U.S. NUCLEAR REGULATORY COMMISSION

ON-SITE LICENSING REPRESENTATIVE REPORT

NUMBER OR-96-08

FOR THE REPORTING PERIOD OF AUGUST 1-31, 1996

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REPORT DETAILS

1.0 INTRODUCTION

The principal purpose of the On-Site Licensing Representative (OR) reports is to alert NRC staff, managers and contractors to information on the U.S. Department of Energy (DOE) programs for site characterization, repository design, performance assessment, and environmental studies that may be of use in fulfilling NRC's role during pre-licensing consultation. The principal focus of this and future OR reports will be on DOE's programs for the Exploratory Studies Facility (ESF), surface-based testing, performance assessment, data management systems and environmental studies. Relevant information includes new technical data, DOE's plans and schedules, and the status of activities to pursue site suitability and ESF development. In addition to communication of this information, any potential licensing concerns, or opinions raised in this report represent the views of the ORs and not that of NRC headquarters' staff. The reporting period for this report covers August 1-31, 1996.

2.0 OBJECTIVES

The function of the OR mission is to principally serve as a point of prompt informational exchange and consultation and to preliminarily identify concerns about site investigations relating to potential licensing issues. The ORs accomplish this function by communicating, consulting and identifying concerns. Communication is accomplished by exchanging information on data, plans, schedules, documents, activities and pending actions, and resolution of issues. The ORs consult with the DOE scientists, engineers, or managers with input from NRC Headquarters management on NRC policy, philosophy, and regulations. The ORs focus on such issues as quality assurance (QA), design controls, data management systems, performance assessment, and key technical issue resolution. A principle OR role is to identify areas in site characterization and related studies, activities, or procedures that may be of interest or concern to the NRC staff.

3.0 SUMMARY AND CONCLUSIONS

Over this reporting period, the ORs met with DOE and M&O management, technical, and QA personnel to better understand DOE's methodology and process for qualifying borehole geophysical data collected prior to the implementation of a Title 10 of the Code of Federal Regulations (10 CFR), Subpart 60 QA program. The objective of this OR exercise was to assure, early in

the process of qualifying existing data, that adequate procedural controls were in place at the time this data was collected to qualify this data in accord with the guidance provided in NUREG-1298. In the ORs view, the qualification process used for this data set was well organized and effective and the guidance from NUREG-1298 was found to be acceptably addressed.

4.0 SPECIAL OR EXERCISE ON QUALIFICATION OF EXISTING DATA

A series of discussions were held with DOE and DOE Civilian Radioactive Waste Management System Management and Operating Contractor (M&O) management, technical, and QA personnel to better understand the methodology and process used for qualifying existing technical data in accordance with the NRC guidance provided in NUREG-1298, "Qualification of Existing Data for High-Level Nuclear Waste Repositories." Existing data is defined as data developed prior to implementation of a 10 CFR, Subpart 60 QA program. To date, only two types of data have been qualified by DOE namely, data for the Extreme Erosion Study and Borehole Geophysical Data. DOE is developing plans to qualify other data which may surface as a result of the development of the DOE Synthesis Reports. For this exercise on the qualification of existing data, the ORs focused on DOE's Borehole Geophysical Data qualification process.

In June 1995, DOE authorized the formation of a Technical Assessment Team to assess the existing geophysical data of 39 boreholes for qualification through a procedural equivalency process. As stated in the Technical Assessment Notice, the purpose of this Technical Assessment was to expand the qualified data base needed to develop the 3-D model of Yucca Mountain. The intent of this qualification effort was not to limit the use of this data for a particular model but rather to establish site reference information for a number of 3-D models for site characterization. The method selected for qualification of boreholes was based on recommendations from the M&O Qualification of Existing Data Natural Working Group which investigated ways to qualify existing data using NRC's NUREG-1298 and the DOE Quality Assurance Requirements and Description (QARD) document. This group decided to focus on Program (Procedural) Equivalency as the most promising candidate method for which an actual process could be developed and proceduralized. The applied process was intended to establish the QA pedigree of the data-gathering activities and not to verify the technical correctness of the data.

