

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 18, 2011

**MEMORANDUM FOR:** T. J. Dwyer, Technical Director  
**FROM:** B.P. Broderick and R.T. Davis  
**SUBJECT:** Los Alamos Report for Week Ending March 18, 2011

**Plutonium Facility – Seismic Safety:** This week, Plutonium Facility personnel placed the recently installed seismic shutdown switches on-line after monitoring system performance for several weeks. This system will isolate power to non-safety-related laboratory floor circuits on indication of a seismic event. An alarm response instruction and abnormal operating procedure have been developed for facility personnel to respond to initiation of this system. These switches will help reduce the likelihood of post-seismic fire initiation and is identified as a deliverable for Recommendation 2009-2.

**Plutonium Facility – Safety Basis:** Plutonium Facility management has submitted for NNSA site office review and approval a Justification for Continued Operations (JCO) related to sealed packages that contain <sup>238</sup>Pu-enriched heat source plutonium (HS-Pu). Facility management has declared three recent PISAs related to the handling and storage of the large and diverse population of sealed HS-Pu containers housed in the Plutonium Facility. Because the existing DSA does not comprehensively analyze hazards associated with all sealed HS-Pu container configurations in the facility, which led to the PISAs, the JCO submittal attempts to address all activities involving all types of sealed HS-Pu containers in a holistic manner. NNSA office site review of the JCO is ongoing.

**Readiness:** On Monday, LANL responded to a recent site office request to review recent adverse indicators in the readiness review program and identify corrective actions to improve the execution of the readiness review and startup process. The review identified the following three causal factors: 1) LANL has failed to adequately implement requirements for timely planning and execution of readiness verification activities; 2) LANL has not used available planning tools to develop adequate assessment criteria for line management verification of readiness; and 3) LANL has not effectively executed appropriately objective and critical self-assessments prior to commencing readiness review activities.

Based on these issues, the response to the site office proposes several improvement initiatives including implementation of an institutional procedure on the conduct of line management readiness verification activities, use of a startup notification report affidavit that ensures programmatic input/concurrence and identification of a senior supervisory watch for Area G readiness activities (several recent readiness and startup issues have occurred at Area G).

**Chemistry and Metallurgy Research (CMR) Building:** As required by a condition of approval identified in the site office Safety Evaluation Report, LANL submitted an update last week on the status of the evaluation of designating the CMR electrical distribution system as safety significant. LANL plans to perform a system adequacy analysis on the system and establish the minimum requirements needed for the system to perform its safety function along with identifying appropriate surveillance and inspection requirements. The final evaluation of the system is scheduled to be complete in July 2011. The safety basis will be updated to reflect the safety significant designation during the next annual update following the July final evaluation.

**Management:** This week, LANL management announced an organizational change that elevates the manager responsible for large capital projects, including the CMR Replacement Facility, from the Associate Director level to the more senior Principal Associate Director level.