

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 19, 2016

MEMO TO: Steven Stokes, Technical Director
FROM: Zachery Beauvais, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending February 19, 2016

Electrical Test Simulator: Consolidated Nuclear Security, LLC (CNS), Production Technicians (PT) received an over-range reading while performing a digital ohmmeter simulator test as part of a limited life component exchange. The simulator test, performed away from the unit, is required to determine that the digital ohmmeter can be safely connected to the unit and a later test can be safely performed. The Nuclear Explosive Operating Procedure (NEOP) for this operation requires PTs to enter the immediate action procedures (IAP) when a failure occurs during this test. According to the Pantex General Safety Requirements for Production Activities, IAPs direct personnel working on or around nuclear explosives in the correct methods to safely stop operations if events affecting nuclear explosive safety occur. The General Safety Requirements also require CNS Nuclear and Explosive Safety concurrence prior to proceeding with operations following IAP entry. The PTs performed the IAP steps and made the appropriate notifications. Personnel from Tester Design performed diagnostic evaluations on the test configuration per the protocol designated in the Pantex procedure on test failure response. Tester Design determined that the over-range was caused by a faulty test adapter and that the reading did not indicate an issue with the digital ohmmeter or the test simulator. CNS Nuclear and Explosive Safety evaluated this information and issued a written release allowing production personnel to return to operations.

Canned Subassembly (CSA) Removal: During disassembly operations performed in a nuclear explosive bay, PTs were unable to remove the CSA from a unit per the approved process. The site representative attended a meeting where personnel from CNS Production and Manufacturing Engineering, CNS Nuclear and Explosive Safety and the cognizant design agency determined that the unit does not meet the criteria to be designated as anomalous. The CNS program manager conducted the meeting per a recently issued work instruction which implements the anomalous unit determination process as defined in DOE Order 452.2E, *Nuclear Explosive Safety*. CNS is working to determine a path forward for continued disassembly of the unit.

Staging of Anomalous Units: PTs successfully executed a Nuclear Explosive Engineering Procedure (NEEP) to load two units that had experienced out-of-tolerance resistance tests (see 4/17/2015, 8/14/2015, and 2/12/2016 reports) into Enhanced Transportation Carts and move the units to an interim staging facility. Further movement of these units is currently restricted in the Integrated Production Planning and Execution System, with specific approval from weapons production management required to lift the restriction. CNS and the cognizant design agency are developing a process to complete disassembly of these units.

Cracked High Explosive Removal: PTs attempted to execute a NEEP to complete disassembly of a unit with a cracked conventional high explosive charge (see 1/15/2016 and 2/12/2016 reports). PTs were unable to separate the charges using the designated shimstock and spatulas. CNS Production and Manufacturing Engineering is revising the NEEP to perform the operation using wedges and spatulas made of stiffer materials than the shimstock.