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DEFENSE NUCLEAR FACILITIES SAFETY BOARD



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April 24, 1995

The Honorable Hazel R. O'Leary Secretary of Energy Washington, D.C. 20585

Dear Secretary O'Leary:

The Defense Nuclear Facilities Safety Board (Board) is pleased to note that a number of Department of Energy (DOE) defense nuclear facilities have made substantial improvements in their radiation protection programs while minimizing additional costs. On the other hand, the Board also notes that contractors at some sites are attempting to justify significant increases in costs to meet radiation protection requirements, the substance of which have been mandatory for many years under DOE Orders. This problem was brought to the Board's attention by reports and activities pursuant to Board Recommendation 91-6.

On December 19, 1991, the Board issued Recommendation 91-6 which proposed fundamental changes designed to improve radiation protection programs at DOE defense nuclear facilities. In a letter dated January 31, 1992 (amended on March 30, 1992), DOE accepted the Board's recommendation.

In a separate initiative, the Secretary of Energy issued a memorandum on January 16, 1992, to the heads of DOE organizations involved in managing radiological programs, directing a series of actions to enhance the conduct of radiological operations within DOE. Those actions included development of a comprehensive Radiological Control Manual (Manual)., which was approved and issued by the Secretary in June 1992.

It was not until July 1993, however, that the Board received an acceptable DOE Implementation Plan for Recommendation 91-6. In the Implementation Plan, the Secretary of Energy committed to achieve full compliance with DOE Order 5480.11, *Radiation Protection for Occupational Workers;* and 10 CFR Part 835, *Occupational Radiation Protection,* at defense nuclear facilities. Although the Board made no recommendation proposing the use of a manual or any other specific radiological control guidance, the Secretary of Energy chose to commit the Department to full implementation of the Radiological Control Manual as the principal method to achieve compliance with radiological safety requirements. The Implementation Plan called for an annual evaluation and report on the progress toward full implementation of the Recommendation and the Manual. On January 12, 1995, Dr. Victor Reis, Mr. Thomas Grumbly, Dr. Martha Krebs, and Mr. Terry Lash, reported the following to you by memorandum regarding implementation of the Manual:

[b]etween 1993 and 1996, the contractors operating DOE sites plan to spend almost \$240 million to bring their facilities into full compliance with the Manual's requirements and to sustain this level of compliance.

Furthermore, the February 23, 1995, DOE correspondence that provided the DOE Radiological Control Manual Implementation Status Report of 1993 to the Board's staff, states that:

[c]ontractors at Department of Energy sites project a cost of \$240 million to bring their facilities into full compliance with the Radiological Control Manual. Nine sites will require \$10 million or more to achieve compliance: Los Alamos National Laboratory (\$35 million), Oak Ridge National Laboratory (\$31 million), Rocky Flats (\$25 million), Y-12 (\$21 million), Fernald (\$19 million), Lawrence Livermore National Laboratory (\$16 million), Sandia National Laboratories (\$14 million), K-25 (\$12 million), and Idaho National Engineering Laboratory - EG&G Idaho, Inc. (\$10 million).

These rather large cost estimates are of concern to the Board from a number of perspectives. First, the estimates are a clear indication of how far these sites are from full compliance with the radiological protection requirements of DOE's own Order and rule. The figures, however, do not indicate what level of expenditures the managers estimate are necessary in the radiation protection area to ensure adequate protection of public health and safety. The Board would like to understand the basis for these costs at DOE defense nuclear facilities, and would also like to understand how these costs compare to those required for other hazardous non-radiological activities at DOE defense nuclear facilities.

Pursuant to 42 U.S.C. § 2286b(d) the Board requests that DOE provide a report that addresses the following:

- a. For fiscal years 1993 through 1996, identify the costs already incurred, and those projected for the future, to meet radiological safety requirements contained in DOE Order 5480.11, 10 C.F.R. Part 835, and other radiological protection standards which DOE deems necessary to ensure adequate protection of public health and safety at defense nuclear facilities. The report should reflect baseline costs of radiological controls necessary to meet safety requirements at these facilities and, separately, the incremental costs for implementing the Radiological Control Manual.
- b. The Board is aware that other facilities within the complex have achieved substantial compliance with radiological control requirements and the Radiological Control Manual at far less cost. Provide the documentation which served as the basis for the cost estimates cited above and state the reasons for the higher costs at the sites listed.

c. Provide cost details for the fiscal years 1993 through 1996 in the following categories related to radiological controls: equipment, capital construction, administrative, overhead, personnel, auditing, oversight, training development, and implementation. In addition, the report should contain similar cost estimates by these categories for any continued and planned efforts.

The Board requests that the above report be submitted within 60 days of receipt of this letter. Mr. James Troan of the Board's staff is available to provide any additional information that you deem your staff may require.

Sincerely,

John N. Conway John T. Conway Chairman

c: Mr. Mark Whitaker, EH-9 Mr. Joseph Fitzgerald, EG-5 Mr. Rick Jones, EH-52