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# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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October 9, 1997

The Honorable **Federico F. Peña**  
Secretary of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585-1000

Dear Secretary **Peña**:

The Defense Nuclear Facilities Safety Board (Board) has received and reviewed two draft guidance documents developed as part of the effort committed to by the Department of Energy (DOE) in the Implementation Plan for Board Recommendation 95-2, *Safety Management: DOE G 450.4-1, Integrated Safety Management System Guide* (Commitment 1.2), and explicit tailoring guidance to be included in the Guide (Commitment 2. 1).

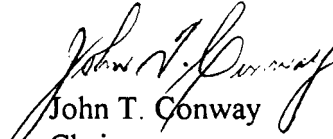
The Board is pleased to see the progress that has been made in capturing what DOE and the Board are mutually trying to communicate to safety managers regarding integrated safety management. However, the Board found the draft guidance to be lacking in some crucial areas and potentially misleading in others.

The Board's staff and the Safety Management Integration Team (SMIT) have worked together to disposition many of the detailed comments that resulted from the Board's review of the draft guidance. Remaining observations the Board considers substantial enough to merit further consideration are detailed in the enclosure to this letter.

Even as revised, the Board questions how user-friendly this Guide will be. Feedback resulting from attempted use of the Guide will be important. The Board appreciates the need to provide guidance to the field as quickly as possible, even though definitive guidance in some areas is still lacking. To that end, the Board suggests that DOE G 450.4-1 as revised be issued as Revision O for "use and comment," with the clear objective of soliciting and encouraging feedback from users. The Board would like to have the SMIT commit to the timely production of Revision 1 of the Guide, which should reflect the resolution of Board comments not fully dispositioned in Revision O, feedback from Guide users, and experience gained from the implementation of integrated safety management at Recommendation 95-2 priority facilities. A date of no later than October 1998 is suggested for Revision 1. In addition, the Board suggests that the SMIT identify a means by which interim guidance can be formally disseminated as experience is gained so that lessons learned can be shared expeditiously.

The Board has attempted to work cooperatively with DOE to expedite the issuance of useful guidance to the field. However, the Board is not ready to conclude that Commitments 1.2 and 2.1 have been completely satisfied. If you have any questions about this matter, please call me.

Sincerely,



John T. Conway  
Chairman

Enclosure

c: Mr. John Angell  
Mr. Mark B. Whitaker, Jr,  
Mr. Richard Crowe

## Enclosure

### Remaining Issues Requiring Resolution in DOE G 450.4-1, *Integrated Safety Management System Guide* Draft, July 1997

#### **1. Authorization Agreement Guidance**

At least six Authorization Agreements have been signed for defense nuclear facilities. However, no guidance on the objectives or essential elements of such agreements currently exists in the draft Guide reviewed or in any other authoritative Department of Energy (DOE) directive. Revision O of DOE G 450.4-1 should contain at least elementary guidance on this vital component of integrated safety management. Supplemental guidance should be developed and issued as experience is gained at the Recommendation 95-2 priority defense nuclear facilities.

#### **2. Overall Integration of Safety Management**

In general, the draft Guide does not adequately address the need to integrate the full spectrum of safety management considerations. This spectrum includes the integration of:

- . Public, worker, and environmental considerations.
- . Controls to be applied at the task level that may be derived from either site, facility, or activity hazard analyses.
- . Design and operational safety concerns.
- . Nuclear with non-nuclear hazard analysis

Most notably, the draft Guide addresses poorly the incorporation of worker protection and environmental considerations into safety planning. It is anticipated that Revision O of DOE G 450.4-1 will partially address these two specific deficiencies, in response to the Board's comments. However, additional guidance on the overall integration of safety management will need to be developed and issued.

#### **3. Tailoring, Verification Core Requirements/Review Protocol, and Feedback and Improvement**

The July draft of DOE G 450.4-1 addresses these three key concepts only minimally. DOE has committed to expanding the discussion of these topics in Revision O of the Guide. However, more guidance will need to be developed and issued expeditiously, especially for the core function of "Feedback and Improvement." DOE should be able to derive examples of tailoring for the Guide as lessons are learned during the implementation of integrated safety management at the priority

facilities. Ongoing reviews of the integrated safety management descriptions that are required by the recently revised DOE Acquisition Regulations should support improvement of the Guide's discussion of "Verification Core Requirements/Review Protocol. "

#### **4. Consistency Among Integrated Safety Management Directives**

The concepts underlying integrated safety management will continue to evolve as field experience is gained. The Safety Management Integration Team (SMIT) will need to be vigilant to ensure that the associated DOE directives, including the Integrated Safety Management Policy and the Guide (DOE P 450.4 and DOE G 450.4-1, respectively), accurately reflect this evolution. The SMIT may need to commit to a periodic, integrated review and revision, as needed, of all authoritative documents governing DOE's integrated safety management system.