SRS PSHA Update - Final Surface Spectra and Implementation

Rucker J. Williams, Geotechnical Engineering Lead

The Savannah River Site has completed its PSHA incorporating the Central and Eastern United States (CEUS) Seismic Source Characterization (SSC) model and the Next Generation Attenuation for Central and Eastern North America (NGA-East) ground motion characterization (GMC) model. Since the last NPH Workshop, the site response analyses have been completed and final design spectra developed.

The SRS PSHA presentation will focus on the results of the site response evaluations and their implementation at SRS. In comparison to the current site seismic design criteria, reductions in the surface spectra were observed at frequencies higher than about 2 Hz. The new PSHA results also demonstrated an increase in the seismic demand in the low frequency region of 0.4 Hz to 0.7 Hz.