

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 25, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending July 25, 2014

Conduct of Engineering: Consolidated Nuclear Security, LLC (CNS), declared a management concern occurrence report when a procedure was put into use in a nuclear explosive facility prior to obtaining the Unreviewed Safety Question (USQ) determination approval. The process engineer made an annotated change to the procedure to update the revision of a cart push-bar from A to B. An annotated change is a change that does not; delete critical steps, require training, validation, or independent review, add or modify figures except for minor text labelling corrections, modify combustibles, and does not exceed one page of combined changes. Several annotated changes can be made before a procedure undergoes an issue change. CNS sends all annotated changes to safety analysis engineering (formerly authorization basis) for a USQ review. The safety analysis engineering system automatically sends an email to the document custodian (process engineer in this case) when the USQ is complete informing them of the review identification number. The document custodian uses the identification number to obtain the approval number from the safety analysis engineering system. The document custodian adds the approval number to the change request before issuing the procedure. In this event, the process engineer placed the approval number for a different change on the change request, and issued the change prior to the safety analysis engineer completing the actual USQ. The process engineer self-identified the error within days, and the cart push-bar revision B was never used.

Use of Nuclear Explosive Safety (NES) Unauthorized Equipment: CNS system engineering self-identified an issue with a leak detector (Category-2 electrical equipment) while reviewing the equipment's revision history. Category-2 equipment is equipment that does not connect electronically to the unit but could come in contact with the unit. The leak detector was originally evaluated, approved, placed on the Category-2 equipment list, and received a Category-2 sticker. Due to a pre-start finding during a contractor readiness assessment, the leak detector was modified by installing a longer electrical cord and designated as revision A. Revision A of the leak detector was given a Category-2 sticker, but was never evaluated or added to the Category-2 equipment list. Revision A of the leak detector was called out in the nuclear explosive operating procedure and used on one weapon program for approximately one year. In 2013, the leak detector was modified to accommodate the use of a new in-line surge suppressor and was designated as revision B. Revision B of the leak detector was evaluated, approved, and added to the Category-2 equipment list. The fact that revision A was not on the Category-2 equipment list was not identified at the time revision B was approved. There are no operational restrictions in place at this time and CNS is performing an extent of condition review.

High Pressure Fire Loop (HPFL) Update: CNS has incorporated the new HPFL pump houses and tanks into the safety basis. The safety basis now consists of five safety-class diesel pumps and four water tanks.

Pause of Nuclear Explosive Operations: CNS paused nuclear explosive operations in three individual facilities for three different reasons. The reasons include an alignment issue with an Enhanced Transportation Cart-1, technicians questioned a procedure step, and a work stand issue.