

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Rory Rauch, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending June 22, 2012

NNSA Production Office (NPO): On Monday, the Y-12 and Pantex Site Offices officially merged to form the NPO. The NPO is led by Steve Erhart, former PXSO manager.

W84 Error Code Units (ECUs): Late last week, PXSO approved the hazard analysis report addendum for the process that will be used to disassemble the W84 ECUs. Of note, B&W applied safety-class controls to all accident scenarios with high explosive violent reaction or inadvertent nuclear detonation consequences that had not been screened by the design agency. Many of these scenarios would not have received a control using B&W's previous approach to documented safety analysis development because the analyst would have deemed the event incredible (citing an extremely low combined initiating event probability and weapon response estimate). This new approach is intended to address one of the primary concerns from the Board's July 6, 2010, letter regarding deficiencies in the implementation of DOE Standard 3016.

Special Tooling: Last week, during a nuclear explosive assembly operation, a technician noticed that the vacuum catch blocks on a pit lifting fixture were interfering with a piece of gauging equipment. Tooling personnel reviewed the records for this pit lifting fixture and found that three copies of the fixture, which had been fabricated within the applicable design tolerances, would create this interference. The process engineer analyzed the unit in question and found that this interference may have affected the relative alignment of certain components and increased certain assembly loads. Both parameters were within tolerance, but approaching the limits specified by the design agency. This week, the design agency formally directed B&W to complete the assembly of the unit, and then prepare it for immediate disassembly and inspection. The design agency will observe certain portions of the disassembly of the unit in order to fully characterize the impact of this tooling design issue.

Conduct of Maintenance: Last weekend, electricians performed unauthorized work on a non-credited generator for a nuclear explosive facility. The electricians were authorized to verify automatic startup of the generator in preparation for a power outage. However, prior to this verification, they performed several unauthorized checks in an attempt to maximize the likelihood that the generator would start automatically. The electricians checked the generator's oil level, battery voltage, and coolant level. In a final unauthorized act, they switched the automatic/ manual switch to manual, which resulted in the rupture of the generator battery and dispersal of the battery electrolyte (low concentration sulfuric acid) on the legs and right side of the body of one of the electricians. He immediately notified his supervisor of the incident by radio and went to a nearby battery shop and flushed the affected areas with water. Maintenance division management has directed a cessation of all work on lead-acid batteries until corrective actions can be developed.