John T. Conway, Chairman

A.J. Eggenberger, Vice Chairman

John E. Mansfield

R. Bruce Matthews

DEFENSE NUCLEAR FACILITIES SAFETY BOARD



625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004-2901 (202) 694-7000

April 5, 2004

The Honorable Spencer Abraham Secretary of Energy 1000 Independence Avenue, SW Washington, DC 20585-1000

Dear Secretary Abraham:

In testimony and presentations at recent public meetings, the Defense Nuclear Facilities Safety Board (Board) has noted references made by a number of Department of Energy (DOE) officials to DOE initiatives aimed at the characterization and management of risk at defense nuclear facilities. Further, in a recent policy statement, the Office of Environmental Management directed its field elements to develop risk-based end states in their cleanup activities, and separately, the National Nuclear Security Agency (NNSA) designated its site managers as the risk acceptance officials for NNSA sites. However, the framework for these risk characterization and management activities has not been made clear.

In a related activity, the Board has reviewed the DOE's use of risk management tools at defense nuclear facilities. This review revealed that DOE and its contractors have employed risk assessment in a variety of activities, including the development of documented safety analyses and facility-level decision making. The level of formality of these assessments varies over a wide range. The Board's review also revealed that DOE does not have mechanisms (such as standards or guides) to control the use of risk management tools nor does it have an internal organization assigned to maintain cognizance and ensure the adequacy and consistency of risk assessments. Finally, the Board's review showed that other federal agencies involved in similar high-risk activities (e.g., National Aeronautics and Space Administration, U.S. Nuclear Regulatory Commission) have, to varying degrees, formalized the use of quantitative risk assessment in their operations and decision-making activities. These agencies have relevant standards and defined organizational elements, procedures, and processes for the development and use of risk management tools.

As a result of these observations, the Board would like to understand DOE's perspective and expectations regarding the use of formal risk assessment in its oversight and operations at defense nuclear facilities. Therefore, pursuant to 42 U.S.C. § 2286b(d), the Board requests that the responsible officials brief the Board within 60 days of receipt of this letter as to DOE's ongoing and planned programs and policies for assessing, prioritizing, and managing risk.

Sincerely,

John T. Conway

Chairman

c: The Honorable Jessie Hill Roberson The Honorable Beverly Ann Cook The Honorable Everet H. Beckner Mr. Mark B. Whitaker, Jr.