The Honorable Peter S. Winokur  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW, Suite 700  
Washington, DC 20004-2901  

Dear Mr. Chairman:  

In your letter dated July 16, 2010, the Defense Nuclear Facilities Safety Board (Board) expressed concerns that a Savannah River Site (SRS) policy may cause degradation in the safety posture of its nuclear facilities. You also asked whether this policy was employed at other sites.

Specifically, at SRS only a subset of the identified hazard controls from the Hazards Analysis (HA) are carried forward to the Documented Safety Analysis (DSA). This subset consists of mainly Safety Class (SC) and Safety Significant (SS) hazard controls. This is a concern because changes that could reduce the effectiveness of controls not included in the DSA are not subject to Departmental review. The planned improvements outlined below will help ensure that a change that could degrade or eliminate an important defense-in-depth control would result in an unreviewed safety question (USQ) and require Federal approval.

SRS has identified planned improvements to its hazard control program. A list of additional important defense-in-depth controls will be compiled from each facility’s HA and added to the DSA. Each list will be developed by an expert review team from each facility that will also include a Federal safety basis engineer and cognizant contractor operations staff. The expert review teams will use Department of Energy (DOE) approved qualitative criteria to form the lists. These additional defense-in-depth controls will be regarded as equipment important to safety, consistent with Section 1 of DOE G 424.1-1B, Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements.

The DOE Savannah River Operations Office (DOE-SR) and the National Nuclear Security Administration’s (NNSA) Savannah River Site Office (SRSO) approved Site USQ process will apply to these controls. By listing the selected defense-in-depth controls directly in the DSA, changes to or elimination of these controls will be directly under DOE purview and subject to the USQ process. It is our expectation that the Site USQ process will identify a USQ if a change impacting a SC, SS or important defense-in-depth control (i.e., equipment important to safety) meets the criteria in DOE G 424.1-1B. Operations and maintenance of the listed defense-in-depth structures, systems and components will be conducted within current SRS programs.
DOE-SR will direct their respective contractors, Savannah River Nuclear Solutions, LLC (SRNS) and Savannah River Remediation, LLC (SRR), to have the DSA revisions to include these additional defense-in-depth controls submitted to DOE-SR and SRSO by March 15, 2011. It is expected that the DOE-SR and SRSO reviews of these DSA revisions will verify the proper incorporation of these additional defense-in-depth controls. Revisions to site-wide manuals, including the SRS Facility Safety Document Manual (11Q), and procedures to institutionalize this process will follow. DOE-SR has previously tasked SRNS and SRR to provide a final plan and schedule for this work by December 14, 2010. In the interim, any proposed changes to the Consolidated Hazard Analyses will be subject to the USQ process. In addition, Environmental Management (EM) and NNSA will evaluate the changes made to safety basis documents and the associated procedures (e.g., the 11Q Manual), to ensure the effectiveness of the actions taken in addressing the identified concerns.

You were provided an update on our path forward during your visit to SRS on October 21, 2010. A final briefing will be scheduled with you in the near future. DOE appreciates the efforts taken by your staff to improve safety and controls, and will continue to work to maintain open lines of communication between DOE, SRS contractors, and the Board staff.

To address your request regarding other sites, EM and NNSA asked our sites (other than SRS) whether safety related controls that provide significant worker protection are not included in the facilities DSAs. All of these sites reported that all safety related controls that provide significant worker protection are included in the DSAs. EM and NNSA are planning to selectively review some DSAs to affirm site reports.

If you have any further questions, please contact James McConnell, Assistant Deputy Administrator for Nuclear Safety, Nuclear Operations, and Governance Reform, at (202) 586-4379 or Ken Picha, Acting Deputy Assistant Secretary for Safety and Security Program at (202) 586-5151.

Sincerely,

Ines R. Triay
Assistant Secretary for Environmental Management

Donald L. Cook
Deputy Administrator for Defense Programs
National Nuclear Security Administration