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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004 (202) 208-6400



June 14, 1995

The Honorable Victor H. Reis Assistant Secretary for Defense Programs Department of Energy Washington, DC 20585

Dear Dr. Reis:

The Defense Nuclear Facilities Safety Board (Board) has continued to follow the activities at Lawrence Livermore National Laboratory's (LLNL's) Plutonium Facility (Building 332). Because a primary function of this facility is the processing of plutonium, the Board believes that operation should be within the safety envelope established for that facility.

Following a recent review by members of the Board's staff, it was pointed out to representatives of LLNL and the Department of Energy (DOE) that various building safety systems were not being monitored as required. At the time of the review, the Board's staff observed that there existed a lack of assurance that the Plutonium Facility was complying with the Limiting Conditions for Operations (LCOs) specified in the approved Technical Safety Requirements (TSRs). LLNL had failed to meet surveillance requirements established to ensure operability of such safety systems as emergency power, fire protection and ventilation. Subsequent to this, LLNL decided to place the Plutonium Facility in administrative standby, and normal nuclear operations were curtailed.

A summary outlining some of the specifics associated with the TSR issues identified by members of the Board's staff is enclosed and is provided for your information. The Board and its staff will be monitoring DOE's resumption operations. When it is available, please provide DOE's plan for addressing the issues that led to these TSR violations. If you need any further information in this connection, please let me know.

Sincerely.

John T. Conway

Chairman

Mr. Mark Whitaker

Enclosure

C:

Summary of Findings from a DNFSB Staff Review at the Lawrence Livermore National Laboratory -- Plutonium Facility

- During a recent (April 1995) review by the Board's staff, it was observed that the requirements to regularly monitor the availability and operability of safety systems, identified in the SAR, were not adequately implemented. Specifically, there was:
 - a lack of approved written procedures to operate and maintain the ventilation and fire suppression systems;
 - an absence of checklists and records that document accomplishment of required tests and verifications for the ventilation, emergency power, criticality alarm and fire suppression systems;
 - an inability to accomplish certain monitoring tasks associated with the emergency power system because of inconsistencies with actual equipment configuration;
 - a failure to review test specifications and results for compliance with uninterruptible power supply electrical power distribution monitoring requirements; and
 - a lack of training provided to facility personnel on the Plutonium Facility's safety envelope.
- In addition, review of other LLNL nuclear facilities has revealed similar conditions. Based on the above observations, coupled with interviews of LLNL personnel, it appears that LLNL's ability to monitor the status of its Plutonium Facility's safety systems and ensure their consistency with those commitments made in LLNL's SAR was not demonstrated.
- When informed of the Board's staff findings, Livermore decided to curtail normal nuclear operations in their Plutonium Facility. The decision by LLNL to terminate normal operations in the facility was prudent and demonstrates Livermore's commitment to nuclear safety.