MEMORANDUM

TO:

Dr. A. B. Ibrahim, Project Manager

Division of Waste Management Nuclear Regulatory Commission

Washington, D.C.

FROM:

V. J. Murphy

Weston Geophysical Corporation

Lyons Street Westboro, MA

DATE:

March 29, 1988

SUBJECT:

Task 22 of Contract No. NRC-02-84-001

Review and Comment (Preparation of Preliminary Drafts Point Papers)

Consultation Draft Yucca Mountain SCP

Dear Dr. Ibrahim:

We have reviewed and provided "Preliminary Draft Point Papers" concerning the above referenced CDSCP - Yucca Mountain. At this time, we wish to comment on the extent or intensity of this review as it could best be performed during the rather limited time frame work assigned for the task.

Our initial assignment involved and required a lead role for Section 8.3.1.4 - "Rock Characteristics"; however, the initial cross references that we performed indicated extensive sections of the CDSCP where geophysics was explicitly considered for numerous site characterization tasks, for numerous objectives, and with further cross references to other sections of the CDSCP.

Accordingly, Weston's involvement then required a rather equal amount of time devoted to not only Section 8.3.1.4 - "Rock Characteristics" but also to the following sections:

8.3.1.8 - Postclosure Tectonics

8.3.1.9 - Human Interference

8.3.1.1.14 - Surface Characteristics

8.3.1.17 - Preclosure Tectonics

Since it was deemed much more prudent to become involved with those additional sections, plus additional cross references to other sections, we were able to achieve a level of effort (within the assigned time frame) that allowed us to become knowledgeable but precluded a true in-depth review and subsequent preparation of <u>all</u> appropriate "preliminary draft point papers."

It is noteworthy, nevertheless, that we were able to identify two key areas for both our written comments as well as open discussions with you and other NRC staff members; namely, the consideration of the volcanic setting, which



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will be characterized largely on the basis of geophysical data, and a second topic to also be characterized by dependence on geophysical data, namely, the consideration of tectonics and near surface faulting.

We have separately identified a specific need for cross referencing throughout the entire CDSCP document with regard to the matter of geophysics/geophysical surveys/geophysical measurements. The CDSCP document is replete with geophysical references, which if carried out as indicated will help to ensure an intensive site characterization program and a high probability of disclosing all significant subsurface conditions essential for reliable site characterization; therefore, we stress the need for such a cross-reference effort, as well as the definitive need for a follow-through program that completes all planned tasks.

We believe that our assigned review and comment task (while sufficient for general understanding of the formated subject matters and limited responses, as well as developing a more complete awareness and preparedness level for the anticipated future programs called for within the CDSCP document) would require a considerably more extensive level of effort for complete review and for assurance that no significant site characterization activities have been overlooked or inappropriately planned or programmed.

It is therefore imperative that a more lengthy time period be allowed for the next CDSCP version and certainly for the final review of the Yucca Mountain site characterization plan; furthermore, the various work plan documents that are anticipated to be issued for the various geophysical field programs will also require such in depth review efforts in order to again assure that all significant subsurface conditions will be disclosed.

We are regretful that the assigned time period precluded a complete in-depth effort. We await further instructions concerning these involvements; we assure you of our continued interest. We will retain the documents for further reference and utilize them on an "FYI" basis in order to maintain current familiarity with the overall document and content. We therefore ask that you accordingly provide us with new, timely information that may be related to the CDSCP document and ongoing D.O.E. activities related to the document, as they are accomplished and reported.

VJM:cap-1820J