

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 6, 2015

**MEMO TO:** Steven Stokes, Technical Director  
**FROM:** Zachery Beauvais, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending November 6, 2015

**Recovery of Nuclear Explosive Operations:** On November 2, 2015, the Consolidated Nuclear Security, LLC (CNS) Pantex Production Operations Manager released a memo stating that Pantex personnel have completed the required actions specified in the recovery plan, and all facilities and programmatic activities have been restored to their pre-strike condition.

**Failed Electrical Tests:** Last week, the NNSA Production Office (NPO) approved the results of a Nuclear Explosive Safety Change Evaluation (NCE) performed to evaluate additional electrical testing of two units that had previously failed a Detonator Cable Assembly (DCA) electrical test and were subsequently declared anomalous (see 4/17/2015, 8/14/2015 and 10/23/2015 reports). CNS had previously suspended this electrical test on other units with similar DCAs. The NCE memo specified conditions wherein CNS could resume this electrical test, contingent on the results of the additional testing performed on the two anomalous units. On November 2, Production Technicians (PTs) performed the tests per the Nuclear Explosive Engineering Procedure (NEEP) evaluated in the NCE, with additional compensatory measures as specified in a Justification for Continued Operations. The obtained results do not allow CNS to rule out the hazard scenario that led to suspending the tests. CNS and the design agency are developing a path forward to implement additional controls in order to resume this electrical test on other units with similar DCAs and a separate plan to continue processing the anomalous units.

**Evaluation of the Safety of the Situation (ESS):** On November 4, NPO issued a Safety Evaluation Report approving an ESS which allows CNS to continue using a Safety Class hoist that has exceeded the allowed grace period for safety basis required in-service inspections (ISI). This hoist is required to perform lifts specified in the NEEP developed to continue processing a unit which had experienced abnormal loads when PTs continued disassembly while a retaining nut remained in place (see 7/31/2015 and 10/16/2015 reports). CNS Systems Engineering personnel prepared an engineering evaluation supporting the ESS that concludes the pre-operational checks for the hoist will test many of the functions normally verified by the lapsed ISIs. Through their approval, NPO requires CNS to perform the required ISIs as soon as reasonably possible. NPO had previously approved a separate ESS which concluded that the proposed operation could be safely performed using the tools and components which had experienced the abnormal loading.

**High Pressure Fire Loop (HPFL) Lead-In Replacement:** This week, subcontractor personnel completed cutting through the floor of the equipment area in two nuclear explosive cells to support the HPFL lead-in replacement for those facilities (see 10/16/2015 report). The site representative accompanied CNS Systems Engineering personnel during a walkdown of the affected facilities. Earlier this year, the lead-in to one of the cells had experienced a leak lasting for multiple weeks, raising the question of whether the leak displaced soil and created a void below the facility (see 8/14/2015 report). During the walkdown, the CNS Systems Engineering personnel and the site representative observed no conclusive evidence of void formation; however, the site representative notes that the excavation has not reached the lead-in elevation.