

109
~~426/JP/9/18/86~~

SEP 19 1986

- 1 -

MEMORANDUM FOR: John J. Linehan, Acting Chief
Repository Projects Branch

FROM: John Greeves, Chief
Engineering Branch

SUBJECT: NRC/DOE GENERIC MEETINGS

The attached list showing WMEG proposed NRC/DOE Generic Meetings for FY87 is submitted as requested by WMRP memorandum dated September 9, 1986, same subject as above.

ORIGINAL SIGNED BY

John Greeves, Chief
Engineering Branch

Attachment:
As stated

B610140406 860919
PDR WASTE
WM-1 PDR

WM Record File

109

WM Project

Docket No.

PDR

LPDR

Distribution:

(Return to WM, 623-SS)

JFC	:WMEG	:WMEG	:WMEG	:WMEG	:	:
NAME	:JPearring:gh:MNataraja	:T.Johnson	:GREEVES	:	:	:
DATE	:09/18/86	:09/19/86	:09/19/86	:09/19/86	:	:

Attachment 1

WMEG PROPOSED NRC/DOE
GENERIC MEETINGS FOR FY87

1. Waste Package (See Note 1 below)
2. Retrievability (See Note 2 below)

NOTE 1 - Attachment A presents a listing of proposed meeting topics, purpose, expectations, timeframe and reason for timeframe for this meeting. Additional meetings will be scheduled if the proposed meeting cannot accomplish discussion of all the topics listed.

NOTE 2 - Attachment B presents a listing of proposed meeting topics, purpose, expectations, timeframe and reason for timeframe for this meeting. If the DOE Position of Retrievability (which we understand will be released in the near future by DOE as a second volume of DOE/NRC/44301-1, "Generic Requirements For A Mined Geologic Disposal System") presents information that will resolve remaining retrievability issues WMEG will withdraw the requirement for this meeting.

Attachment A

Proposed Issues for Discussion at
Generic Waste Package Meeting

The following is a list of topics we are proposing to discuss with DOE at one or more generic HLW waste package meetings.

1. Engineered Barrier System Definition

The purpose of this discussion topic is to address the physical location at which NRC would evaluate the EBS release rate performance objective. We would hope to reach agreement on a specific definition which we would develop into a GTP and possibly a rulemaking to close out the issue. We would propose that this discussion take place during the first half of FY87. At this time we should be able to reach internal agreement on a preliminary position. We also consider that DOE should be ready to discuss this issue. Because resolution of this issue will be important for the development of waste package designs and test programs it should be held prior to the SCP publication.

2. Substantially Complete Containment

The purpose of this discussion topic is to address the NRC approach for evaluating what is "substantially complete containment" as is stated in the performance objectives in 10 CFR Part 60. We would hope to reach agreement with DOE on a specific definition which we would develop into a GTP and possibly a rulemaking to close out this issue. We would propose to discuss this topic during the first half of FY87. At this time we should be able to reach internal agreement on a preliminary position. We would also expect that DOE should be ready to discuss this issue. Because resolution of this issue will be important for the development of waste package designs and test programs it should be held prior to the SCP publication.

3. Extrapolation of Test Data Over Long Time Periods

The purpose of this discussion topic is to address the NRC approach for extrapolating test data to time periods of up to 10,000 years. We would hope to reach agreement with DOE on a general approach to extrapolation of test data. This approach would be developed into a GTP and possibly a rulemaking to close out this issue. We would propose to meet on this issue during the first half of FY87. At this time we should be able to reach internal agreement on a preliminary position. We would also expect

that DOE should also be ready to discuss this issue. Because resolution of this issue will be important for the development of waste package designs and test programs it should be held prior to the SCP publication.

