

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Wayne Andrews and David Kupferer, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending July 13, 2012

ORNL Building 3019/Uranium-233 (U-233) Disposition. Last year, DOE Headquarters directed DOE-ORO to execute a two-phase plan for disposition of U-233 from Building 3019 (see the 4/29/11 and 6/1/12 reports): (1) proceed with a direct disposition campaign to dispose of half of the U-233 inventory (e.g., shipping Zero Power Reactor plates and Consolidated Edison Uranium Solidification Project canisters to the Nevada National Security Site) and (2) continue the alternatives analysis effort and identify the preferred alternative for processing the remaining U-233. Two weeks ago, DOE Headquarters approved the DOE-ORO's Phase II Alternatives Analysis Report recommendations, which includes the following activities: (a) dissolve and downblend in existing hot cells in Building 2026, (b) transfer downblended solutions to the Melton Valley Storage Tanks (MVST), (c) process the solutions into cement monoliths at the Transuranic Waste Processing Center in conjunction with the planned MVST sludge processing campaign, and (d) ship the cement monoliths to Nevada as low-level waste.

Facility Risk Review (FRR) for Buildings 9204-2E and 9215. Last month, B&W submitted its action plan and proposed funding strategy to NPO for addressing the recommendations of the FRR Follow-on Study of Buildings 9204-2E and 9215 (see the 5/18/12 report). B&W proposed an integrated, multi-program strategy to fund 28 discrete projects identified by the FRR Follow-on Study team rather than the line-item funding approach adopted by the Nuclear Facility Risk Reduction (NFRR) project for Building 9212 (see the 11/12/10 report). These discrete projects include replacing electrical equipment (e.g., switchgear and electrical panels), safety-significant sprinkler heads (see the 3/16/12 report), and ventilation equipment (e.g., fans and ductwork). This multi-program strategy would rely on funding from the Readiness in Technical Base and Facilities (RTBF), Directed Stockpile Work (DSW), and Capabilities-Based Facilities and Infrastructure (CBFI) programs. B&W and NPO are committed to perform another FRR Follow-on Study of Buildings 9204-2E and 9215 during FY 2017.

Work Planning and Control/Conduct of Operations. This week, B&W's Vice President of Facilities, Infrastructure and Services (FI&S) issued a new standing order that consolidates and clarifies requirements associated with lockout/tagout (LO/TO) processes and practices (see the 6/8/12 report) including specification of training requirements for LO/TO Issuing Authorities, maintenance supervisors, engineering support personnel, and other maintenance personnel that are responsible for conducting LO/TO activities.

Training. Based on the observations identified during a review the staff conducted in March 2012 (see the 3/16/12 report), the Board sent a letter to NPO on 6/5/12 stating that although the staff concluded that B&W's training and qualification program utilizes a systematic approach to training consistent with DOE requirements, the staff identified several opportunities for improvement in the program's implementation and effectiveness. Two weeks ago, NPO directed B&W to review the staff's report and identify any proposed corrective actions by the end of July.

Implementation Verification Reviews (IVRs). In March 2012, DOE's Office of Enforcement and Oversight performed a review of B&W's processes for verifying and re-verifying the implementation of new or substantially revised safety basis controls. DOE recently issued its final report, which concluded that B&W's processes provide assurance that proper implementation of safety basis controls is adequately verified initially and periodically re-verified through execution of IVRs, readiness reviews, facility evaluations, and other less formal assessments performed by both the Engineering and Production Facilities departments.