

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 20 April 2007
SUBJECT: Pantex Plant Weekly Report

DNFSB Activity: Staff member M. Duncan was onsite to observe the second week of Phase II (assembly and satellite operations) of the W76-1 Nuclear Explosive Safety Study.

Potential Inadequacy in the Safety Analysis (PISA): This week, BWXT reported the discovery of a PISA—specific to one program—based on new weapons response information received from Lawrence Livermore National Laboratory (LLNL). BWXT and PXSO have determined that no compensatory measures are required at this time and a request for additional clarification from LLNL and Los Alamos National Laboratory is being drafted.

Conduct of Operations (ConOps) Assessment: In 2006, NNSA performed an effectiveness review of BWXT's ConOps Continuous Improvement Plan (CIP). The 2006 team recommended that ConOps improvement efforts be focused on reader-worker verification, procedure compliance and tracking and trending of work performance data. This week, NNSA completed a follow-on assessment to further evaluate the effectiveness of the improvement plan. The team observed that, in general, ConOps in nuclear facilities has improved. However, the team does not believe that the CIP actions have evolved to the point that a mature ConOps program is in place. The team also noted that there has been a steady decline in the number of nuclear safety officers (NSOs), which is concerning due to the significant role the NSOs have in implementing CIP action items.

Surveillance of Safety Systems: On several occasions during the past few years, BWXT and NNSA have discovered that surveillance and in-service inspection activities were not being performed in accordance with the applicable safety basis requirements. Notable examples include the following discoveries: a yearly structural evaluation of the loading docks was missed; a semi-annual battery charger operability evaluation was missed; a procedure used to verify that contaminated waste isolation valves were closed was inadequate; hourly temperature monitoring of pit storage magazines was missed; and, most recently, an annual inspection of several gas regulators was missed. It appears that BWXT could improve the following processes: (1) the processes for ensuring that surveillance and in-service inspection requirements are accurately incorporated into the appropriate maintenance procedures and (2) the processes for ensuring that surveillance and in-service inspection activities are performed within the required periodicity.

Differing Professional Opinion (DPO) Program: As one of the corrective actions from the November 2006 anonymous letter, BWXT has developed a DPO program and issued a work instruction that defines the process to submit a DPO regarding technical concerns associated with environment, safety, and health matters. In accordance with DOE P 442.1 and the associated manual, a formal protocol has been established to encourage dissenting opinions and document the decision-making and issue resolution processes.

DOE Voluntary Protection Program (DOE-VPP): BWXT has initiated meetings with the local unions to establish a DOE-VPP steering committee to provide guidance during the DOE-VPP application process and, in parallel, ensure safety programs are maintained. Requirements for participation in DOE-VPP are based on employees being actively involved in assessing, preventing and controlling site hazards and going beyond compliance with DOE orders (<http://www.hss.energy.gov/HealthSafety/WSHA/vpp/index.html>).

Pantex Guard Union Strike: On Sunday, the union voted and rejected BWXT's contract offer.