96-0002619

Department of Energy
Washington, DC 20545

June 25, 1996

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

In your letter of May 28, 1996, you noted the progress achieved in Disassembly and Assembly operations at the Y-12 Plant. Fundamental to maintaining the momentum gained in the earlier restart efforts will be the ability to institutionalize a formal, disciplined system to review all activities for startup.

The Lockheed Martin Energy Systems, Inc., (LMES) procedure Y10-190, "New Activity Startup Requirements," implements the requirements of Department of Energy (DOE) Order 5480.31/425.1, "Startup and Restart of Nuclear Facilities." This procedure identifies the level of review and the degree of independence necessary, based on hazards and complexity of the operation being started. The review process selection is risk based and conforms to the requirements and expectations of DOE Order 425.1. As implemented, Y-12 management prohibits a reviewer from reviewing work for which he is responsible. The DOE Y-12 Site Office monitors the implementation of this process for both proper categorization and adequacy of review. We are prepared to discuss the implementation of this procedure with your staff.

Planning for the safe conduct of work occurs well before a readiness review. The Pantex Plant has formalized this process with their Seamless Safety 21 (SS-21) methodology. The DOE Executive Management Team for Dismantlement (EMTD) tasked the Y-12 Plant to review their work planning process and to compare that process to the SS-21 process. The purpose of this effort was to fully evaluate the value of developing a similar procedure for the Y-12 Plant. Based on presentations to the EMTD in February 1996, the EMTD concluded that the Y-12 Plant process meets the spirit and intent of the SS-21 methodology in the areas of planning, personnel selection, training, procedure development, and facility safety interface. However, they noted that the Y-12 Plant process falls short in providing safety standards or criteria that SS-21 uses as the benchmark for developing weapons operations. The Y-12 Plant has an action to review the safety criteria listed in EP401110, "Integrated Safety for Assembly and Disassembly of Nuclear Weapons," to determine which criteria are applicable at the Y-12 Plant.

As briefed to members of your staff May 13-17, 1996, LMES is establishing an improved Criticality Safety Approval (CSA) program based on lessons learned from previous restarts, CSA walkdowns, and conclusions reached from benchmarking trips at other DOE sites. The Y-12 Plant CSAs were not written with the intent of verbatim compliance. As part of the enriched uranium operations resumption process, criticality safety requirements will be extracted from the CSAs and placed into appropriate procedures, postings, and guidance documents. This corrective action, along with the ongoing effort to improve the overall conduct of operations at the Y-12 Plant, is expected to correct the systemic problems identified in Recommendation 94-4. If additional root causes are discovered, corrective actions will be applied, as appropriate, throughout the Y-12 Plant.

We will keep your staff apprised on our progress related to these issues. If you have any questions concerning these matters, please contact me or have your staff contact Dale Dunsworth of my staff at (301) 903-5156.

Thomas P. Seitz
Deputy Assistant Secretary for
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