

United States Government

Department of Energy

memorandum

DATE: SEP 18 1985

REPLY TO
ATTN OF:

RW-23

SUBJECT:

Q-List Action Plan

TO:

Jeff Neff, SRPO
Don Vieth, WMPO
Lee Olson, BWIP
Sally Mann, CRPO

WM Record File
405

WM Project 1

Docket No.

PDR ✓

LPDR

Distribution:

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(Return to WM, 623-SS)

Kennedy & Selligo
SAC

On July 1, 1985, DOE met with NRC to discuss the Department's methodology for generating a list of the structures, systems and components important to safety and waste isolation - the so called Quality List or Q-List. At that meeting DOE made the following commitments:

- 1) To provide NRC with a generic list of activities covered by our QA Program (in the SCP's);
- 2) To furnish NRC an expanded rationale for the DOE-proposed methodology for the Q-List;
- 3) To propose a low probability cut-off limit for risk assessments to support Q-List determinations;
- 4) To eliminate the safety class 1 and 2 terminology (have only Q-List and Non-Q-List);
- 5) To furnish the NRC a provisional Q-List prior to submittal of the SCP's;
- 6) To furnish NRC more detail on the DOE approach for reviewing retrievability to identify possible Q-List items.
- 7) To specify in the revised Q-List Methodology document that any discrepancies between definitions in the DOE GRD and NRC regulations will be resolved.
- 8) To discuss further with NRC a graded approach to QA.

The action plan outlined below has been formulated to assure that these DOE commitments to NRC will be fulfilled in a timely fashion.

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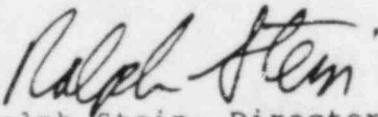
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The action plan we are proposing consists of the following four elements:

- 1) On August 20 DOE-HQ sent to the projects a revised Q-List methodology paper, and preliminary generic Q-List, and a proposed approach to graded QA. This revised paper addresses the DOE commitments listed above.
- 2) By October 1 the projects are to complete their review of the HQ proposed Q-List methodology paper, the preliminary generic Q-List, and the graded QA paper. Also, the projects are to compile their own first-cut site-specific Q-Lists. A meeting is to be held on October 1 in Washington, D.C. to receive project comments and to formulate a consolidated approach.
- 3) By October 22 DOE-HQ is to send a revised methodology paper to NRC that describes the Department's approach to evaluating items for inclusion on the Q-List and for applying graded QA. A copy of project-specific Q-Lists will also be furnished to NRC.
- 4) In November DOE-HQ and the projects will meet with NRC to discuss their comments on the DOE approach. We believe this will satisfy commitment No. 8 above.

I need help from each of you in carrying out this plan. Carl Newton will be contacting each project to confirm the availability of your Q-List representative for the scheduled meetings and to confirm that the project activities necessary to support this plan can be accomplished on the proposed schedule. This is a high priority task and I request that each of you make every possible effort to support it.


Ralph Stein, Director
Engineering and Licensing Division

Attachment: Summary of NRC/DOE
Meeting on Methodology
for Generating a Q-List

cc w/att:

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Andy Avel, SRPO
Jim Blaylock, WMPO
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✓ Dale Hedges, NRC

Originator's Chron: Newton

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E&L Div. Chron.

E&L Div. File 12.13.6

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PC Code: Action.cn

Mach C

C. Head

STF

1 Pls. see pg 2 and 3. For the items yellowed, pls. let me know when you'll have action completed or underway and who has action. ~~11/16~~ 0

SUMMARY OF
NRC/DOE MEETING ON
METHODOLOGY FOR GENERATING A Q-LIST
FOR GEOLOGIC REPOSITORIES

R 7/16

Date/Location of Meeting

July 1, 1985
Willste Building, Rm., 106
Silver Spring, MD

Attendees/Organizational Affiliation

A list of attendees is attached as Enclosure 1.

Background/Facts

The purpose of the meeting was to discuss the scope of and methodology for generating a Q-list for geologic repositories.

