

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 11, 2021

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Mark Bradisse and Christopher Berg, Acting Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending June 11, 2021

**Readiness Assessment:** CNS kicked off the contractor readiness assessment for restart of nuclear explosive disassembly operations for a certain weapon program. These operations have been paused since 2019 due to internal charge generation hazards (see 3/29/19, 10/25/19, 3/5/21, 3/19/21 and 3/26/21 reports). The resident inspector observed demonstrations on Friday.

**Nuclear Explosive Safety (NES):** A NES study group (NESSG) briefed NPO on their conclusions from an operational safety review for a different weapon program. The NESSG did not identify any findings, but did record 14 deliberation topics and 3 senior technical advisor comments. In one deliberation topic, the NESSG noted a practice where fire alarm testing was performed while production technicians (PT) conducted operations. While the PTs are informed about the upcoming testing, the NESSG acknowledged that this practice could desensitize response to a real alarm and could lead to technician distraction. The acting resident inspectors noted a similar observation during walkdowns and provided it NPO and CNS management.

**Safety Basis:** Previously, CNS issued an evaluation of the safety of the situation (ESS) for a positive unreviewed safety question related to a tooling weight discrepancy for a certain weapon program (see 5/28/21 report). The ESS provided further evaluation of mechanical impact hazards associated with the correct (i.e., higher) weight, and identified six hazards not bounded by currently applied rules. Five of those hazards already resulted in consequences that required crediting a design feature (i.e., the tool will not topple during design basis events), so no changes were required. The sixth hazard resulted in increased consequences, but that same design feature could be newly applied to manage that hazard. This week, NPO issued a safety evaluation report approving the ESS; there were no conditions of approval. CNS safety analysis engineering will correct the weight discrepancy in a future change package to the hazard analysis report.

**Operations:** On Tuesday, PTs discovered that an installed tool was past the grace period for its in-service inspection (ISI). The PTs originally installed the tool in January, but multiple technical issues have since delayed operations on this unit. During the event investigation, it was noted that while the production planning software system tracks preventive maintenance data and provides notifications for upcoming deadlines, it does not track expiration dates or grace periods for ISIs. Per a current standing order, it is incumbent on the PTs to inspect tools daily and notify the tooling engineering organization of any tool within three calendar days of its ISI expiration date. Following this notification, the tooling engineering organization would be required to take action to allow entry into the grace period and eventually provide the PTs with a replacement tool. During the investigation, it was noted as a gap that the PTs had not performed the daily ISI check on several occasions. Consequently, the tooling engineer was not notified and thus did not take any action. At the critique, management noted that this process is evolving, and that there are several actions in progress to remove the responsibility of checking ISIs from the PTs, and allow tooling engineers better insight into the current status of tools in the plant. The standing order will remain in effect until these process changes are complete.