficiency may be required by field element programs and procedures after an absence from FR duties, a period of inactivity at a given facility, or based on length of time between the FR's full qualification and next requalification date.

Qualification. The process of completing requirements determined to be necessary to performing the FR role in a given facility. This process includes acknowledgment of the required education and experience, completion of the core knowledge requirements to perform FR duties, facility-specific requirements determined by the field element, and oral and written examinations.

Qualifying Official. An individual, designated by the Field Element Manager or designee, authorized to sign the qualification card after verifying the candidate possesses the appropriate level of knowledge or skills for such signature.

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

Training Equivalency. The completion of training requirements by an individual through the means of prior experience or training, which results in comparable knowledge or capabilities equivalent to that which would be gained by complying

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with the specified requirements. Prior experience and training is evaluated and documented to demonstrate equivalency to the specified requirements.

Training Program. A planned, organized sequence of activities designed to prepare persons to perform their jobs, to meet a specific position or classification need, and to maintain or improve their performance on the job.

Walkthrough. A tour through a facility to maintain operational awareness of the facility.

4. 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 expected of FRs. Field Element Managers 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 facility, operating procedures, facility authorization 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, 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 difficulty of the work. This knowledge is primarily acquired by walking through the facility, observation of work in progress, review of facility records and documentation, and attendance at appropriate 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 PERFORMANCE INDICATORS. Field Element Managers shall ensure that operating contractors apprise FRs of planning, scheduling, maintenance, operations review, and safety review meetings.

4.1.2 Communication. The FR shall maintain frequent communication with field element supervision. The FR shall ensure that DOE Line Management is cognizant of current facility conditions.

4.1.3 Availability. The FR shall be available to respond to 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, if required, and reporting of occurrences and any safety or operational concerns.

4.1.4 Independence. An FR should be in a position to provide information to DOE Line Management independent of programmatic responsibilities. Therefore, Field Element Managers should not make FRs responsible for preparing budgets or schedules for assigned facilities. In cases where separating programmatic responsibilities is impractical, the Field Element Manager or designee should approve all assignments of programmatic responsibilities to FRs.

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- 4.1.5 Scope of Reviews. The FR shall observe, evaluate, and report on the effectiveness of the operating contractor in multiple areas important to safe, efficient operations, such as operational performance, 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 to deficiencies identified by facility reviews, including corrective actions that stem from identifying, reporting, and tracking nuclear safety noncompliance under the Price-Anderson Amendments Act of 1988.
- 4.1.6 Oversight Routine. FRs should vary their day-to-day presence in assigned 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 can achieve beneficial oversight by walking through assigned facilities with contractor facility managers, certain benefits are lost when FR presence is 100% predictable and always with facility managers.
- 4.1.7 Stop Work Authority. The FR shall "Stop Work" in the following instances, or in accordance with the guidance provided by the Field Element Manager:
- 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.
 - 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 line/program managers and senior line 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 Line Management. If DOE Line 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.

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.

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- 4.1.9 Relationship of Facility Representative with Other DOE Oversight Personnel. Descriptions of Senior Technical Safety Managers and Safety System Oversight and their relationships to FRs can be found in DOE O 426.1. FRs shall follow this guidance and 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 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 Program Office and Field Element 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 DOE Line Management and, therefore, should exercise authority consistent with specific program and management 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 prescribed in DOE M 231.1-2.
 - c. The contractor is responsible for the safe and efficient operation of the 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 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 and discussing identified deficiencies and corrective action with contractor management. Field Element Managers 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. Field Element Managers should ensure that the contractor does not rely solely on the FR to identify or correct deficiencies.

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- f. Minor events or problems are frequently clues that indicate more general problems in the contractor's organization, management, personnel abilities, or practices. Therefore, attention to detail in the identification and correction of minor problems can result in significant improvements in the contractor's performance. When corrective actions are called for, DOE line/program 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 certain rules of conduct, or protocol, while performing assigned duties, including the facility's approved conduct of operations procedures. Formal protocols should be established to include the following:
 - 1. FRs should avoid interrupting operators in their work. The FR should wait for opportune times to question facility operators. If the FR is observing operations or activities, he or she should perform observations unobtrusively. Operators carry the true burden of safety, and a diversion from their duties could adversely affect plant operations.
 - 2. The FR should maintain frequent contact with facility management. When FRs observe something that raises a safety concern, they should discuss their concerns with the facility management. If the contractor response is deemed unsatisfactory, the FR should discuss the concern with DOE Line Management for appropriate action.
 - 3. FRs should use established chains of command for all requests for action, except when exercising "Stop Work" authority.
 - 4. FRs shall keep a record of their activities and observations in accordance with local procedures. FRs should periodically review their records to determine if a systemic or recurring problem exists with contractor activities at one or more facilities. This record is subject to review in audits or appraisals and may be used by the Field Element Manager 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 226.1A, DOE M 231.1-2, DOE O 422.1, and DOE M 411.1-1C, and associated lower-tier functions and responsibilities documents.

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4.2.1 Deputy Secretary.

- a. Establish DOE policy on FRs.
- b. Resolve any cross-organizational disputes regarding FRs.
- c. Ensure the Facility Representative Program Manager and Cognizant Secretarial Officers take actions necessary to consistently meet program goals.

4.2.2 DOE Facility Representative Program Manager.

- a. Guide DOE-wide program implementation and continuous improvement.
- b. Monitor DOE-wide implementation performance and disseminate information to senior DOE and 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 Web page.
- f. Host periodic FR Steering Committee meetings.

