



UNITED STATES
NUCLEAR REGULATORY COMMISSION
 ADVISORY COMMITTEE ON NUCLEAR WASTE
 WASHINGTON, D.C. 20555

August 30, 1991

MEMORANDUM FOR: B. J. Youngblood, Director
 Division of High-Level Waste Management

FROM: *Dade W. Moeller*
 Dade W. Moeller, Chairman
 Advisory Committee on Nuclear Waste

SUBJECT: RESPONSE TO SIX EPA QUESTIONS ON THE HIGH-
 LEVEL WASTE STANDARDS, WORKING DRAFT NO. 3

This is to acknowledge and thank you for your memorandum of August 20, 1991, to Mr. Raymond F. Fraley and the proposed combined NRC staff-ACNW responses to the six questions that EPA asked with respect to its proposed standards for a high-level waste repository. This effort on your part was in response to the Staff Requirements Memorandum dated August 21, 1991.

With the exception of the change in the response to Question No. 5, which we discussed on August 29, 1991, during our 34th meeting, we find this proposed response satisfactory, and we express our appreciation for the professional manner in which you have addressed these issues.

References:

1. Memorandum from B. J. Youngblood, NMSS, to R. F. Fraley, ACRS, dated August 20, 1991, Subject: Comments on Working Draft No. 3 of EPA HLW Standards
2. Staff Requirements Memorandum M910725A dated August 21, 1991, Subject: Staff Requirements, Periodic Meeting with ACNW

cc: The Chairman
 Commissioner Rogers
 Commissioner Curtiss
 Commissioner Remick
 Samuel J. Chilk, SECY
 James M. Taylor, EDO
 Hugh L. Thompson, DEDO
 Robert M. Bernero, NMSS
 Margaret V. Federline, NMSS
 Abraham L. Eiss, NMSS



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September 3, 1991

The Honorable Ivan Selin
 Chairman
 U.S. Nuclear Regulatory Commission
 Washington, D.C. 20555

Dear Chairman Selin:

SUBJECT: PROGRAM PLAN FOR THE ADVISORY COMMITTEE ON NUCLEAR WASTE

Since December 1989 the Advisory Committee on Nuclear Waste (ACNW) has provided at four-month intervals a program plan of anticipated Committee activities. This plan covers the period September-December 1991. We hope you will find this a convenient avenue for us to share information on our proposed upcoming activities and for you to provide feedback on issues on which the Commission wishes us to focus our efforts.

In preparing this program plan, we have considered the list of specific technical issues of particular interest to the Commission, requests of individual Commissioners, the EDO's list of proposed agenda items for the ACRS and the ACNW, the NRC's Five-Year Plan, and items of particular interest and/or concern to the Committee. The priorities proposed are based on information provided by representatives of NMSS, NRR, RES, and the EDO, as well as our own interpretation of the subject in relation to our activities as a Committee and our input into the regulatory process.

This program plan is based on the current best estimates of work output by the DOE, EPA, NRC staff, and their consultants and contractors, as well as our own estimates of how to deal with these issues effectively. In addition to the full Committee meetings noted, Working Group meetings will be held as necessary to facilitate full Committee review and action. A list of planned Working Group meetings follows the list of full Committee topics. There may be some revisions to this plan due to delays in the completion of NRC staff, applicant, and/or contractor studies and reviews as well as other schedule problems beyond our control.

Full Committee meeting dates for this period are presently scheduled as follows:

35th Meeting	-	September 27, 1991
36th Meeting	-	October 18, 1991
37th Meeting	-	November 20-21, 1991
38th Meeting	-	December 18-19, 1991

The Committee anticipates considering the topics listed below during this four-month period.

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September 27, 1991

- The Committee will continue deliberations to investigate the feasibility of a systems analysis approach to reviewing the over-all high-level waste program, including the short and mid-range technical milestones for handling high-level waste with the goal of reporting back to the Commission the ACNW's recommendations as to the scope of such a review and the advisability of the ACNW undertaking it. (High Priority)
- The Committee will review and comment on selected draft Regulatory Guides that implement the revised 10 CFR Part 20, Standards for Protection Against Radiation. (Medium Priority)
- Members of the Committee plan to attend the EPRI Workshop on the technical basis for the Environmental Protection Agency's high-level waste standards. The workshop is being held in Arlington, Virginia on September 24-26, 1991.

October 18, 1991

- The Committee will complete its response to the request of the Chairman for the ACNW to investigate the feasibility of a systems analysis approach to reviewing the over-all high-level waste program, including the short and mid-range technical milestones for handling high-level waste, and will report to the Commission the ACNW's recommendations as to the scope of such a review and the advisability of ACNW undertaking it. (High Priority)
- The Committee will begin deliberations on a request from Commissioner Rogers regarding whether the NRC staff has developed a suitable performance assessment program and whether the NRC staff has adequate equipment, expertise and training to conduct high- and low-level waste computer modeling. (High Priority)
- The Committee will be briefed by the DHLW staff on their basis for establishing a probability limit for distinguishing between unlikely and very unlikely events. This relates to the alternative approach to the probabilistic section of the containment requirements in 40 CFR 191.

