

FIRE PROTECTION (FP)

OBJECTIVE

FP.1: The Site Office has documented and implemented a fire protection program that complies with DOE requirements and the Site Office oversight processes and procedures have ensured that an effective fire protection safety management program has been implemented by the Site Contractor.

CRITERIA

1. The Site Office has documented and implemented a fire protection program (DOE O 420.1B).
2. The Site Office has documented and implemented processes and procedures to effectively oversee contractor performance in this functional area. The Fire Protection Program Manager reviews and validates performance data from various sources including the Annual Fire Protection Summary Report, corporate performance evaluation reports, and performance based incentives (DOE O 226.1A; NA-1 SD 226.1A; DOE O 420.1B).
3. Site Office procedures and mechanisms ensure that the Site Contractor's fire protection program is defined in accordance with contract requirements and that the implementing mechanisms comply with DOE expectations. The Contractor is staffed with adequate numbers of technically competent, experienced, fully qualified personnel, including fire protection engineers, technicians, and firefighting personnel (DOE O 420.1B).
4. Site Office procedures and mechanisms ensure that Fire Hazard Analyses (FHAs) have been prepared for each nuclear facility and that the results have been integrated into the Documented Safety Analysis (DSA) and Technical Safety Requirements (TSRs) (DOE O 420.1B).
5. Site Office procedures and mechanisms ensure that a baseline needs assessment has been completed that establishes the minimum required capabilities of site firefighting forces. The assessment includes staffing, apparatus and equipment, and pre-fire plans. Required information is incorporated into the site Emergency Plan, FHAs and DSAs (DOE O 420.1B).
6. Site Office procedures and mechanisms ensure that fire protection systems are designed, installed, and maintained to ensure reliable operation. Design requirements per DOE O 420.1B are observed. Qualified fire protection staff review plans and specifications for all new facilities and for significant modifications to existing facilities (DOE O 420.1B).
7. Site Office procedures and mechanisms ensure that the Site Office and Site Contractor have a process for developing, reviewing, recommending approval, tracking, and maintenance of fire safety equivalencies and exemptions. (DOE O 420.1B).

8. Site Office procedures and mechanisms ensure that the Site Contractor has conducted periodic assessments that provide confidence that the fire protection SMP is effectively implemented in all nuclear facilities (DOE O 226.1A; NA-1 SD 226.1A; DOE O 420.1B).
9. Issues identified during previous reviews (e.g. CDNS Biennial Reviews, HSS reviews, self-assessments) have been appropriately resolved, corrective actions have been completed and are adequate, or a clear path to completion is indicated (DOE O 226.1A; NA-1 SD 226.1A; DOE O 420.1B).
10. The Site Office has sufficient staff, and assigned personnel have adequate technical competence, to oversee the performance of the contractor in this functional area (NA-1 SD 411.1-1C; DOE O 420.1B).

APPROACH

References:

- 10 CFR Part 830, *Nuclear Safety Management*
- DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*
- DOE G 420.1-3, *Implementation Guide for DOE Fire Protection and Emergency Services Programs for Use with DOE O 420.1B*, Facility Safety
- DOE O 420.1B, *Facility Safety*
- NA-1 SD 411.1-1C, *NNSA Safety Management Functions, Responsibilities and Authorities Manual (FRAM)*
- NA-1 SD 226.1A, *NNSA Line Oversight and Contractor Assurance System Supplemental Directive*

Record Review:

- Review site contract List A/B and Site Office fire protection policy and implementing documents.
- Review Site Office fire protection assessments and fire safety survey results.
- Review nuclear facility FHAs, DSAs, and TSRs and TSR surveillance records for fire protection Safety Management Program (SMP) Systems, Structures, and Components (SSCs).
- Review maintenance records for fire protection SSCs with emphasis on SSCs that support nuclear facilities.

Interviews:

- Interview Site Office personnel responsible for oversight of the fire protection SMP.

Observations:

- Observe fire protection -assessments by the Site Office and fire emergency exercises associated with nuclear facilities if possible.
- Walk down selected facilities with Facility Representatives and Site Office personnel responsible for oversight of the fire protection SMP, focusing on installation and operability of all elements of the fire protection SMP, including physical systems and components and combustion control and storage programs.