

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 17, 2011

MEMORANDUM FOR: Timothy Dwyer, Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending June 17, 2011

DNFSB Staff Activity: Anderson, Gibson, Roscetti, and Shuffler were at the laboratory performing a review of safety system design, functionality, and maintenance. The team examined systems in the Plutonium Facility, Tritium Facility, and Hardened Engineering Test Building.

Livermore Site Office (LSO): On June 15, 2011, the Assistant Manager for Facility Operations received contracting officer authority for contract requirements related to Department of Energy (DOE) directives for Configuration Management, Conduct of Operations, Emergency Management, Occurrence Reporting, and the System Engineering program. Facility Operations has also released a list of priorities and initiated integrated process review team efforts focused on (1) training and the work control process and (2) corrective actions resulting from critiques, occurrences, and other abnormal events.

Safety Basis: In a letter dated June 15, 2011, LSO approved revision 9 of the contractor's Unreviewed Safety Question (USQ) procedure. One of the primary changes associated with this revision is the incorporation of the expert USQ process (see weekly report dated July 2, 2010). LSO documented the basis for approval in a safety evaluation report, which referenced a February 2011 evaluation of the contractor's safety basis and USQ processes performed with assistance from the DOE Office of Health, Safety and Security. The evaluation identified a lack of formal procedures for maintaining lists of the document types subject to the USQ process. The contractor developed procedures to correct this weakness and incorporated them into revision 9 of the USQ procedure. LSO directed implementation of revision 9 within 90 days. The contractor was further directed to perform a six month pilot of the expert USQ process and provide LSO with a formal briefing on the the results.

Safety-in-Design: The contractor recently determined that the installation of the shaker and jerk testing equipment in the Hardened Engineering Test Building did not require evaluation as a major modification according to the institution's implementing procedure for DOE-STD-1189, *Integration of Safety into the Design Process*. Based on direction from LSO, this procedure only applies to acquisitions exceeding a cost threshold of \$500k (see weekly report dated July 3, 2009). The contractor estimated the cost of each of these efforts to be less than this threshold. The Site Representative notes that the contractor does not utilize a procedure or otherwise provide guidance for cost estimates determined as part of the change control process. While the shaker and jerk testing efforts are relatively limited in scope, the contractor would benefit from formalizing expectations for cost estimates to support future efforts.