

JUN 27 1990

NOTE FOR: Ronald L. Ballard, Chief  
Geosciences and Systems Performance Branch  
Division of High-Level Waste Management

FROM: John J. Linehan, Director  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level Waste Management

SUBJECT: REPOSITORY LICENSING AND QUALITY ASSURANCE PROJECT DIRECTORATE  
(HLPD) COMMENTS ON THE OFFICE OF NUCLEAR REGULATORY RESEARCH  
(RES) DRAFT HIGH-LEVEL WASTE RESEARCH PROGRAM PLAN FOR THE  
DIVISION OF HIGH-LEVEL WASTE MANAGEMENT (HLWM)

The HLPD staff has reviewed the subject document transmitted by R.E. Browning's memorandum of May 29, 1990. The HLPD staff limited its review to policy issues insofar as a detailed examination of the technical merits of the draft plan fall within the purview of the Division's technical staff. Therefore, based on its review, HLPD has no substantive comment from the technical standpoint. The HLPD staff has recommended some organizational and editorial changes, as noted during the June 15, 1990, meeting with you and your staff and representatives from RES that would enhance the ease with which the plan can be read and assimilated. These recommended organizational and editorial changes have been provided for your consideration in the attachment.

However, as also noted in the June 15 meeting on this draft plan, the HLPD staff has some concerns about the draft research plan that are similar to some of the substantive issues recently raised in the Subcommittee on Waste Management Research of the Nuclear Safety Research Review Committee's (NSRRC's) program review of the high-level waste (HLW) program in the so-called "Todreas Letter." These concerns are given below.

Major Comment No. 1:

It is not clear how the basic research requirements of the HLWM User Need Letter were translated by RES into the proposed research plan. For example, Table 1 of the draft research plan is intended to show how RES's research activities/proposals correlate to HLWM's research requirements. However, in examining the table, it is not clear which technical issues provide the correlation between the user needs and the proposed research topics. Furthermore, the discussions provided in the specific chapters of the draft program plan do not correlate with the research activities to the level of detail identified in the table.

Therefore, it would be desirable to see an illustration of some type (e.g., a matrix), supported by the necessary background discussion in the text, explaining how RES arrived at its proposed research program plan, and more clearly identify what research activities correlate to the User Need Letter.

Similarly, it would also be useful to see a discussion in the draft program plan of how RES arrived at its own alternative research proposals given the requirements identified by HLWM.

Major Comment No. 2:

The plan does not provide a clear-cut justification as to why the staff proposes to conduct the proposed research. As noted during the meeting, the HLPD staff believes that it is appropriate for the staff to conduct research for any one of the following reasons:

- (1) develop the licensing tools and technical basis necessary to review DOE's license application;
- (2) develop a sufficient understanding of the basic physical processes taking place at the geologic repository; and
- (3) maintain a independent but limited confirmatory research capability under NRC auspices.

Therefore, the draft program plan should provide justifications that are related to one or more of the aforementioned reasons. Moreover, the HLPD staff believes that providing a sufficient justification for each research proposal will also help to address the two concerns raised in the Todreas Letter on the need for the staff to (1) identify its views regarding the balance between generic versus site-specific research and (2) identify which research products will be obtained from DOE and which ones would be obtained from NRC.

Major Comment No. 3:

The individual research projects need to describe how and to what extent they are timely in their support of the Division's overall HLW program. In addition, information on the timeliness of the research to the HLW program would help to justify the need for it. For example, each research proposal should indicate why a particular form of applied research contributes to the staff's efforts in such areas as rulemakings, staff positions, regulatory guides, or analysis methods.

If you have any questions, please contact Michael P. Lee at extension 20421.

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John J. Linehan, Director  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level Waste Management

Enclosure: As stated

cc: R.E. Browning  
B.J. Youngblood

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