

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 7 July 2006
SUBJECT: Pantex Plant Weekly Report

Seismic Controls Project: BWXT continues to evaluate and document its approach to resolving seismic issues related to equipment and appurtenances in nuclear facilities. A lack of consistent and adequate funding has limited the progress made to date in evaluating the outliers (components that require additional seismic analysis) and completing the detailed design. At this point it appears that the concerns are primarily with components attached to the ceilings, as those bolted to walls have been calculated to not be a threat to the nuclear explosive if a minimum standoff is maintained. BWXT will request \$12 million in the fiscal year 2008 budget and is now projecting five years to complete the modifications. PXSO is expected to request a prioritization scheme for the limited funding, with the cell upgrades anticipated to be the initial focus.

Mass Properties Start-up: BWXT recently completed modifications to two bays that include installation of mass properties machines and electronic scales, construction of control rooms, and installation of new electrical utilities. The currently operating mass properties bays have equipment in which replacement parts are increasingly difficult to procure and will likely be phased out as weapon programs become authorized in the new bays. The project team was well prepared for the recently completed facility Nuclear Explosive Safety Master Study and NNSA readiness assessment as was evident by the small number of relatively minor findings. Although no product is expected to be sent to the new mass properties bays in the near-term, start-up authorization from PXSO could be granted within a couple weeks.

Conduct of Operations (ConOps) Assessment: PXSO recently provided BWXT the results of the May 2006 NNSA effectiveness review of the contractor's ConOps Continuous Improvement Plan. The general indication is that an acceptable rate of improvement has been established. Progress was noted in the areas of training, Nuclear Safety Officer observations of work, and management commitment to working safely. The review team recommended that near-term ConOps improvement efforts be focused on reader-worker verification, procedure compliance and tracking and trending of work performance data. A follow-on assessment to further evaluate the effectiveness of the improvement plan is scheduled for later this year. BWXT Manufacturing Division is currently in the middle of its own ConOps management assessment which is looking at pre-operational checks, lockouts and tagouts, and operations turnovers, among other areas.

Documented Safety Analysis (DSA) Training: As part of corrective actions from previous ConOps reviews and analyses, BWXT recently completed general DSA training of production technicians (PTs) and other operations personnel. The terminal objective of the course was for the trainee to demonstrate knowledge of their role in the development and implementation of the DSA and associated process controls and the requirements for working to the DSA. The level of instruction seemed to be appropriate for the audience it was intended to reach. Weapon-specific DSA training is now being provided to PTs and supervisors.

High Pressure Fire Loop (HPFL) Software: BWXT recently purchased an information management system for water utilities called WaterCAD. The design and analysis safety software should help BWXT engineers determine HPFL flow requirements and the reliability of the system in the event of a power outage or pipe break. It is estimated that the software quality assurance evaluation will be completed early next year.