



Department of Energy

Washington, DC 20585

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DNF SAFETY BOARD

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW
Suite 700
Washington, DC 20004-2901

Dear Mr. Chairman:

This is in response to your November 1, 2000 letter to me regarding the approval by field managers of nuclear safety analysis methodologies that may depart significantly from Department of Energy (DOE)-approved methodologies. I agree substantially with the issues you raise and plan to take several specific steps to remedy the Board's concerns consistent with your suggested approach.

To summarize, the Board's concern stems, in part, from a proposed use of a methodology for the treatment of dose calculations for identification and classification of safety structures, systems, and components (SSCs) for a nonreactor nuclear facility. This proposed methodology, approved by the DOE field manager for the facility, reduces the conservatism in the current DOE-recommended approach that is established by DOE-STD-3009. You suggest that the Office of Primary Interest (OPI) of the DOE-approved methodologies in DOE Directives approve any departures to ensure intended conservatism.

Your letter raises an issue long debated in DOE about the proper safety management functions and responsibilities of policy-setting organizations, such as those in the Office of Environment, Safety and Health (EH), versus those with direct line management responsibilities. The Department's Safety Management Functions, Responsibilities, and Authorities Manual (FRAM) establish those functions and responsibilities. Currently, the FRAM establishes safety basis approval authority with the line management organization and, in most instances, this authority is delegated to the field elements. EH has no approval or concurrence authority unless "requested or directed" by the line organization or the Secretary. This subsidiary role for EH review and approval was viewed as not conflicting with or jeopardizing EH's primary responsibilities of policy-setting and independent oversight of DOE line management.

The issuance of the Nuclear Safety Management rule (10 CFR Part 830) has caused us to revisit this issue. Appendix A to Part 830 has numerous "safe harbors." These are approved methodologies for the establishment of a safety basis for various applications defined in the rule, including DOE-STD-3009 for nonreactor nuclear facilities. These methodologies were developed



developed by a consensus approach involving extensive peer review, including review by the Board. Contractors may use alternative methodologies but they require prior DOE line approval.

Since deviations from the regulatory requirements in Part 830 may jeopardize safety and subject contractors to civil penalties, it is incumbent upon DOE to assure that contractors are meeting DOE's requirements and safety expectations. Accordingly, we will shortly propose within the Department that EH, as the office responsible for the technical substance of the regulatory requirements, must review and concur in deviations from approved methodologies in Part 830. In its review, EH will work with line organizations responsible for the nuclear facility and the OPI of the approved methodology. Such a review will ensure that any proposed methodology (a) is consistent with the proposed work, (b) provides an acceptable level of safety to meet the regulations, and (c) can be appropriately captured in revised safe harbor methodologies or Directives.

To accomplish these changes, we will be proposing a revision of the existing provisions of the FRAM. Additionally, we plan to add similar review and approval process language in the Documented Safety Basis Implementation Guide for Part 830 which is now undergoing review and comment.

Finally, we note the Board's observation of a proposed methodology for treatment of dose calculations for identification and classification of safety SSCs that uses a probabilistic combination of uncertainties in calculating unmitigated consequences. We have reviewed that methodology and we share the Board's concern that it may reduce the conservatism of the methodology described in DOE-STD-3009 to unacceptable levels. We have discussed this matter with individuals at the involved site and are working toward a resolution of the problem.

We will keep you informed of our progress as these planned actions proceed.

Sincerely,



David Michaels, PhD, MPH
Assistant Secretary
Environment, Safety and Health

cc:
Ellen Livingston, S-1
Mark Whitaker, S-3.1