May 31, 2001

The Honorable Richard A. Meserve Chairman U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

SUBJECT: SUMMARY REPORT — 126TH MEETING OF THE ADVISORY COMMITTEE ON

NUCLEAR WASTE, MAY 15-16, 2001, AND OTHER RELATED COMMITTEE

ACTIVITIES

Dear Chairman Meserve:

During its 126th meeting, May 15–16, 2001, at Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, the Advisory Committee on Nuclear Waste (ACNW or the Committee) discussed several matters and approved the following reports and memorandum:

REPORT

- "Advisory Committee on Nuclear Waste Comments on Entombment" (Report to the Honorable Richard A. Meserve, Chairman, NRC, from B. John Garrick, Chairman, ACNW, May 24, 2001).
- "April 11, 2001, Staff Requirements Memorandum on the March 22, 2001, ACNW Briefing of the Commission" (Report to the Honorable Richard A. Meserve, Chairman, NRC, from B. John Garrick, Chairman, ACNW, May 24, 2001).

MEMORANDUM

"Draft Proposed Major Revision to 10 CFR Part 71, 'Packing and Transportation of Radioactive Material'" (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, Advisory Committee on Nuclear Waste, May 23, 2001).

HIGHLIGHTS OF KEY ISSUES CONSIDERED BY THE COMMITTEE

1. Planning and Procedures

The ACNW approved the following topics for discussion during its 127th meeting, June 19–21, 2001:

• **Planning and Procedures**—The Committee will review items under consideration at this meeting and consider topics proposed for future ACNW meetings.

- **Update on the Pre-Closure Approach**—A representative from the NRC staff will brief the Committee on the staff's approach to pre-closure issues at the proposed HLW repository at Yucca Mountain. Nevada.
- **Public Outreach Activities**—The NRC staff will brief the Committee on its public outreach activities.
- **Key Technical Issues—Vertical Slice Report**—The Committee members will discuss their progress and the elements of a report on their assigned key technical issues (KTIs).
- Memorandum of Understanding on Multimedia Environmental Modeling—The NRC staff
 will brief the Committee on the recently signed memorandum of understanding on establishing a
 framework for facilitating cooperation and coordination among Federal Agencies engaged in
 research and development of multimedia environmental models, software and related databases.
- **Election of ACNW Officers**—The Committee will nominate and elect members to fill the positions of Chairman and Vice Chairman for the period July 1, 2001, through June 30, 2002.
- **Department of Energy's Science and Engineering Report**—A representative from DOE will make a presentation on DOE's Science and Engineering Report (S&ER).
- Overview of Private Fuels Storage—A representative from the NRC staff will provide an overview on the status of the facility application for a license to store spent fuel in a facility to be constructed in Tooele County, Utah.
- Overview of Sequoyah Fuels Storage—A representative from the NRC staff will provide an overview on the current status of activities at the Sequoyah Fuels Corporation Facility.
- **Discussion of Proposed ACNW Reports**—The Committee will discuss proposed ACNW reports on HLW chemistry, public outreach activities, Yucca Mountain pre-closure approach, and risk-informed, performance-based waste management and decommissioning.

2. Key Technical Issues — Vertical Slice Report

Milton Levenson, ACNW, discussed his progress on his vertical slice review of thermal effects on flow, and summarized the highlights of a meeting in San Antonio between himself, Richard Major, NRC staff, and staff of the Center for Nuclear Waste Regulatory Analyses. B. John Garrick, ACNW, and Andrew Campbell, ACNW staff, summarized their planned approach to the total system performance assessment (TSPA) vertical slice review. Committee members and staff discussed approaches, results, and next steps.

Dr. Garrick said he is pursuing two basic questions: What is the evidence supporting the results of the Department of Energy's TSPA? And, is the staff's approach adequate for using the total system performance assessment code and Yucca Mountain Review Plan to review the TSPA?

It was noted that the ACNW vertical slice review is a snapshot in time similar to the staff's sufficiency review. The Committee expects to continue the concept throughout issue resolution and into possible licensing processes.

Conclusions/Action Items

The ACNW members agreed to provide completed templates for the vertical slice reviews at the June meeting. George Hornberger, ACNW, and Lynn Deering, ACNW staff, agreed to provide a draft outline of a letter report on the NRC staff's sufficiency review so that the Committee can begin putting the pieces together during the next meeting. The Committee plans to have a draft letter report by the July meeting.

3. Yucca Mountain Draft Environmental Impact Statement

The Committee heard a presentation by, and had a discussion with, a representative of the Department of Energy's (DOE) staff regarding DOE's Supplement to the Draft Environmental Impact Statement (DEIS) for a Geologic Repository at Yucca Mountain. The DEIS described and evaluated the preliminary design concept and identified design features and alternative design concepts under consideration. DOE held 21 public hearings during a 199-day public comment period and received more than 11,000 comments. DOE will try to address these comments in the Final Environmental Impact Statement.

The supplement to the DEIS was issued May 4, 2001, for a 45-day public comment period ending June 25, 2001. DOE also plans to hold three public meetings during the comment period in the vicinity of Yucca Mountain. The purpose of the DEIS supplement is to update the repository design information in the DEIS. The DEIS and the supplement represent the most current and comprehensive analyses and information related to the repository design and operating modes. In the supplement, DOE outlined its plans to include a solar energy facility, a revised emplacement drift layout, and an expansion of the capacity of the waste handling building to allow blending.

Conclusions/Action Items

This presentation was for information only and no Committee action was required.

4. Supplemental Draft Environmental Impact Statement

The Committee heard a presentation by, and had a discussion with, a member of the NRC staff regarding DOE's supplement to the DEIS. The staff member described the process by which the staff will review the supplement to the DEIS. NRC's role is to be a commenting agency. The staff plans to complete draft comments on the DEIS by May 28, 2001, and finalize its comments by June 25, 2001.

Conclusions/Action Items

This presentation was for information only and no Committee action was required.

Sincerely,

/RA/

B. John Garrick Chairman