Annual Workforce Analysis and Staffing Plan Report
as of December 31, 2011
Reporting Office: Chief of Nuclear Safety

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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 in support 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 Energy and Science 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 Energy and Science contracts pursuant to DEAR 970.5204-2(c).
   - Concur with all exemptions from nuclear safety requirements in Energy and Science 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 Chief of Health, Safety and Security 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 Energy and Science 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 Energy and Science 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 Energy and Science 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.

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 senior Energy 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. All are fully qualified. The remaining staff is comprised of recognized QA and Safety Software QA SMEs along with a new staff member joining the organization as permanent staff who was previously detailed to the CNS from the Department's EM Career Development Program. This staff member is required to and in the process of qualifying Nuclear Safety Specialist (NSS) having commenced FY10 Q1. In addition, all staff members, with the exception of the CNS and prospective NSS, are required to qualify Headquarters (HQ) Safety System Oversight (SSO) per Environmental Management (EM) HQ SSO TQP requirements. Of these, five are qualified with two in the engaged in qualification.

Site Characteristics Table[1]: 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)

	For All Facilities[1]		
Technical Capability	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Comments
Senior Technical Safety Managers	6	5	Four staff members and the CNS are STSM qualified.. Three staff members and the CNS are required to re-qualify during FY12 and are enrolled in the May STSM course at the NTC
Safety System Oversight Personnel[2]	7	6	All CNS staff must qualify as HQ SSO except the CNS and NSS. Four are qualified and two are in progress.
Facility Representatives[3]			
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 or HQ SSO.
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 Mgmnt			
Waste Management			
Weapons QA			
Federal Project Directors[4]			

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. They are posted at http://www/hss.energy.gov/deprep/ftcp.
3. Facility Representative staffing analysis worksheets are posted at http://www/hss.energy.gov/deprep/ftcp.
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 current Mechanical Engineer/Acquisition Professional position, qualified as STSM and HQ SSO, has become vacant as of November 2011. Additionally, the fully qualified Nuclear Safety and Operations Engineer position is projected to be vacated in the January-March 2012 quarter. The responsibilities of these two positions have been distributed to existing staff.

Section Four: Projected shortage/surplus over next five years

Based on attrition to date and natural job progression, a significant percentage (2/6) of technical lead positions will have turned over from the Dec 2010 to the Dec 2012 report. A smaller and more stable turnover rate is projected thereafter.

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.