4.2.3 Cognizant Secretarial Officers.

- a. Review overall effectiveness of FR programs at assigned field elements, including performance indicator information and accomplishment of program self-assessments and associated corrective actions.
- b. Ensure adequate allocation and use of resources for FR programs at assigned field elements.

4.2.4 Field Element Managers.

- a. Determine facility coverage needs and make assignments of qualified FRs to maintain day-to-day oversight of applicable facilities, 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, and ensure that affected DOE and contractor managers

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understand the role of the FRs and provide the necessary access and support.

- d. Establish a formal protocol for FRs to follow while performing their duties.
- e. Periodically evaluate the effectiveness of the field element's FR program and pursue changes to improve overall performance and effectiveness, using Appendix A, FACILITY REPRESENTATIVE PERFORMANCE INDICATORS, and Appendix B, FACILITY REPRESENTATIVE PROGRAM ASSESSMENT GUIDE.
- f. Provide developmental opportunities for FRs. Examples of such opportunities could be 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 take appropriate action to resolve identified safety and management issues.
- j. Ensure that FRs have the authority to "Stop Work" in the facility. The Field Element Manager 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. Guide and direct FR program implementation within the field element.
- c. Ensure that FRs are effectively contributing to the field element and that DOE line/program managers are effectively using FRs' contributions.
- d. 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. Duties may also included ensuring that training materials, qualification cards, qualification standards, and examinations are periodically updated.

5. FACILITY REPRESENTATIVE PROGRAM REQUIREMENTS

- 5.1 Facility Coverage and Staffing. Field Element Managers shall evaluate each hazardous facility to determine an appropriate level of FR coverage. Appendix C, PROCESS TO DETERMINE FACILITY REPRESENTATIVE STAFFING, provides a detailed process to determine appropriate facility coverage and assignment and is the methodology to be used. The Field Element Manager or designee should prepare staffing plans to document these assignments and supporting rationale.
- a. Field Element Managers shall assign one or more full-time Facility Representatives to each nuclear hazard category 1 facility, unless the Field Element Manager and Cognizant Secretarial Officer agree that less coverage is necessary. For nuclear hazard category 2 or 3 facilities, radiological facilities, and hazardous non-nuclear facilities, Field Element Managers may assign an FR to two or more facilities. In unusual situations, 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. Field Element Managers should make assignments so that FRs spend a significant portion of their time in their assigned facility(s). Location of FR offices near or within the facility of primary responsibility is preferable. Field Element Managers should make assignments so that administrative work does not prevent FRs from performing their primary function of monitoring the performance of the facility and its operations as described in Section 5.2.
 - c. To the degree that FRs are transferred or otherwise lost from the program, Field Element Managers should take necessary steps to ensure that departing FRs are replaced in a timely manner. The goal of the Field Element Manager 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), Field Element Managers 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, Field Element Managers should also consider making use of existing DOE and NNSA technical intern

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programs to provide a source of prospective FRs candidates, especially for sites that have experienced historically high attrition rates.

- e. Field Element Managers should 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. In addition to the recommended annual review of staffing plans and assignments of FRs, Field Element Managers shall reevaluate each hazardous facility on a biennial basis to determine an appropriate level of FR coverage.
- f. Field Element Managers may also establish provisions for changing coverage. For example, as the degree of hazard, complexity, or other governing factors is reduced, the Field Element Managers may increase the number of processes, facilities, buildings or areas covered by a single FR. Field Element Managers may use special coverage assignments for a facility that operates only intermittently. Also, Field Element Managers 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.
- g. Field Element Managers should make FR assignments to optimize effective interaction with the facility operating organization line management responsible for ensuring safe and efficient performance at the facility. For example, Field Element Managers may make assignments based on facility and/or operating organization subdivisions. If the contractor has established a building or facility manager concept, the Field Element Manager may assign FRs on a similar basis.
- h. Field Element Managers should ensure that adequate facility coverage is maintained by qualified FRs during any period the assigned FR has extended absence.

5.2 Facility Assessment Plans and Reports. Field Element Managers should develop facility assessment plans consistent with the requirements in DOE O 226.1A. Assessment plans may review compliance with the safety directives and standards listed in section 2.1.

- a. Field Element Managers should ensure that reporting does not become an onerous task that unduly limits the oversight activities of the FR. In order to facilitate a direct communications link with senior contractor management, the FR and DOE managers should meet with senior contractor managers on a periodic basis to report the results of FR assessments and to discuss trends and systemic issues.

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- 5.3 Unencumbered Access. Field Element Managers shall ensure that FRs have independent, direct, and immediate access to contractor personnel, facilities, and records, as necessary, to carry out their assigned responsibilities. Unencumbered access does not preclude an FR 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.
- a. Field Element Managers shall ensure that FRs have immediate, unannounced access to every assigned facility, consistent with necessary security and safety controls. FRs shall maintain the proper clearances, training, personal protective equipment, and physical qualifications for such access.
 - b. Field Element Managers shall ensure that contractor management affords the FR the opportunity to attend meetings, training classes, operator certification boards/examinations, etc., that contribute to the execution of the duties and responsibilities of the FR.
 - c. Access to some contractor records may be limited as specified in the contract between DOE and the contractor. For example, the contract may include an item such as DEAR 970.5204-79, "Access to and Ownership of Records," which sets forth certain categories of records that may be considered to be the property of the contractor.
 - d. Due to safeguards and security requirements, Field Element Managers may require that more than one properly trained and cleared individual be present before access can be gained to some areas.
- 5.4 Training and Qualification. The Field Element Manager shall develop the overall qualification program in accordance with DOE O 426.1, DOE M 360.1-1B, and any additional elements defined in this standard. This program shall include the formal and on-the-job training elements specific to the assigned facilities and systems. Field Element Managers shall define and document the qualification process and authority of personnel involved in the training of FRs. FR supervisors should ensure that training materials, qualification cards, qualification standards, and examinations are periodically updated to reflect changing facility conditions and new or updated DOE directives. The steps involved in the various levels of qualifications are described below and in Table 1 – Facility Representative Qualification.
- 5.4.1 Formal Training. Field Element Managers shall ensure that FRs receive the training necessary for the position. Frequently, appropriate courses and training can be found within the DOE complex, other Federal agencies, or from non-government sources within the scientific community to satisfy some of the training needs. Headquarters offices, in coordination with the field elements, can develop additional training

