DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 13, 2015

MEMO TO: Steven Stokes, Technical Director

FROM: Thomas Spatz, Pantex Site Representative

SUBJECT: Pantex Plant Report for Week Ending February 13, 2015

Update on Anomalous Unit Determination: On January 29, 2015, Representatives from CNS process engineering, CNS nuclear explosive safety, and the Design Agency determined that the configuration of the nuclear explosive in one facility met the anomalous unit criteria. NNSA assembled an anomalous unit project team to establish the path forward for this unit. The project team performed two inspections of the anomaly and had photographs taken. The second inspection was done after Production Technicians (PTs) thought the anomaly had grown, which was later determined not to be the case. CNS sent an Information Engineering Release (IER) to the Design Agency (DA) to provide them the results of the second inspection and to submit to the DA a draft Nuclear Explosive Engineering Procedure (NEEP) to continue disassembly operations. In the IER, CNS requested the DA to release a Special Instruction Engineering Release to authorize the process described in the NEEP and to provide any additional information and/or instruction. The DA had not issued the Special Instruction Engineering Release at the time of this report. CNS is preparing another IER requesting the DA to confirm that the weapon response information in the safety basis is applicable to this anomalous configuration.

Pause in Operations Due to Disassembly Issue: On February 11, 2015, PTs paused a nuclear explosive disassembly operation and placed the unit in a safe and stable configuration, after discovering an issue with the removal of a detonator cable assembly. CNS has an approved procedure to deal with this issue on a different weapon program; however, CNS does not have authorization to perform this operation on the current weapon program. CNS does have weapon response information for the unit in its current configuration and there is no component damage. CNS is still determining the path forward.

Standing Order for the Purchase and Receipt of NQA-1 Items: CNS issued a standing order for personnel to verify that safety-class and safety-significant items meet Commercial Grade Dedication requirements. The standing order contains instructions for the verification of items currently in stock, currently on order, and items for construction projects and for identification of new items that must be verified prior to requisition. CNS has established a Commercial Grade Dedication Board to conduct the required verifications. The Board will review lists of items provided by work planners, Supplier Quality Inspectors, Supplier Quality Specialists, System Engineers, and Project Managers.

Clear Weather Window for Electrical Testing: There is a Nuclear Explosive Safety (NES) control that requires PTs to call the Operations Center (OC) and obtain a clear weather window prior to starting an electrical test on a nuclear explosive. One day this week, at 9:36 am, the PTs in one facility called the OC and requested a 90-minute lightning free window. The OC granted the request based a report it obtained from the National Weather Service at 7:57 am that lightning producing storms were unlikely or not predicted within a 35-mile radius of Pantex for the next 12 hours. Nineteen minutes after the request was granted, the OC declared lightning warnings due to the radar system detecting a specific cloud density within the 35-mile radius of Pantex. The PTs performing electrical testing took the appropriate lightning warning actions.