DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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April 29, 1994

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

Dear Dr. Reis:

Staff members of the Defense Nuclear Facilities Safety Board (DNFSB) and an outside expert have been reviewing the Department of Energy (DOE) Operational Readiness Review (ORR) regarding increased storage of pits in Zone 4 at Pantex. The ORR, led by DOE Headquarters personnel, was conducted in February 1994, and the ORR report was issued on March 24, 1994. The Zone 4 ORR was the first ORR conducted to the requirements and guidance of new DOE Order 5480.31, *Startup and Restart of Nuclear Facilities* and new DOE Standard, DOE-STD-3006, *Planning and Conduct of Operational Readiness Reviews*.

Based on DNFSB Staff observations of the ORR and DNFSB review of the ORR report, the DNFSB considers that the ORR was conducted by a well-qualified team, and that the team generally conducted the review in a manner consistent with DOE Order 5480.31 and DOE-STD-3006. The ORR team found major deficiencies in key areas important to safety, including safety basis definition, training for response to abnormal events, and radiological controls. The DNFSB notes the ORR team recommendation that DOE Headquarters, with support from the ORR team, review and approve closure of the ORR prestart findings. Due to the nature of the ORR findings, the DNFSB agrees with this recommendation and considers this approach necessary for this operation. The DNFSB believes that the ORR team should be commended on the manner in which the Zone 4 ORR was conducted.

The findings of the ORR team, as described in the ORR report, indicate that DOE and contractor line management did not achieve a state of readiness in the areas noted above, nor properly assess the state of readiness prior to certifying readiness for this operation. Contrary to the original intent, the ORR team functioned as an adjunct to line management to achieve readiness in these areas, rather than as an independent check of readiness. This result is in conflict with DOE policy on ORRs defined in DOE Order 5480.31, and with a key tenet of DNFSB Recommendation 92-6.

Based on DNFSB Staff observations of the ORR and DNFSB review of the ORR report, the DNFSB is particularly concerned with two issues dealing with the conduct of future ORRs:

- The ORR report indicates that there were deficiencies in the certification of readiness by line management. Several defined ORR prerequisites were not met. While line management at Pantex performed a review of closure of contractor ORR findings, the readiness certifications did not document assessments of defined prerequisites or other appropriate assessments to ascertain readiness. Current guidance in this area may not be adequate to ensure the proper technical content of line management certifications of readiness for future ORRs.

- While certain DOE Orders were referenced for the criteria guiding the ORR team's review, individual ORR criteria generally were not referenced to specific requirements "contained in DOE Orders, and policies, ...professional codes and standards, ..." as defined in DOE-STD-3006-93. This practice does not appear to be in keeping with the DOE Order 5480.31 requirement that the ORR team base its conclusions on "Extensive use of references to DOE requirements in the Operational Readiness Review documentation." Additionally, the review approaches for each criteria often were not defined in a manner to clearly show the required depth of evaluation. While the Zone 4 ORR was conducted by well-qualified individuals, such practice may place inordinate reliance on the capability of future ORR team members.

The DNFSB requests that you consider these two issues regarding line management readiness certifications, and ORR criteria and review approaches, to determine if additional guidance or other actions are necessary for future ORRs. Please inform the Board of your intended actions related to these two issues.

Mr. Steve Krahn of the DNFSB Staff will be available to provide any assistance in addressing these issues.

Sincerely,

John T. Conway

John T. Conway
Chairman

c: RADM Charles Beers, DP-20
Mr. Mark Whitaker, EH-6