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courses and material to help meet non-facility-specific FR training needs. Close collaboration among field elements and Headquarters Line Management is encouraged to minimize development costs for courses. In cases where formal course work is not practical, Field Element Managers should ensure that informal training provides FRs the required level of knowledge.

- 5.4.2 On-the-Job Training. Field Element Managers shall establish the “On-the-Job Training” requirements, regarding the controls, activities, processes, and specialized procedures necessary for qualification. Encouraged practices include mentoring of FR candidates by qualified, experienced FRs and providing ample opportunities for candidates to participate in facility operational awareness activities.
- 5.4.3 Continuing Training. Field Element Managers² shall establish a continuing training program to enhance and strengthen the knowledge, skills, and abilities of FRs to ensure that they are aware of significant new hazards or activities they may encounter during the performance of their duties, and to provide a mechanism to share lessons learned from facilities on the site and across the complex. Guidance for continuing training is included in Appendix A of DOE-STD-1151. Continuing training should also be used to stay abreast of changing technologies, enhance skills, improve performance and proficiency, and review new requirements.
- 5.4.4 Qualification Standard. Field Element Managers shall establish a corresponding standard detailing the required level of knowledge for each site/facility-specific objective.
- 5.4.5 Qualification Card. Field Element Managers shall establish an FR qualification card (“qual card”) or equivalent for each major facility or group of lesser facilities for which they are responsible. The qualification card should contain the following:
- a. The specific competencies/learning required.
 - b. The training method(s) used, such as classroom, computer-based, on-the-job, self study, or walkthrough.
 - c. The evaluation method(s) used by the qualifying official, such as written examinations, job performance measures, operational evaluations, simulator examinations, or oral evaluation.
 - d. Provisions for signatures to attest to satisfactory completion of each objective to the appropriate level of knowledge.

² In some instances, organizations external to the Field Element may be tasked with establishing and maintaining continuing training or elements thereof (e.g., NNSA Service Center).

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- e. Final qualification requirements. These requirements include a Comprehensive Written Examination, a Facility Evaluated Walkthrough Examination with a qualifying official, and an Oral Board.
- 5.4.6 Training Equivalencies. Field Element Managers shall provide justification for each equivalency based on DOE O 426.1. Justification includes appropriate support documentation such as transcripts or certificates of completion. Field Element Managers shall maintain a copy of the approved equivalency in the FR's qualification record.
- 5.4.7 Core Qualification. Core qualification requirements are presented in DOE-STD-1146 and DOE-STD-1151. Having one qualification card that covers both core and site/facility-specific requirements is acceptable.
- 5.4.8 Interim Qualification. DOE Field Element Managers 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. Field Element Managers shall formally define and document the duties and authorities that may be assigned to an Interim Qualified FR. Field Element Managers should minimize the time FRs spend under Interim Qualification. Field Element Managers should also determine the compensatory measures to be implemented during periods while no fully qualified FR is assigned to a given facility. In addition, some Field Element Managers designate FRs, as described in Section 5.5, at the completion of interim qualifications.
- 5.4.9 Full Qualification. 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 and verify the eligibility of the candidate to become an FR. Qualification is granted by the Field Element Manager or designee.
- 5.4.10 Qualification on Additional Facilities After Full Qualification. Upon assignment of FRs to a different or additional facility or site, Field Element Managers or their designees should identify any additional qualification requirements that are necessary for an FR to complete for that facility or site. For permanent assignments, the additional qualification requirements should, as a minimum, consist of the qual card for the new facility, a walkthrough, and a written and/or oral exam. For temporary assignments (1 month to 6 months), the additional qualification requirements should, as a minimum, consist of a review of facility documentation designated by the Field Element Manager or designee, a discussion with the Field Element Manager or designee, and documentation of the temporary assignment and qualification.

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- 5.4.11 Requalification. FRs shall requalify at a minimum of every five years. The Field Element Manager shall establish processes or procedures to ensure that FRs do not exceed the five year time limit for requalification. The purpose of requalification is to ensure that the incumbent FR maintains the knowledge and skills necessary to properly perform FR duties at the assigned facilities. 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. DOE Field Element Managers shall document the requalification process, which shall as a minimum include the following:
- a. Items added to the FR Qualification Cards since the individual's last qualification or requalification, including General Technical Base, Facility Representative Functional Area Qualification Standard, and applicable Site Specific Qualification Standards.
 - b. Determination by the FR's supervisor of what system, process, and facility documentation changes have occurred since qualification (or last requalification) that are to be included for examination.
 - c. Determination by the FR's supervisor, based on demonstrated performance, any areas of theory or fundamentals, if any, which should be included for examination.
 - d. A written examination and/or oral check-out covering the material included for requalification examination.³
 - e. Certification of requalification granted by the DOE Field Element Manager or designee.
- 5.4.12 Proficiency. Field Element Managers shall formally define proficiency requirements. These requirements shall include actions 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 – Facility Representative Qualification. DOE Field Element Managers shall document the actions required to regain proficiency following periods of inactivity as an FR, which shall as a minimum include the following:
- a. Demonstration of knowledge of any facility modifications since the FR last served in that capacity.

