

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 6, 2026

TO: Technical Director
FROM: Pantex Plant Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending February 6, 2026

Staff Activity: This week, a DNFSB staff member was onsite to evaluate an ongoing nuclear explosive safety study for a certain weapon program.

Safety Basis: PXD performs certain measurements of nuclear explosives with equipment located in special-purpose facilities; this equipment is electrically powered to precisely move the nuclear explosive during these activities. As part of the initial qualification process to use this equipment, as well as during an annual inspection, PXD verifies that the nuclear explosive will always be electrically isolated from the power source for the equipment.

Last week, PXD safety analysis engineering declared a potential inadequacy of the safety analysis (PISA) after discovering that the safety basis did not account for or credit all features required to isolate electrical power from the nuclear explosive. This week, PXD determined that this PISA represented an unreviewed safety question due to the increased probability of equipment malfunction. As these safety features are always present on the equipment, and this PISA only represented a gap in information within the safety basis, PXD did not identify any operational restrictions necessary in response to this discovery.

Causal Analysis: This week, PXD continued a causal analysis concerning PXD technicians—instructed by PXD personnel who responded to the facility as part of the safe and stable process—who placed a protective cover on a damaged cable assembly (see 1/9/2026 report). Subsequently, PXD safety analysis engineering declared two PISAs: one for placing the protective cover—made of dielectric material—on the damaged component, and another PISA for packaging a separate damaged component without a hazard evaluation addressing this scenario in the safety basis. During the first causal analysis meeting held last week, PXD participants noted that many personnel involved with the event were not present. During the follow-up meeting this week, PXD personnel questioned the timeline of events and perceived issues. By the end of the meeting, PXD participants noted some variance in perceived events. The resident inspectors note that PXD did not perform a fact-finding meeting for this event and did not record a timeline or issues to focus on, making the causal analysis process cumbersome. PXD has scheduled a meeting next week to continue discussions for this causal analysis. Also, outside of the causal analysis, PXD is pursuing changes to the safe and stable process to limit which protective covers should be installed to minimize reoccurrence of this event.

Incorrect Valve Manipulation During Lock-Out Tag-Out: Last week, PXD convened a fact-finding meeting concerning a failed surveillance for the safety-class high-pressure fire loop after PXD personnel discovered a valve was not in the expected position (see 1/23/2026 report). During the fact-finding meeting, PXD personnel discussed the timeline of the event and identified that the PXD maintenance personnel had modified the lockout/tagout location and manipulated an incorrect valve without receiving proper approval. PXD plans to brief all associated maintenance personnel on the event and conduct a causal analysis meeting.