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Mr. Sheldon Meyers
 Program Director
 Office of Nuclear Waste Management
 B-107
 U.S. Department of Energy
 Washington, D.C. 20545

Dear Mr. Meyers:

The meeting on November 7, 1979, between the U.S. Department of Energy (DOE) and the U.S. Nuclear Regulatory Commission (NRC) was indeed a productive exchange. Meetings of this type are quite useful in identifying areas of agreement, narrowing differences and, perhaps more importantly, in exchanging and clarifying points of view. I was gratified to find that many areas of apparent disagreement were merely the result of misunderstandings about the intent of certain of the proposed requirements.

Enclosed is the meeting summary prepared by my staff. As you can see your November 15, 1979, memorandum describing apparent areas of general agreement is substantially in line with our assessment of the meeting.

There now appears to be a clear effort by DOE and its contractors to understand what the NRC staff is trying to accomplish. It has always been my firm belief that definitive regulatory procedures and requirements will not only serve to protect the public health but will permit development of an effect method for high-level radioactive waste disposal in the shortest possible time. Although DOE and NRC each has its distinct and independent role, I look forward to focussing the resources of both agencies toward this end.

Sincerely,

Original Signed by
 John B. Martin

John B. Martin, Director
 Division of Waste Management

Enclosure:
 As stated

11/30/79	WMHL JCMALARO:jd	WM REBROWNING	WM JBMARTIN	NMSS WJ Dircks	
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DISCUSSION POINTS

- The draft regulation does not focus on the overall safety of the repository system. Undue emphasis is placed on component performance unrelated to system performance.
- Implementation of the regulation will be difficult within the constraints of the present institutional/legal system. Implementation costs and impacts are high and are not balanced by gains in safety.
- The regulation should focus on objectives to be met and the type and quality of information to be provided; it should not dictate the means for implementation, e.g., shafts and in situ testing.
- The numerical criteria set forth in the regulation apply to unique conditions and are not generically applicable to all situations that may be encountered as different systems are analyzed.
- The numerical values specified should be supported by specific technical data and analyses with clearly stated assumptions and models in order to provide a clear basis for future interpretation and modifications.
- The ALARA process is not suitable for repository siting evaluations.
- The issue of basing exclusionary criteria on resource potential and institutional considerations has not been sufficiently ventilated.
- It is suggested that the NRC staff needs more access to ongoing scientific studies. DOE will actively seek opportunity for this.
- The technical portion of the regulation should be deferred until more information is available from the Confidence Rulemaking.
- Further use of the strawman approach for quantitative criteria is discouraged.

MEETING SUMMARY

Date: November 7, 1979

Place: U.S. Nuclear Regulatory Commission, Silver Spring, Maryland

Purpose: Discussion of DOE concerns with 10 CFR Part 60

Attendees: See attached list

Introduction:

The meeting was requested by the U.S. Department of Energy (DOE) to discuss several concerns with respect to the staff's draft of 10 CFR Part 60. A list of discussion topics is attached. During the meeting, it became clear that there was misunderstanding by DOE of the staff's intent in certain sections of rule. Through discussion, general agreement was reached on several points and differences were narrowed on others. Where there was disagreement remaining, the staff explained its rationale for the proposed requirements.

1. Alternative Sites and Media: DOE agrees that several media and sites will need to be explored and that site characterization should proceed accordingly. There was also agreement that alternative sites should be compared based on NEPA considerations.
2. Site Characterization: The staff and DOE agreed that the NRC should focus on what information is needed for site characterization rather than how to get the needed information. The staff pointed out that although the regulation does not categorically require sinking of an exploratory shaft, excavation of exploratory drifts, lateral borings and in situ testing, the staff considers that at the present time it is not likely that a site can be satisfactorily characterized without such exploration and testing at depth.

The staff pointed out, and DOE agreed, that one of the major purposes of the in situ testing is for repository design. The staff also pointed out that in order to establish the suitability of a site for a repository, it must be demonstrated there is reasonable assurance that a repository can be designed which will meet NRC performance requirements given site conditions and the type of waste to be disposed of.

