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LPDR B, U, S

30 July 1984  
Ref. No. 1148-004-041  
Project Letter No. 041

Distribution: \_\_\_\_\_  
BUCKLEY  
Return to Wm, 623-SS) \_\_\_\_\_

High Level Waste Technical Development Branch  
Division of Waste Management  
U. S. Nuclear Regulatory Commission  
7915 Eastern Avenue  
Silver Spring, MD 20910

Attention: Mr. John Buckley, Project Officer  
Mail Stop 623-SS

Subject: Contract No. NRC-02-84-00  
Meeting Report for July 10, 1984  
Meeting Held in Silver Spring, MD

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WM DOCKET CONTROL  
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Dear Mr. Buckley:

Enclosed is one (1) copy of the subject meeting report. The expense account vouchers are being sent with the monthly report. If there are any questions, please contact me.

Sincerely,

ENGINEERS INTERNATIONAL, INC.

  
Swapn Bhattacharya  
Lead Mining Engineer

SB/bt

Enclosure: 1

cc: Office of the Director, NMSS (Attn: Program Support Branch)  
Division of Waste Management (Attn: Division Director)  
Contracting Officer (Attn: Ms. Mary Mace)  
High-Level Waste Technical Development Branch (Attn: Branch Chief)

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# ENGINEERS INTERNATIONAL, INC.

## MEETING REPORT

NRC Contract No. NRC-02-84-002, Task Order 004

EI Project No. 1148-004

### TECHNICAL ASSISTANCE FOR IN SITU TESTING

DATE 10 July 1984

PLACE U. S. Nuclear Regulatory Commission  
7915 Eastern Avenue  
Silver Spring, MD 20910

PURPOSE Preparation for the NNWSI repository data review meeting in the technical areas of facility design and rock mechanics.

### PARTICIPANTS

#### U. S. Nuclear Regulatory Commission:

J. Buckley, WMEG  
P. Dutta, WMED  
J. Greeves, WMEG  
J. Pearring, WMEG  
N. Tanious, WMEG  
D. Tiktinsky, WMEG  
R. Johnson, WMRP  
L. Pittiglio, WMRP  
T. Schmitt, RES

#### Engineers International, Inc:

S. Bhattacharya  
M. Christianson (Itasca)  
J. Daemen (University of Arizona)

#### U. S. Bureau of Mines:

L. Mundell

### DISCUSSION

Piyush Dutta opened the meeting by stating the purpose of the meeting and introducing the participants. Robert Johnson then discussed the high points of the EA review process and recounted his experience with the Salt Project data review. He made some general comments on the content of the EAs and indicated that Chapter 6, which deals with the suitability for site characterization and repository development, is a requisite starting point for review of the EAs. He also clarified NRC's chief objective in the data review process as to simply inventory data that DOE has generated and referenced in reports, and not involve in the interpretation of data or in recommending future plans.

Larry Pittiglio made some further comments on the scope and objectives of the data review meeting and reiterated that data interpretation and sufficiency aspects will not be addressed at this meeting, but will be taken up at a later date during the design workshop. Jerry Pearring added that the data review participants should attempt to form an opinion regarding the quantity, quality, and sufficiency of data that are essential for EA review, and think of possible future plans that may be required to generate data. These views should be communicated to the WMEG and WMRP personnel after the meeting.

Piyush Dutta provided details of the schedule for the data review meeting and the site visit to the Yucca Mountain. The field visit is scheduled for 17 July and the data review meeting is between 18-20 July 1984. An agenda proposed by DOE was circulated to all the participants. A discussion ensued on the types and extent of data and documents to be obtained from DOE. Piyush Dutta identified primary areas of data including USGS core logs, laboratory test data, and field rock properties data. Jerry Pearring pointed out secondary areas of interest including tectonics, geochemistry, hydrogeology, and geology. Jaak Daemen expressed interest in obtaining data on the weapons testing programs at NTS, data on rock mass permeability, and the extrapolation of G-Tunnel rock property data to the repository location. Swapan Bhattacharya presented a list of documents that are referenced in the draft EA, another list of recent and unreleased pertinent documents that EI has not been able to procure to date, and a master list of documents that will comprise the data base for reviewing the EA.

Following a short break, discussions resumed regarding the identification of key data for review. Jaak Daemen emphasized on gathering information on the sampling procedures for rock tests at the Sandia National Laboratories (SNL). Swapan Bhattacharya pointed out some discrepancies in past documents regarding the characterization of rock mass and in situ properties including fracture intensity and character, in situ stress determinations, rock quality designations, unsaturated zone hydrology, and sonic velocity correlations between drill hole and laboratory data. Piyush Dutta presented a comprehensive list of data types including physical, thermal, mechanical properties, field rock properties, field test data, and data on sealing materials. Several suggestions from J. Pearring, J. Daemen, and S. Bhattacharya were incorporated to this list. The group broke for lunch at this point.

The meeting reconvened after lunch with Piyush Dutta handing out a list of participants for the data review meeting and a facsimile data review checklist form to be filled out at the meeting. All the items in the checklist were discussed individually to ensure that all concerned were fully aware of the intent and requirements of each item. A discussion ensued on whether an individual test data should be included per sheet or should groups of data be included. After much discussion a decision was made that the forms be essentially filled for a single data set along with comments on the general results. Next, the participants for the data review meeting were divided into several subgroups in order that information on the various tests could be gathered with maximum time savings.

John Greeves joined the meeting to help resolve any questions that may have arisen during the course of the meeting. He provided further instructions on filling out the data review forms and emphasized on the need to exercise judgment in filling out the forms within the available time. He scrutinized the personnel assignments for the data review meeting and concluded the meeting with some general comments on the scope and objectives of the field visit and the data review meeting.