

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Wayne Andrews and David Kupferer, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending January 7, 2011

Uranium Processing Facility (UPF). As part of executing the UPF 'road map', YSO initiated its 'vertical slice' review of the UPF project this week (see the 11/19/10 report). The review team consists of personnel from both YSO and the NNSA Service Center. The purpose of the vertical slice review is for YSO to ensure that the UPF project team is adequately (1) executing its hazard analysis process including identification of design basis events and their consequences; (2) identifying all safety structures, systems, and components (SSCs) and their associated functional requirements, seismic design categorization, and performance criteria; and (3) integrating this information into the design effort. The review team is reviewing the following documents: hazard evaluation studies, accident analyses, system design descriptions, process and instrumentation diagrams, ventilation and instrumentation diagrams, design analysis calculations, the safety SSCs table, and criticality safety process studies. The review plan stated that the review team could identify instances where controls are excessive or do not add benefit. YSO is planning to complete its review next week and to issue a Preliminary Safety Validation Report in February that will document its concurrence or concerns with (a) B&W's safety basis development and design processes and (b) the resulting safety basis controls. The UPF project team is planning to submit its full-scope Preliminary Safety Design Report to YSO this summer.

ORNL Specific Administrative Controls (SACs). Based on the observations from a series of field reviews the Board's staff performed in 2007, the Board sent a letter to DOE in July 2007 that noted the Board would not close Recommendation 2002-3, *Requirements for the Design, Implementation, and Maintenance of Administrative Controls*. In response to the Board's letter, DOE has been conducting complex-wide reviews of SACs. This week, staff member Jeff Shackelford visited Oak Ridge to observe a DOE assessment of SACs at ORNL. The review team was led by the DOE Office of Environmental Management and focused on the following operations: K-25/27, Transuranic Waste Processing Center, on-site transportation, Melton Valley Solid Waste facilities, Low Level Liquid Waste facilities, and inactive facilities. The review team is planning to complete its review next week.