A Technical Assessment Team of 13 members was formed and was composed of a Team Chairperson, Secretary, Technical Team Members, Records Assemblers, and Records Retrievers. The six technical team members included two Procedural Equivalency Reviewers, two Compliance Demonstration Reviewers, and two QA representatives. Prior to forming this team, minimum technical qualifications of at least five years of experience in QA, including a background in procedure development and work with an NQA-1 program or equivalent; or a BS or higher degree in an earth science or engineering discipline and current training to an NQA-1 or equivalent program were required. (See Enclosure 1 for the actual Technical Team personnel qualifications). None of the Technical Reviewers had any previous involvement in the collection of the data being qualified. Technical disciplines were determined and qualifications for these disciplines were established, reviewed, certified, documented, and included as permanent records in the data qualification package. The technical assessment process for this data qualification effort was conducted in two phases.

Phase 1 - Procedural Equivalency

In Phase 1, separate checklists were used to compare current procedures and relevant parts of the QARD to historical procedures and standard scientific and engineering practices. Phase 1 was principally a procedural equivalency examination. The current Yucca Mountain Site Characterization Project procedures YAP-SIII.4Q (Project Field Verification of Geophysical Logging Operations) and YAP-SIII.5Q (Preparation of Borehole Geophysical Logging Programs for Surfaced-Based Testing Program Boreholes) and the QARD document were reviewed to develop the checklist for Phase 1. This checklist contained (1) the proceduralized process steps necessary for the gathering of the data from borehole geophysical logs, and (2) the applicable portions of the QARD. (See Enclosure 2 for the Phase I checklist).

Phase 2 - Compliance Demonstration

The Technical Assessment team initiated Phase 2 compliance demonstration phase after the completion of the Phase 1 procedural equivalency. Phase 2 involved a review of objective evidence that the historical procedures under review were followed when the data was acquired. As in Phase 1, a checklist was developed for reviewing evidence that borehole geophysical logging data was collected according to procedures. The compliance demonstration checklist contains items that reviewers were to consider in judging the acceptability of the data-gathering process for the borehole geophysical data. (See Enclosure 3 for the Phase 2 checklist).

After the checklist was developed, the technical assessment team assigned two individuals with the responsibility for conducting the compliance demonstration review. The compliance demonstration reviewers were responsible for evaluating objective evidence to determine whether historical procedures were actually complied with during the gathering of the subject data set. These reviewers also examined supporting documentation to determine whether various controls, procedures, audits, and requirements were in place and implemented during the collection of the borehole geophysical data.

The compliance demonstration reviewers independently evaluated the body of evidence for each of the 39 boreholes (one notebook for each borehole). This evidence also includes separate notebooks covering (1) field processes for drilling program participants; (2) early quality assurance program plans; (3) Raytheon Services Nevada logging procedures; (4) Fenix & Scisson procedures; and (5) selected logging audits for the years 1979-1992. The reviewers documented their assessment of each checklist item and their recommendations and comments regarding the acceptance or rejection of the evidence for each geophysical log.

The Chairperson reviewed the two sets of independently completed checklists for differences in acceptance/rejection of individual logs. There were a total of 19 differences of opinion between compliance demonstration reviewers. Of these, two were resolved by consultation between Chairperson and the reviewers resulting in acceptance of the geophysical log data. The remaining 17 geophysical logs were rejected. As a result of this effort, 1,011 geophysical logs were reviewed, of which 766 were found to have sufficient objective evidence to demonstrate compliance with historical procedures. The technical assessment team recommended that DOE qualify the 766 geophysical logs and DOE subsequently adopted that recommendation.

