

Department of Energy  
Washington, DC 20585

AUG 31 1992

Mr. Joseph J. Holonich, Director  
Repository Licensing & Quality Assurance  
Project Directorate  
Division of High-Level Waste Management  
Office of Nuclear Material Safety  
and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Holonich:

The U.S. Nuclear Regulatory Commission's (NRC) Phase I review letter on study plan 8.3.1.14.2, "Studies to Provide Soil and Rock Properties for Potential Locations of Surface Facilities", (enclosure) contained questions that pertained to the Level of Detail Agreement for study plans. The NRC requested that the information contained in the second paragraph of their January 23, 1992, letter be supplied in a revised study plan or in a letter.

As the NRC pointed out, the information requested, "...could not have been included in the study plan because ... at the time of the preparation of the study plan, the Exploratory Studies Facility, Title I design had not proceeded far enough to include all relevant information consistent with the study plan content agreement."

Study plan 8.3.1.14.2 identifies the range of studies to be carried out, provides a general sequencing for these studies and tests, and identifies the general locales where they would be performed. They provide the NRC with enough information for the staff to make a judgement as to whether the scope of work can potentially affect waste isolation and whether the range of tests have potential for interferences between them. That the NRC seldom comments in Phase I review letters that study plans are found wanting with respect to overall level of detail, gives confidence that the U.S. Department of Energy's (DOE) preparation and review process for study plans has provided the necessary information.

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In general, study plans do not contain information presumed to indicate precisely where various tests are to be conducted. Specific locations for tests are not known until the preparation of test planning packages. A study plan would not be a candidate for revision unless it was inconsistent with the Site Characterization Program Baseline. This would occur if the study/activity objectives changed, the scope of the work in the plan was amended, or if the work departed spatially from the general area identified in the plan for conduct in of the study. Section 2.1 of the study plan describes an exploration program, or reconnaissance exercise, designed to help determine where tests are to be carried out, and to define other details about specific test parameters applicable to specific locations.

From a DOE management perspective, study plans are not intended to be a historical record for the scope of work described in them. Nor does DOE anticipate amending study plans to include the results of site characterization work, unless that work affects the variables noted above. DOE seeks to document the planning for the lowest levels of site characterization work through implementation of the Office of Civilian Radioactive Waste Management's (OCRWM) quality assurance (QA) program, rather than amend study plans for low levels of detail while implementing our QA program at the same time. The latter course only delivers a "perfect" plan, after the work is completed. If the scope of work encompassed in Study Plan 8.3.1.14.2 departs sufficiently so that a revision to the plan is warranted, YMPO will implement the applicable parts of Administrative Procedure (AP) 1.1Q, "Preparation, Review, Approval, and Revision of SCP Study Plans," and the NRC will be informed through receipt of a revised study plan. The NRC will also be notified that the study plan has been revised through the Site Characterization Progress Report.

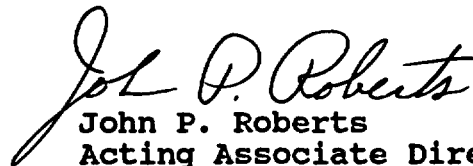
As part of our response to NRC's Phase I review letter for Study Plan 8.3.1.14.2, DOE seeks to further develop and expand upon information exchanged at the recent DOE/NRC management meeting on July 23, 1992, to initiate revision to the May 7-8, 1986 agreement. There, DOE explained the process used by YMPO to implement in the field the scope of work defined in study plans using two APs, AP 5.21Q, "Field Work Activation," and AP 5.32Q, "Test Planning and Implementation Requirements." The documentation that results from these procedures is really the place where the type of detail apparently sought by the NRC is to be found, for example, the exact location and depth for boreholes; the number, sequencing, and duration of tests; analyses for waste isolation impacts; and analyses of test-to-test interferences.

DOE is concerned that the NRC receives the information that the NRC staff believes is necessary to conduct study plan reviews. In order to do this, the NRC staff has to understand YMPO's other management and control processes for implementing site characterization work, beyond the study plan, and plan QA surveillances and audits accordingly. DOE must derive benefit from the major efforts expended since 1989 in assembling a scientific investigation control process which can be audited under the OCRWM QA Program Requirements.

In summary, for the reasons stated above, DOE does not now plan to revise the study plan or provide a letter specifically to supply the information requested in the NRC's Phase I review letter (enclosure).

If you have any questions, please contact Mr. Chris Einberg of my office at 202-586-8869.

Sincerely,



John P. Roberts  
Acting Associate Director for  
Systems and Compliance  
Office of Civilian Radioactive  
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Enclosure:

Ltr, 1/23/92, Holonich to Roberts

cc:

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cc:

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

JAN 23 1992

Mr. John P. Roberts, Acting Associate Director  
for Systems and Compliance  
Office of Civilian Radioactive Waste Management  
U. S. Department of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585

Dear Mr. Roberts:

SUBJECT: PHASE I REVIEW OF U.S. DEPARTMENT OF ENERGY (DOE) STUDY PLAN FOR  
SOIL AND ROCK PROPERTIES

On October 16, 1991, DOE transmitted the study plan entitled "Studies to Provide Soil and Rock Properties for Potential Locations of Surface Facilities and Subsurface Access Facilities" (Study Plan for Study 8.3.1.14.2) to the U.S. Nuclear Regulatory Commission (NRC) for review and comment. The NRC has completed its Phase I Review of this document using the Review Plan for NRC Staff Review of DOE Study Plans, Revision 1 (December 6, 1990).

Aside from the exceptions noted below, the material submitted in the study plan was determined to be consistent with the agreement on content resulting from the NRC-DOE agreements made at the May 7-8, 1986, meeting on Level of Detail for Site Characterization Plans and Study Plans. However, the study plan did not: (1) specify the number of tests and locations, (2) provide illustrations of test locations, (3) provide the rationale for number, location, depths, duration, and timing of tests, considering uncertainties and obvious alternatives. These items are of particular importance because the ability to execute the test borings and the corresponding tests depend upon identification of the specific number, locations, types, and depths of the borings. NRC staff recognizes the uniqueness of the situation in that the missing information could not have been included in the study plan because at the time of the preparation of the study plan, the ESF Title I design had not proceeded far enough to develop this information. However, more design information is currently available, and therefore this study plan needs to be updated to include all relevant information consistent with the study plan content agreement. The missing information should be provided to NRC as it becomes available either in a revised study plan or in a letter.

A major purpose of the Phase I Review is to identify concerns with studies, tests, or analyses that if started could cause significant and irreparable adverse effects on the site, the site characterization program, or the eventual usability of the data for licensing. Such concerns would constitute objections, as that term has been used in earlier NRC staff reviews of DOE's documents related to site characterization (Consultation Draft Site Characterization Plan and Site Characterization Plan for the Yucca Mountain site). Enough information was available in the study plan to make a conclusion that there are no objections with any of the activities proposed.

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ENCLOSURE

After completion of the Phase I Review, selected study plans are to receive a second level of review, called a Detailed Technical Review, based on the relationship of a given study plan to key site-specific issues or NRC open items, or its reliance on unique, state-of-the-art test or analysis methods. We will make a decision regarding the need for a Detailed Technical Review of this study plan after receiving the missing information.

If you have any questions concerning this letter, please contact Robert Johnson at [301]-504-2409/(FTS 964-2409) or, after January 27, 1992, Charlotte Abrams at [301]-504-2446/(FTS 964-2446).

Sincerely,



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