

April 13, 2004

The Honorable Brian Sandoval
Attorney General of Nevada
1325 Airmotive Way, Suite 340
Reno, NV 89502

Dear Attorney General Sandoval:

The staff of the U.S. Nuclear Regulatory Commission (NRC) recently completed an independent evaluation of the quality of certain technical information in three documents, the U.S. Department of Energy (DOE) may use to support its expected application for a license to build a high-level radioactive waste repository at Yucca Mountain, Nevada. Enclosed is a copy of the report of this evaluation.

While the NRC found a number of good practices, it also identified some concerns with both the clarity of the technical bases presented in the reports evaluated and with the sufficiency of technical information DOE used to explain the technical bases. The number and similar pattern of concerns found in the three documents that NRC reviewed suggests that other DOE documents may have similar limitations. To review DOE's potential license application, the NRC will need to understand DOE's explanation of its technical bases and find that DOE has supplied sufficient technical information to justify that explanation. The report finds that, if DOE continues to use its existing policies, procedures, methods and practices, at the same level of implementation and rigor, the license application may not contain information sufficient to support the technical positions in the application. This could result in the NRC issuing many requests for additional information in some areas, which could extend the time needed for the NRC staff to complete its safety review and, in the end, delay a determination on issuance of a construction authorization.

The three documents evaluated, known as Analysis Model Reports, were selected because NRC believes their subjects are of significance to understanding the performance of a potential repository at Yucca Mountain. These documents are on: (1) general and localized corrosion of the waste package outer barrier, (2) commercial spent nuclear fuel waste form degradation model and (3) drift (*i.e.* tunnel) degradation analysis. The NRC assembled a team which conducted three week-long audits during the months of November, December and January. The team evaluated DOE's process for developing and controlling the quality of the three documents and reviewed the effectiveness of recent DOE corrective actions affecting the quality of models, software, and data. The NRC made no determination on the technical adequacy of the documents evaluated, and conclusions drawn from the results of this evaluation indicate neither NRC acceptance nor rejection of any DOE documents.

As Chairman Diaz committed in his January 9, 2004, letter to you on this subject, NRC has documented the results of this evaluation, and is making its findings public. Copies of this report, "U.S. Nuclear Regulatory Commission Staff Evaluation of U.S. Department of Energy Analysis Model Reports, Process Controls, and Corrective Actions," will be available on the

The Honorable B. Sandoval

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NRC web site at: <http://www.nrc.gov/waste/hlw-disposal/reg-initiatives/resolve-key-tech-issues.html>. The NRC staff will present its findings to DOE at a public Technical Exchange, in Las Vegas, on May 5, 2004. DOE staff and members of the public will have opportunities to ask questions about the evaluation and about the staff's findings. The NRC staff expects DOE to provide a written response to the evaluation findings by June 4, 2004.

Please contact me if you have any questions on this matter.

Sincerely,

/RA/

C. William Reamer, Director
Division of High Level Waste
Repository Safety
Office of Nuclear Material Safety
and Safeguards

Enclosure:
NRC Staff Evaluation Report

cc w/out enclosure: See Attached List

Letter or Memorandum to M. Chu from C. Reamer, dated: April 13, 2004

cc:

A. Kalt, Churchill County, NV	A. Elzeftawy, Las Vegas Paiute Tribe
R. Massey, Churchill/Lander County, NV	J. Treichel, Nuclear Waste Task Force
I. Navis, Clark County, NV	W. Briggs, Ross, Dixon & Bell
E. von Tiesenhausen, Clark County, NV	M. Chu, DOE/Washington, D.C.
G. McCorkell, Esmeralda County, NV	G. Runkle, DOE/Washington, D.C.
L. Fiorenzi, Eureka County, NV	C. Einberg, DOE/Washington, D.C.
A. Johnson, Eureka County, NV	S. Gomberg, DOE/Washington, D.C.
A. Remus, Inyo County, CA	W. J. Arthur, III , DOE/ORD
M. Yarbro, Lander County, NV	R. Dyer, DOE/ORD
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M. Maher, Nye County, NV	S. Mellington, DOE/ORD
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K. Kirkeby, NV Congressional Delegation	D. Beckman, BSC/B&A
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S. Lynch, State of NV	R. Boland, Timbisha Shoshone Tribe
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J. Pegues, City of Las Vegas, NV	J. Birchim, Yomba Shoshone Tribe
M. Murphy, Nye County, NV	R. Holden, NCAE

cc: (Continued)

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D. Feehan, GAO

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G. Hernandez, Las Vegas Paiute Tribe

K. Finrock, NV Congressional Delegation

P. Johnson, Citizen Alert

A. Capoferri, DOE/ Washington, DC

C. Meyers, Moapa Paiute Indian Tribe

R. Wilder, Fort Independence Indian Tribe

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J. C. Saulque, Benton Paiute Indian Tribe

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R. Joseph, Lone Pine Paiute-Shoshone Tribe

L. Tom, Paiute Indian Tribes of Utah

E. Smith, Chemehuevi Indian Tribe

D. Buckner, Ely Shoshone Tribe

V. Guzman, Walker River Paiute

D. Eddy, Jr., Colorado River Indian Tribes

H. Jackson, Public Citizen

J. Wells, Western Shoshone National Council

D. Crawford, Inter-Tribal Council of NV

I. Zabarte, Western Shoshone National Council

S. Devlin

G. Hudlow

D. Irwin, Hunton & Williams

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Sincerely,

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C. William Reamer, Director
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 Office of Nuclear Material Safety
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Enclosure:
 NRC Staff Evaluation Report

cc w/out enclosure: See Attached List

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*See previous concurrence

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