

Annual Workforce Analysis and Staffing Plan Report  
as of December 31, 2014  
Reporting Office: Chief of Nuclear Safety

**Section One: Current Mission(s) of the Organization and Potential Changes**

Revision 2 of U.S. Department of Energy Implementation Plan for DNFSB Recommendation 2004-1 established the seven core CTA responsibilities. The Office of the Chief of Nuclear Safety (CNS) performs to following functions of the CTA meeting these responsibilities:

1. Nuclear Safety Requirement Concurrence and Exemption
  - Concur with the determination of the applicability of DOE directives involving nuclear safety included in Environmental Management contracts pursuant to Department of Energy Acquisition Regulation (DEAR), 48 CFR 970.5204-2, Laws, regulations, and DOE directives, item (b).
  - Concur with nuclear safety requirements included in Environmental Management contracts pursuant to DEAR 970.5204-2(c).
  - Concur with all exemptions from nuclear safety requirements in Environmental Management contracts that were added to the contract pursuant to DEAR 970.5204-2
2. Guidance for Implementing Nuclear Safety Requirements
  - Advise the Under Secretary on recommendations to the Associate Under Secretary for Environment, Health, Safety, and Security (AU) for issues and proposed resolutions concerning DOE safety requirements; concur in the adoption or revision of nuclear safety requirements (including supplemental requirements); and provide expectations and guidance for implementing nuclear safety requirements as necessary for use by DOE Environmental Management employees and contractors.
3. Operational Awareness of Nuclear Safety Requirements Implementation
  - Maintain operational awareness of the implementation of nuclear safety requirements and guidance, consistent with the principles of Integrated Safety Management, across the DOE Nuclear Security complex. Awareness is accomplished by working with Headquarters, Field Offices, and Facility Representatives to implement DOE O 226.1A, Implementation of DOE Oversight Policy. This includes CNS staff participation in project reviews, Headquarters line management oversight, Field Office oversight, Operational Readiness Reviews, and reviewing Documented Safety Analyses to evaluate the adequacy of safety controls and implementation.
4. Maintaining Adequate Numbers of Technically Competent Personnel
  - Periodically review and assess whether DOE Under Secretary for Management and Performance organizations are maintaining adequate numbers of technically competent personnel necessary to fulfill nuclear safety responsibilities.
5. DOE-Wide Nuclear Safety Related Research and Development Activities
  - Provide inputs to, review, and concur with DOE-wide nuclear safety-related research and development activities proposed by the National Nuclear Security Administration.

Currently, there are no expected potential or probable changes to this mission that may significantly affect technical staffing needs.

**Section Two: Technical Staffing**

Per Commitment 3 in Revision 2 of the Department's DNFSB Recommendation 2004-1 Implementation Plan, the DOE FRAM has been updated to include the CTA functions, responsibilities, and authorities. The directed revision to the FRAM was documented in letter to the DNFSB dated April 26, 2005. The FRAM was updated and approved on June 22, 2007 to include detailed functions, responsibilities, and

authorities of the Energy, Science and Environment CTA and CNS. These have translated to the current functions, possibilities and authorities to the Environmental Management CTA.

For the technical staffing analysis, the Department concluded that the Office of the Chief of Nuclear Safety should be a small group of recognized experts with diverse technical education and experience who would provide operational awareness and technical nuclear safety advice to Under Secretary for Management and Performance's senior line managers. The Office of the CNS has been established, and eight key technical positions were identified, including:

- Chief of Nuclear Safety
- Mechanical Engineer/Acquisition Professional
- Natural Phenomenon Hazards (NPH)/Seismic/Geologic Specialist
- Nuclear Engineer
- Nuclear Facilities and Tritium Risk Specialist
- Nuclear Safety and Operations Engineer
- Nuclear Safety Specialist (NSS)
- Quality Assurance (QA) Engineer
- Software Quality Assurance Engineer

The CNS was selected as a respected expert in the field of nuclear safety. All the planned positions on the staff of the CNS were filled with permanent career Federal employees of the highest caliber. The results of the initial staffing of the Office of the CNS were documented in a memorandum for the Secretary of Energy dated October 27, 2006, and in a letter to the DNFSB dated October 30, 2006.

The CNS and the five “technical lead” positions have been designated as Senior Technical Safety Managers (STSM) per the DOE technical qualification program. Two the “technical lead” positions have been vacated via transfers and promotions, the responsibilities of these two positions have in the interim been temporarily absorbed by the remaining CNS staff, while awaiting personnel action to fill the positions. The remaining staff is comprised of recognized QA and Safety Software QA SMEs along with a staff member who is in the process of qualifying as a Nuclear Safety Specialist (NSS).

**Site Characteristics Table<sup>1</sup>** : Completion of this table is not applicable to the Office of the CNS as this is a Headquarters entity and is not site-specific.

**Section Two – Technical Staffing Summary Table (see Notes below)**

Technical Capability	For All Facilities <sup>1</sup>		Comments
	Number of FTEs Needed <sup>1</sup>	Number of FTEs Onboard <sup>1</sup>	
Senior Technical Safety Managers	6	4	Three CNS staff members and the CNS himself are STSM qualified. Two staff members and the CNS re-qualified during FY12.
Facility Representatives <sup>3</sup>			
Other Technical Capabilities:			
Aviation Safety Manager			
Aviation Safety Officer			
Chemical Processing			
Civil/Structural Engineering			
Construction Management			
Criticality Safety			
Deactivation & Decommissioning			
Electrical Systems			
Emergency Management			

Environmental Compliance			
Environmental Restoration			
Facility Maintenance Management			
Fire Protection Engineering			
Industrial Hygiene			
Instrumentation & Control			
Mechanical Systems			
NNSA Packaging Cert. Engineer			
Nuclear Explosive			
Nuclear Safety Specialist	1	1	Staff member currently engaged in qualification process, additionally the NSS is not required to qualify as an STSM.
Occupational Safety			
Quality Assurance	1	1	DOE recognized QA SME and is not required to qualify as STSM.
Radiation Protection			
Safeguards & Security			
Safety Software Quality Assurance	1	1	DOE recognized SQA SME and is not required to qualify as STSM.
Technical Program Manager			
Technical Training			
Transportation & Traffic Mgmt			
Waste Management			
Weapons QA			
Federal Project Directors <sup>4</sup>			

Notes:

1. These columns identify the number of FTEs needed to perform the Federal Safety Assurance function for your site or office based on potential facility and operational hazards.
2. SSO staffing analysis worksheets may be used in this process.
3. Facility Representative staffing analysis worksheets are used in this process.
4. Federal Project Managers/Directors are not qualified via the Technical Qualification Program, but are qualified in accordance with the Project Management Career Development Program

**Section Three: Current shortages and plans for filling them**

The STSM positions of Mechanical Engineer/Acquisition Professional and Nuclear Safety and Operations Engineer are vacant with those responsibilities distributed to existing staff in the interim.

The Nuclear Safety and Operations Engineer is currently posted.

**Section Four: Projected shortage/surplus over next five years**

A significant percentage (2/6) of technical lead positions have turned over from the Dec 2010 to the Dec 2013 report as those individuals were interested in management positions. Three senior CNS staff members will be retirement eligible in the next three years and the Safety Software Quality Assurance CNS staff member is projected to retire in June 2015. Currently some of those responsibilities are currently being performed in anticipation of her retirement, and a permanent replacement is being considered for posting.

**Section Five: General comments or recommendations related to the Technical Staffing**

The CNS Office does not have any general comments or recommendations related to Technical Staffing at this time.