

RECOMMENDATION TO THE SECRETARY OF ENERGY
pursuant to Section 312(5) of the
Atomic Energy Act of 1954, as amended.

Dated: March 7, 1991

Among other functions of the Defense Nuclear Facilities Safety Board (Board), section 312 of the Atomic Energy Act requires that:

The Board shall review and evaluate the content and implementation of the standards relating to the design, construction, operation, and decommissioning of defense nuclear facilities of the Department of Energy (including all applicable Department of Energy orders, regulations, and requirements) at each Department of Energy defense nuclear facility. The Board shall recommend to the Secretary of Energy those specific measures that should be adopted to ensure that public health and safety are adequately protected. The Board shall include in its recommendations necessary changes in the content and implementation of such standards, as well as matters on which additional data or additional research is needed.

The Defense Nuclear Facilities Safety Board is continuing its review of the adequacy of the content and implementation of applicable nuclear safety standards relating to the design, construction, operation, and decommissioning of defense nuclear facilities of the Department of Energy. This review is not confined to the area of standards as they are sometimes understood, such as those issued by standards organizations, but includes as well all applicable Department of Energy Orders and regulations, directives, and other requirements that fall within the Board's statutory oversight responsibility, 42 U.S.C. §2286a.

During 1990, the Board communicated to senior Department of Energy (DOE) personnel its preliminary concerns about the content and the implementation of currently available standards. The Board's previous Recommendation 90-2, dated March 8, 1990, addressed certain aspects of this subject. On several occasions since Recommendation 90-2 was issued, the Board and its staff have met with DOE representatives on this subject, including an in-depth briefing given to the Board, at the Secretary's direction, by three Assistant Secretaries, major Office Directors, and their staff on December 11, 1990. That briefing was arranged to provide an opportunity for senior DOE officials to present to the Board the Department's overall safety management philosophy and to demonstrate DOE's commitment to

fully implement Recommendation 90-2 and other aspects of its standards program. On February 13, 1991, in fulfillment of a commitment given to the Board at the briefing, DOE transmitted to the Board a schedule for completing the first phase of its nuclear safety rulemaking. In a cover letter accompanying the February 13, 1991, schedule, DOE stated that safety orders "will be issued concurrently with publication of the proposed rules for comment."

The Board remains concerned that progress in issuing standards within DOE is not being made rapidly enough to meet the priorities that the Secretary of Energy has articulated regarding the implementation of safety standards at DOE's defense nuclear facilities. Existing policy, infrastructure, and management priorities relating to the safety standards program may need alteration or refinement if nuclear safety requirements are to be issued, and more importantly, implemented, in a timely fashion. Therefore, the Board recommends:

1. that the Department expeditiously issue a formal statement of its overall Nuclear Safety Policy;
2. that increased attention be given to the qualifications and background of managers and technical staff assigned to the development and implementation of standards and that the numbers of personnel suited to this activity be increased commensurate with its importance;
3. that standards program officials be given direct access to the highest levels of DOE management;
4. that the Department critically reexamine its existing infrastructure for standards development and implementation at Headquarters to determine if organizational or managerial changes are needed to (1) emphasize the priority and importance of standards to assuring public health and safety; (2) expand the program to facilitate the rapid development and implementation of standards; and (3) streamline the DOE approval process for standards; and
5. that the Department reexamine the corresponding organizational units at DOE's principal Operations and Field

offices and DOE contractor organizations to determine if those organizations' standards infrastructure, responsibilities and resources would also benefit from changes to reflect improvements at Headquarters which strengthen and expedite standards development and implementation.

In addition to these important organizational and management concerns, the Board's continuing review of the Savannah River standards program has resulted in identifying other standards issues which need to be addressed. In November 1990, the Board transmitted to the Secretary of Energy copies of a MITRE Corporation report, developed under the Board's direction and guidance, on the subject of Department of Energy standards imposed by Department Orders and supplements prepared by the Savannah River Operations Office. The MITRE report disclosed a number of deficiencies in the Department's Order program, many of which had previously been noted by other reviewing bodies.

Certain findings and conclusions reached by MITRE are of particular concern to the Board. Specifically, MITRE concluded that "the DOE Orders...lack the systematic approach and coherence necessary for understanding DOE's safety management philosophy." MITRE also concluded that "In many areas pertinent to safety, the DOE Orders do not provide specific requirements and supporting guidelines for implementing DOE's safety objectives...; a great deal is left to be defined and interpreted by the DOE contractor(s) operating the facilities."

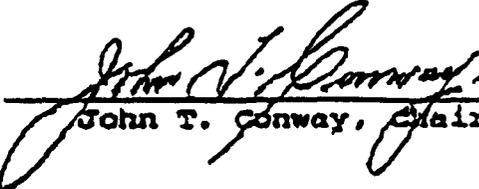
In addition, MITRE concluded that "Certain DOE Orders that address topics important to safety do not focus on safety," and that "The DOE Orders require compliance with very few mandatory nuclear safety standards for existing reactors or nonreactor facilities." Therefore, the Board recommends:

6. that DOE review all the findings and conclusions of both the Executive Summary and of Volume 2 of the MITRE report, identify which findings and conclusions it considers valid and appropriate in DOE's Response to this set of Recommendations, and subsequently address those findings and conclusions in the Implementation Plan.

The Board has also noted that in DOE's restructuring of the hierarchy of orders, directives, and requirements governing the performance expected of the Department and its contractors, DOE is proceeding with the simultaneous development of rules and DOE orders. Following formal adoption of rules and the issuance of related DOE orders, revised directives and other requirements are to be issued. Recognizing the immediacy of need, one such

directive has already been issued as an Immediate Action Directive (IAD). In view of DOE's decision to proceed with rulemaking as the means for addressing some of the subjects appropriate for articulation of Department requirements, the Board recommends:

7. that DOE expedite the issuance of revised safety orders, directives, or other requirements as a means of addressing the need for substantive guidance on the wide variety of safety requirements, while DOE is promulgating rules.



John T. Conway, Chairman

Draft Letter Nelson to Zane

Subject: Defense Nuclear Facilities Safety Board Recommendation

On March 7, 1991, the Defense Nuclear Facilities Safety Board approved a recommendation which is enclosed for your information. This recommendation will be also be placed in our public reading room and published in the Federal Register.

After DOE has completed its review of the recommendation, we will solicit your input in the development of an implementation plan for this recommendation.

cc: All EG&G AGMs
All RFO AMs and direct reports