

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 1, 2016

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending April 1, 2016

L-Area: The Structural Integrity Program requires in-service inspections of safety structures, systems, and components and their supports. In June 2015, SRNS identified that a mechanic had performed the peer inspection role for an inspection of a general service grapple hook, but had not completed the qualification to be a peer inspector. The subsequent extent of condition review examined inspections conducted for the previous 24 months. This week, SRNS identified that this same mechanic had acted as the peer inspector for the safety significant 70-ton cask lid support structure's 3-year inspection last performed in June 2013, just beyond the scope of the previously mentioned extent of condition review. Since a qualified peer inspector was not present for this verification, SRNS issued a nonconformance report. SRNS is taking actions to ensure that only qualified peer inspectors observe future inspections across SRS.

Savannah River National Laboratory (SRNL): SRNS personnel discovered an error in the structural calculation used to show that the SRNL facility structure meets safety class requirements. SRNS personnel were updating the structural calculation after a DNFSB technical staff review raised concerns about the conservatism of the conclusions. SRNL personnel declared a Potential Inadequacy in the Safety Analysis, however, citing the low probability of a seismic event and the expectation that the error resulted in a more conservative analysis, SRNL personnel identified no compensatory measures.

Shift Operations Managers (SOM): The site rep met with SRNS and SRR training managers to discuss the selection and training of SOMs, shift technical engineers, and control room managers (CRM). Due to demographics and other factors, the attrition rate for these positions is dramatically rising from a couple per year to more than 20 in the next two years or so. In the past, candidates would rise up the operations ranks over several years, progressing from a first line manager (FLM) to a CRM (if applicable) to a SOM, which allowed candidates to accumulate several years of operations experience along the way. However, with several FLMs and CRMs nearing retirement themselves and plans to hire up to 7 SOMs in DWPF and tank farms, future candidates may have to be hired directly into these positions, which may impact training needs. While the current qualification cards are very focused on systems and process training, the site rep is taking a look at how candidates are being trained on the management of normal and abnormal operations. The site rep identified that none of the 15 abnormal operating and emergency preparedness implementing procedures linked in the K-Area Abnormal Operations computer based training (CBT) course could be accessed due to a firewall issue. SRNS is reviewing whether other students or CBT courses were also affected.

Federal Staffing: In response to Board Recommendation 2000-2 and DOE Order 426.1, DOE assigns personnel to perform oversight of safety systems. The current program is understaffed. Due to the number of authorization basis changes and staffing shortages, personnel assigned to SSO are often spending less than 25 – 30% of their time performing SSO duties. Considering the number of vital safety system (VSS) assessments completed by the Waste Disposition Engineering Division in the last four years, it would take 23 years to complete assessments on all the VSS at the current pace. While DOE-SR has requested authority to hire additional SSO and facility representatives, DOE-HQ has not approved this request yet.