Discussion

The objective of the OR exercise was to assure early enough in the process of qualifying existing data, that there are adequate procedural controls in place to meet the NRC guidance contained in NUREG-1298. The guidance contained in this NUREG was committed to be implemented by DOE in the QARD. In turn, this implementation is accomplished mainly in accordance with YAP-SIII.1Q, "Qualification of Existing Data" and YAP 2.1Q, "Technical Assessment." It is the OR's understanding that these two procedures are currently being revised to incorporate some of the lessons learned from this qualification process. The OR review focused on selected

data in the qualification package due to limited time and resources.

The ORs looked at the appropriate detail contained in the Borehole Geophysical Data Qualification records package and found this package to be well organized, identifiable, readily retrievable, and maintained in an orderly manner. Each of the 39 boreholes reviewed has its own checklist with provisions to note acceptance or rejection. The objective evidence for compliance and other information is contained in 44 notebooks. This objective evidence consists of a separate logbook for each borehole and 5 supplementary books. Due to the voluminous amount of this information, it is not an integral part of the main records package. It is maintained in a separate record cabinet by M&O Technical Data Management and traceable into the records system via accession numbers provided in the Technical Assessment records package or other means as the Technical Assessment Team Chairperson indicated to the ORs.

After looking at the package, the ORs prepared a number of questions that requested clarification on some of the information reviewed. Certain of these questions pertained to the use of the data, how the method was selected to qualify the data, whether any of the data is currently being used, flowdown of NUREG-1298 guidance into the DOE QARD and associated implementing procedures, and several procedural type inquires. In regards to the use of this data, it is important to note that while this data was qualified for use in developing a 3-D model of Yucca Mountain, once the data is qualified and submitted to the Technical Data Base it is available to other users as qualified data. Yucca Mountain Site Characterization Project procedure YAP-SIII.3Q (Processing of Technical Data) make data users responsible for ensuring that the data is suitable for its intended use. DOE is attempting to declare data qualified because it was collected in a manner procedurally equivalent to the procedures outlined in the approved DOE QA program. The DOE procedure would have a second step which determines if the data is technically suitable for its intended purpose. From a licensing perspective, NRC would not consider data "qualified" unless it was both collected in a procedurally acceptable manner and technically suitable for its intended function. Confusion in the program can result if data exists which is qualified and not technically suitable for its intended function. However, NRC has no problems with DOE conducting this data review as a two step process. The first step is to verify that the data is collected in a procedurally correct manner, and the second step is to verify that the data is technically acceptable for its intended use. From the QA, technical, and licensing perspectives, the ORs recommend that if DOE continues to

call data qualified based solely on procedural equivalency, then DOE should establish provisions to assure that the intent and suitability of the use of this data is documented to avoid any misinterpretation in the future use of this data.

The ORs checked to ensure that specific objective evidence did exist in the qualification package. The ORs examined a number of geophysical logs for borehole USW-G2 to verify that fundamental information was included in the log headers. Specific items checked included borehole name, location, elevation, diameter, and casing information; name of geophysical logging company and operator; identification of survey type and instrument numbers; calibration of survey instrument; survey run number and depth over which run conducted; and logging speed. The ORs confirmed that this information was contained in the log headers examined. The ORs also verified that a Log Quality Report (Enclosure 4) was completed for each geophysical log examined. The Log Quality Report is filled out by a log analyst, representing the project, immediately after the log data is collected. This report serves as an independent check on the acceptability of the log.

In an August 29, 1995 letter, DOE requested that this data be entered into the Technical Data Base and that the Automated Technical Data Tracking (ATDT) system be modified to reflect the quality status of the data. The ORs checked ATDT to determine if this data was listed in this tracking system and if data was entered into the Technical Data Base. This check confirmed that the data was listed in ATDT with the appropriate quality status designation. Subsequently, the ORs briefly scanned the original technical data in a separate portion of the Technical Data Base. It is the ORs understanding that the Technical Data Base and associated implementing procedures are in process of revision to facilitate the system being more user friendly. There is also about a nine month backlog, due to resource constraints, to enter related data into the system. As the revised system nears completion, the ORs intend to observe some random retrievability of technical data and determine whether this data can be readily retrieved from a licensing perspective.

