

**[DNFSB LETTERHEAD]**

June 28, 1996

The Honorable Victor H. Reis  
Assistant Secretary for Defense Programs  
Department of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585-0104

Dear Dr. Reis:

Members of the Defense Nuclear Facilities Safety Board's (Board) staff have performed several reviews of the first scheduled subcritical experiment (REBOUND) to be conducted at the Nevada Test Site (NTS). Staff trip reports from these reviews are enclosed for your information and use.

As discussed in Recommendation 95-2 to the Secretary of Energy, the Board believes all operations and activities conducted within the defense nuclear complex that involve radioactive materials should be subject to Safety Management Plans that are graded according to the risk associated with the activity. The effort to define the authorization basis for REBOUND did not completely follow the standardized safety management approach established for nuclear facilities, nor did it follow the approach established for nuclear explosive operations. In addition, neither approach was tailored to the unique characteristics and hazards of this experiment.

Although the hazards associated with REBOUND appear to have been adequately addressed by the approach developed by the Los Alamos National Laboratory, the Board believes that both the Department of Energy (DOE) Headquarters and the Nevada Operations Office need to develop a comprehensive Safety Management Plan that would address the full range of potential hazards associated with the complete suite of future subcritical experiments at NTS. DOE's active participation in developing such a plan, in cooperation with both of the nuclear design laboratories fielding the subcritical experiments, is essential for the safe management of these experiments at NTS.

The Board and its staff will continue to closely monitor the conduct of subcritical experiments at NTS.

Sincerely,

**John T. Conway**  
Chairman

c: Mr. Mark B. Whitaker, Jr.  
Mr. Terry Vaeth

Enclosures

1. [\*Hazards Analysis for the REBOUND Subcritical Experiment\*](#)
2. [\*Los Alamos National Laboratory Briefing Concerning the REBOUND Subcritical Experiment\*](#)
3. [\*Containment Review Panel Review for LANL Subcritical Experiment, REBOUND-1\*](#)