The meeting agenda is attached as Enclosure 2. Prior to this meeting DOE developed the paper on the proposed methodology attached as Enclosure 3. This paper was provided to the staff on June 6, 1985 as a basis for discussion.

The meeting started with a presentation by DOE summarizing the subject paper (Enclosure 4) and a presentation by NRC summarizing the regulatory background on the Q-list and the staffs comments/questions on the methodology proposed by DOE (Enclosure 5).

Observations/Agreements/Open Items

1. Activities Related to Important to Safety and Important to Waste Isolation

a. The NRC and DOE staffs agreed that the natural system will be included as an "item" on the "Q" list. This will help to assure that the "activities" associated with data collection to characterize the site will be included under the 10CFR Part 60 Subpart G QA requirements. The staff notes that at this early stage of the program, when the performance expected of the various features of the natural system is not known, it is prudent to include all site characterization, data collection, interpretation and analysis activities under the QA program.

b. To give the staff additional assurance that the site characterization phase activities will be adequately addressed, DOE will provide a generic list of activities which will fall under the Appendix B QA program. This list will be provided in the SCP at the latest. (1)

2. Recurrence Interval

DOE agreed: (1) to furnish to NRC the rationale showing their methodology is conservative and appropriate. This includes both the shape of the curve delineating the "Q" list and the non-"Q" list areas (see Figure 1 of Enclosure 4), and (2) to propose for consideration a low probability cut-off limit. NRC recommends that relevant positions and policy recommendations of ICRP and other regulatory experience be considered. (2)

The NRC staff agreed to investigate other rationales for developing a low cut-off probability limit. The staff stated that they consider the 500 mrem limit for important to safety items is a maximum and should not be exceeded for credible accidents. (3)

3. "Q" List Versus Non-"Q" List and Reassignment of Items

The DOE agreed to eliminate reference to Safety Classes 1 and 2 in the methodology paper. The paper will address only the "Q" list and Non-"Q" list safety classes. The DOE indicated that for the first cut of the "Q" list, a conservative approach will be utilized. The staff believes it prudent to utilize a conservative approach to avoid attempts to backfit QA at a later date. (4)

4. Development of Methodology and Analysis

The DOE indicated that they will develop a provisional "Q" list for consultation with NRC staff prior to submittal of the SCP. The schedule for this list is October, 1985. (5)

5. Important to Safety for Retrieval

DOE will provide more detail on the approach for reviewing retrievability for possible "Q" list items. This information was presented verbally during the meeting and will be included in the revised paper on the "Q" list methodology. (6)

6. Waste Isolation

NRC staff agreed to provide DOE additional information on the definition of "important to waste isolation". The staff believes that items contributing to (7)

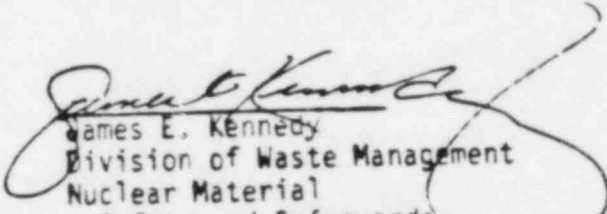
or otherwise affecting achievement of the performance objectives in Part 60 should be on the "Q" list. Where DOE can demonstrate with reliable data and analyses that they will not take credit for a component and that the component will not degrade the performance of other components in meeting the performance objectives, the item may not have to be on the "Q" list.

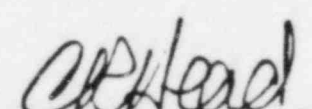
7. Definitions

DOE agreed to specify in the "Q" list methodology document that any discrepancies between definitions in the DOE Generic Requirements Document (GRD) and the regulations would be resolved so that the basis for the "Q" list analysis will be well founded. DOE believes that the GRD is consistent with the regulations. (9)

8. Grading QA Within the "Q" list

The NRC and DOE staffs agreed there should be additional discussion on grading QA within the "Q" list and assurance measures for non-"Q" list items which fall under NRC oversight. DOE is permitted to grade QA in accordance with the importance to safety or waste isolation for a particular item. (10)


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