³ An Oral Board is not required for requalification.

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- 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.
- 5.4.13 Examinations. The Field Element Manager, 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 in DOE-HDBK-1080, DOE-HDBK-1204, and DOE-HDBK-1205.
- a. Facility Evaluated Walkthrough Examination. Field Element Managers shall establish requirements for facility evaluated walkthroughs of assigned facilities at selected points 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.
 - b. Written Examinations. During Full Qualification, the Field Element Manager or designee shall administer a written examination to the FR candidate as listed in Table 1 – Facility Representative Qualification. The examination should include only subjects on the FR core and facility-specific qual cards. The minimum passing grade shall be 80%.
 - c. Oral Examinations. Oral examinations (e.g., oral check-outs) may be used in FR qualification as shown in Table 1 – Facility Representative Qualification. 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 Field Element Manager or designee shall convene and chair an Oral Board for the purpose of conducting an oral examination of the FR candidate. The Field Element Manager or designee shall determine the composition of the Oral 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.” Field Element Managers 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

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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. Failure of Written or Oral Examinations. Field Element Managers 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. Field Element Managers or their designees may direct candidate reexaminations, with concentration in the identified weak areas. Field Element Managers should reassign FR candidates who repeatedly fail examinations to a non-FR position. In rendering a final decision on reassignment, the Field Element Manager 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	Facility Evaluated Walkthrough Examination	Exam Type	Oral Board
1. Core Qualification	X [Note 1]	X	-	-	Written [Note 2]	-
2. Interim Qualification	X [Note 1]	X	<u>And</u> as determined by the Field Element Manager when an FR provides interim coverage in a facility for which he or she is not fully qualified.			
3. Full Qualification	Core Qualified as Noted in Row 1, <u>and</u> →		X	X	Written [Note 2]	X [Note 4]
4. Qualification on additional facilities after Full Qualification	-	-	X	X	Written and/or Oral check-out [Note 4]	-
5. Periodic Requalification [Note 3]	Items added, and areas of theory or fundamentals, if any, as determined by the Supervisor.		Changes to system, process, and facility documentation, as determined by the Supervisor.	[Note 5]	Written and/or Oral check-out [Notes 4,5]	-
6. To regain proficiency after inactivity as an FR	Any items added	Any items added	Any items added	[Note 5]	Written and/or Oral check-out [Notes 4,5]	-

Notes:

1. Satisfactory completion of the General Technical Base Course on the DOE Online Learning Center may be used.
2. Written exams for Core Qualification and Full Qualification may be combined into a single written exam.
3. The steps in Row 5, Periodic Requalification, may be combined with steps in Rows 4 and/or 6 to meet those qualifications concurrently, if necessary.
4. Oral check-outs and boards are described in more detail in DOE-HDBK-1080, *Guide to Good Practices for Oral Examinations*.
5. A Facility Evaluated Walkthrough Examination may be utilized in place of a Written and/or Oral check-out.

- 5.5 Designated Facility Representatives. Field Element Managers may establish criteria for designating FRs. For example, to become “Designated,” an FR should be core qualified and have at least six months experience in an FR position. The purpose of this “Designation” is to indicate unique technical proficiency for the purposes of retention based upon unique competitive level codes. Designation is not equivalent to full qualification as designation will normally occur before an FR achieves full qualification. Some Field Element Managers designate FRs at the completion of interim qualifications.
- 5.6 Recruitment, Selection, Retention, and Advancement Considerations. As qualified FRs gain experience, they become a valuable resource of DOE. Field Element Managers 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, Field Element Managers and Cognizant Secretarial Officers 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. Field Element Managers and Cognizant Secretarial Officers should identify these developmental experiences and training opportunities in the personnel development plans for their organizations, and in FRs’ Individual Development Plans. DOE P 426.1 and DOE O 426.1 provide various mechanisms that can be used to retain these valuable resources.
- 5.6.1 Recruitment and Selection. Field Element Managers should develop position descriptions and vacancy announcements that reflect the requirements of this standard. Several mechanisms available to assist field elements in the recruitment of high-quality candidates are identified in DOE O 426.1. In order for individuals to enter an FR training and qualification program with the greatest opportunity for successful completion, Field Element Managers should select candidates based on the following criteria.
- a. Education Requirements. Educational requirements are necessary to ensure that the individuals possess the baseline knowledge to successfully complete the training program, the ability to function independently in the field, and the ability to understand scientific principles and communicate in technical terms. Field Element Managers should establish the expected minimum education necessary to provide competent technical assessment of contractors. Minimum education level is expected to be a Baccalaureate degree or equivalent technical degree. Alternately, completion of an appropriate formal training program and extensive experience in a directly related field such as naval nuclear power, commercial nuclear power, radioactive waste management, nuclear weapons,

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nuclear research, industrial safety, chemical safety, or accelerator facility programs is also sufficient.

