ENCLOSURE

On November 3, 1988 members of the Nuclear Regulatory Commission (NRC) staff met with representatives from the Department of Energy (DOE), the State of Nevada, and Nye County, Nevada to discuss the design control on the exploratory shaft facility (ESF). A list of attendees is contained in Attachment 1. During the meeting, the NRC staff identified one acceptable approach DOE could use to demonstrate the adequacy of the current design. The approach was reviewed and revised based on input received from other participants. The final, tentatively agreed upon version is contained in Attachment 2. In addition, DOE presented its approach to evaluating alternative exploratory shaft locations. A copy of this is contained in Attachment 3. The NRC staff noted that it believes that the DOE approach by itself would not be acceptable; however, further staff discussions would be necessary before a final position would be taken.

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Attachment 1

Attendees

NRC
J. Holonich
J. Kennedy
J. Linehan
K. Stablein
M. Nataraja
D. Gupta
J. Conway

STATE OF NEVADA
C. Johnson

NYE COUNTY
E. Holstein

DOE
E. Wilmont
G. Appel
R. Stein
J. Saltzman
L. Barrett
S. Echols

WESTON
D. Siefken

GENERAL ACCOUNTING OFFICE
K. Turner
E. Nakamura

Attachment 2

Design Acceptability Analysis

In the site characterization plan (SCP), the Department of Energy (DOE) will be providing design information on the exploratory shaft facility (ESF) that was developed without a design control process that met 10 CFR Part 60, Subpart G. Before the staff can comment on the ESF design information presented in the SCP, DOE must first demonstrate that the design meets the applicable 10 CFR Part 60 technical requirements. One acceptable approach to demonstrate the acceptability of the ESF design is outlined below.

Develop and implement a plan that meets the appropriate requirements of 88-9 and addresses Steps 1 and 2.

Step 1

Provide an analysis for 10 CFR Part 60 requirements which:

(a) identifies all 10 CFR Part 60 requirements that are applicable to the design and construction of the ESF;

(b) evaluates design interfaces; and

(c) generates design criteria based on (a) and (b) or demonstrates how the current design criteria used for the Title I addresses (a) and (b).

Step 2

DOE should analyze the current design against the design criteria generated under 1(c). This analysis should demonstrate that the ESF design and construction satisfy the three general objectives in 10 CFR Part 60. These are: (1) the long-term waste isolation capability of the site is not compromised; (2) the ability to characterize the site is not compromised; and (3) the ESF site characterization activities would provide representative data. This analysis should also address the appropriateness of the data used in the design and how the uncertainties were considered. The analysis is not intended to meet NUREG-1298, "Qualification of Existing Data for HLW Repositories," but will demonstrate the reasonableness of the data for the type of analyses being performed.

Step 3

DOE needs to brief NRC on the design control process and quality assurance applied to the ESF Title I design to the degree it was relied upon in the design acceptability analysis as well as the methodology for and status of the design acceptability analysis prior to the SCP.

Step 4

DOE should submit the design acceptability analysis to the staff for review along with the SCP.

Step 5

For any area of the design found unacceptable by DOE during the design acceptability analysis, DOE should identify the impact on the overall design and the DOE actions to correct the deficiency.

Step 6

After the SCP is issued, DOE should independently confirm the design acceptability analysis through an on-site review that is observed by NRC.

Step 7

Based on the results of Step 6, the NRC staff will assess the need for it to conduct a visit to evaluate the QA and technical aspects of the ESF Title I design and the design acceptability analysis.

Step 8

The ability of the staff to comment on the ESF will be dependent on the timeliness and ability of DOE to demonstrate the adequacy of the design and to independently confirm the design acceptability.

Prior to the start of sinking of the ESF, DOE must have a fully qualified QA program, including design control, in place for ESF activities.

III. PERFORM COMPARATIVE EVALUATIONS RELATED TO ALTERNATIVE SHAFT LOCATIONS TO EXAMINE:

- ANY SIGNIFICANT DIFFERENCES IN THE CAPABILITY OF THOSE LOCATIONS TO ISOLATE OR CONTAIN WASTES AND WHAT INFLUENCE, IF ANY, THESE DIFFERENCES MAY HAVE HAD ON THE SELECTION OF THE PREFERRED SHAFT LOCATION IF THEY HAD BEEN AN EXPLICIT PART OF THE SELECTION PROCESS

- ANY SIGNIFICANT ADVERSE EFFECTS THAT A SHAFT MIGHT HAVE ON THE ABILITY OF THE LOCATION TO CONTAIN AND ISOLATE WASTE AND WHAT INFLUENCE, IF ANY, THESE DIFFERENCES MAY HAVE HAD ON THE SELECTION OF THE PREFERRED SHAFT LOCATION IF THEY HAD BEEN AN EXPLICIT PART OF THE SELECTION PROCESS