November 20-21, 1991

- The Committee will complete a response to a request from Commissioner Rogers regarding whether the NRC staff has developed a suitable performance assessment program and whether the NRC staff has adequate equipment, expertise and training to conduct high- and low-level waste computer modeling. (High Priority)

- The Committee will review and comment on Rulemaking to revise 10 CFR Part 61, Licensing Requirements for Land Disposal of Radioactive Waste. (High Priority)
- The Committee will review and comment on a revision to NUREG-1200, Standard Review Plan for the review of a license application for a Low-Level Radioactive Waste Disposal Facility. (High Priority)
- The Committee will be briefed by Louisiana Energy Systems on their private uranium enrichment facility plans. Topics of interest include the disposal of the depleted uranium and the licensing process for the facility. (Medium Priority)
- The Committee has scheduled a visit to the WIPP site on November 5, 1991. Discussions at the site and a tour of the facility are planned.
- The Committee is scheduled to meet with the Commissioners to discuss items of mutual interest during the November ACNW meeting. The Committee requests that this meeting with the Commissioners be deferred to the December 1991 ACNW meeting. (High Priority)

December 18-19, 1991

- The Committee will review and comment on an NRC staff Technical Position on Investigations to Identify Fault Displacements and Seismic Hazards. (High Priority)
- The Committee will review and discuss the historical evidence and the potential for climate changes in the Southern Basin and Range and their associated impact on performance assessment for the proposed high-level radioactive waste repository at Yucca Mountain. (High Priority)
- The Committee will review and discuss problems and limitations with various Quaternary dating methods to be used in the assessment of volcanic features for site characterization of the proposed high-level waste repository at Yucca Mountain. (High Priority)

Other Topics: (Will be considered as documents and time become available.)

- The Committee will be briefed on the NRC HLW staff's review of the Calico Hills Risk/Benefit Analysis and the staff's position on penetration of the Calico Hills tuff.

- The Committee will be briefed on the NRC staff's review of the DOE reports on the Exploratory Studies Facility Alternatives Study and the site suitability analysis.
- The Committee will be briefed on the adoption by EPA of a revised Hazard Ranking System for use in assessing the threat associated with the release or potential release into the environment of hazardous chemicals and/or radioactive materials.
- The Committee will be briefed on the status of the low-level radioactive waste compacts.
- Members of the Committee will participate in a conference sponsored by the Society for Risk Analysis at which a summary of the Committee's report on expert judgment will be presented. Conference dates are December 9-11, 1991, in Baltimore, Maryland.

Working Group Meetings:

Regulatory Guides for Implementing Revisions to 10 CFR Part 20, September 23-24, 1991, Bethesda, Md. - The Working group will review, discuss and make recommendations on regulatory guides, being prepared by the NRC staff which assess the impacts of handling, storage and treatment of nuclear waste materials, as well as other radiation protection activities.

NRC Staff Computer Modeling and Performance Assessment Program in High-and Low-Level Waste, October 15, 16, 17, 1991, Bethesda, Md. - The Working Group will begin its review of a request from Commissioner Rogers regarding whether or not the NRC staff has developed a suitable performance assessment program and whether the NRC staff has adequate equipment, expertise and training to conduct high- and low-level waste computer modeling.

Geologic Dating, November 19, 1991, Bethesda, Md. - The Working Group will review and discuss problems and limitations of various Quaternary dating methods that are proposed for use in the assessment of volcanic features for site characterization of a high-level waste repository at Yucca Mountain.

The Impact of Long-Range Climate Change in the Area of the Southern Basin and Range, December 17, 1991, Bethesda, Md. - The Working Group will review and discuss the historical evidence and the potential for climate changes in the Southern Basin and Range and their associated impact on performance assessment for the proposed high-level radioactive waste repository at Yucca Mountain.

Post-Closure Monitoring, TBD, Bethesda, Md. - The Working Group will discuss post-closure monitoring of an HLW repository and other

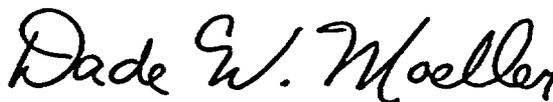
September 3, 1991

related issues. Representatives from EPA and NRC will be invited to brief the Committee on various aspects of post-closure monitoring.

Residual Contamination Clean-up Criteria, TBD, Bethesda, Md. - The Working Group will review, discuss and make recommendations on guidelines for radionuclide contamination limits for unrestricted use of sites that are or have been under NRC license.

Methods for Assessing Natural Resources at a Proposed High-Level Waste Repository Site, TBD, Bethesda, Md. - The Working Group will discuss methodologies for the assessment of the potential for natural resources at the proposed high-level waste repository site at Yucca Mountain. The relationship between such resources and the potential for human intrusion will be emphasized.

Sincerely,



Dade W. Moeller
Chairman

cc: Commissioner Rogers
Commissioner Curtiss
Commissioner Remick
Samuel J. Chilk, SECY
James M. Taylor, EDO
Robert M. Bernero, NMSS