

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Rory Rauch, Site Representative
SUBJECT: Oak Ridge Activity Report for Week Ending October 12, 2012

R.T. Davis was at Y-12 to augment site rep coverage.

Work Planning and Control: Last Thursday, engineering personnel performed non-destructive assay (NDA) surveys inside induction furnaces at Building 9212 in proximity to potentially energized electrical coils and bus bars without required lockout/tagout (LO/TO) controls. A maintenance worker that was performing work on one of the furnaces recognized the potential hazard and appropriately communicated the concern to the shift manager. After initial investigation, B&W management issued a standing order requiring the operations manager's approval before conducting all NDA field activities in Building 9212 and 9215.

These NDA surveys are performed throughout Building 9212 and 9215 with a generic procedure and job hazard analysis (JHA) that does not address specific hazards (e.g., electrical) that may be present. B&W is reviewing all required survey locations to identify and address, with a separate procedure and JHA, any hazards that may be unique to a specific location. Prior to performing the surveys, engineering personnel also failed to inform the shift manager as required by the conduct of operations manual. As a result, the personnel performing the surveys were not aware of other activities taking place in the area and any associated hazards. In this case, maintenance personnel were preparing to perform post-work testing following a LO/TO of the subject furnace and could have exposed the personnel performing the surveys to an uncontrolled electrical hazard. By virtue of their location in the engineering organization, the personnel who perform these surveys do not receive conduct of operations training that is as rigorous as the training received by other personnel who perform field activities. Engineering management has identified this as a potential weakness and is conducting training on conduct of operations and LO/TO requirements and performing an extent-of-condition review to identify other engineering elements that perform field activities.

Training: B&W recently issued a letter describing additional actions being taken in response to opportunities for improvement identified in the Board's June 5, 2012, letter on the B&W training and qualification program (see 8/3/12 report). B&W's letter describes enhancements to the LO/TO training program, such as providing more challenging practical exercises, more rigorous qualification requirements for issuing authorities, and more role-specific content in classroom training. In addition, both the maintenance and production organizations have enhanced their continuing training programs primarily by including more practical exercises with content that is based on future activities, requalification requirements, and lessons learned from recent events.

Nuclear Criticality Safety (NCS): B&W, as part of a NCS program improvement plan, has been upgrading NCS evaluations to meet current NCS requirements and align with current operations in Y-12 nuclear facilities. NPO issued a letter on September 28 expressing concern that 9 of 12 NCS evaluation upgrades from fiscal years 2011 and 2012 have not been implemented. NPO requested a response to this concern by October 28, 2012.