



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

September 7, 1990

The Honorable Kenneth M. Carr
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Carr:

SUBJECT: PROGRAM PLAN FOR THE ADVISORY COMMITTEE ON NUCLEAR WASTE

This is our third response to your memorandum of November 6, 1989, in which you requested that the Advisory Committee on Nuclear Waste (ACNW) provide a program plan at four-month intervals. This plan covers the period September-December 1990. We hope you will find this a convenient source for anticipating our upcoming activities and for providing 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 office, 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. There may be some revisions to this plan associated with 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 tentatively scheduled as follows:

24th Meeting - September 19-20, 1990
25th Meeting - October 24-26, 1990
26th Meeting - December 12-14, 1990*

* November Meeting cancelled and December meeting date changes.

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

September 19-20, 1990

- The Committee will discuss a response to the EPA's request for clarification of the comments made by ACNW which critique the EPA's high-level waste standards. (High Priority)
- The Committee may review the NRC staff's evaluation of the National Academy of Sciences/National Research Council report on "Rethinking High-Level Radioactive Waste Disposal." (Medium Priority)
- The Committee will hear a presentation on EPRI's performance assessment methodology for a HLW repository. EPRI's report on this work is scheduled for release in October. (High Priority)
- The Committee will define the strategy and schedule for responding to recent requests from Commissioner Curtiss to review technical issues involved in the disposal of mixed waste with an emphasis on the resolution of conflicts between NRC's and EPA's regulations, and to review subsystem requirements within 10 CFR Part 60 to determine their conformance with the EPA high-level waste standards. (High Priority)
- The Committee will review the "Public Comment" version of the Format and Content Guide for High-Level Waste Repository Licensing Applications. (Medium Priority)

October 24-26, 1990:

- The Committee will hear a presentation by the Division of High-Level Waste Management (DHLW) staff on the "Phase I Demonstration of the Nuclear Regulatory Commission's Capability to Conduct a Performance Assessment for a HLW repository." (High Priority)
- The Committee will be briefed on a recent report by Sandia National Laboratories which concluded that there is reasonable confidence that compliance of the WIPP facility with the EPA Standards is achievable. (High Priority)
- The Committee will hear a presentation on the revision of the NRC staff review plan for DOE Study Plans associated with site characterization for the proposed high-level waste repository. (Medium Priority)

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- The Committee will hear a briefing and review information on Performance Assessment Methodology for an LLW site by NMSS. (High Priority)
- The Committee will be briefed by a member of NRC's Nuclear Safety Research Review Committee relative to its findings on the NRC's radioactive waste research program. (Medium Priority)
- The Committee will be briefed on revisions to the Standard Format and Content of a License Application for a Low-Level Radioactive Waste Disposal Facility (NUREG-1199) and the Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Waste Disposal Facility (NUREG-1200). (Medium Priority)

December 12-14, 1990

- The Committee will meet with the Commissioners to discuss items of mutual interest (tentative). (High Priority)
- The Committee will be briefed by the Division of Low-Level Waste Management and Decommissioning (DLLWMD) staff on other than Part 50 Decommissioning activities. (Medium Priority)
- The Committee will hear a presentation by the Division of High-Level Waste Management (HLW) staff on the Technical Position on Repository Design Thermal Loads. (High Priority)
- The Committee will be briefed by the DHLW staff on the results of their reviews of the Study Plans for characterization of volcanic features and mineralogy, petrology and chemistry of transport pathways (tentative). (High Priority)

Unscheduled: (Will be considered as documents and time become available)

- The Committee will be briefed by the Division of High-Level Waste Management (DHLW) staff and the Center for Nuclear Waste Regulatory Analyses (CNWRA) staff on the feasibility of the substantially complete containment concept. (High Priority)
- The Committee will be briefed and/or visit a proposed low-level radioactive waste disposal site and meet with appropriate state and/or local officials. (Low Priority)
- The Committee will be briefed on the status of the decommissioning of the Hanford Production Reactors. (Low Priority)

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- The Committee will hear a report by PNL on in-place vitrification. (Low Priority)
- The Committee will schedule a short update on the status of the LLW compacts. (Wanted periodically) (Low Priority)
- The Committee will be briefed on the potential problems that could arise at a high-level radioactive waste repository as a result of migration of carbon-14. This will include a discussion of what fundamental assumptions are made in evaluating the hazard from this radionuclide. (High Priority)
- The Committee will hold discussions on the subject of human intrusion at a high-level radioactive waste repository. This review will be designed to explore the range of current thinking from various groups in the United States and other countries. (High Priority)
- The Committee will be briefed on the NRC staff review of the DOE/USGS white paper on integration of the geophysical programs for repository site characterization. (High Priority)
- The Committee will be briefed on the Exploratory Shaft Alternatives Study and the Surface Based Testing Prioritization study. (Medium Priority)

The following items are areas where we have an interest and can make a contribution. We would welcome an expression of your interest before proceeding.

- The Committee will review the use of expert judgment or opinion and its role in performance assessment of high-level waste disposal facilities. (High Priority)
- The Committee will review potential long-range climate change and its impact on performance assessment. (High Priority)
- The Committee intends to prepare a summary and critique of the high-level waste repository standards formulated by other countries. This would include standards proposed by Nordic countries, as well as those by Canada, France, the IAEA and ICRP. (High Priority)
- The Committee intends to evaluate 10 CFR Part 61 as it relates to low-level waste disposal facilities that utilize methods other than shallow land burial. Questions to be addressed include whether Part 61 can be applied, in its existing format, to engineered facilities, such as below and above ground vaults. (High Priority)

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This list represents our best estimate of the topics to be considered through December 1990. If you or your fellow Commissioners have additional items to suggest or proposed changes in priorities, please let us know.

Sincerely,



Dade W. Moeller
Chairman

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

