## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 22, 1998

**TO:** G.W. Cunningham, Technical Director

**FROM:** Paul F. Gubanc, Oak Ridge Site Representative

**SUBJ:** Activity Report for Week Ending December 25, 1998

I will be on annual leave Wednesday, December 23, through Friday, January 1. Accordingly this report is being filed early and there will be no site report for the week ending January 1, 1999.

A. <u>Criticality Safety Calculations</u>: Late last week, Y-12 self-identified the following problem regarding criticality safety calculations (ORO--LMES-Y12NUCLEAR-1998-0095):

- 1. Y-12 criticality safety personnel learned that the neutron cross-section database (ENDF) maintained by ORNL was discovered to be incorrect for aluminum at intermediate energies.
- 2. Preliminary estimates are that k-effectives calculated using this data could be off by as much as ten percent in a non-conservative direction.
- 3. Y-12 operations have established compensatory measures restricting the on-site handling and movement of U-Al material until the criticality safety margins can be verified.

Details have been provided to staff members Burns, Hunt and Forsbacka for additional review.

## B. Oak Ridge Contracts News:

- 1. This week, Secretary Richardson announced that he would extend the LMES contract at Y-12 for 15 months to June 2001 to permit more time to evaluate the weapons program "megacontract" option. Significantly, the Secretary was quoted as saying, "We can't have effective contract consolidation until we manage the department better....I do not believe that we will achieve the optimum benefits of consolidation without first resolving the issue of federal roles and responsibilities."
- 2. On December 11, DOE released a draft Request For Proposal (RFP) for the ORNL contract. The current LMER contract expires on March 31, 2000. One potential bidder is reported to be a team including Battelle and Oak Ridge Associated Universities (ORAU).

cc: Board members