

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 11, 2018

**TO:** Steven A. Stokes, Technical Director  
**FROM:** Ramsey P. Arnold and Zachery S. Beauvais, Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending May 11, 2018

**Operational Restrictions:** Within the past year, Pantex has changed their strategy on implementing operational restrictions upon declaration of a potential inadequacy of the safety analysis (PISA) or a positive unreviewed safety question (USQ) determination. Previously, CNS generally paused or restricted affected operations; however, since the strategy change, CNS has periodically implemented operational restrictions in the form of physical controls, administrative controls, or training. DOE guidance states that “in situations of a positive [USQ determination] and if operations are to continue for an extended period of time (i.e., greater than a month) under the restricted conditions of other than [a pause of affected operations], then the contractor should evaluate whether further (more detailed) analysis may be appropriate to justify that continuance.” CNS should submit either a justification for continued operations, evaluation of the safety of the situation, or a change package to update the safety basis. The resident inspectors analyzed the number of operational restrictions and the duration they have been in effect over the past year. The analysis showed that on average operational restrictions were in effect well over one month. Further, technical safety requirement violations occurred that were directly related to not following imposed operational restrictions in two instances (see 12/21/17 and 5/4/18 reports). While operational restrictions can be appropriately utilized to continue operating safely with interim controls in place, their implementation must be rigorous enough to ensure all personnel are aware of such restrictions. This week, CNS issued a memorandum to NPO acknowledging that they have not met DOE expectations in the submittal of timely safety basis documentation after a PISA declaration and discussing plans to rectify the issue. CNS is performing a review of current operational restrictions to verify implementation and identify any weaknesses, is revising their USQ procedure to include the thirty-day expectation for timely submittals, and is adding a formal implementation verification review process for operational restrictions.

**Falling Man Hazard:** Based on discussions of resident inspector observations and NPO concerns (see 2/23/18 and 4/20/18 report), CNS issued a memorandum discussing their plans to improve the rigor of operational restrictions and compensatory measures put in place via the falling man protocol. Currently, the protocol is limited to production technician (PT) training. CNS plans to develop measurable administrative controls that will minimize tripping hazards in the immediate vicinity of sensitive components and improve personnel approaches to these components. Once developed, CNS will implement them on the two affected programs.

**Cell Emergency Lights:** Upon entry into a nuclear explosive cell, PTs identified that multiple emergency lights were out in the facility. The PTs notified production management and the facility representative (FR). Per the technical safety requirements, the individuals took appropriate actions given three or more inoperable emergency lights. The FR entered the limiting condition of operation, placed material in a safe and stable configuration, restricted access to the round room, and placed the facility into maintenance mode. The issue was categorized as a performance degradation of a safety class system. Based on similar issues (see 2/2/18 report), CNS believes that the voltage regulator is faulty and is developing a work order to troubleshoot and repair the system.