

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 9, 2026

TO: Technical Director
FROM: Lawrence Livermore National Laboratory (LLNL) Cognizant Engineer
SUBJECT: LLNL Report for December 2025

Defense Nuclear Facilities Safety Board (Board) Staff Interactions: On December 2–3, 2025, members of the Board’s staff were onsite to attend orientation meetings for a nuclear explosive safety study (NESS).

Nuclear Explosive Safety: LLNL hosted introductory activities for the ten-year NESS for one weapon program. This NESS will re-baseline and reauthorize nuclear explosive operations at the Pantex Plant, ensuring the operations meet nuclear explosive safety standards and requirements. The orientation consisted of presentations by the contractor project team—with members from LLNL, Sandia National Laboratories, and the Pantex Plant—to familiarize study group members with the program. Key presentations included overviews of the weapon system, nuclear weapon safety themes, the weapon electrical system, and Pantex process flows for nuclear explosive assembly and disassembly, including associated special tooling and electrical testers. Previous study groups have identified potential improvements to the associated special tooling and process flows—such as eliminating certain hoist lifts of the nuclear explosive as incorporated on other weapon programs. The Board’s staff will continue to evaluate the path forward by the project team to implement these potential improvements. Further presentations and demonstrations will be conducted at the Pantex Plant beginning in January 2026.