4. Level of Detail of the NRC Waste Package Review

The purpose of this discussion topic is to address the scope of NRC's planned review of the HLW package designs and convey to DOE the level of detail we will be expecting in the license application. We would hope to reach an understanding on the level of detail NRC expects so that DOE can develop a sufficient testing program to address the relevant waste package issues. We would propose that this discussion take place during the first half of FY87. At this time we should be able to reach internal agreement on a preliminary position. We would also expect that DOE should be ready to discuss this issue. Because resolution of this issue will be important for the development of waste package designs and test programs it should be held prior to the SCP publication.

5. Code Class Requirements for Waste Packages

The purpose of this discussion topic is to address the code class requirements for waste packages. We would hope to solicit input from DOE on their philosophy for code class designations. This input would be further used to assist us in developing a draft GTP. A later meeting on this topic would also be anticipated to reach agreement in this area. We would propose to discuss this issue during the first half of FY87. At this time we would expect to have reached internal agreement on a preliminary position. We would also expect that DOE should also be ready for initial discussion in this area. Because this issue is pertinent to waste package design development this discussion should take place at an early point in the design process and prior to SCP publication.

6. Implementation of the Waste Package Reliability GTP

The purpose of this discussion topic would be to determine how DOE intends to address reliability evaluations in their performance assessment programs and how consistent these approaches are with the GTP of Waste Package Reliability. At this meeting we would hope to solicit input from DOE on their approaches. This information would be evaluated following the meeting and would be used as a basis for revising the GTP if other approaches are found to be acceptable. A further meeting following our evaluation of DOE information may be necessary in order to reach agreement. We would propose to discuss this issue during the first half of FY87. We would expect that DOE should be ready to discuss their

approaches in this area. Because this discussion could have substantial effect on the SCP test and evaluation programs it should be held prior to SCP submittal.

7. Access to Performance Assessment Codes

The purpose of this discussion topic would be to determine what HLW package performance assessment codes DOE is planning to use and how NRC will have access to these codes for review efforts. We would expect to reach agreement on a protocol for making up-to-date versions of codes available to NRC staff and contractors. We would propose to discuss this issue during the first half of FY87. We would expect that we could develop a draft protocol for discussion purposes by this time. We would also expect that DOE should be also ready to discuss this issue. Because SCP reviews may require running DOE performance assessment codes, this discussion should take place prior to SCP publication.

8. Implementation of Ad Hoc Corrosion Panel Recommendations

The purpose of this discussion would be to ascertain the status of the recommendations made by the Ad Hoc Corrosion Panel and how DOE plans to use peer review panels in the development of their HLW package designs and test programs. We would expect to reach agreement on the acceptability of their peer review programs and how DOE has implemented the recommendations of the Ad Hoc Panel. We would expect to have these discussions during the first half of FY87. We would expect that DOE should be ready to discuss this issue at this time. Since most of the recommendations will substantially affect SCP preparation this discussion should take place prior to SCP publication.

9. Status of Waste Package Related Sections of the SCP

The purpose of this discussion topic is to provide NRC with an update of changes to waste package designs and a preview of information to be provided in the SCP's. We would expect to receive the latest input of the waste package SCP sections in order to better prepare for reviewing the SCP's. We would expect to have this discussion during the first half of FY87. This discussion will be important for SCP review preparation and planning and should take place prior to SCP publication.

10. Acceptability of Performance Assessment Codes

The purpose of this discussion topic is to propose to DOE that NRC is willing to review and approve waste package performance assessment codes

GENERIC WP MTG LIST

- 4 -

prior to the submittal of the license application. We would expect to reach agreement with DOE on their submittal of codes for evaluation and a tentative schedule for submittal and review. We would expect to have this discussion during the first half of FY87. We would expect that DOE would be prepared to discuss this issue and identify candidate codes at this time. This discussion should take place at this early time so that we can factor code reviews into our five year planning.

Attachment B

Proposed Issues for Discussions at the
Generic Retrievability Meeting

The following is a list of topics we are proposing to discuss with DOE at the generic retrievability meeting.

