



**Department of Energy**  
Washington, DC 20585

QA: N/A  
Project No. WM-00011

June 3, 2008

HAND DELIVERY

**ATTN: Document Control Desk**  
Michael F. Weber, Director  
Office of Nuclear Material Safety and  
Safeguards  
U.S. Nuclear Regulatory Commission  
EBB-2B2  
11545 Rockville Pike  
Rockville, MD 20852-2738

**YUCCA MOUNTAIN REPOSITORY LICENSE APPLICATION (LA) FOR  
CONSTRUCTION AUTHORIZATION**

Dear Mr. Weber:

Pursuant to Section 114(d) of the Nuclear Waste Policy Act, as amended, and 10 C.F.R. Part 63, and in accordance with 10 C.F.R. § 2.101, the U.S. Department of Energy (DOE) hereby submits the unclassified part of its Yucca Mountain Repository LA (Enclosure 1) to the U.S. Nuclear Regulatory Commission (NRC). The DOE initially seeks construction authorization pursuant to 10 C.F.R. § 63.31 for a high-level radioactive waste repository at a geologic repository operations area at Yucca Mountain in Nye County in the state of Nevada. To the extent that portions of the LA are based upon the NRC's proposed revisions to 10 C.F.R. Part 63 (70 Fed. Reg. 53,313), the DOE will provide a revision to the LA as the NRC or DOE determine to be necessary. DOE anticipates providing the NRC with an update to the LA prior to requesting a "Receive and Possess" license pursuant to 10 C.F.R. § 63.24.

DOE prepared the LA in accordance with the requirements set forth in 10 C.F.R. § 63.21, "Content of Application," and the guidance contained in the "Yucca Mountain Review Plan," NUREG-1804, Revision 2, Final Report (July 2003) (YMRP). DOE is submitting the LA to the NRC, in both paper and electronic format (i.e., DVD), three (3) copies of the unclassified LA for the Director of the Office of Nuclear Material Safety and Safeguards, as required by 10 C.F.R. § 63.22(a), and an additional thirty-one (31) copies of the LA, as required by 10 C.F.R. § 63.22(b).



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The complete LA includes the following documents:

- General Information.
- Safety Analysis Report (SAR) – the SAR, while not containing any classified information, contains certain information that the DOE has determined to be Official Use Only (OUO) information. Such information is exempt from public disclosure under the Freedom of Information Act and 10 C.F.R. § 2.390 and is appropriately marked. DOE has segregated those pages of the SAR containing OUO information into Appendix A of the SAR, which has been printed as a separate volume, and requests that such information be withheld from public disclosure.
- Naval Nuclear Propulsion Program (NNPP) Technical Support Document (TSD), which DOE is transmitting under separate cover (*classified: 214 pages*).

Because the NNPP TSD contains classified information related to naval fuel, the DOE has separated this part of the LA from the unclassified SAR in accordance with 10 C.F.R. § 63.21(a). The DOE is submitting the NNPP TSD concurrently with the unclassified LA, but under separate cover along with a request to withhold from public disclosure pursuant to 10 C.F.R. § 2.390.

Pursuant to Section 114(f) of the Nuclear Waste Policy Act, as amended, and 10 C.F.R. Part 63.22, accompanying the LA in this submittal is the 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* (FEIS) (February 2002) (Enclosure 2). DOE will submit under separate cover the *Final Supplemental 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* (Repository SEIS), which currently is in the process of being finalized and is expected to be available on or before June 30, 2008. Because the Repository SEIS incorporates by reference portions of the *Final Supplemental 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 – Nevada Rail Transportation Corridor* (Rail Corridor SEIS) and the *Final Environmental Impact Statement for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada* (Rail Alignment EIS), DOE will also provide copies of those documents to the NRC for information at the same time it provides the Repository SEIS.

On October 19, 2007, DOE certified to the Pre-License Application Presiding Officer (PAPO) Board compliance with the Licensing Support Network (LSN) requirements pursuant to 10 C.F.R. § 2.1009(b). Today, DOE is updating its certification with the PAPO Board pursuant to 10 C.F.R. § 2.1009(b). DOE is providing a hard copy of its updated certification to the NRC under separate cover, in compliance with 10 C.F.R. § 2.1012(a).

As required by 10 C.F.R. § 63.22(d), the DOE is also making paper and electronic copies of the public version of the LA available at appropriate locations near the proposed geologic repository operations area. Those locations are identified in Enclosure 3. DOE will make paper and

electronic copies of the Repository SEIS, the Rail Corridor SEIS, and the Rail Alignment EIS available for public inspection at these same locations. The public version of the LA has also been included in DOE's LSN collection.

Finally, for informational purposes, the DOE is also submitting as an enclosure to this letter, but not part of the LA, the following: copies of primary reference documents in electronic format (Enclosure 4); and a matrix cross-referencing sections of the SAR to 10 C.F.R. Part 63 and NUREG-1804 (Enclosure 5). A listing of the electronic files in this submittal is provided as Enclosure 6.

If you have any questions regarding your review and acceptance of this application, please contact William J. Boyle, Director, Regulatory Authority Office, Office of Civilian Radioactive Waste Management, at (702) 794-5506 or e-mail [william\\_boyle@ymp.gov](mailto:william_boyle@ymp.gov).

Sincerely,



Edward F. Sproat, III, Director  
Office of Civilian Radioactive  
Waste Management

6 Enclosures:

1. Yucca Mountain Repository License Application  
(3 originals and 31 copies in paper; 34 DVDs marked "Official Use Only" (OUO) containing all three components below (to be withheld from public release); 1 DVD marked "For Public Release" containing the General Information and non-OUO portions of the Safety Analysis Report, but omitting the OUO Appendix A of the Safety Analysis Report)
  - a. General Information
  - b. Safety Analysis Report (non-OUO volumes)
  - c. Safety Analysis Report Appendix A (OUO volume)
2. FEIS (33 copies – paper and electronic)
3. Locations of LA for Public Availability
4. Primary Reference Documents (34 sets of 2 DVDs marked "Official Use Only" containing some references to be withheld from public release and 1 set of 2 DVDs marked "For Public Release" containing those references except those considered OUO, which are omitted)
5. Yucca Mountain Review Plan Cross Reference Matrix (34 CDs)
6. Listing of electronic files provided on enclosed DVDs and CDs

cc:

A. C. Eitreim, NRC, Rockville, MD  
L. E. Kokajko, NRC, Rockville, MD  
J. D. Parrott, NRC, Las Vegas, NV  
D. B. Spitzberg, NRC, Arlington, TX  
Rosemary Ryan, CNWRA, Rockville, MD  
Mike Simpson, CNWRA, San Antonio, TX

cc: With enclosures (except Enclosure 1(c)):

The Honorable James A. Gibbons, Office of the Governor, Carson City, NV  
R. R. Loux, State of Nevada, Carson City, NV  
Nevada State Legislature, State of Nevada, Carson City, NV  
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Irene Navis, Clark County, Las Vegas, NV  
Ed Mueller, Esmeralda County, Goldfield, NV  
Ron Damele, Eureka County, Eureka, NV  
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Chuck Chapin, Lander County, Battle Mountain, NV  
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bcc w/o encls:

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