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DEFENSE NUCLEAR FACILITIES SAFETY BOARD



625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004 (202) 208-6400

January 20, 1995

The Honorable Victor H. Reis Assistant Secretary for Defense Programs Washington, D.C. 20585

Dear Dr. Reis:

The Defense Nuclear Facilities Safety Board (Board) and its staff have been reviewing the implementation of the Department of Energy (DOE) Qualification Evaluation (QE) process. This process, developed partially in response to the Board's Recommendation 92-6, *Operational Readiness Reviews*, is used to ensure readiness to conduct nuclear weapons assembly, disassembly, and surveillance operations at Pantex.

The Board is encouraged by the increased involvement by National Laboratory personnel, with their weapons expertise and experience, in the W48 QE at Pantex. As noted in the Board letter of December 9, 1994, the DOE-Albuquerque (DOE-AL) QE guidance is also an improvement over earlier readiness review guidance for Pantex operations, subject to the comments provided in that letter. However, problems still appear to exist throughout both the line management readiness confirmation phase and the independent review phase of the dismantlement process.

Board Staff observations of the W48 QED indicate that this intended verification of "readiness of personnel, procedures, processes, tooling, equipment, and facilities" (DOE-AL Dismantlement and Production Manual, Chapter 3.7) appeared to be in actuality a technical assistance visit by National Laboratory personnel. Technical assistance of this nature has great potential value; however, it should take place during the process design and procedure development phase of the dismantlement process instead of during the final independent readiness review.

On-going efforts to implement the QE process have resulted in the identification of additional deficiencies, both in guidance and implementation. In addition, there appear to be inconsistencies in application of the existing guidance between the different types of weapon activities to which the QE applies. It is unclear to the Board how, and on what schedule, these identified deficiencies will be corrected and integrated.

The Honorable Victor H. Reis

The Board requests that DOE provide the following:

A report presenting the results of an integrated review of the current status of the implementation of the QE process. The review group should involve representatives from all organizations including: DOE Headquarters, DOE Albuquerque Operations Office, DOE Amarillo Area Office, National Laboratories, and the operating contractor (Mason & Hanger).

This report should address as a minimum:

- The need for National Laboratory involvement in reviewing ... dismantlement processes from the outset:
- QE team composition, including both National Laboratory personnel and personnel with operations and procedure development expertise;
- Modifications to the QE process for various weapon activities (i.e., dismantlement, surveillance, or production);
- Required balance between review and approach criteria and expert-based review:
- Line management assurance of "readiness to proceed" with appropriate National Laboratory input, prior to the start of the QE;
- Fidelity of QE demonstrations during the QE performed on training units;
- Criteria for categorization of QE findings; and
- An appropriate schedule for implementation of any required QE process/guidance corrective actions.

Mr. Steve Krahn of the Defense Nuclear Facilities Safety Board will be available to provide any assistance required with the above report. Given the critical nature of the QE implementation, the Board requests the report be provided in a timely manner. Please advise us as to the date that it can be expected. If you need any further information, please let me know.

Sincerely,

John T. Conway

Chairman

C: The Honorable Tara O'Toole, EH-1 Mr. Mark Whitaker, EH-6 **RADM Charles Beers**, DP-20 Mr. Bruce Twining, DOE-AL Manager