3. Multiple Barriers: The staff and DOE agreed that multiple barriers must be provided in the system. DOE is moving away from the concept of total reliance on the geology and looking more at the waste package and repository design as being major barriers. The staff explained its rationale for setting performance objectives for the major barriers and how they fit into the overall framework of the total system. In particular it was noted that in addition to performance requirements for the overall system, performance objectives for individual barriers are needed to compensate for uncertainties in predicting overall system performance over long periods of time. In addition, performance objectives for individual system barriers provides a benchmark for engineers and scientists working on the individual system barriers. The staff also emphasized that flexibility is provided in the details of design and that the staff is not looking for ironclad proof, but rather a reasonable demonstration that performance objectives will be met. The staff stated that it feels this arrangement is entirely consistent with and constitutes a sensible application of the systems approach.

DOE expressed concern regarding setting performance objectives for major parts of the system without having objectives for overall system. The staff explained that its performance objectives are being structured so that they are compatible with the proposed EPA standard.

4. Waste Package Requirements: The staff agreed with DOE that as written, 10 CFR Part 60 is specific to high-level waste and that different requirements might be more appropriate for disposal of other waste (e.g., comingled TRU waste). The staff indicated that it has been thinking about this. The Keystone Group suggested, for example, setting the release limits after the first 1000 years on the total engineered system. The staff is considering this suggestion since it would alleviate part of this problem. On the other hand, for those wastes which do not contain fission products and its accompanying heat, it may be possible to select waste forms which last much longer than 1000 years. NRC stated they were giving additional thought to how comingled TRU should be treated and will consider any constructive suggestions DOE may have.

5. Clarity of Rule and Rationale: The staff agreed with DOE that care must be taken to insure that the intent of each proposed requirement is clear and not subject to misinterpretation. It was noted that the draft regulations will be accompanied by a statement of considerations which would explain the underlying bases for all of the requirements. This would not only provide the rationale for requirement but would help the reader to clearly understand the intent of the requirement. The staff also agreed that documentation is an important aspect of rulemaking and indicated a docket file would be established to provide a clear record of considerations leading to each principal requirement.

6. Interaction and Exchange of Technical Data: There was agreement that positive steps should be taken to increase interaction and the exchange of technical data between DOE and the staff.

Prior to adjournment of the meeting, DOE distributed the specific comments which are attached.

Enclosures:
As stated.

Attendees List: NRC-DOE Meeting 11/7/79

Edward Regnier	NRC-WM	W. Mark Grayson	NRC-WM
Joel S. Wiebe	NRC-RSSB	J. R. Wolf	NRC-OELD
George Sauter	NRCOOCM	Stephen Schreurs	NRC-WM
Paul Goldberg	NRC-OPE	Leon Beratan	NRC-OSD/SSSB
Edward F. Hawkins	NRC-WM	E. Held	NRC/RES
David Siefken	NRC-WM	T.J. Schmitt	NRC-OSDI
Stephen Brocoum	NRC-SD	Clyde Jupiter	NRC-RES
John B. Martin	NRC-WM	D. J. Fehringer	NRC-WM
Mike Kearney	NRC-WM	David Rohrer	NRC-WM
K. G. Steyer	NRC-SD	F. Djahanguiri	Battelle/ONWI
Larry Doyle	NRC-RES	M. Glora	BPNO/ONWI
Regis Boyle	NRC-WM	S. Matthews	BPNO/ONWI
Carl Newton	DOE-WM	C.W. Nilsen	NRC-OSD
Carol Borgstrom	DOE-NEPA	E.A. Wick	NRC-WM
M. J. Baraunca	DOE-RL-C	M. Knapp	NRC-WM
Gary Robbins	NRC-WM	P.A. Comella	NRC-SD
Charles Nichols	NRC-OSD	F. A. Costanzi	NRC-SD
Ludwig Hartung	NRC-WM	S. M. Coplan	NRC-WM
Larry Rossbach	NRC-WM	L. A. White	NRC-WM
M. Bell	NRC-WM	Nuzaffer Kehnemuyi	DOE-GC
J. Malaro	NRC-WM	Neal Carter	ONWI
Steve Gottlief	DOE-GC	Colin Heath	DOE
Martha Crosland	DOE-GC	B. Hewitt	ONWI