



Department of Energy
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NOTIFICATION OF CHANGE OF COMMITMENT FOR SUPPLEMENTING THE FINAL ENVIRONMENTAL IMPACT STATEMENT

Reference: Ltr, Boyle to Kokajko, dtd 10/3/08 (Notification of Plan for Supplementing the Final Environmental Impact Statement [FEIS])

In a letter dated September 8, 2008, the U.S. Nuclear Regulatory Commission (NRC) announced its decision to docket the U.S. Department of Energy's (DOE) license application to the NRC for a construction authorization for a geologic repository pursuant to Section 114 of the Nuclear Waste Policy Act of 1982, as amended (NWPA). The letter also provided the NRC staff conclusion regarding adoption of DOE's *Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0250F, February 2002) (Yucca Mountain FEIS) and supplements in accordance with Section 114(f)(4) of the NWPA. The NRC staff concluded that it was practicable to adopt the Yucca Mountain FEIS and supplements prepared by DOE, but that additional supplementation was needed to address the potential impacts of the proposed action on groundwater and from surface discharges of groundwater. In the letter, the NRC staff requested that DOE provide a plan for the preparation of a supplement to the Yucca Mountain FEIS and supplements within 30 days.

On October 3, 2008, DOE informed the NRC that it planned to supplement the Yucca Mountain FEIS and supplements through the preparation of a Supplemental Environmental Impact Statement (Supplement), as discussed in the enclosure to the NRC letter of September 8, 2008. DOE also informed the NRC that the Supplement would be provided no later than Fall 2009.

DOE has decided not to complete the Supplement, but rather has used the material prepared for the Supplement to develop the enclosed *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* (Analysis of Postclosure Groundwater Impacts).

The enclosed analysis addresses:

- A description of the full extent of the volcanic-alluvial aquifer, particularly those parts that could become contaminated, and how water (and potential contaminants) can leave the flow system.
- An analysis of the cumulative amount of radiological and non-radiological contaminants that can reasonably be expected to enter the aquifer from the repository, and the amount that could reasonably remain over time.
- Estimates of contamination in the groundwater, given potential accumulation of radiological and non-radiological contaminants.
- A description of the locations of potential natural discharge of contaminated groundwater for present and expected future wetter periods.
- A description of the physical processes at the surface discharge locations that can affect accumulation, concentration, and potential remobilization of groundwater-borne contaminants.
- Estimates of the amount of contaminants that could be deposited at or near the surface.

DOE is also separately providing the NRC with four supporting documents: three calculation packages that provide additional supportive analytical information and the primary reference (prepared by Sandia National Laboratories) to the Analysis of Postclosure Groundwater Impacts.

DOE believes this course of action provides NRC with all the requested information and analysis in a timely manner. Specifically, the Analysis of Postclosure Groundwater Impacts and the supporting documents provide the additional analyses needed to address the potential impact of the proposed action on groundwater and from surface discharges of groundwater.

If you have questions regarding DOE's decision or the Analysis of Postclosure Groundwater Impacts, please contact Jeffrey R. Williams at (202) 586-9620, or e-mail jeff.williams@rw.doe.gov.


William J. Boyle, Director
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OTM:JRS-0825

Enclosure:
Analysis of Postclosure Groundwater Impacts

cc w/encls:

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EIE Document Components

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| 002_RWEV-REP-001_PC_GW_Imp_Part_1.pdf | 26,755 kB |
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