

ESF OPEN ITEMS 31 AND 32

- 1 -

MAY 15 1990

Mr. Ralph Stein, Associate Director
 for Systems Integration and Regulations
 Office of Civilian Radioactive Waste Management
 U.S. Department of Energy, RW-30
 Washington, D.C. 20585

Dear Mr. Stein:

I am responding to DOE's letter (Appel to Linehan, dated February 27, 1990) in which DOE suggested that Exploratory Shaft Facility (ESF) open items 31 and 32 should be considered closed on the basis of information provided in the Site Characterization Plan (SCP) for the Yucca Mountain, Nevada site. The NRC staff has reviewed the relevant information in the SCP and does not consider that information sufficient to close open items 31 and 32 at this time.

Open item 31 calls upon DOE to demonstrate that the site chosen for the ESF is representative of the repository block. Section 8.4.2.1.5 of the SCP addresses the issue of representativeness of the ESF location. However, based upon the material there and elsewhere in the SCP, the NRC staff has continuing concerns about representativeness and has documented them in Site Characterization Analysis (SCA) Comment 35.

Even if the material in the SCP had been sufficient to have closed open item 31 with respect to the representativeness of the ESF location presented therein, it would be necessary to maintain it as an open item pending the outcome of the DOE's ESF Alternatives Study. During the Nuclear Waste Technical Review Board (NWTRB)-DOE technical exchange of April 7, 1990 concerning the ESF Alternatives Study, and the NRC-DOE technical exchange held later that day, DOE indicated that a number of ESF/repository options being considered would involve changes in the ESF location. Until the question of the ESF location is settled, the demonstration of its representativeness will remain an open item.

Open item 32 calls upon DOE to demonstrate the adequacy of the planned tests in the ESF and of the ESF testing layout. DOE provided the test plans for the ESF in sections 8.3 and 8.4 of the SCP. However, having reviewed that information, the NRC staff questioned the adequacy of DOE's test layout, particularly with respect to potential interferences with tests, and documented its concerns in SCA Objection 1.

As in the case of open item 31, the closure of open item 32 is necessarily affected by the outcome of the ongoing ESF Alternatives Study. Until the question of what the ESF test layout is to be is settled, the demonstration of its adequacy will remain an open item.

DOE also makes the point in its February 27, 1990 letter that several open items deal with sealing and cannot be addressed until fundamental differences between DOE and NRC regarding the time frame for design and testing of seals are resolved. NRC is in agreement with this statement and stands ready to meet

9005170272 900515
 PDR WASTE
 WM-11 PDC

102
 WM-11
 NH/6

with DOE as necessary to work toward agreement on basic principles regarding sealing.

If you have any questions about this letter, please contact King Stablein (FTS 492-0446) of my staff.

Sincerely,

ORIGINAL SIGNED BY

John J. Linehan, Director
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

- cc: R. Loux, State of Nevada
- C. Gertz, DOE/NV
- S. Bradhurst, Nye County, NV
- M. Baughman, Lincoln County, NV
- D. Bechtel, Clark County, NV
- D. Weigel, GAO

DISTRIBUTION

CNWRA	NMSS R/F	HLPD R/F	LSS LPDR
ACNW	PDR	Central File	REBrowning, HLWM
BJYoungblood, HLWM	JBunting, HLEN	JLinehan, HLPD	RBallard, HLG
On-Site Reps	NStablein, HLPD	DGupta, HLEN	MNataraja, HLEN

OFC :	HLPD	:	HLEN	:	HLEN	:	HLEN	:	HLEN	:	HLPD	:
NAME:	Stablein	:	DGupta	:	MNataraja	:	JBunting	:	JLinehan	:		:
Date:	05/14/90	:	05/14/90	:	05/14/90	:	05/14/90	:	05/14/90	:		:

OFFICIAL RECORD COPY