

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 24, 2006

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: M. J. Merritt and J. Plaue (acting), DNFSB Site Representatives
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending February 24, 2006

DNFSB Staff Site Activity: J. Plaue, F. Bamdad, B. Broderick and R. Raabe were at LLNL this week reviewing the Plutonium Facility Documented Safety Analysis (DSA). J. Plaue also augmented site representative coverage.

Configuration Management: The LLNL Nuclear Material Technology Program (NMTP) has developed a schedule (see weekly report dated September 9, 2005) to address the configuration management of vital safety systems at some of the laboratory's highest hazard nuclear facilities. Based on the schedule provided in the attachment to the October 26, 2005, letter to the Board from the Administrator of the National Nuclear Security Administration, the commitment date for preparation of the configuration management plan was February 3, 2006. This commitment, a key component to the overall success of the program, has been delayed. The configuration management plan will presumably outline the process and prioritization strategy for incorporation of critical vital safety system documentation (system design descriptions, surveillance procedures, drawings, etc.) and other key documentation related to safety (operational safety plans, administrative control procedures, etc.) into the Enterprise Configuration Management System (ECMS). ECMS was developed to support construction of the National Ignition Facility (NIF), and provides a software-based solution to document control. While the software infrastructure and many of the procedures have already been developed for NIF, NMTP is spending time ensuring these are appropriately tailored for their facilities.

Plutonium Facility Safety Basis: On December 19, 2005, LLNL submitted a DSA and Technical Safety Requirements (TSR) document for the Plutonium Facility to comply with 10 CFR Part 830, the *Nuclear Safety Management* rule (see weekly report dated December 23, 2005). LSO is in the process of completing its review of the submitted documentation, which primarily involves verification of appropriate disposition of the approximately 270 comments issued against the October 2003 submittal. Issuance of LSO's Safety Evaluation Report (SER) is expected in the near future. LLNL has committed to submitting an implementation plan for the rule compliant DSA/TSR within 30 days from receipt of the SER. Currently, a rolling approach to implementation of the DSA is being discussed.

Critical considerations for the overall implementation strategy will likely include: (1) a schedule for rolling implementation with an associated verification process for each of the safety systems and administrative control programs, (2) a process for integration of the configuration management recovery program, and (3) a clear mapping of controls credited in the DSA/TSR to the implementing procedures (e.g., operational safety plans and operating procedures). Adequate resources to allow for continued close-coupled integration of the configuration management recovery program, in order to support effective and durable implementation of the DSA, appears warranted.