As noted, the Technical Assessment was initiated in June 1995. It was completed by the team and submitted to DOE August 3, 1995, and accepted by DOE as qualified data on August 29, 1995. From November 14-21, 1995, a surveillance was conducted to review the Yucca Mountain Process for qualifying existing technical data. The auditors limited this surveillance to the qualification of geophysical log data only. Land survey data, which is included on the

geophysical logs that were qualified, was not qualified. [The Technical Assessment team intentionally did not seek to qualify this information as it was not considered to be part of the immediate data-gathering (logging) process.] Qualification of land survey data is under way as a separate effort. Consequently, the auditors cautioned potential users of this data that the pedigree of the land survey data was considered indeterminate. Although one Performance Report was issued and four recommendations were made, the auditors concluded that this process for qualification of this data was considered effective.

Conclusions

The qualification of borehole geophysical data was performed to expand the information base for the development of a 3-D model for Yucca Mountain. This conceptual model serves as the framework for other design and process models. As such, the qualification of this data is important to a number of NRC Key Technical Issues.

In the ORs view, DOE selected an effective method for the qualification of borehole geophysical data. This type of data is well-suited to this qualification method since the data is in a common form and collected by common industry practices. This qualification method may be less effective where there is different types of data collected from diverse sources, or where objective evidence of compliance is not readily accessible.

The ORs verified that the original borehole geophysical data resides in the Technical Data Base under a single data tracking number for 40 boreholes. The ORs were informed that the newly qualified data package is awaiting re-entry into the Technical Data Base under a separate data tracking number for each borehole with qualified logs.

Technical Assessment team members interviewed were found to be objective and independent from any involvement in the collection of the data being qualified. Provisions were satisfactorily implemented for resolving differences when reviewers disagreed or reached different conclusions. Overall, the process for this particular data qualification exercise appeared to be well organized and effective. The guidance from NUREG-1298 appears to be acceptably translated into the DOE QARD and implementing procedures. This conclusion is based on the fact that DOE will determine both that the data is collected in a procedurally acceptable manner and that the data is technically acceptable for its intended function. The second step of this process was not reviewed by the ORs at this time.

5.0 GENERAL

1. Meetings/Interactions

- Attended the August 8, 1996, OCRWM Director's Program Review Videoconference held in Las Vegas, NV and Washington, DC. (Enclosure 5 provides the agenda for the subject matter discussed at this meeting).

- Attended the August 15, 1996 DOE/NRC Technical Exchange on the Yucca Mountain Site Characterization Office's Long Range Plan videoconference held in Las Vegas, NV and Washington, DC. (Enclosure 6 provides the agenda for the subject matter discussed at this meeting).

- Attended the Entrance and Exit meetings for the August 5-9, 1996, QA programmatic audit of the Yucca Mountain Site Characterization Office in Las Vegas, NV. A total of 21 preliminary concerns were noted namely, one Corrective Action Request, nine potential deficiencies corrected during the audit, seven Performance/Deficiency Reports, and four recommendations. The audit did not pursue qualification of existing data due to the limited scope of the audit.

2. Appendix 7 Site Interactions

- Conducted August 7, 1996, site visit with 2 members from the Center for Nuclear Waste Regulatory Analyses to examine fractures in outcrop and in the Exploratory Studies Facilities. There were no outstanding issues raised on this visit.

- On August 31, 1995, NRC participated in a Global Positioning System (GPS) survey in southern Nevada. This was the fifth in a series of NRC sponsored GPS surveys conducted since the network was established in 1991. This network consists of 15 survey sites, with 5 of these sites situated in the vicinity of Yucca Mountain. These surveys are performed to assess performance of a potential repository at Yucca Mountain relative to seismotectonic issues.

6.0 REPORTS

During this reporting period the following reports were received in the NRC Las Vegas office.

