John T. Conway, Chairman

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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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August 7, 2003

The Honorable Beverly Ann Cook Assistant Secretary for Environment, Safety and Health U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-0119

Dear Ms. Cook:

In a letter dated June 21, 2001, the Defense Nuclear Facilities Safety Board (Board) urged the Department of Energy (DOE) to take a proactive stance to ensure that adequate electrical safety programs were in place at defense nuclear facilities, based on the *DOE Handbook: Electrical Safety* (DOE-HDBK-1092-98). The Board also encouraged DOE to update the handbook and to enhance the guidance on electrical safety during excavation, decontamination, and decommissioning activities.

DOE responded to the Board's letter on August 5, 2002, agreeing that DOE-HDBK-1092-98 provided effective guidance for establishing and implementing adequate electrical safety programs, and indicating that a revision to the handbook would be available within approximately 1 year.

Recently, the Board reviewed the proposed revision to DOE-HDBK-1092-98. In the proposed revision the technical content has been removed. In addition, the proposed section meant to address electrical safety during excavation does little to promulgate the lessons learned reflected in DOE Safety Notice 96-06, or to identify available detection technology. This is unacceptable.

If DOE issues this proposed revision, the defense nuclear complex will suffer a significant loss. The handbook is used extensively for training purposes at many DOE sites, providing a complex-wide consistency that is lacking in many other functional areas. By excerpting or referencing specific sections of each code, DOE provides clear expectations and emphasizes areas of importance in a manner that is not possible if DOE shifts to the generic citations used in the proposed revision. The existing handbook also provides several chapters of DOE-unique applications, developed from hard-won experience and lessons learned.

The importance of electrical safety cannot be overstated. For example, in the 18-month period from July 2001 though December 2002, more than 450 incidents related to electrical safety were entered into the Occurrence Reporting and Processing System. Nearly one in six of

these incidents were categorized as near misses, electrical shocks, or injuries to personnel. DOE's recent Operating Experience Summary (#2002-13) reports that electrical near miss events have increased in the first half of 2003. These data indicate a need for greater effort with regard to electrical safety programs.

The Board believes that to establish effective electrical safety programs, DOE contractors need guidance from a detailed explanatory document such as DOE-HDBK-1092-98. The Board also believes that the stipulation in the letter of August 5, 2002, is still true—the existing version of the handbook is providing effective guidance to contractors. The revision to which DOE committed must retain this degree of detail.

Therefore, pursuant to 42 U.S.C. § 2286b(d), the Board requests a response within 30 days of receipt of this letter explaining how DOE plans to provide effective, detailed guidance to contractors on electrical safety programs. In the interim, DOE should take steps to ensure that the existing version remains effective until an acceptable revision is developed.

Sincerely,

John T. Conway

Chairman

c: Mr. Mark B. Whitaker, Jr.