- b. Experience Requirements. Field Element Managers should also establish and apply facility- and operations-specific experience criteria as part of the selection criteria for FR candidates. The facility- and operations-specific experience criteria should reflect the complexity, hazard classification, and activity level of the facility and be commensurate with the responsibilities, authority and duties of the assigned position.
- c. Physical Requirements. Field Element Managers should also establish and apply appropriate physical requirements. For example, most positions require moderate exertion, such as walking over uneven surfaces; climbing over equipment, machinery, ladders, and scaffolding; crouching, bending, stooping, stretching; and moving in confined spaces. Most positions also involve regular and recurring exposure to moderate risks and discomforts from use of protective clothing in elevated temperatures; close proximity to moving machinery, heavy equipment, hoisting and rigging activities; potential exposure to hazardous and radioactive materials; and exposure to normal industrial and chemical hazards. Safety and protective clothing and equipment such as respirators, safety shoes and glasses, ear protection, dosimeters, or other equipment is usually necessary. The use of emergency protective equipment may involve significant exertion over extended periods of time. FRs need to be capable of working in what is often an industrial environment.
- d. Security Requirements. Field Element Managers should also establish and apply appropriate security requirements so that FRs have adequate security clearances to fulfill their duties.

5.6.2 Retention and Advancement. Several mechanisms may be available to assist field elements in the retention of high-quality personnel necessary for their program. Field Element Managers 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. Access and interaction with senior DOE and Facility Managers such as on joint walkthroughs and feedback meetings
- c. Mentoring from senior DOE and Facility Managers
- d. Qualification bonuses
- e. Performance bonuses
- f. Requalification bonuses

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- g. Anniversary bonuses
- h. Educational reimbursement incentives
- i. Quality Step Increases based on experience and performance
- j. Higher Pay Grade or Band based on higher facility hazard category
- k. Higher Pay Grade or Band based on scope of facility assignments
- l. Higher Pay Grade or Band for FR Program Managers, Supervisors, Work Leads, and Team Leads
- m. Promotions based on knowledge and experience
- n. Reimbursement incentives for obtaining and maintaining professional certifications

5.7 Facility Representative Program Performance Assessment and Feedback. Field Element Managers shall periodically evaluate and adjust their FR programs as necessary to ensure a high and continuously improving level of performance. The following methods may be used.

- 5.7.1 Performance Indicators. Carefully chosen performance indicators (PIs) can provide valuable measures of the effectiveness of FR programs. DOE-wide Performance Indicators that address compliance to program requirements, improvements to safety, and performance effectiveness are shown in Appendix A. Field elements may provide additional site-specific performance indicators. Field elements shall submit quarterly PI data to Program Offices at DOE Headquarters, with a copy to the DOE FR Program Manager. PIs for the preceding quarter are due to Headquarters on the first working day of February, May, August, and November. The DOE FR Program Manager shall use these PIs to evaluate DOE-wide program effectiveness and compile a DOE-wide PI report for dissemination to applicable field elements and program offices.
- 5.7.2 Field Element Self-Assessments. Field Element Managers shall ensure that their FR Programs are evaluated periodically (not to exceed three years) relative to the requirements in Sections 4 and 5 of this standard. Field Element Managers should use evaluators who have adequate knowledge and experience to conduct meaningful reviews and provide the results of these self-assessments to the responsible Program Office at DOE Headquarters, with a copy to the DOE FR Program Manager. Guidance for the performance of these assessments is provided in Appendix B.
- 5.7.3 Peer Reviews. Field Element Managers or designees should invite FRs and/or FR management from other sites to perform peer reviews of their FR programs. These reviews may be accomplished as part of the periodic self-assessment described in section 5.7.2. Peer reviews can

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provide a mutual benefit through sharing lessons learned and can foster a more consistent FR program throughout the DOE.

- 5.7.4 Annual Facility Representative Workshop. Field Element Managers should encourage as many FRs, FR Program Sponsors, and line managers as possible to attend the 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 PERFORMANCE INDICATORS

Scope: Carefully chosen Performance Indicators (PIs) can provide valuable measures of the effectiveness of FR Programs. These PIs will be used by Field Element Managers and DOE-HQ personnel to evaluate program effectiveness. Other PIs may be useful at a local level 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. Effectiveness in providing contractor oversight may be difficult to capture in measurable terms; therefore, some subjective measures are used.

General Points:

1. The attached Performance Indicators shall be used DOE-wide as a minimum. Field elements may use additional, local PIs that suit their own needs.
2. PIs for DOE-wide use are divided into the following categories: Staffing, Training and Qualification, FR Program Accomplishments, and Fulfilling the FR Role.
3. PIs that measure contractor performance have been avoided as measures of FR program effectiveness.
4. PIs shall be reported quarterly by Field Element Managers to program offices, 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. Performance Indicators, their methods of calculation, and goals (or targets) are presented in the following tables.

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Appendix A

STAFFING			
TYPE	INDICATOR NAME	HOW TO CALCULATE	GOAL
DOE-wide	Staffing level (%)	$\frac{\text{Number of FR positions filled}}{\text{Number of FR positions (per DOE-STD-1063 Appendix C)}}$ <p>[Indicate if the authorized FTE level is different than the staffing level per DOE-STD-1063]</p>	100% of [#FRs]
DOE-wide	Attrition	<p>Number of FRs leaving the program this quarter. Provide reason for attrition using the following options: Transfer, Promotion, Lateral, Retirement, or Resignation.</p> <p><u>Definitions</u> 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 GS or ES level Retirement: Leaves DOE for retirement Resignation: Leaves DOE other than retirement</p>	N/A

