

2.2.1.2.2 Identification of Events With Probabilities Greater Than 10^{-8} Per Year RAIs

REQUEST FOR ADDITIONAL INFORMATION (RAI)

Volume 3—Postclosure Chapter 2.2.1.2.2—Event Probabilities (1 RAI) (DEPARTMENT OF ENERGY'S SAFETY ANALYSIS REPORT Section 2.2.2.2)

RAI #1

Justify the use of Total System Performance Assessment (TSPA) v5.000 in the igneous event sensitivity analyses (SNL, 2008, Appendix P), when TSPA v5.005 was used to evaluate the igneous event scenario in the license application.

Basis: As part of igneous scenario analysis, the DOE provided sensitivity analyses using a single-value probability of intrusive and extrusive igneous events at 1×10^{-7} per year (SNL, 2008, appendix P). The igneous intrusive sensitivity analyses were identified as LA v5.000 IG_003000 16.gsm and LA v5.000 IG 003000 7.gsm (SNL, 2008, Appendix P, pg P-44). However, these analyses were performed using a version of the TSPA identified as v5.000, which is not the version used for license application dose calculations. Instead the license application relies on a TSPA version v5.005. This information is needed to verify compliance with 10 CFR 63.114.

References

CRWMS M&O. 1996. "Probabilistic Volcanic Hazard Analysis for Yucca Mountain, Nevada." BA0000000-01717-2200-00082. Rev. 0. Las Vegas, Nevada: CRWMS M&O.

SNL. 2008. "Total System Performance Assessment Model/Analysis for the License Application." MDL-WIS-PA-000005. Rev. 00. ERD 01, ERD 02, ERD 03. Las Vegas, Nevada: Sandia National Laboratories.