



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

ACNWS-0035

PDR 5/13/92

October 18, 1991

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

Dear Chairman Selin:

SUBJECT: SUMMARY REPORT - THIRTY-FIFTH MEETING OF THE ADVISORY  
COMMITTEE ON NUCLEAR WASTE, SEPTEMBER 27, 1991

During our 35th meeting, September 27, 1991, we completed the  
activities noted below including the memorandum listed.

MEMORANDUM

- SECY-91-240, Security Support for NRC Meetings/Hearings  
(Memorandum for James Taylor, Executive Director for  
Operations, from Raymond Fraley, dated October 1, 1991.)

The members concluded that the policies and procedures  
recommended in SECY-91-240, Security Support for NRC Meetings/  
Hearings, appear adequate for the support of ACNW meetings.

HIGHLIGHTS OF MATTERS CONSIDERED BY THE COMMITTEE

1. ACNW Thoughts on Use of a Systems Approach to the Management  
and Disposal of Low-Level Radioactive Waste

The Committee discussed a systems approach to the management  
and disposal of low-level radioactive waste (LLW). Items of  
particular Committee interest included consideration of  
reduction in the volume and concentrations of radioactive  
materials produced during waste generation, recycling  
practices, selection of program priorities, and reporting of  
mishaps. The Committee will continue its deliberations on  
this subject during the 37th ACNW meeting, November 20-22,  
1991.

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2. Review of Regulatory Guides That Implement the Revised 10 CFR Part 20, Standards for Protection Against Radiation

The Committee heard presentations by and held discussions with representatives of the NRC staff and NUMARC regarding several draft regulatory guides related to the implementation of the revised 10 CFR Part 20. These guides were also discussed during a joint ACRS/ACNW Working Group meeting on September 23-24, 1991.

The Committee is in the process of preparing a letter to the EDO summarizing its views on these guides.

3. Systems Analysis Approach to the Interim Storage of Spent Fuel

The Committee continued its deliberations to consider a systems analysis approach to review the over-all high-level waste program, including the short and mid-range technical milestones for handling high-level waste. The Committee plans to discuss this matter further during its October 18, 1991 meeting.

4. Visit to the Waste Isolation Pilot Plant (WIPP)

The Committee discussed the proposed visit by members to the Waste Isolation Pilot Plant near Carlsbad, New Mexico, on November 5, 1991. Discussions at the site and a tour of the facility are planned.

5. EPRI Workshop on the Technical Basis for the Environmental Protection Agency's High-Level Waste Standards

Several Committee and staff members briefed the Committee on aspects of the EPRI Workshop, held in Arlington, Virginia, on September 24-26, 1991. This briefing was for information only. No Committee action was taken.

6. ACNW Future Activities

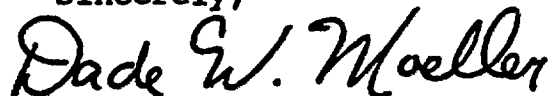
- The Committee agreed to add a third day to the 37th ACNW meeting (November 20-22, 1991) to provide adequate time to discuss a response to your question on the feasibility and benefits of applying a systems analysis approach to reviewing the over-all high-level waste program.

October 18, 1991

- The Committee agreed to plan a Working Group meeting in January 1992 to consider human intrusion as an element of performance assessment.
- The Committee agreed to schedule the 39th ACNW meeting for January 16-17, 1992.

Appendix A summarizes the proposed items for future meetings of the Committee and related Working Groups. This list includes items proposed by the Commissioners and NRC staff as well as ACNW members.

Sincerely,



Dade W. Moeller  
Chairman

Enclosures: As stated

APPENDIX A. FUTURE SCHEDULE

**36th ACNW Committee Meeting October 18, 1991 (Tentative Schedule)**

Meeting with the Director of the Office of Nuclear Material Safety and Safeguards - The Committee will meet with the Director of NMSS to discuss items of mutual interest.

Computer Modeling and Performance Assessment Capabilities - The Committee will continue discussions on the request from Commissioner Rogers to evaluate whether the NRC staff has developed a suitable performance assessment program and whether the NRC staff has adequate equipment, expertise and training to conduct performance assessment for high- and low-level waste disposal facilities.

Uncertainties in Implementing the EPA HLW Standards - The Committee will be briefed by representatives of the HLWM 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 Part 191.

Committee Activities - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda (including next year's meeting schedule), and organizational matters (nomination of next year's officers), as appropriate. The members will also discuss matters and specific issues that were not completed during previous meetings.

**Working Group Meetings**

NRC Staff Computer Modeling and Performance Assessment Program in High-Level and Low-Level Waste, October 16-17, 1991, 7920 Norfolk Avenue, Bethesda, MD (Gnugnoli) - The Working Group will conduct discussions related to the request from Commissioner Rogers to evaluate whether the NRC staff has developed a suitable performance assessment program and whether the NRC staff has adequate equipment, expertise and training to conduct performance assessment for high- and low-level waste disposal facilities.

Geologic Dating, November 19, 1991, 7920 Norfolk Avenue, Bethesda, MD (Abrams) - The Working Group will discuss problems and limitations of various Quaternary dating methods that are proposed for use in the assessment of volcanic features for site characterization of the proposed high-level waste repository at Yucca Mountain.

Seismic and Faulting Investigations for Characterization of a High-Level Waste Repository Site, December 17, 1991, 7920 Norfolk Avenue, Bethesda, MD (Abrams) - The Working Group will be briefed by representatives of DOE, State of Nevada, American Society of Civil Engineers, Association of Engineering Geologists, U.S. Geologic Survey, and Edison Electric Institute, on seismic investigations of the proposed Yucca Mountain HLW site.

The Impact of Long-Term Climate Change in the Area of the Southern Basin and Range, January 15, 1992, 7920 Norfolk Avenue, Bethesda, MD (Abrams) - The Working Group will 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, (Date to be determined), 7920 Norfolk Avenue, Bethesda, MD (Larson) - The Working Group will discuss post-closure monitoring requirements for an HLW repository and other 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, (Date to be determined), 7920 Norfolk Avenue, Bethesda, MD (Gnugnoli) - The Working Group will review the guidelines for radionuclide contamination limits for unrestricted use of sites that are or have been under NRC license, or were at one time, under AEC license. This effort will be coordinated with a proposed effort by the ACRS to incorporate a land contamination limit into the nuclear power plant safety goals.

Methods for Assessing the Presence of Natural Resources at the Proposed HLW Repository Site, (Date to be determined), 7920 Norfolk Avenue, Bethesda, MD (Abrams) - 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 resources and the potential for human intrusion will be emphasized.