

## beta SOAR Package

The beta-Scoping of Options and Analyzing Risk ( $\beta$ -SOAR) model is a flexible performance assessment designed to provide the U.S. Nuclear Regulatory Commission (NRC) staff timely risk and performance insights for a variety of potential high-level radioactive waste (HLW) disposal options. It was developed by the NRC staff with the assistance of its contractor, the Center for Nuclear Waste Regulatory Analyses. The model applies technical knowledge developed over more than two decades in the field of nuclear waste repository performance assessment modeling. The beta ( $\beta$ ) designation in the name indicates this version of the model and the assigned default input parameters are considered preliminary and have yet to undergo rigorous review and validation. Hence, application and results from the  $\beta$ -SOAR should be used with caution.

The beta SOAR Package is a collection of files that include the model as well as supporting documentation. The beta SOAR Package contains the following files:

- beta\_SOAR\_gs10.11.gsm - the beta SOAR GoldSim model file
- beta\_SOAR\_gs10.11.gsp - the beta SOAR GoldSim player file
- FPA-SOAR.mdb - the beta SOAR database
- beta SOAR User\_Guide.pdf - the beta SOAR user guide ML102720755
- beta SOAR FAQ.pdf - frequently asked questions about the beta SOAR
- Player.pdf - the GoldSim player software user guide
- READ ME.txt - this read me text document.

The beta SOAR Package is publicly available through the NRC Agencywide Document Access and Management System (ADAMS), and both noted items are enclosed for your convenience. ADAMS is accessible through the internet at <http://www.nrc.gov/reading-rm/adams.html>. The ADAMS accession number for the User Guide is ML1021606220. For the entire Package, it is ML11083A004. Copies of the CD-ROM containing the beta SOAR Package can be obtained through the NRC Public Document Room (<http://www.nrc.gov/reading-rm/contact-pdr.html>). The beta SOAR Package contains two file types for the beta SOAR model; a GoldSim model file (\*.gsm) and a GoldSim player (\*.gsp). The professional version of GoldSim probabilistic simulation software is required to run the beta SOAR model. The free GoldSim Player can be used to run the beta SOAR player file. For system requirements and GoldSim software, please refer to the GoldSim website at <http://www.goldsim.com/>.

For additional information regarding  $\beta$ -SOAR, please contact the project manager:

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# A Flexible Performance Assessment: Scoping of Options and Analyzing Risk

2010 BETA VERSION