LOS ALAMOS

LA-12956-MS RADIONUCLIDE SORPTION IN YUCCA MOUNTAIN TUFFS WITH J-13 WELL WATER: NEPTUNIUM, URANIUM, AND PLUTONIUM (YMP Characterization Program, Milestone 3338), 8/96, I. Triay, C. Cotter, S. Kraus, M. Huddleston, S. Chipera, D. Bish

LA-12957-MS VALIDITY OF BATCH SORPTION DATA TO DESCRIBE SELENIUM TRANSPORT THROUGH UNSATURATED TUFF, (YMP Characterization Program, Milestone 3415), 8/96, J. Conca, I. Triay

LA-12958-MS COMPARISON OF NEPTUNIUM SORPTION RESULTS USING BATCH AND COLUMN TECHNIQUES (YMP Characterization Program, Milestone 3041), 8/96, I. Triay, A. Furlano, S. Weaver, S. Chipera, D. Bish

LA-13167-T MODIFICATION OF THE FINITE ELEMENT HEAT AND MASS TRANSFER CODE (FEHM) TO MODEL MULTICOMPONENT REACTIVE TRANSPORT, 8/96, H. Viswanathan

DOE and TRW for DOE

B00000000-01717-5705-00030 REV 00 THE VEGETATION OF YUCCA MOUNTAIN: DESCRIPTION AND ECOLOGY, 3/29/96 (Numerous contributors)

DOE/EM-0266 CLOSING THE CIRCLE ON THE SPLITTING OF THE ATOM, 1/96 (2nd printing), USDOE Office of Environmental Management

U.S. GEOLOGICAL SURVEY

Open-File Report 94-469 PROPOSED STRATIGRAPHIC NOMENCLATURE AND MACROSCOPIC IDENTIFICATION OF LITHOSTRATIGRAPHIC UNITS OF THE PAINTBRUSH GROUP EXPOSED AT YUCCA MOUNTAIN, NV, 1996, D. Buesch, R. Spengler, T. Moyer, J. Geslin

Open-File Report 95-280 PHYSICAL AND HYDROLOGIC PROPERTIES OF ROCK OUTCROP SAMPLES AT YUCCA MOUNTAIN, NV, 1996, L. Flint, A. Flint, C. Rautman, J. Istok

YUCCA MOUNTAIN PROJECT BRANCH USGS PROGRESS REPORT, July, 1996

SANDIA NATIONAL LABORATORIES

SAND94-0779 SENSITIVITY OF HYDROLOGICAL PERFORMANCE ASSESSMENT ANALYSES TO VARIATIONS IN MATERIAL PROPERTIES, CONCEPTUAL MODELS AND VENTILATION MODELS, 7/96, S. Sobolik, C. Ho, E. Dunn, T. Robey, W. Cruz

SAND94-2320 BENCH-SCALE EXPERIMENTAL DETERMINATION OF THE THERMAL DIFFUSIVITY OF CRUSHED TUFF, 6/96, E. Ryder, R. Finley, J. George, C. Ho, R. Longenbaugh, J. Connolly

NUREG

CR-4918, Vol. 9 CONTROL OF WATER INFILTRATION INTO NEAR SURFACE LLW DISPOSAL UNITS, 8/96, R. Schulz, R. Ridky, E. O'Donnell

TA TEAM QUALIFICATIONS:

Personnel qualifications were reviewed for the technical assessment team and are as follows: (See Recommendation #1)

Person	Degree	Years Experience/Industry	Area of Technical Assessment
L. Cuba	N/A	N/A	Chairperson
N. Jones	M.S. Geochemistry	5 Years YMP	Secretary
F. Tsai	Phd. Mineral Engineering	7 Years YMP	Procedure Equivalency
M. Fortsch	B.A. Chemistry	23 Years Nuclear	Procedural Equivalency
M. Pendleton	M. S. Geology	20 Years Earth Science	Compliance Demonstration, Technical
R. Clayton	Phd Geoscience	4 Years Geological Exploration	Compliance Demonstration, Technical

