

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 31, 2016

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending May 27, 2016

Power Operations (PO)/Electrical Distribution System: Last week, while conducting a walkdown in Building 9767-13 (a utility support facility) in preparation for an electrical outage, PO electricians discovered that a 4 kV tie breaker was closed when it was required to be open. Tie breakers are designed to allow PO personnel to cross-connect two high voltage transformers. In this instance, both transformers were energized and both tie breakers between the transformers were closed, a configuration that is not allowed at Y-12 as it could create a hazardous condition for equipment or personnel. Fortunately, the electrical current in each transformer was in phase and the transformers were rated to handle the additional fault current. The PO electricians recognized the problem when they noted the cabinet's lights indicated both tie breakers were closed. Upon further investigation, they discovered that the pistol-grip handle on the cabinet that is used to close one of breakers was broken. It is unclear how the tie breaker was closed, but PO personnel believe the handle may have been inadvertently contacted. CNS corrective actions include reviewing the electrical meter data to try and determine the time of the event, which could aid in the identification of the cause. In addition, CNS management will evaluate ways to demarcate a boundary on the floor around electrical cabinets to help prevent inadvertent contact with the handles.

Highly Enriched Uranium Materials Facility (HEUMF): Late last month, NPO approved a safety basis supplement to allow storage of a specific type of canned subassembly (CSA) in HEUMF (see 4/29/16 report). Last week, CNS transported a motorized equipment handling unit (known as a tugger) into the facility to allow workers to train moving these units. Immediately after the tugger was introduced to HEUMF, CNS recognized that the equipment did not comply with the current Documented Safety Analysis as the NPO-approved safety basis supplement, which allowed the use of the tugger, had not yet been marked as effective. CNS declared this a discrepant condition and immediately removed the tugger from the facility. CNS is currently working to complete an implementation validation review to allow the supplement to go effective and provide workers realistic practice prior to the upcoming readiness assessment (RA).

Building 9204-2E: This week, CNS completed an RA to support the authorization to utilize a different glovebox to disassemble a certain type of CSA. The site reps observed the RA demonstration. In general, the demonstration was adequate, though the site reps and RA team lead communicated some opportunities to improve the clarity of the procedure and Reader/Worker method of procedure execution. The RA team identified no findings and Assembly/Disassembly Operations management anticipates authorization next week.

NPO Oversight: Operational awareness is a key method of oversight specified in DOE directives and refers to activities performed by DOE line personnel to maintain cognizance of a facility's overall status and safety posture. Recently, NPO issued the first monthly NPO Operational Awareness Reports for Y-12 and Pantex. The new reports contain site-specific analyses from each NPO Associate Deputy Manager for Operations and Assistant Managers of the results of operational awareness activities in their area of responsibility. The integrated report is intended to improve NPO's ability to share and analyze operational awareness data. It is also intended to improve NPO's communication of operational awareness results to CNS management. The Y-12 report notes that CNS conducted a successful electrical and steam outage last month. It also communicates several issues, including continued problems with coordination between CNS Y-12 operations and maintenance organizations.