



Department of Energy
Washington, DC 20585

October 3, 2014

Dr. Josephine Piccone
Director
Division of Spent Fuel Alternative Strategies
3 White Flint 13B 16
11555 Rockville Pike
Rockville, Maryland 20852

Re: Docket No. 63-001, Submittal of updated and new reports

Dear Dr. Piccone:

In a February 28, 2014 letter, the Department of Energy (DOE) committed to submitting an updated version of the July 30, 2009 report entitled, *Analysis of Postclosure Groundwater Impacts for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada*. With this letter, the DOE submits this report to the Nuclear Regulatory Commission. DOE is also separately transmitting five additional hard copies of the report.

When the 2009 report was submitted, DOE included four documents: a report from Sandia National Laboratories (SNL) and three calculation sets. None of these four documents have changed, so these documents are still relevant.

However, a new SNL report, *Review of Inputs Provided to Jason Associates Corporation in Support of RWEV-REP-001, the Analysis of Postclosure Groundwater Impacts*, was written to address updated references and evaluate technical consistency. This new SNL document is being transmitted with this letter and five additional hard copies are being transmitted separately. DOE has created a website where the 2009 and 2014 reports and all the non-copyrighted references used in the reports can be downloaded. The web address for these materials is: <http://www.id.energy.gov/groundwater/>.

The scope and intent of this report is identical to the 2009 report. In developing this update, DOE reviewed scientific publications that have been available since 2009, updated the irrigation recycle model, reviewed updated international research that could affect the analysis, and made minor corrections and clarifications to improve the report. None of the updated information or analyses changed the conclusions of the previous report.



It should be noted that all references to the Document Identification Retrieval System (DIRS) numbers were deleted because the DIRS system was not used to prepare the 2014 report. Change bars have been added in the margins of this report to show the sections that have been modified; however, no change bars are shown for the DIRS number deletions.

If you have questions regarding any of the above, please feel free to contact me, at 702-295-2436 or william.boyle@doe.gov.

Sincerely,

A handwritten signature in cursive script that reads "William Boyle".

William J. Boyle, Director
Office of Used Nuclear Fuel Disposition
Research and Development