

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 30, 2026

TO: Technical Director
FROM: Pantex Plant Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending January 30, 2026

Staff Activity: This week, DNFSB staff members were onsite to evaluate an ongoing nuclear-explosive safety study for a certain weapon program and to perform a scoping visit for an upcoming review on the electrical tester program.

Underground Utilities Damaged: This week, a PXD subcontractor damaged an underground fire alarm cable while performing excavation activities. During the subsequent fact-finding meeting, PXD personnel stated that the subcontractor had marked the location of all underground utilities in the vicinity of the excavation two weeks prior to this event. In that time, PXD stated that the effects of a winter storm had partially washed away some of the markings and made them difficult to identify. As a result, PXD asserted that the subcontractor did not follow the provisions set forth in the excavation permit to positively identify all underground utilities prior to performing excavation activities. PXD personnel developed actions to repair the damaged fire alarm cable and review the corrective action plan from the subcontractor. Additionally, during this fact-finding meeting, PXD personnel discussed two other occurrences of piping or conduit damaged by subcontractors during the previous four months. PXD completed a preventive action as a result of one of these events that included revising subcontractor permits to include verbiage to instruct subcontractors “to pause work when exact utility location(s) cannot be verified within the direct excavation boundary.” For the other event, PXD determined that a causal analysis was not warranted because it was the subcontractor who made the mistake and relied on the subcontractor to perform its own analysis. PXD plans to convene a causal analysis for this most recent event.

Special Purpose Facilities: Earlier this month, PXD facility engineering personnel questioned representatives from the vendor of particular measurement equipment used in special-purpose facilities, concerning the interface between the equipment software and the safety interlock system. Through these interactions, PXD facility engineering discovered that, for measurements involving limited rotation with a certain holding fixture, the software temporarily bypasses the safety interlock system—used to prevent excessive spinning of materials of concern with this fixture. Previously, PXD facility engineering personnel had asserted that this software could not interact with the safety interlock system. As a result of this discovery, PXD disallowed the continued use of this equipment by placing a “do not use” tag and removing the associated procedures from active status. This week, upon further evaluation, PXD facility engineering personnel determined that while the software does interact with the safety interlock system, this interaction is necessary to perform these limited operations and does not affect the interlocks at any other time. Further, PXD noted that configuration management of the software prohibits modifications that could lead to excessive spinning with this holding fixture. After PXD approved this evaluation, PXD lifted the restrictions for this equipment. PXD also recommended in its engineering evaluation to revise the equipment maintenance procedure, requiring testing of all safety interlocks after a software patch is installed, and to clarify how the software interacts with the safety interlock system for this equipment in the software quality assurance plan.