

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending February 14, 2014

Staff members B. Caleca and D. Andersen were at Y-12 to attend a workshop on the Department of Energy's project to develop a verification and validation problem set for the computer program SASSI, *A System for Analysis of Soil-Structure Interaction*. They also observed a structural design and analysis meeting for the Uranium Processing Facility (UPF) project and walked down Buildings 9215 and 9204-2E with B&W structural experts in support of a broader staff effort to evaluate the age-related degradation effects on each facility.

Lockout/Tagout (LO/TO) Performance: Last week, an electrician completed a job to repair a fan motor for a steam heater in Building 9995 without complying with several Y-12 conduct of operations and LO/TO requirements. The electrician initiated work without reading the approved work instruction for the activity or receiving work start approval from the shift manager. Prior to installing the motor, the worker bypassed a hold point requiring the installation of a LO/TO. Without an approved LO/TO permit, the electrician ensured that the electrical energy source to the fan was isolated prior to starting work, but failed to isolate steam to the heater, which was identified on the draft LO/TO permit as another hazardous energy source requiring isolation. After installing the motor, the electrician failed to inform the shift manager that the job was completed. As a result, the shift manager did not perform the required return to service notifications. The job supervisor identified these non-compliances after reviewing the work package the following day.

This event was one of several recent events in which workers failed to comply with basic Y-12 hazardous energy control practices. Early next week, the Vice President (VP) of Facilities, Infrastructure, and Services (FI&S) plans to conduct an all hands meeting with craft and supervisory personnel to review these recent events and reinforce LO/TO program requirements. The VP of FI&S is also instituting several interim measures that include enhanced management oversight of LO/TO activities and a requirement for craft personnel to use placekeeping when executing minor and complex work instructions.

Aging Infrastructure: B&W has been developing a new Building 9212 Transition Evaluation for the last several months (see 9/13/13 report). Last week, the NNSA Deputy Administrator for Defense Programs (NA-10) issued a memorandum requesting that B&W finalize the evaluation and develop a supporting implementation plan that identifies an execution schedule and required funding allocations. The memorandum requests that B&W integrate this implementation plan with a comprehensive Uranium Infrastructure Strategy. As stated in the memorandum, the goal of the strategy is to transition out of Building 9212 by 2025 while maintaining all required enriched uranium processing capabilities. To that end, the new strategy is also intended to reduce safety and operational risk by identifying an approach to improve the Y-12 infrastructure during the next decade. The memorandum mandates that the strategy evaluate several factors, such as the use of existing infrastructure as a bridging strategy until replacement facilities are available, and opportunities for exemptions or different interpretations to regulatory drivers.

The memorandum requests that this comprehensive Uranium Infrastructure Strategy be coordinated with the ongoing evaluation of alternatives for the UPF project. NA-10 requested the final Building 9212 Transition Evaluation by mid-February, the supporting implementation plan by early March, and the Uranium Infrastructure Strategy by early April.