

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 26, 2014

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman, Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending November 28, 2014

Defense Waste Processing Facility: SRR determined that a positive Unreviewed Safety Question exists with regards to the use of the melter vapor space low temperature interlock to prevent the melter feed rate from exceeding the rate assumed in the safety analysis. The basis for the interlock's set point is a heat model that used assumptions that were valid before the installation of the melter bubblers, but which were not updated to reflect operation of the melter bubblers. This issue was raised by the technical staff.

Nuclear Criticality Safety: A DOE analyst determined that the latest (and previous) validation reports for two software programs used to analyze nuclear criticality scenarios did not use the latest International Criticality Safety Benchmark Evaluation Project handbook data. SRNS determined that the largest impact was a 0.6% non-conservative error, which was bounded by the 5% minimum subcritical margin imposed by SRNS during their calculations of k_{eff} .

Field Observations: The site rep observed a tank transfer and ion exchange operations in HB-Line, charging of spent fuel bundles at H-Canyon, and an operator oral board in K-Area. No concerns were identified.