

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 24, 2026

Pantex Plant Resident Inspectors Activity Report for Week Ending April 24, 2026

Staff Activity: This week, members of DNFSB headquarters staff were onsite to perform walkdowns of defense nuclear facilities, receive updates on upcoming production activities and safety-related considerations, and review documentation for upcoming construction projects.

Unreviewed Safety Question (USQ) Process: During a recent review of work practices related to subcontractors, the resident inspectors identified that PXD safety analysis engineering (SAE) personnel had included assumptions in their USQ determination that did not match the work as performed. For this work activity, the subcontractor removed poles that had been used for power lines, which Pantex previously abandoned. In the associated USQ determination, PXD noted that a nearby safety-class diesel fire pumphouse would not be available due to a lockout/tagout, and PXD would rely on the remaining two pumphouses supplying the high-pressure fire loop (HPFL) system to maintain operability. The resident inspectors note that operations center logbook entries do not list this fire pumphouse as being unavailable during the removal of the poles, but one of the other pumphouses was declared inoperable during this time. While PXD was able to show that the equipment used at this work site was outside the fall-down distance of the pumphouse, and therefore the HPFL maintained operability, the resident inspectors questioned how assumptions relied upon to make USQ determinations are protected to ensure potential hazards from work activities are properly controlled. PFO personnel responded that they plan to review this concern as part of an ongoing assessment of the PXD USQ process. The resident inspectors note this is not the first time they have identified USQ determinations that contained assumptions that were not protected with a control. For example, PXD previously determined in a USQ determination that a pole-cat truck with its boom extended to brace a suspect catenary pole outside nuclear explosive bays and rampways posed no additional hazard to material of concern. PXD based this conclusion on the fact that the rampways and nearby facilities were barricaded and cleared of material, but did not protect those assumptions with formal controls (see 3/21/2025 and 4/4/2025 reports). As a result, after PXD personnel moved material of concern past the barricaded ramp, invalidating critical assumptions within the USQ determination, PXD SAE personnel determined they had not violated any safety-related controls.

Electrical Switch Failure: This week, PXD fire department and electrical safety personnel responded to a defense nuclear facility due to a report of an electrical burning smell. Upon arrival, the PXD electrical safety personnel noted that a light switch in the facility had failed and tripped the associated breaker. Of note, the electrical lighting in this facility is not credited to perform a safety function within the safety analysis. As a result of this discovery, a PXD facility representative submitted a work order request to repair this equipment.

Safety Basis: PXD SAE personnel declared a potential inadequacy of the safety analysis (PISA) after discovering that the safety basis contained incorrect weapon response for a configuration on a certain weapon program (see 4/17/2026 report). This week, PXD SAE personnel determined that this PISA represented an unreviewed safety question due to the increase in consequences for a hazard scenario. PXD did not establish operational restrictions due to existing controls.