TRAINING AND QUALIFICATION			
TYPE	INDICATOR NAME	HOW TO CALCULATE	GOAL
DOE-wide	% of FRs Core Qualified (see Section 3 Definition)	$\frac{\text{Number of FRs Core Qualified}}{\text{Number of FR positions (per DOE-STD-1063 Appendix C)}}$	None specified
DOE-wide	% of FRs Fully Qualified	$\frac{\text{Number of Fully Qualified FRs}}{\text{Number of FR positions (per DOE-STD-1063 Appendix C)}}$	Greater than 80%

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Appendix A

FACILITY REPRESENTATIVE PROGRAM ACCOMPLISHMENTS			
TYPE	INDICATOR NAME	INFORMATION TO PROVIDE	GOAL
DOE-wide	Accomplishments	Any accomplishments of note during the quarter, including examples where safety and/or facility mission accomplishment is enhanced due to FR interaction, improvements in site Facility Rep programs, hiring new Facility Reps, etc.	None specified

FULFILLING THE FACILITY REPRESENTATIVE ROLE			
TYPE	INDICATOR NAME	HOW TO CALCULATE	GOAL
DOE-wide	% of time FR is performing FR duties	$\frac{\text{Number of available work hours this quarter (Note 1) - hours performing Non-FR duties I (Note 2)}}{\text{Number of available work hours this quarter (Note 1)}}$	Greater than 65%

Note 1 - Number of available work hours this quarter equals the actual number of hours an FR works in a calendar quarter. These include the activities in Column 1 of the additional guidance below. The hours do not include leave time (sick, annual, or other) or holidays. Overtime hours spent performing non-FR duties should not be included.

Note 2 - Non-FR Duties include any duty assigned to an FR by Management not directly supporting duties, responsibilities, and authorities of the FR position. These include the activities in Column 2 of the additional guidance below

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Appendix A

Additional Guidance on Computing Facility Representative
Time Spent Performance Indicators

Activities that Count as Time Spent Performing FR Duties *		Activities That Should Not Be Counted in Numerator
COLUMN 1		COLUMN 2
Goal: Greater than 65%		
Plant walkthroughs/walkdowns	Emergency Operations Center assignments	Training (mandatory refresher, etc.) not related to an FR's abilities to perform oversight.
Surveillances	Performing facility review activities (e.g., ISMS verification, ORR, RA) in a facility at the Facility Rep's site	
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	
Facility grounds and property tours	Reviewing contractor documents and procedures at desk	Administrative/Collateral duties
Completing facility condition assessments	Attending facility meetings	
Commute time between facilities or driving tours within facility and between oversight activities	Communications involving issues requiring DOE oversight	
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	

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Appendix A

EXAMPLE REPORT – RED RUN Site

**Performance Indicators for First Quarter CY2010
(January 2010 through March 2010)**

Submitted April 30, 2010

STAFFING			
TYPE *	INDICATOR NAME	INDICATOR VALUE	DOE GOAL
DOE-wide	Staffing level (%)	90% [9 of 10]	100%
DOE-wide	Attrition	1 – Promotion 1 – Retirement	N/A

TRAINING AND QUALIFICATION			
TYPE	INDICATOR NAME	INDICATOR VALUE	DOE GOAL
DOE-wide	% of FRs Core Qualified	90% [9 of 10]	None specified
DOE-wide	% of FRs Fully Qualified	70% [7 of 10]	Greater than 80%

FACILITY REPRESENTATIVE PROGRAM ACCOMPLISHMENTS			
TYPE	INDICATOR NAME	INFORMATION	DOE GOAL
DOE-wide	Accomplishments	<p>Safety and/or facility mission accomplishment is enhanced due to FR interaction:</p> <ul style="list-style-type: none"> FRs at the nuclear fuel facility recognized the potential for a high airborne radioactivity condition being caused by leak-by of a contaminated system pressure relief valve. Air samples conducted as a result of the FRs' questions confirmed a high airborne condition. An FR observed a worker who was working approximately 21 feet above a concrete slab without using fall protection equipment. The worker immediately began using the safety equipment and the safety manager briefed workers on the incident. <p>Improvements in site Facility Rep programs:</p> <ul style="list-style-type: none"> An FR completed qualification at an additional facility. <p>Other:</p> <ul style="list-style-type: none"> Red Run Site hired a new FR in February. Core qualification is underway. 	None specified

FULFILLING THE FACILITY REPRESENTATIVE ROLE			
TYPE	INDICATOR NAME	INDICATOR VALUE	GOAL
DOE-wide	% of time FR's performing FR duties	75%	Greater than 65%

* All samples in this table are the minimum DOE-wide indicators necessary to meet the intent of this standard. Field elements may provide additional site-specific performance indicators.

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.

Purpose:

The purpose of this guide is to provide the DOE with a consistent set of guidelines to assess the effectiveness of FR Programs.

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:

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

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I. ASSESSMENT LINES OF QUESTION

The following Lines of Question examine the strength and maturity of the Field Element's FR Program and the effectiveness of its FRs by assessing performance at meeting the five objectives of the FR Program. The Lines of Question are based on program requirements (i.e., "shall" statements), recommended practices (i.e., "should" statements), and suggested practices (i.e., "may" statements). Not all Lines of Question are based on "shall" requirements and may not apply to all FR programs.

