



**Department of Energy**  
Office of Civilian Radioactive Waste Management  
Office of Repository Development  
1551 Hillshire Drive  
Las Vegas, NV 89134-6321

QA: N/A  
Project No. WM-00011

DEC 10 2003

OVERNIGHT MAIL

**ATTN: Document Control Desk**  
Chief, High-Level Waste Branch, DWM/NMSS  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852-2738

**TRANSMITTAL OF KEY TECHNICAL ISSUE (KTI) AGREEMENT PRECLOSURE  
(PRE) 7.02**

Reference: Ltr, Reamer to Brocoum, dtd 8/14/01

The report *Response to Key Technical Issue Agreement Preclosure Safety 7.02*, Revision 1 (enclosure 1) and a CD of the report (enclosure 2) provides the DOE response to the KTI agreement PRE 7.02. The agreement is as follows:

PRE 7.02: "Provide the waste package finite element analysis based numerical simulations that represent a significant contribution to DOE's safety case. Provide documentation demonstrating that a sufficient finite element model mesh discretization has been used and the failure criterion adequately bounds the uncertainties associated with effects not explicitly considered in the analysis. These uncertainties include but are not limited to: (1) residual and differential thermal expansion stresses, (2) strain rate effects, (3) dimensional and material variability, (4) seismic effects on ground motion, (5) initial tip-over velocities, and (6) sliding and inertial effects of the waste package contents, etc. In addition, document the loads and boundary conditions used in the models and provide the technical bases and/or rationale for them. DOE agreed to provide the information. The information will be available in FY03 and documented in the Waste Package Design Methodology Report."

The response to KTI agreement PRE 7.02 provided in the enclosed report addresses the items requested in the agreement stated above. PRE 7.02 is a stand alone KTI agreement and was not linked with any general agreement items.

Based on the information presented and pending NRC review and approval, DOE recommends that PRE 7.02 be closed.

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There are no new regulatory commitments in the body or the enclosures of this letter. Please direct any questions concerning this transmittal to David C. Haught at (702) 794-5474 or Kirk D. Lachman at (702) 794-5096.

  
Joseph D. Ziegler, Director  
Office of License Application and Strategy

OLA&S:TCG-2036

Enclosures:

1. *Response to Key Technical Issue Agreement*  
*Preclosure Safety 7.02, Revision 1*
2. CD of Enclosure 1

cc w/encls 1 and 2:

G. P. Hatchett, NRC, Rockville, MD  
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cc w/encl 2:

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Chief, High-Level Waste Branch

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cc w/encl 2: (continued)

L. W. Bradshaw, Nye County, Pahrump, NV

Mike Simon, White Pine County, Ely, NV

R. I. Holden, National Congress of American Indians, Washington, DC

cc w/o encls:

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