

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 16, 2006

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: M. J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending June 16, 2006

Configuration Management: On June 12, 2006, LLNL provided a briefing to LSO regarding its configuration management path forward for vital safety systems in Nuclear Materials Technology Program (NMTP) facilities. The briefing provided an update on progress in establishing an improved process for configuration management of drawings, system design descriptions and procedures. The briefing also identified problems with deployment of the Enterprise Configuration Management System (ECMS). Many of the Plutonium Facility procedures are currently controlled by ECMS, but change control has been problematic. NMTP management is committed to the continued use of ECMS in the near term, but is considering other options.

The current status of configuration management commitments is indeterminate. LLNL will rebaseline the resource-loaded schedule provided to the Board (see weekly report dated February 24, 2006) at some undefined time in the future. Furthermore, a plan has not been established for the implementation of configuration management in NMTP facilities and implementation delays in NMTP facilities other than the Plutonium Facility are expected. Also, LLNL has not established a plan to institutionalize configuration management of vital safety systems as was intended by Board Recommendation 2000-2, *Configuration Management, Vital Safety Systems*.

Nuclear Criticality Safety Training: LSO has granted approval to LLNL to conduct nuclear criticality safety training in the Plutonium Facility. The training will include sub-critical multiplication experiments using pre-existing LLNL uranium parts, referred to as the Training Assembly for Criticality Safety (TACS). In its Safety Evaluation Report (SER), LSO approved the safety basis amendment for the activity with one condition of approval (COA). The COA is to revise the 10CFR830-compliant TSR specific administrative control (SAC) to address use of the TACS outside of engineered confinement for more than one hour. The current SAC is too restrictive to support the training needs. The goal is to establish the level of training needed to qualify contractor and DOE criticality safety engineers to DOE-STD-1135-99, *Guidance for Nuclear Criticality Safety Engineer Training and Qualification*. Training courses are expected to begin in July with four courses to be completed by the end of fiscal year 2006.

Radiography Facility Operations: Operations were performed in the Radiography Facility this week. The operation involved radiography a plutonium hemispherical-shell. The performance of the nuclear activities in the facility continues to improve. The most notable difference in the recent operations was the improvement in the process to develop work permits. The work permit has been revised to be consistent with improvements made for similar operations in the Hardened Engineering Test Building, Building 334. The improved work permit better defined radiological controls and criticality safety requirements. This week, the work in the Radiography Facility was completed in accordance with the Facility Safety Plan requirements and the controls identified in the work permit.