1. Well-trained, qualified Facility Representatives.

- Do training records show that FRs who are listed as qualified have the proper education and experience, and that they have completed all qualification requirements as specified in DOE-STD-1146, DOE-STD-1151, and local directives? [Section 5.4]
- Do Field Element Managers or designees qualify FRs? [Section 5.4]
- Do the training records show that FRs complete all requalification requirements at the periodicity specified in the program directive? [Section 5.4.11]
- Are the qualifying officials involved in the qualification of FRs formally identified? [Sections 5.4 and 5.4.13]
- Is the process used to ensure that qualified FRs maintain or regain proficiency formally defined and effective? [Section 5.4.12]
- If FRs have failed to qualify or requalify within the time allowed, what actions were taken by the responsible Field Element Manager? [Section 5.4 and 5.4.13]
- Does the examination process challenge the candidate sufficiently to verify the proper level of knowledge of all qualification areas and facilities? Does it test the FR's technical understanding of facility processes, judgment and decision-making abilities, and ability to communicate expectations to the contractor? [Section 5.4.13]
- How well does the FR understand his/her roles and responsibilities under the Field Element's FR Program? [Section 4.1]
- How well does FR continuing training provide hazard-related and activity-related information to FRs? [Section 5.4.3]

2. Adequate coverage for DOE facilities.

- Is the FR staffing analysis performed in accordance with this standard and are FRs staffed to the indicated level? [Sections 5.1 and Appendix C]
- Are sufficient numbers of FR candidates undergoing qualification to fill known or projected FR vacancies? If not, what is being done to correct the situation? [Section 5.1]

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- How long have current FR vacancies existed? [Section 5.1]
 - What is the trend of the reported time spent performing Operational Awareness activities? [Section 5.7.1 and Appendix A]
 - What methods are used by the Field Element Manager to ensure that adequate facility coverage is maintained by qualified FRs during periods of leave? [Section 5.1]
3. Facility Representatives provide effective oversight of facilities.
- Has FR unencumbered access and “Stop Work” authority in their assigned facilities been adequately implemented? [Sections 4.1.7 and 5.3]
 - Has “Stop Work” authority been exercised? Was it appropriate? Was it effective? Have occasions taken place when it was appropriate for FRs to exercise “Stop Work” authority, but it was not used? [Sections 4.1.1 and 4.1.5]
 - What is the effectiveness of the FRs as verified by observing selected qualified personnel who are monitoring training, operations, or maintenance evolutions? [Section 4.1]
 - Based on a sample of occurrence reports, are FR reviews of the occurrence reports accomplished in a timely manner while ensuring that the root cause has been determined and effective action proposed? [DOE M 231.1-2 Section 5.6.c]
 - Do FRs accomplish operational awareness activities, facility assessments, surveillances and audits as scheduled? [Sections 4.1.1 and 4.1.5]
 - Based on a sample of findings identified by FRs during reviews, have FRs evaluated the overall effectiveness of the operating contractor? [Section 4.1.5]
 - How do FRs ensure that they are available to respond to facility events, such as reporting of occurrences and safety or operational concerns? [Section 4.1.3]
 - How adequate is the documentation of FR activities (e.g., reports, log keeping)? [Section 4.1.10]
 - How are FR findings reported (formally and informally) to the contractor? Are the reports provided to the contractor consistent with the information recorded by the FRs? [Section 4.1.10]
 - Does the FR communicate effectively with DOE Line Management and other oversight personnel, and with contractors to provide information related to their assigned facilities? [Sections 4.1.2 and 4.1.9]

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4. Adequate functional support from the Field Element Management.

- What are the reasons for any FR attrition? Are FRs leaving for promotions, laterals, downsizing? Have steps been taken to counter excessive attrition? [Section 5.1 and 5.6.2]
- What steps has management taken to ensure that the FR positions are career enhancing? Do senior or supervisory FR opportunities exist? [Section 4.2.4]
- What training, professional certifications, graduate studies, or similar development activities are actively supported? [Sections 5.4.1 and 5.6.2]
- What role does Field Element Management have in the qualification process? [Sections 4.2.4 and 5.4]
- Does management provide the resources necessary to qualify FRs within a defined schedule? [DOE O 426.1 Section 5 paragraph g.(5)]
- How does Line Management support the actions taken by the FRs at the respective facilities? [Section 4.1.8]
- Do FRs periodically meet with senior line managers within the field element to provide information related to the assigned facilities? [Section 4.1.8]
- How does DOE Line Management track and follow up on issues raised by the FRs? [Section 4.1.10]
- What process does DOE management use to address differing professional opinions? [Section 4.1.8]
- How do FRs interface with other DOE oversight personnel? What local processes provide guidance on how FRs access the Field Element technical expertise? [Section 4.1.9]
- What Performance Indicator data is used to provide indication of the FR program status? What trending and analysis is done on Performance Indicator data? How is this information used? [Section 5.7.1 and Appendix A]
- What incentive programs are available for the FR position? [Section 5.6.2]
- How are the incentive programs being used for the FR position? [Section 5.6.2]
- Do these programs make the FR position desirable and career enhancing? [Section 5.6.2]

5. Performance assessment and feedback program in place.

- How often does the field element conduct self-assessments of the entire FR program? [Section 5.7.2]
- Are peer reviews incorporated into the self-assessment process? [Section 5.7.3]

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- How does the Cognizant Secretarial Officer ensure that program performance assessments are accomplished, and any indicated corrective actions are completed? Mechanisms could include providing a representative to participate in assessments. [Section 4.2.3]
- How well does the self-assessment program ensure that the evaluators have adequate knowledge and experience to conduct meaningful reviews? Based on self-assessment reports, have adequate reviews been conducted to be able to properly evaluate the assigned area of assessment and have the self-assessments generated meaningful recommendations for improvement and corrective actions? [Section 5.7.2 and Appendix B]
- Did the Field Element Manager pursue improvements to the FR program resulting from self-assessments of the program? [Sections 4.2.4 and 5.7]
- How are the FRs kept informed on changes to their facilities and their operating practices? [Sections 5.4.3 and 5.4.11]
- How are lessons learned from facility events disseminated to FRs? [Section 5.7]
- How are applicable lessons learned from facility events at other DOE facilities sought and disseminated to FRs? [Section 5.7]

II. APPROACH

The approach to be used in performing the FR Program assessment is expected to vary between Field Elements. In order to obtain a valuable assessment of the program, the following methodology is presented.

