DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 29, 2013

MEMO TO: Steven Stokes, Acting Technical Director FROM: Thomas Spatz, Pantex Site Representative

SUBJECT: Pantex Plant Report for Week Ending March 29, 2013

Conduct of Operations—Operating with Incorrect Tester Software: B&W Pantex discovered that production technicians had processed nuclear explosive units using a tester with the incorrect version of software. B&W's extent of condition review revealed that two units had been processed by two different teams of production technicians. B&W Pantex had revised the software in response to an Operational Safety Review (OSR) team post-start finding. The finding identified the software's failure to allow for reader/worker/checker routines as a nuclear explosive safety (NES) deficiency. B&W Pantex also revised the tester software for quality reasons at the same time. B&W Pantex had revised the Nuclear Explosive Operating Procedure (NEOP) to reflect the new tester software revision, but had not completed recalling all testers with the old software. B&W management has taken immediate action to retrain the production technicians.

Unanalyzed Hazards for Linear Accelerator (LINAC) Facilities: NNSA Production Office (NPO) approved the Evaluation of the Safety of the Situation (ESS) report from B&W Pantex, and issued the Safety Evaluation Report (SER) to allow limited operations to resume in the LINAC facilities. Operations were halted when B&W Pantex declared a positive Unreviewed Safety Question (USQ) for impact and electro-static discharge (ESD) hazards for the LINAC facilities. (See report for 3/15/2013.) NPO approved continuing operations only for specific weapon configurations that do not result in adverse weapon responses. NPO has not imposed compensatory measures for these configurations. Configurations sensitive to electro-static discharge insults and impact insults will remain paused. B&W's proposed path forward with respect to the configurations that remain paused is to design new tooling to support the X-ray cassette that meets seismic, tripping man, and ESD requirements.

Federal Readiness Assessment (RA) for Mass Properties Operations: This week, the National Nuclear Security Administration (NNSA) issued the final report for the mass properties operations Federal RA. The RA team reviewed readiness to resume operations in one facility following the replacement of test equipment that had been damaged by water intrusion into the facility in July 2010, and facility modifications to change from an ultraviolet-activated deluge fire suppression system to a wet-pipe sprinkler fire suppression system. The RA team reported one pre-start finding, one post-start finding, and two observations. The pre-start finding was related to the securing of a fixture to the staging cart. This pre-start finding resulted in a Technical Safety Requirement (TSR) violation for ongoing operations in another facility. (See report from 3/8/2013.) The RA team reported one post-start finding related to two Evaluation of the Safety of the Situations that were not listed in the *Master Authorization Agreement for Nuclear and Nuclear Explosive Operations at the Pantex Plant*. NPO sent a letter to B&W Pantex requesting a closure package documenting the actions taken to address these findings.

Potential Inadequacy of the Safety Analysis (PISA) for Fire Barriers: This week, B&W Pantex declared a PISA because the Nuclear Material Safety Analysis Report does not address fire barriers between facilities within a special nuclear material building.