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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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December 14, 2004

The Honorable Spencer Abraham
Secretary of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Secretary Abraham:

In Recommendation 98-2, *Accelerating Safety Management Improvements at the Pantex Plant*, the Defense Nuclear Facilities Safety Board (Board) recommended that the Department of Energy (DOE) strengthen and simplify the process by which DOE designs and develops nuclear explosive work activities at the Pantex Plant. The Board remains concerned with long delayed important commitments in DOE's Implementation Plan for Recommendation 98-2 related to accelerating key safety improvements to nuclear explosive operations.

One delayed commitment is implementation of the Seamless Safety for the 21st Century (SS-21) process for B83 nuclear explosive operations. DOE originally committed to implementing SS-21 for the B83 program by May 2002. In an October 28, 2002 letter, several changes were proposed to the Implementation Plan for Recommendation 98-2, including a two year delay in the delivery date for the B83 program to May 30, 2004. Despite reservations, the Board accepted this change. In an April 28, 2004 letter, the B83 commitment was extended again by the National Nuclear Security Administration (NNSA) to October 29, 2004. In an August 6, 2004 letter, the B83 commitment was again extended to January 2005. The B83 Nuclear Explosive Safety Study was extended to March 31, 2005, to accommodate this delay. The Board has now received a letter from NNSA dated November 3, 2004, that indicates the implementation of SS-21 for the B83 program is once again being delayed, with a new target date of March 2005. In addition, BWXT has requested another extension of the B83 Nuclear Explosive Safety Study. The B83 program is only now beginning the startup reviews necessary to authorize operations.

The second late commitment is the implementation of improved site-wide Technical Safety Requirement (TSR) controls for on-site transportation of nuclear explosives. The implementation plan for the Transportation Safety Analysis Report was integrated with plans to implement controls from other new Safety Analysis Reports in an effort to consolidate and coordinate available resources. In total, more than 200 new or revised TSR controls were scheduled to be implemented and verified.

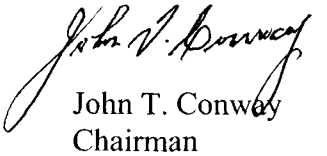
During a recent review of the safety basis and efforts to implement TSR controls for the Pantex Plant, the Board's staff found that the contractor's schedule of interim milestones for the implementation and verification of TSR controls has continued to slip. The contractor

committed to achieve implementation of 150 TSR controls by October 1, 2004. The contractor, BWXT-Pantex, fell 94 controls short of this milestone. In the Quarterly Report for Recommendation 98-2, July 1 through September 30, 2003, the contractor committed to completing a final contractor readiness assessment of the TSR controls by March 2005. In the latest revision to the TSR implementation plan, dated November 17, 2004, the contractor has delayed the TSR implementation project end date by four months to September 2005.

A third commitment of concern to the Board is the development of a Technical Business Practice that establishes guidance on expectations for the evaluation and documentation of weapon response information. On January 31, 2001, DOE sent the Board a revision to Chapter 11.8, "Integration of Weapon Response into Authorization Bases at the Pantex Plant," of the *Development and Production Manual* in lieu of the proposed Technical Business Practice. However, as has been discussed in several interactions with NNSA, the scope of the revision fell short of establishing a consistent approach for evaluating weapon responses, particularly with respect to consensus expectations for an expert elicitation process and the supporting technical basis for documenting expert opinions. Senior NNSA management agreed to have a Technical Business Practice developed that would provide the needed guidance. However, the Board has not been informed of any progress in this area.

Pursuant to 42 U.S.C. § 2286b(d), the Board hereby establishes a monthly requirement from senior NNSA managers for a briefing on the status of these commitments under the Recommendation 98-2 DOE Implementation Plan. These monthly briefings appear necessary to focus attention within NNSA on the continuing delays in these important commitments. At a minimum, the briefings should provide the following information: (1) the number of TSR controls that have been implemented, verified, and made effective, (2) the current status of implementation of SS-21 for the B83 program, and (3) status of the Technical Business Practice that establishes quality requirements for weapon responses. These monthly briefings are to begin following receipt of this letter and continue until these commitments have been fulfilled.

Sincerely,



John T. Conway
Chairman

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