

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 18, 2025

**TO:** Technical Director  
**FROM:** Pantex Plant Resident Inspectors  
**SUBJECT:** Pantex Plant Activity Report for Week Ending July 18, 2025

**Staff Activity:** This week, the DNFSB cognizant engineer for the Pantex Plant visited the site to provide resident inspector augmentation and to observe and assess a Nuclear Explosive Safety (NES) change evaluation.

**Implementation Verification Review (IVR):** Last week, PXD discovered that an incomplete IVR had been posted for a safety basis change. The IVR was incomplete because it was missing the associated standing order, which describes the implementation of the necessary compensatory measures. This standing order is eventually provided to the workers to inform them how to fully and properly implement the compensatory measures. Last week, during the fact-finding meetings, PXD noted that the readiness to proceed (RTP) memo did not mention the associated standing order; the RTP listed the safety basis change as “a standalone document,” with the sections for control owners, compensatory measures, training, revised implementing documents, and human factors evaluation marked “N/A.” After the RTP memo was issued, when the IVR began, reviewers were unaware of the associated standing order and, subsequently, it was not included in the IVR. PXD plans to conduct a causal analysis for this event.

**Nuclear Explosive Safety:** This week, a NES study group (NESSG) conducted an evaluation for the proposed resumption of nuclear explosive operations for a certain weapon program. These operations have been paused since February after a design agency sent formal notification that the organization could no longer support the Mechanical Insult Weapon Response Rules for this program (see 2/14/2025 report). PXD developed a justification for continued operations, which established compensatory measures to prevent certain postulated impact scenarios. During the evaluation, the NESSG identified at least 10 instances across the various operating procedures for this weapon program where the compensatory measures had not been properly implemented. This is similar to a discovery that PXD made last year during an IVR on a different weapon program (see 11/8/2024 report). The project team agreed to correct these instances prior to issuing the procedures for operational use.

**Contractor Readiness Assessment (CRA):** Last week, PXD commenced the CRA for the startup of special nuclear material operations within a recently renovated facility. The resident inspectors attended CRA activities, which included a facility walkdown, operational demonstrations, and level-of-knowledge interviews of personnel associated with the operations. The resident inspectors provided minor observations related to the facility to both the CRA and project teams. The CRA team plans to conclude the evaluation later this month.

**Issues Management:** DOE directives state that the site contractor must establish a process to investigate events and prevent recurrence. According to the site issues management process, PXD ensures that recurrence is prevented by developing actions only during causal analyses. This week, to meet this requirement, PXD established a standing order to require a causal analysis evaluation for every event entered in the issues management process.