DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Steven Stokes, Acting Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending February 22, 2013

Return of Safety Basis Change Proposal Without Action: The NNSA Production Office (NPO) returned a safety basis change proposal to B&W Pantex without taking action to issue a Safety Evaluation Report. The change proposal was intended to extend the expiration date of the Justification for Continued Operation (JCO) for a weapon program that has experienced component removal issues. The Design Agency supplied weapon response data to support the JCO when it was approved on May 4, 2012. The initial JCO will expire on May 4, 2013.

Since the JCO was issued in 2012, B&W Pantex and the Design Agency have been working to update the weapon response data as part of the *CASTLE* (Collaborative Authorization for the Safety-basis Total Lifecycle Environment)*/Issue G Weapon Response Project Plan*. B&W Pantex stated in the change proposal transmittal letter that operations described in the JCO have been incorporated into the CASTLE database, operational hazards have been identified, and the Design Agency has applied weapon response rules to the hazards. However, B&W further stated that the project plan had undergone major revision and extended the date at which Pantex would officially receive the new weapon response data, necessitating the need to extend the JCO.

NPO stated in their letter returning the change proposal that in order to accurately characterize the degree of operational safety provided for the operations covered by the JCO, the JCO needs to be based on the most current weapon response data. NPO directed B&W to obtain Design Agency concurrence that the weapon response data provided for the original JCO bounds the associated weapon response data currently in the CASTLE database.

In-Service Inspection (ISI) Requirement: Last week, the NPO sent a letter to B&W Pantex directing them to take immediate action to ensure the adequate implementation of the ISI for the High Explosive (HE) floor mat control. (See report for 1/25/13 and 2/15/13.) This week, B&W Pantex revised six nuclear explosive operating procedures that involve uncased HE operations. B&W incorporated steps to sweep the HE floor mats at the start of each uncased HE task to enhance the ability of the HE floor mats to perform their required safety function when needed. During their extent of condition review, B&W identified a second weapon program that will also incorporate these procedural changes prior to the start of the next surveillance cycle.

Lifting and Rotating Fixture: This week, B&W Pantex paused operation in one facility when the weld connecting one of the handles on a lifting and rotating fixture failed, the handle became dislodged, and the handle would not allow the rotation of the unit. The fixture contained an empty re-entry body at the time and therefore was in a safe and stable configuration. The production technicians notified nuclear explosive safety personnel, tooling engineering, and process engineering. B&W tooling engineers stated that the weld was not a load-bearing weld and failure of the weld would only cause the fixture to remain in the locked position. B&W will remove the tool from service, and tooling engineers will perform an engineering evaluation of the failed weld.