

[DNFSB LETTERHEAD]

December 17, 1996

The Honorable Victor H. Reis
Assistant Secretary for Defense Programs
Department of Energy
1000 Independence Avenue, SW
Washington, D.C. 20585-0104

Dear Dr. Reis:

The Defense Nuclear Facilities Safety Board (Board) has been following the Department of Energy's (DOE) progress toward improving the Orders and standards that govern nuclear weapons operations and the associated facilities and programs under DOE's Implementation Plan for Board Recommendation 93-1, *Standards Utilization in Defense Nuclear Facilities*.

The Board has had an opportunity to review the most recent drafts of DOE O 452.1, *Nuclear Explosive and Weapon Surety Program*; DOE O 452.2, *Safety of Nuclear Explosive Operations*; and the Implementation Guide DOE G 452.2-1, *Safety of Nuclear Explosive Operations*. The Board is as eager as DOE for these documents to be issued and implementation to begin. The Board is pleased to note that the revision of the Orders meets the objectives of both Recommendation 93-1 and the Board's December 8, 1993, letter regarding the nuclear explosive safety study process.

The Board considers these versions of the new Orders to be a much improved set of safety requirements. When implemented, they should adequately ensure that the level of safety assurance at those facilities which assemble, disassemble, and test nuclear weapons is at least as rigorous as that required of other defense nuclear facilities. The revised Orders meet the objectives of Recommendation 93-1.

However, some changes that were made to the draft Orders and Guide in the interval since the Board last reviewed them may deserve further attention before final approval by DOE:

- Two slight modifications would be beneficial to move the Orders into closer conformance with evolving DOE policy on safety:
 - The Requirements section of the Orders states that "application of a graded approach shall be commensurate with potential NES and ES&H impacts." A minor modification would bring the intent of this statement in direct accordance with DOE Policy P 450.4, *Safety Management System Policy*. It is suggested that DOE O 452.1, Section 4.b., and DOE O 452.2, Section 4.a(5), be modified as follows:

Integrated Safety Management. The requirements in this Order may be implemented using a DOE-approved integrated safety management approach as described in DOE Policy P 450.4 (issued 8-28-96) and in DOE Guide G 450.4. A "graded approach" to the requirements in this Order is not permitted unless in the context of an approved integrated safety management program.

- Also with reference to DOE Policy P 450.4, the second sentence of DOE O 452.2, Section 4.a(1), might be modified to read: "Facility safety analyses shall be prepared using hazard Category 2 nuclear facility guidance unless (i) a different hazard category is determined by DOE using applicable hazard classification guidance, or (ii) a different hazard category is justified for a

facility within the context of an approved integrated safety management program."

- The Guide's section on Occurrence Reporting downgrades the classification of "near misses" and eliminates "mismarking" as reportable. These particular changes to the Guide do not appear to clarify the application of reporting requirements for DOE's field activities, and may allow degradation of control of nuclear explosives and nuclear explosive-like assemblies. The Board is certain that if either kind of event were to occur, Defense Programs would want the matter drawn to its attention, along with follow-up to ascertain the root cause and correctional measures. This would require restoring such events to the category of reportable occurrences.

Sincerely,

John T. Conway

Chairman

c: The Honorable Thomas P. Grumbly
Mr. Victor Stello, Jr.
Mr. Mark B. Whitaker, Jr.