



The Under Secretary of Energy
Washington, DC 20585

October 13, 2004

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, DC 20004-2901

Dear Mr. Chairman:

This is in response to your letter to me dated August 27, 2004, concerning the adequacy of Department of Energy (DOE) natural phenomena hazards design standards and the performance category (PC) designation for the conceptual seismic design of the Savannah River Site (SRS) Salt Waste Processing Facility (SWPF). As part of our nuclear safety management implementation, the Department places a high priority on hazards evaluation and mitigation, and on the protection of our workers and the public. The Department therefore carefully reviewed your letter and extensively considered the issues it raised, including whether further guidance in DOE Directives is required.

Based on your letter, we reviewed the background and intent of the guidance in DOE Guide 420.1-2, *Guide for the Mitigation of Natural Phenomena Hazards for DOE Nuclear Facilities and Non-nuclear Facilities*, and DOE Standard 1021-93, *Natural Phenomena Hazards Performance Categorization Guidelines for Structures, Systems and Components*, regarding the consideration of PC-3 designation of structures, systems and components (SSC's) for worker safety. Consideration of PC-3 designation for worker protection relies on judgment by line management considering several factors, including the results of safety analyses.

Our review concluded that DOE guidance can be strengthened by providing clarification and supplemental guidance on factors that should be considered in determining whether PC-3 SSC's are appropriate for worker protection. Accordingly, we will revise the guidance documents noted above and any other affected DOE Directives or guidance documents by January 31, 2005. These revisions will deal with such issues as local confinement, protection of in-facility workers and co-located workers, design margins, and consideration of the ensemble of safety controls and the results of safety analyses for events of concern. Your staff will be consulted on the revision of those guidance documents.

We also considered your suggestion that the confinement features of SWPF may be more appropriately designed as PC-3, rather than the current PC-2 designation. The enhanced conceptual design for the SWPF was recently completed and the preliminary hazards analysis (PHA) is being revised at this time to reflect the most recent design changes and process enhancements, to incorporate additional information on waste feed characteristics based on sampling of bounding waste tanks, and to incorporate additional controls and defense in-depth to enhance safety. Review of the revised PHA by the Department's Savannah River Operations Office identified additional areas for improvement that enhance the conceptual design.

The basis established in the revised PHA for functional classification and performance categorization of key confinement SSC's for the SWPF has been the subject of continuing staff to staff discussions. The latest detailed discussion was held on September 29, 2004. As facility design and safety basis development progresses, we will continue to work with the Board's staff to assure that worker and public safety are protected. To ensure that information is sufficient for both the Board and DOE safety reviews, we will provide a briefing to you and your staff within 60 days.

I have asked Mr. Dae Chung of the Office of Environmental Management to coordinate this briefing with your staff. If you have any additional questions regarding our plans for updating DOE guidance on natural phenomena hazards or the SWPF project, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Garman", with a horizontal line extending to the right.

David K. Garman

cc:

J. Shaw, EH-1

M. Whitaker, DR-1

P. Paul Golan, EM-1

D. Chung, EM -24

J. Allison, SRS