

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 28, 2023

**TO:** Timothy J. Dwyer, Acting Technical Director  
**FROM:** C. Stott and C. Berg (acting), Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending July 28, 2023

**Nuclear Explosive Safety (NES):** In May 2023, a NES study group completed its evaluation of multi-application transportation attachment device (MTAD) operations for a specific weapon program (see 4/7/23 report). The study group documented one finding against the MTAD operating procedure, concerning the lack of site ownership and formal change control of this document at Pantex. Specifically, this procedure is not under local NES change control, which would evaluate any revision to the document and determine any impact to principles or measures relied upon for nuclear explosive safety.

Earlier this month, NPO transmitted the results from this study to CNS and directed action on the study group finding. NPO instructed the contractor to incorporate the MTAD process into a Pantex procedure to ensure it remains under formal NES change control. Additionally, NPO requested that CNS perform an extent of condition review to ensure similar processes and procedures used at Pantex are under such change control. However, this week, NPO revised its transmittal letter to state that CNS “is recommended to create a way to capture any potential changes to [these procedures] in local configuration management...” The revised transmittal letter is less prescriptive and would allow the contractor to evaluate other methods to ensure procedural change control versus development of standalone Pantex procedures. Finally, NPO agreed with the NES study group that a validation occur during the first few MTAD activities to confirm that actual operations are consistent with key aspects demonstrated during the study.

**Operational Safety Review (OSR):** In March 2023, NPO transmitted to CNS the results from an OSR on one weapon program (see 3/17/23 report). This week, NPO approved the contractor’s corrective action plan to address the deficiencies, deliberation topics, and senior technical advisor comments from the review. Noteworthy items include the following:

- Finding One—deficiencies in the process for responding to Category One electrical equipment issues during an electrical test of a nuclear explosive (i.e., using procedure P7-0912). NPO directed CNS to address the conduct of operations and procedure adherence issues from the finding. In response, CNS modified P7-0912, including raising its level-of-use to *Critical Use*, and generating training on the revised procedure. NPO plans to close this Finding once CNS briefs them on extent of condition efforts detailed in their corrective action plan.
- Finding Two—insufficient maintenance practices to meet NES requirements for certain Category One electrical equipment. The corrective action plan from CNS includes adding this equipment into the appropriate preventive maintenance program.
- Opportunity for Enhancement—lack of an end-to-end self-check on a certain electrical cable. CNS developed an action plan to incorporate this check for the equipment.
- Deliberation Topic—lack of change control for shorting plugs used for electrostatic discharge protection. The project team adopted NES change control on the equipment drawings. NPO considers this Deliberation Topic closed.