

Department of Energy

Office of Civilian Radioactive Waste Management
Office of Repository Development
P.O. Box 364629
North Las Vegas, NV 89036-8629

QA: N/A Project No. WM-00011

JUL 21 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

STATUS OF U.S. DEPARTMENT OF ENERGY (DOE) TOPICAL REPORT ON DISPOSAL CRITICALITY ANALYSIS METHODOLOGY

Reference: Ltr, Brocoum to Reamer, dtd 2/21/01

In February 2001, DOE submitted the *Disposal Criticality Analysis Methodology Topical Report* (Topical Report), Revision 1, as a continuation of the Topical Report/Safety Evaluation Report process on disposal criticality. The DOE met with U.S. Nuclear Regulatory Commission (NRC) staff in July 2002 to discuss the status of criticality issues, including the NRC review of Revision 1 of the Topical Report. During the meeting, DOE presented to NRC a revised approach in the configuration generator contained in Topical Report, Revision 1, from a Monte Carlo software-based approach to an event-tree/fault-tree approach.

The DOE is currently drafting the changes that support the revised approach, and has determined that the most transparent way to include the changes is to revise the Topical Report and submit it to the NRC as Revision 2. Revision 2 of the Topical Report is underway and it is anticipated that it should be available to the NRC in October 2003.

The DOE considers the information provided to the NRC in the referenced letter to reflect the basic approach. The few exceptions to this approach to be reflected in Revision 2 include the configuration generator approach and other changes intended to further clarify the approach. In this regard, DOE supports the NRC decision not to proceed with the review of Revision 1 of the Topical Report and its plans to provide a detailed review of the upcoming Topical Report, Revision 2.

Please direct any questions concerning this letter to David C. Haught at (702) 794-5474 or Paige R.Z. Russell at (702) 794-1315.

seph D. Ziegler, Acting Director

ffice of License Application and Strategy

OLA&S:DCH-1540

Um5507

cc:

C. W. Reamer, NRC, Rockville, MD

A. C. Campbell, NRC, Rockville, MD

L. L. Campbell, NRC, Rockville, MD

D. D. Chamberlain, NRC, Arlington, TX

G. P. Hatchett, NRC, Rockville, MD

R. M. Latta, NRC, Las Vegas, NV

J. D. Parrott, NRC, Las Vegas, NV

N. K. Stablein, NRC, Rockville, MD

H. J. Larson, ACNW, Rockville, MD

W. C. Patrick, CNWRA, San Antonio, TX

Budhi Sagar, CNWRA, San Antonio, TX

J. R. Egan, Egan & Associates, McLean, VA

J. H. Kessler, EPRI, Palo Alto, CA

M. J. Apted, Monitor Scientific, LLC, Denver, CO

Steve Kraft, NEI, Washington, DC

W. D. Barnard, NWTRB, Arlington, VA

R. R. Loux, State of Nevada, Carson City, NV

Marjorie Paslov Thomas, State of Nevada, Carson City, NV

Alan Kalt, Churchill County, Fallon, NV

Irene Navis, Clark County, Las Vegas, NV

George McCorkell, Esmeralda County, Goldfield, NV

Leonard Fiorenzi, Eureka County, Eureka, NV

Andrew Remus, Inyo County, Independence, CA

Michael King, Inyo County, Edmonds, WA

Mickey Yarbro, Lander County, Battle Mountain, NV

Spencer Hafen, Lincoln County, Pioche, NV

Linda Mathias, Mineral County, Hawthorne, NV

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

Josie Larson, White Pine County, Ely, NV

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

Allen Ambler, Nevada Indian Environmental Coalition, Fallon, NV