



Department of Energy
National Nuclear Security Administration
Washington, DC 20585



2006 FEB 16 PM 5:12
DEFENSE NUCLEAR FACILITIES SAFETY BOARD

The Honorable A. J. Eggenberger
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, DC 20004

Dear Mr. Chairman,

The purpose of this letter is to inform you that the Central Technical Authority for the National Nuclear Security Administration has completed Commitment 2 in the Department's 2004-1 Implementation Plan, dated June 10, 2005. Specifically, the deliverable for this commitment is the enclosed memorandum to the Secretary declaring the CTA has adequate technical support and providing the basis for this declaration.

If you have any question, please contact me or have your staff contact James McConnell at (202) 586-4379.

Sincerely,

Gerald S. Paul
Central Technical Authority
National Nuclear Security Administration

Enclosure

cc: C. Sell, Deputy Secretary
D. Garman, Under Secretary for Energy, Science and Environment
L. Brooks, Administrator, National Nuclear Security Administration
M. Whitaker, Departmental Representative
F. Russo, Senior Advisor for Environment, Safety and Health






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BOARD

MEMORANDUM FOR THE SECRETARY

FROM: Jerald S. Paul 
Central Technical Authority
National Nuclear Security Administration

SUBJECT: Technical Support For The National Nuclear Security
Administration Central Technical Authority

The National Nuclear Security Administration (NNSA) Central Technical Authority (CTA) was established as part of the Department's Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 2004-1. Commitment 2 of that Implementation Plan requires that the NNSA CTA send you a report by January 2006 declaring that the CTA has adequate technical support and providing a basis for that declaration. This memorandum fulfills commitment 2.

The NNSA CTA is supported by the Chief of Defense Nuclear Safety (CDNS), the NNSA Environment Safety and Health Advisor, and their staffs. The NNSA CTA function was formally established in February, 2005. Based on the experience gained throughout 2005, NNSA has determined that this group of technical experts is adequate to provide the technical support necessary to fulfill the CTA functions, responsibilities, and authorities defined in DOE Manual M 411.1-1C, *Safety Management Functions, Responsibilities, and Authorities Manual*.

The Office of the CDNS was established in July 2004 in response to an internal NNSA review of the root causes and organizational implications of the Columbia space shuttle accident. The NNSA Administrator, working directly with me and the other senior leaders in NNSA concluded that the Office of the CDNS 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 NNSA line managers. The CDNS, Mr. James J. McConnell was selected in November 2004 after a nation-wide search. Mr. McConnell is a respected expert in the field of nuclear safety. He has more than 20 years experience in the nuclear industry including service as a nuclear-trained officer in the United States Navy and as the Deputy Technical Director of the Defense Nuclear Facilities Safety Board. All the planned positions on the staff of the CDNS have been filled with permanent career Federal employees of the highest caliber. The positions that comprise the office of the CDNS are described in attachment 1.

The CDNS and all the technical staff personnel within the Office of the CDNS are required to qualify as Senior Technical Safety Managers. Those members of the Office of the CDNS who have not already completed qualifications are currently working toward qualification in accordance with the Department's Federal Technical Capabilities Program Manual. The NNSA



Federal Technical Capabilities Program Agent has evaluated all members of the CDNS staff pursuing Senior Technical Safety Manager qualifications and has determined that no compensatory measures are required.

The CTA is also supported by the Senior Advisor for Environment, Safety and Health. Mr. Frank Russo has served as the Senior Advisor for NNSA since October 2005. Mr. Russo has 30 years of Federal experience, primarily serving the Department of Energy and the Environmental Protection Agency. Mr. Russo advises the NNSA Administrator in matters relating to radiological controls, environmental protection, occupational health, industrial safety and nuclear safety and advises other senior officials on policy matters concerning ES&H. In addition, he advises NNSA in its interactions with DOE and other Federal, state, and local agencies on matter relating to ES&H. All but one of the positions on the staff of the ES&H Advisor has been filled with permanent career Federal employees of the highest caliber. This position should fill within the next two months. The positions that comprise the office of the ES&H Advisor are described in attachment 2.

The Senior Advisor for Environment, Safety and Health and all the technical staff within the office are required to qualify as Senior Technical Safety Managers. Three are qualified and the remaining member is currently working toward qualification in accordance with the Department Federal technical Capabilities Manual and the NNSA Technical Qualification Program Plan. One Senior Technical Safety Manager on the staff is assigned as the NNSA Federal Technical Capability Agent. He has evaluated all members of the staff and has determined that no compensatory measures are required.

Attachments

Attachment 1
Office of the Chief of Defense Nuclear Safety Staff Positions

The Office of the CDNS is comprised of the Chief of Defense Nuclear Safety and the following staff positions:

- Nuclear Engineer – Expert on nuclear engineering issues and/or criticality safety.
- Mechanical/Civil Engineer – Experienced with American Society of Mechanical Engineering codes and standards, civil structural engineering and/or natural phenomenon hazards. This position also supports mechanical design reviews of major nuclear facility construction projects.
- Electrical Engineer – Focus on Lightning, electro-static discharge, power distribution systems, digital control systems, etc. This position also supports electrical design reviews of major nuclear facility construction projects.
- Chemist/Chemical Engineer – Special Nuclear Material Chemistry and/or Explosives Expert. This position also supports chemical process design reviews of major nuclear facility construction projects (as applicable). Operations/Readiness Expert – Recognized expert in application of Formality of Operations and in the implementation of DOE 0 425.1 C, *Startup and Restart of Nuclear Facilities*.
- Authorization Basis – Expert on DOE Rules, Directives, and Standards governing the development, approval, and maintenance of Documented Safety Analyses and Unreviewed Safety Questions.
- Fire Protection Engineer – Expert in National Fire Protection Association codes and standards including fire hazards analysis and the design, maintenance, and operation of fire detection and suppression systems. This position also supports fire protection system design reviews of major nuclear facility construction projects.
- Administrative Assistant – Non-technical support position.

Attachment 2

Office of the Senior Advisor for Environment, Safety and Health Staff Positions

The Office is comprised of the Senior Advisor and the following staff positions:

- Radiological Scientist – Recognized expert on radiation protection programs and radiological polices and procedures. This position serves as the NNSA Accident Investigation Coordinator and the NNSA Price Anderson Amendments Act Coordinator.
- Nuclear Safety and Operations Engineer – Experienced in nuclear engineering issues, conduct of operations, quality assurance, and integrated safety management. This position supports NNSA management in the resolution of issues and concerns raised by the Defense Nuclear Facilities Safety Board. This position also works with NNSA management to identify and resolve technical qualification and staffing issues.
- Occupation Safety and Health – Expert on occupational and health management systems, procedures and polices. Recognized expert on the Worker Safety and Health Program. Certified Industrial Hygienist and Certified Safety Professional.
- Environmental Specialist – Experienced in environmental systems, programs, policies and procedures. This positions work with NNSA management on environmental policies and regulations including the National Environmental Policy Act. This position is currently vacant and is expected to be filled within the next two months.
- Administrative Assistant – Non-technical support position.