

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 5, 2025

**TO:** Technical Director  
**FROM:** Pantex Plant Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending September 5, 2025

**Staff Activity:** This week, a resident inspector traveled to Defense Nuclear Facilities Safety Board headquarters in Washington, D.C., to participate in an agency review.

**Violation of Technical Safety Requirements (TSR):** Last week, PXD safety analysis engineering personnel determined that some nuclear explosive operating procedures did not include instructions that ensured the requirement for load path verification are accomplished prior to commencing operations associated with positioning the hoisting equipment over the nuclear explosive or nuclear material. As required in the Pantex TSRs, two technicians must verify that all hoisting components—necessary to attach the facility crane hook to various items that require hoisting—are correctly installed prior to any lift over or near nuclear explosives, nuclear material, or certain other items of interest. Relevant to this specific event, the administrative control prevents hazards associated with hoisting components dropping onto the nuclear explosive or special nuclear material.

During a recent review of procedures to check for control implementation adequacy, PXD safety analysis engineers noted differing procedural step formats for conducting load path verifications. One format split the actions into two steps: one step containing a bulleted list that directed attachment and verification of the hoisting components onto the facility crane hook and another step that would require positioning of the hoisting component assembly over the unit and securing it to the lifting and rotating fixture—which is attached to the unit. Each of these steps was a *critical step* requiring two-technician verification and procedure stamping. The other procedural step format combined all these actions into a bulleted list under one step, only including a place for the two technicians to stamp and verify that they did perform these actions at the end of the entire step. Consequently, when using the latter procedural format, PXD could not assert that production technicians were performing the load path verification *prior* to lifting the hoisting component assembly over the unit. As a result, PXD safety analysis engineers determined that this second format did not ensure appropriate TSR implementation and resulted in a violation of the load path verification TSR.

Upon declaration of the TSR violation, PXD instituted a stop work event, which included preventing use of facility overhead cranes by placing administrative tags on equipment that was immediately accessible, and restricting access to inaccessible facilities. As recorded during the fact-finding meetings, PXD plans to make changes to the associated programmatic site procedures to reflect how to properly execute an operational step containing a bulleted list. Specifically, PXD will ensure technicians perform each action within the bulleted list and verify it before moving onto the next bullet. If executed appropriately, this should resolve the current TSR implementation concern and ensure load path verification prior to lifting hoisting components over nuclear explosives and nuclear material.