

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 18, 2003

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** W. White, Pantex Site Representative  
**SUBJECT:** Pantex Plant Activity Report for Week Ending July 18, 2003

**DNFSB Activity Summary:** W. White was on site all week.

**Electrical Safety:** A near miss occurrence took place this week when a construction contractor contacted a communications line with a hydraulic excavator while attempting to navigate across a drainage ditch and under the communications line. The communications line was secured on power poles and was below active power lines. The contact with the communications line apparently caused the power lines to contact each other and shorted out electrical circuits, resulting in a power loss to several facilities. Fortunately, the incident did not cause the power poles or attached power lines to fall on or near the excavator.

The job hazard analysis completed for the construction activity noted the presence of the power lines. However, the analysis required only that personnel “watch for overhead power lines”. In previous occasions observed by BWXT safety personnel, the contractor had operated the excavator from the other direction and had a spotter to assist. Even in the best case, however, it appears the contractor would have had only about 5 feet of clearance from the communications line. The analysis also noted that BWXT could lock out the power to some of the lines and suggested this be planned in advance. This was not required by BWXT, and the contractor chose not to have BWXT do this. This is the third event in the past six weeks involving maintenance or construction personnel in a near-miss occurrence with electrical power circuits. Each event had the potential for significant injury to the personnel involved. [II.A]

**No-Notice Exercise:** On Tuesday, BWXT conducted a site-wide, no-notice exercise. The exercise simulated an accident involving a small fire and local contamination. The emergency response organization within the operations center was staffed in numerous cases with backup personnel. The BWXT plant manager was offsite, and the PXSO manager and two assistant managers chose to continue oral boards for facility representative candidates that were in progress and not to participate in the exercise. This allowed personnel in backup positions to gain exercise experience at the expense of some primary personnel. Potential areas for improvement that resulted from the exercise include the failure to participate in the exercise by large numbers of plant personnel, limited response resources available within the fire department, inadequate communications equipment, difficulty setting up communications between PXSO personnel in the emergency operations center and offsite personnel, the need for more integrated training between fire department and other response personnel, and concerns with accountability for on-scene personnel. [II.A]

**W88 Seamless Safety Tooling:** NNSA NA-12 met with PXSO, BWXT and LANL this week to discuss the path forward for implementing seamless safety tooling for W88 bay operations. A contractor readiness assessment is now scheduled for the week of July 28. A planning meeting will occur for the nuclear explosive safety study the week of August 12, and demonstrations will be held for the nuclear explosive safety study group the week of August 25. NNSA NA-12 and PXSO have committed to expediting their review of the study results to facilitate implementation of the new tooling in the bay, if possible. The longer-term question of implementation of seamless safety tooling for W88 cell operations remains unresolved. NNSA senior management will meet with management from PXSO, BWXT, LANL, SNL and LLNL on August 8 to begin resolving the issues that have led to continuing slips in the schedule for implementing this tooling. [II.A]