1. Demonstration of Retrieval Equipment and Methods

The purpose of this discussion topic is to clarify what is meant by the proof-of-principle mock-up demonstration and prototypical development of retrieval equipment, which were proposed by DOE in the July 31, 1985 meeting. Our expectation is that DOE should be ready to discuss this issue and possibly reach agreement on it. We would propose that this discussion take place during the fall of 1986. Because resolution of this issue will be important to the repository design and the insitu testing programs it should be held prior to publication of the first SCP.

2. Impact of Rock/Waste Emplacement/Equipment Interactions

The purpose of this discussion topic is to address the lack of emphasis in the DOE 1985 draft retrievability position on the rock problems which includes access/entry problems, opening stability, rock mechanical and thermomechanical response to thermal load and time, etc. Our expectation is that DOE should be ready to discuss this issue and possibly reach agreement on it. We would propose that this discussion take place during the fall of 1986. Because resolution of this issue will be important to the repository design and insitu testing programs it should be held prior to publication of the first SCP.

3. Duration of Retrievability Period

The purpose of this discussion topic is to clarify the terminology used in the DOE 1985 draft on the duration of the retrievability period. Our expectation is that DOE should be ready to discuss this issue and possibly reach agreement on it. We would propose that this discussion take place during the fall of 1986. Because resolution of this issue will be important to the repository design and the insitu testing programs it should be held prior to publication of the first SCP.

4. Retrieval Definition

The purpose of this discussion topic is to clarify DOE's definition of retrieval and movement of waste underground after it was emplaced, and the appropriate NRC regulations under which the waste movement is covered. Our expectation is that DOE should be ready to discuss this issue and possibly reach agreement on it. We would propose that this discussion take place during the fall of 1986. Because resolution of this issue will be important to the repository design and the insitu testing programs it should be held prior to publication of the first SCP.

5. Waste Package

The purpose of this discussion topic is to obtain more information on the waste package operation and design related to retrieval and non-retrieval activities. Our expectation is that DOE should be ready to discuss this issue and possibly reach agreement on it. We would propose that this discussion take place during the fall of 1986. Because resolution of this issue will be important to the repository design and the insitu testing programs it should be held prior to publication of the first SCP.

6. Post Retrieval Isolation Capability

The purpose of this discussion topic is to obtain DOE's retrieval methodology and how it affects the repository isolation capability. Our expectation is that DOE should be ready to discuss this issue and possibly reach agreement on it. We would propose that this discussion take place during the fall of 1986. Because resolution of this issue will be important to the repository design and the insitu testing programs it should be held prior to publication of the first SCP.

SEP 19 1986

426/JP/9/18/86

- 2 -

Distribution: (WM-86781)

WM FILE: 426 ✓

WMEG ~~0210~~

NMSS

REBrowning

MJBell

JTGreeves

MNataraja

MTokar

TCJohnson

JPearring

Rock Mechanics Section

JOBunting

JJLinehan

MRKnapp

PJustus

DFC	:WMEG	:WMEG	:	:	:	:	:
NAME	:JPearring:gh:	MNataraja	:	:	:	:	:
DATE	:09/ /86	:09/ /86	:	:	:	:	:

FROM <i>Shanley</i>		DATE OF DOCUMENT 9/9/86	DATE RECEIVED 9/11/86	NO WM-86781
TO JGreeves		LTR	MEMO XX	REPL
		ORIG.	CC XX	OTHER
CLASSIF		ACTION NECESSARY <input checked="" type="checkbox"/>	CONCURRENCE <input type="checkbox"/>	DATE ANSWERED BY 9/19
POST OFFICE REG. NO.		NO ACTION NECESSARY <input type="checkbox"/>	COMMENT <input type="checkbox"/>	
DESCRIPTION (Must Be Unclassified) HRC/DOE Generic Meetings		FILE CODE: 426		
ENCLOSURES		REFERRED TO	DATE	RECEIVED BY
		JGreeves	9/11	
		TCJohnson		
		MNataraja		
		<i>J. Pearson</i>	<i>9/17</i>	
REMARKS				