

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 28, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: Zachery S. Beauvais, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending September 28, 2018

Maintenance Work Authorization: Technicians performed a radiation alarm monitoring system (RAMS) monthly preventive maintenance (PM) activity in one nuclear explosive bay without authorization. As the blast door interlock system (BDI) interfaces with the RAMS, the monthly RAMS PM requires that facilities personnel perform the limiting conditions for operations (LCO) actions associated with intentionally overriding the BDI system. These LCO actions were not performed. CNS facilities personnel authorized the RAMS technicians to perform the monthly PM in two other bays in the facility but were unable to authorize maintenance work in the third bay due to production operations carrying over onto swing shift. The work authorization paperwork, which accompanies all work orders, only listed two of the three bays as authorized for work. As discussed during the fact finding meeting, the maintenance supervisor had instructed the RAMS technicians in their stand-up briefing to perform work in the first two bays and contact the CNS facility representative for approval before performing work in the third bay. The RAMS technicians failed to contact the CNS facility representative. In response to the event, CNS infrastructure management has required the RAMS technicians to perform additional training and has briefed additional crews on the details of the event. CNS management has also instructed the RAMS technicians to verify LCO entry with the operations center prior to performing PMs.

Fire Suppression System: This weekend, the emergency services dispatch center received a battery fault trouble signal from the Det-Tronics control panel serving one nuclear explosive bay. Fire department personnel reset the panel, but the trouble signal quickly returned. CNS facilities personnel entered the LCO required for an inoperable Det-Tronics panel. Fire protection engineering personnel reported to the plant, walked down the impacted areas, and determined that combustible materials were adequately controlled, effectively implementing the LCO actions. CNS management determined that the condition represented a degradation of the safety system when required to be operable. Crafts personnel executed a work order to restore the system to operability.

Safety Basis: NPO approved a safety basis supplement (SBS) to address legacy issues with the documented safety analysis (see 7/6/18 and 9/21/18 reports). The SBS includes compensatory measures equivalent to specific administrative controls (SAC). One of these compensatory measures stipulates that “[o]perating procedures shall have Safety Requirements that state” expectations for approaching the unit and removing unnecessary equipment. In their safety evaluation report, NPO clarifies the applicability of SBS compensatory measures to state that “[t]he safety requirements themselves are [SACs] that require a slow and cautious approach to the unit, not placing temporary/unused tripping hazards in the immediate area around the base of the workstand, and removing ‘removable’ tripping hazards after use.” The requirements to slowly and cautiously approach the unit are subjective and inherently difficult to enforce. The SBS will expire after two years, during which time CNS plans to review the safety basis documents to address legacy issues.