Documentation. Much information can be determined in advance of the assessment by careful review of program documentation. This can include:

1. Program directive(s) and procedure(s)
2. Performance Indicators (DOE-wide and locally generated)
3. Qualification tracking data
4. Significant Occurrence Reports
5. Performance Assessments including the FR Program Self-Assessment
6. Training records (including continuing training)
7. Qualification records
8. FR logs
9. FR reports
10. Management tracking system for Facility-Representative-reported issues
11. Written and oral examination question banks

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Interviews. By discussing the program with its participants, a determination can be made about program performance “on paper” as opposed to “in reality.”

Consideration should be given to interviewing:

1. FR Program sponsors
2. FRs
3. FR supervisors
4. Line managers
5. Contractor facility managers
6. Technical Expertise support (health physics, explosive safety, etc.)

Walkthroughs. Much information can be determined by performing walkthroughs with the FRs.

Walkthroughs can provide indication of:

1. Level of FR facility knowledge
2. Actual practices of the facility
3. Interactions with contractor personnel
4. Log-keeping and reporting practices
5. Corrective action verification

Other methods. The preceding list of methods is for example purposes. Additional methods exist that may help in assessing program performance and should be used as appropriate.

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III. REPORT

This section contains the report format that can be used to document reviews of FR Programs. The report should be in narrative format and include the following:

Report header:

Date of report
FR Program Review
Field Organization
Date(s) of review

Summary:

Includes a brief synopsis of the program assessment including activities observed, personnel interviewed (by position), and documents reviewed. Each section of the report should be evaluated as adequate, marginal, or unsatisfactory. An overall grade for the assessment (satisfactory or unsatisfactory) should be assigned. The report should specifically identify excellent practices worth sharing as well as significant or key weaknesses noted. A rationale should be provided for the grade given, based on current program status, progress made, and achievement of the program objectives.

Discussion:

For each of the listed program objectives, provide a report of current status, progress made in this area, grade assigned, and recommendations for improvement.

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.

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.
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 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.

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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 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 3	Medium	Intermittent	0.25 – 0.50	0.25	0.73	0.34
Non-Categorized Facility Z	Non-Categorized High	Medium	Intermittent	0.25 – 0.50	0.50	0.73	0.68
Total FR FTEs Required							3.07
Total FR FTEs Onboard							2.0
Explanation of Difference	Hiring action in progress to add 1 FR.						

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Procedure for Completing Table 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 that has been determined by regulatory requirements.

- a. Nuclear hazard categorization is from DOE-STD-1027, *Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports*.
- 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 Fourth Edition, May 1999.
- 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. Extremely Hazardous Substances and Threshold Planning Quantities are listed in 40 CFR Part 355, Appendices A and B. Process Safety Management chemicals are listed in 29 CFR 1910.119.

Other hazardous facilities are identified by the Field Element Manager 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, worker, and 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. FR coverage is optional for non-categorized facilities with a low Facility Hazard Categorization.

The ranking system used in this process is:

- High Hazard – 3 – Potential for major impact to the public, workers, or the environment.

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- Moderate Hazard – 2 – Potential for moderate impact to the public, workers, or the environment.
- 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 of Non-Categorized Facilities																												
Facility or Group of Facilities	Biological			Hazard. Chem.			Fire			Electrical / Laser			Cryogenics			High Pressure			Hoisting & Rigging			Explosive			Other			Facility Hazard Categorization
	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 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.

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4. Column D – Base FR Facility Coverage Level

Determine the recommended Base Coverage Level using the following guide and list in Column D.

Nuclear Hazard Category	Biosafety Level	Chemical Hazard Classification	Non-Categorized Facilities	Facility Activity Level		
				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 Category 3	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 Field Element Manager 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 Field Element Manager 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.

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5. Column E – Base FR FTE Level

Determine the recommended Base FTE Level using the following guide and list in Column E.

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 Field Element Manager may further adjust the level of coverage. This adjustment should take into consideration factors such as those listed below, and be based on the Field Element Manager’s judgment of the contractor’s operational performance and the priority for providing FR oversight.

- 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

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.

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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.

CONCLUDING MATERIAL

Review Activities:

Headquarters Offices

National Nuclear Security Administration
Office of Health, Safety and Security
Office of Environmental Management
Office of Nuclear Energy
Office of Science
Office of Management

Site Offices

Ames Area Office
Argonne Area Office
Brookhaven Site Office
Carlsbad Field Office
Chicago Operations Office
Fermi Area Office
Idaho Operations Office
Los Alamos Site Office
Livermore Site Office
Nevada Site Office
NNSA Service Center
Oak Ridge Operations
Office of River Protection
Pantex Site Office
Portsmouth/Paducah Project Office
Richland Operations Office
Savannah River Operations Office
Savannah River Site Office
Sandia Site Office
West Valley Demonstration Project
Y-12 Site Office

External Agency

Defense Nuclear Facilities Safety Board

Preparing Activity:

Office of Nuclear Facility Safety
Programs (HS-32)

Project Number:

MGMT-0006