PROCEDURAL EQUIVALENCY CHECKLIST
JUNE 1995

The first 17 statements are based on steps found in Section 5 of YAP-SIII.4Q and YAP-SIII.5Q

1. When appropriate, CR provides field instructions for specific reruns
2. When appropriate, CR reviews (validates) tool calibration
3. CR validates main pass logging run
4. CR establishes hold points when data quality becomes unacceptable
5. CR advises/recommends any special tests
6. CR gathers/compiles documentation on the quality of the downhole geophysical logs
7. CR provides for distribution of field prints
8. CR provides for distribution of final prints
9. Evidence of records management with regards to logging activities
10. CR reviews (validates) field print header information
11. CR provides instructions for logging speeds/curve scales for field prints
12. CR validates use of proper YMP-approved logging procedures
13. CR provides instructions for order of tools to be run
14. Client representative (CR) maintains Log of field activities during logging
15. Logging instructions established prior to actual logging
16. Geophysical logging services identified prior to drilling
17. Estimate starting date for geophysical logging operations prior to drilling

The following questions are based on the RTN reports

18. Was there a definition of the work scope, objectives, and a listing of the primary borehole geophysical logging and downhole surveys involved?
19. Was there a planning process for the identification and incorporation of applicable standards and criteria related to borehole geophysical logging and downhole (deviation) surveys?
20. Was there a planning process for developing appropriate implementing documents?
21. Were the types of borehole geophysical logs and downhole (deviation) surveys provided for in the planning process?
22. Were planning provisions made for generating specific required records and the recording of objective evidence of the results of the borehole geophysical logging and downhole (deviation) surveys?
23. Were planning provisions made for identifying prerequisites, special controls, environmental conditions, processes, or skills, such as changes to the logging program based on changing work conditions, deleting/adding logs/surveys, and qualification of technical personnel?
24. Were provisions made in the planning process for coordinating borehole geophysical logging and downhole (deviation) survey needs of the various participating organizations?

25. Were provisions made for ascertaining accuracy, precision, and representation of results from the borehole geophysical logging and downhole (deviation) surveys?
26. Were responsibilities for the various aspects of borehole geophysical logging and downhole (deviation) surveys defined in the implementing documents?
27. Was there a sequential description of the borehole geophysical logging and downhole (deviation) survey process, including controls for altering the sequence of events, defined in the implementing documents?
28. Were quality verification points and hold points established for the geophysical logging processes?
29. Were methods described for demonstrating that the work was performed as required (such as provisions for recording inspection and test results, checkoff lists, or signoff blocks)?
30. Were provisions made for the long-term storage for the results from borehole geophysical logs and downhole (deviation) surveys?
31. Did the implementing documents specify the procedures to be used to perform work related to the collection of borehole geophysical logs and downhole (deviation) surveys?
32. Were changes to the implementing documents controlled?
33. Was there a change process by which an activity which could not be performed as listed in the implementing document be changed at the work location by responsible management?
34. Were the results of the borehole geophysical logs and downhole (deviation) surveys reviewed and documented?
35. Was the reviewer of the borehole geophysical logs and downhole (deviation) surveys someone other than the data collector?
36. Were provisions made for the contracted logging company to deliver documents resulting from the borehole geophysical logs and downhole (deviation) surveys?
37. Were provisions made for the contracted logging company to deliver documents with recorded evaluation against technical acceptance criteria?

COMPLIANCE DEMONSTRATION CHECKLIST

Objective Evidence Topic

1. Drilling plans and reports
2. Log Quality Checklists
3. Personnel qualifications
4. Work orders and change requests
5. Surveillance/audit documentation
6. Corrective Action Reports (CARs) or equivalent
7. Document control records
8. Records management procedures
9. Technical and quality requirements imposed on contractor(s)
10. Nonconformance reports

FENIX & SCISSON
LOG QUALITY REPORT

QAP-9.16
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Hole _____ Log Date _____ Current Date _____

Log _____ Run # _____ Engr. _____

Field Print ☐ Final Print ☐ Log Analyst _____

CHECK ALL BOXES – ACCEPTABLE YES OR UNACCEPTABLE NO
Sections not applicable to a particular service, Leave Blank.

