DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 6, 2004

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJ: Activity Report for Week Ending August 6, 2004

A. Skull Oxide Calciner Deactivation. This week, BWXT decided to "pause" the Readiness Assessment (RA) for the clean-out of the Skull Oxide Calciner. BWXT plans to use this time to ensure the operability of a hood that will be used during this activity and to revise the RA Plan of Action to include additional scope. In addition, required security training is also impacting the ability to continue the RA. The site reps. believe it would be appropriate to formally stop or suspend the RA, document the reviews that have been completed, and formally identify the actions that will be performed prior to restarting the RA. The site reps. discussed this observation with YSO management.

B. Y-12 Authorization Basis (AB) Implementation - Independent Validation. As reported on February 6th, as part of actions briefed to the Board, YSO and BWXT were developing requirements and guidance to conduct independent Implementation Validation Reviews (IVRs) of AB controls developed under 10 CFR 830 compliant Documented Safety Analyses (DSAs). BWXT IVR protocols have since been developed, but YSO protocols have not yet been finalized. The first major Y-12 nuclear facility nearing completion of DSA control implementation is the facility that conducts assembly/disassembly and storage operations and the BWXT IVR for this facility is expected to start in the next few weeks.

C. Highly Enriched Uranium Materials Facility (HEUMF). Responding to an NNSA Headquarters inquiry, YSO and BWXT have the evaluated the construction and startup/load out schedules for HEUMF to determine where accelerations can be made. YSO concluded that a potential acceleration of the construction schedule from about 2½ years to 2 years was possible but costly. For the startup/load out schedule, YSO concluded that an acceleration from about 3 years to 1½ years was practical with load out completed in FY 2009. In the YSO transmittal to NNSA Headquarters, YSO noted that those materials not suitable for storage in HEUMF will be dispositioned prior to FY 2009 or be relocated/stored in an operational material access area. A comprehensive enriched uranium storage plan is to be developed by late September.

D. Oxide Conversion Facility. BWXT plans to start their line management Performance Self-Assessment (operational demonstrations, interviews, etc.) on August 9th. This effort and resolution of numerous items are expected to take several weeks, with line management declaration of readiness and start of the BWXT Operational Readiness Review still planned for late September.

As reported on July 16th, YSO was evaluating criticality safety controls for the product receiver glovebox as part of response to the Board's letter dated December 31, 2003. In addition to crediting the glovebox structure/ductwork from preventing the intrusion of water during a seismic event (as noted in NNSA's response dated April 29th), YSO has since approved a defense-in-depth interlock to prevent transfer of product to the receiver if the receiver discharge valve is open or if there are indications of water in the receiver.

E. Fire Protection System Modification and Testing. On Friday, BWXT identified that surveillance testing required to return a safety-significant fire protection system to service in the facility that conducts assembly/disassembly and storage operations was not performed following a system modification in mid-July. A formal work package was not used during this modification, as required. BWXT investigation of this issue continues.