

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 14, 2019

TO: Christopher J. Roscetti, Technical Director
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SUBJECT: Pantex Plant Activity Report for Week Ending June 14, 2019

Weapon Authorization: CNS began the first phase of a contractor readiness assessment (CRA) of operational changes to support an upcoming life-extension program. CNS and NPO recently changed the startup plan to separate the full authorization into two phases. Phase one includes the majority of assembly and disassembly activities and phase two includes full unit radiography and code management system activities. The CRA initiated with a known pre-start finding related to the availability of code management system hardware.

Special Tooling: Following the identification of cart weight discrepancies, CNS engineers implemented an operational restriction to use an alternate cart for operations. NPO personnel subsequently noted that the technical safety requirements (TSR) specify using the original cart during certain operations and that the use of the alternate cart constituted a TSR violation (see 6/7/19 report). During a fact finding meeting on the violation, CNS engineering personnel stated that they had understood that the original cart was specified in the TSR, but believed that the Pantex unreviewed safety question procedure allowed an operational restriction to supersede the TSR. Since operational restrictions are not elevated to NPO for approval, they cannot contradict the approved TSRs. CNS engineers intend to review recent operational restrictions to determine the extent of the condition. This week, NPO approved a justification for continued operation that extends the use of the alternate cart as a compensatory measure, allowing CNS engineering to release an administrative pause on its use. CNS is preparing a separate JCO to identify compensatory measures related to other carts and toolboxes.

Tooling In-Service-Inspections (ISI): Following the discovery of potential component damage (see 5/3/19 report), CNS operations personnel staged an off-normal unit in an enhanced transporter type 2 (ETC-II) as mission engineering and the design agencies developed a process to further address it. The Pantex TSR defines both quarterly and annual ISIs for the ETC-II. A 2017 agreement between NPO and CNS mission engineering reiterated the expectations provided in the TSR that special tooling may remain in use past its maintenance expiration, provided that NPO approves an evaluation of the safety of the situation (ESS, see 9/30/16 and 7/28/17 reports). CNS had identified the need for an ESS to address this ETC-II but identified need dates based on the annual and not the quarterly ISI. This delta was not identified until after the quarterly ISI grace period expired. Following consultation with NPO, CNS management categorized this event as a TSR violation consisting solely of a surveillance performed after the prescribed period. NPO has subsequently approved an ESS to continue using the ETC-II.

Fire Suppression System: Last week, the deluge system inadvertently released water into a bay. No nuclear explosives were present in the bay; however, inert weapon components were present. The inadvertent water release occurred during an annual fire protection system preventive maintenance that required verifying the valve release functions properly. The maintenance procedure requires opening and closing valves in the deluge system and includes the note, "Be prepared to quickly perform steps... to prevent water from flowing beyond the riser."