Department of Energy
Washington, DC 20585

FEB 9 1989

Robert E. Browning, Director
Division of High-Level Waste Management
Office of Nuclear Materials Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Browning:

Enclosed with this letter are copies of the five construction phase Exploratory Shaft Facility (ESF) study plans prepared by the U.S. Department of Energy (DOE) for the Yucca Mountain Site. These are the five study plans scheduled for release to the U.S. Nuclear Regulatory Commission (NRC) in the same time-frame as the Yucca Mountain Site Characterization Plan (SCP). The study plan numbers and titles are listed below. The study plan number corresponds to the same section number in the SCP for the Yucca Mountain Site.

Number	Title
8.3.1.2.2.2	Water Movement Test
8.3.1.2.2.3	Characterization of Yucca Mountain Percolation in the Unsaturated Zone - ESF Investigations
8.3.1.4.2.2	Characterization of the Structural Features Within the Site Area
8.3.1.15.1.5	Excavation Investigations
8.3.1.15.2.1	Characterization of the Site Ambient Stress

The DOE has reviewed the study plans for consistency with the content requirements for study plans as given in Attachment B to the Summary of the NRC/DOE Meeting on the Level-of-Detail for Site Characterization Plans (May 7-8, 1986). The DOE is submitting these plans to the NRC as agreed to in that meeting.

As discussed during our recent meeting on study plans (December 15, 1988 DOE/NRC Meeting on Study Plans), the DOE has decided to control preparation and review of study plans as a Quality Assurance (QA) Level I activity. Because the five subject study plans were in preparation prior to this

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decision, they were not prepared under current Project Office QA Level I procedures. During the December 15, 1988, DOE/NRC meeting on study plans, the DOE agreed to prepare an evaluation of the preparation of these 5 study plans relative to current QA requirements. The DOE is currently in the process of preparing this evaluation. The results of this QA evaluation will be transmitted to your office following completion of the evaluation. This evaluation is being performed under procedures consistent with NNWSI/88-9, Rev. 2, which you have accepted. It is our understanding that the NRC will accept these study plans for information and a review of these study plans will be initiated following receipt of the QA evaluation.

Upon receipt of the QA evaluation for these study plans, the DOE anticipates that the NRC will review these plans as described in the NRC review procedure for review of study plans. This NRC procedure specifies that: the NRC will notify the DOE in writing when NRC's acceptance review is completed; notify DOE of any major concerns with the plans at the conclusion of the three-month start-work review; and, if the NRC elects to perform a detailed technical review of any of these plans, the NRC will provide the complete package of review comments within six months of the initiation of the start-work review. At the December 15, 1988, DOE/NRC meeting, the DOE agreed to supply to the NRC, with the study plans, references that are not readily available to the NRC as well as obscure references from the open literature. Such references are being forwarded under separate cover. If additional references supporting the study plans are needed, DOE will supply copies of these references upon request by the NRC.

Please note that the Quality Assurance Level Assignments (QALAs) for the activities to be performed under these study plans, are included as part of a QA appendix to each of the five enclosed study plans. These QALAs were included in the study plan to satisfy the May 7-8, 1988, Level-of-Detail Agreement for Content of Study Plans. As you are aware, the DOE is currently in the process of implementing QA procedures that are consistent with NNWSI QAP 88-9, Rev. 2 and NUREG 1318. Following the implementation of these procedures, the DOE will reevaluate existing QALAs that are not level-I and will revise them, as appropriate. All study plans will be distributed as controlled documents, and as such, any revision to the study plans and appended QALA lists will be distributed as controlled documents.

The DOE is also developing program wide definitions of standard and nonstandard technical procedures to ensure consistent identification and utilization of these procedures in the development of future study plans.

If you have any questions, please contact Donald Alexander of my staff on 586-2834.

Sincerely,

Ralph Stein

Ralph Stein
Associate Director for Systems
Integration and Regulations
Office of Civilian Radioactive
Waste Management

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