

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 24, 2006

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for the Week Ending March 24, 2006

A. Highly Enriched Uranium Materials Facility. This week, BWXT briefed YSO on near-term plans for resuming rebar installation and concrete placements for Performance Category-3 structures. BWXT addressed results of causal analyses of the non-conforming conditions, extent of condition assessments performed to date, and corrective actions. Extent of condition assessments requiring non-destructive evaluations (ultrasonic measurements) are in progress. Some non-conformance reports are under review for certain placements. Major corrective actions identified by BWXT during the briefing include:

- two new BWXT project management personnel experienced in nuclear facility construction were added to the project;
- several new BWXT quality assurance and engineering personnel were added to the project to perform field oversight and reviews of design/construction issues;
- the construction contractor and subcontractors performed training, revised inspection procedures and instituted additional inspection points; and
- BWXT engineering and quality assurance personnel will perform rebar verifications and the BWXT construction manager will approve all concrete placements for some period (YSO asked for specific metrics/criteria for reduction of these verifications).

BWXT intends a limited resumption of placements by March 31st in areas where extent of condition assessments are completed and any non-conforming items have been dispositioned. YSO oversight actions supporting this resumption are being defined.

B. Uranium Processing Facility. This week, YSO formally requested NNSA-Headquarters approval of Critical Decision-1 for the Uranium Processing Facility. Review by the Energy Systems Acquisition Advisory Board to release design activities is expected to occur in May.

C. Oxide Conversion Facility. In September 2005, BWXT completed system testing with hydrogen fluoride and scheduled a maintenance outage to resolve instrumentation problems that had been identified during that testing (see 9/23/05 site rep. report). In particular, BWXT modified the B-1 Wing scrubber system to eliminate problems identified with fluid level instrumentation. During testing this week to confirm these modifications were successful, operations personnel identified similar problems with the fluid level instruments. BWXT continues to investigate these problems and will develop a path forward next week.

D. Wet Chemistry - Secondary Extraction. Secondary extraction operations have been suspended since December because of an Unreviewed Safety Question (USQ) associated with unexpected presence of concentrated organics in the system. Last week, YSO issued their Safety Evaluation Report (SER) that approves the proposed Justification for Continued Operation (JCO). The SER identified certain conditions of approval. BWXT is in the process of implementing the JCO that includes numerous administrative controls. BWXT management noted to the site reps., however, that BWXT is revisiting the JCO to ensure that these controls are appropriate as safety basis controls in addressing the USQ.