	YES	NO
A. HEADING		
1. Correct Heading Used		
2. Heading Data Properly Completed		
3. Logging Data Section Completed		
4. Equipment Data Section Completed		
5. Scale Changes Noted on Heading		
6. Are all abnormal conditions explained in the remarks section		
B. CALIBRATIONS AND SCALES		
1. Scales Correct for Area		
2. Scales Labelled		
3. Scale Changes Labelled		
4. Zeroes Recorded		
5. Before Log Calibrations		
6. After Log Calibrations		
7. Repeat Section Recorded		
8. Repeat Section Acceptable		
C. VALIDITY OF LOG		
1. Curves Functioning Correctly		
2. Do Log values fall within reasonable limits		
3. Curves on Depth		
4. Logging Speed Indicated		
5. Logging Speed Correct		
D. APPEARANCE		
1. Printing or Typing Neat		
2. Printing or Typing Accurate		
3. Grid and Pen Traces		
4. Splices Straight and Clean		
5. Film Correctly Processed		
6. General Print Quality		

REMARKS: Code Remarks with the proper Section Number. For Example: Remarks concerning before log calibrations would be coded B-5.

Enclosure 4

AGENDA
Director's Program Review
Thursday, August 8, 1996
Videoconference Rooms: M&O Contractor (Dunn Loring),
DOE/Forrestal, Room GF-277, and YMSCO (Hillshire Bldg., Atrium Conf. Rm.
& Conf. Rm. #302)

Time (PST)	Subject	Presenter
7:00 AM - 7:10 AM	Opening Remarks	Dreyfus/Barrett
7:10 AM - 7:15 AM	Recognition of Visitors	Conner
7:15 AM - 7:30 AM	Program Status Overview Program Performance Status Funds Status Multi-year baseline cartoon	Milner
7:30 AM - 8:10 AM	YMSCO Overview ESF Core Science Licensing YMP Performance Measurement	 Barnes Craun Jones Brocoum Kozai
8:10 AM - 8:45 AM	WAST Project Overview Phase I ISF TSAR Market Driven Transport.Approach WAST Performance Measurement	 Rousso Williams Desell Bokhari
8:45 AM - 8:55 AM	Quality Assurance	Horton
8:55 AM - 9:05 AM	Program Management & Integration	Milner
9:05 AM - 9:15 AM	Human Resources and Administration	Bresee
9:15 AM - 9:25 AM	Information Management Multi-year Program Plan	Brandt
9:25 AM - 9:35 AM	Program Integration Performance Measurement	Trebules
9:35 AM - 9:45 AM	Review of the Day's Action Items	Conner
9:45 AM - 9:55 AM	Questions from Visitors	All
9:55 AM -10:10 AM	Lunch at Seats	
10:10 AM -12:00 PM	Executive Session	

Enclosure 5

DOE/NRC TECHNICAL EXCHANGE, YMSCO'S LONG RANGE PLAN

August 15, 1996

Videoconference: YMSCO - Hillshire Atrium Conference Room
NRC - Rockville, MD

9:00 am PST

- Opening Remarks — DOE/NRC
- Orientation - YMSCO Planning Process Overview — Janie Summerson, DOE
- Introduce YMSCO's Planning Support Team and planning leads — Marshall Weaver, PMO
  - Waste Isolation Strategy — Jean Younker, M&O
  - Regulatory — Jean Younker, M&O
  - PA — Bob Andrews, M&O
  - Site — Larry Hayes, M&O
  - ESF — Jim Beyer, M&O
  - Engineering — Jack Bailey, M&O
  - EIS — Ed McCann, M&O
  - LSS — Tom Wooderson, M&O
  - QA — James E. Clark, QATSS
- Closing Remarks — DOE/NRC

1:00 pm ADJOURN