

February 25, 2002

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

Dear Chairman Meserve:

SUBJECT: SUMMARY REPORT — 132ND MEETING OF THE ADVISORY COMMITTEE ON
NUCLEAR WASTE, FEBRUARY 7–8, 2002, AND OTHER RELATED COMMITTEE
ACTIVITIES

The Advisory Committee on Nuclear Waste (ACNW or the Committee) held its 132nd meeting on February 7–8, 2002, at Two White Flint North, 11545 Rockville Pike, Rockville, Maryland. During that meeting, the Committee discussed the topics identified below.

HIGHLIGHTS OF KEY ISSUES CONSIDERED BY THE COMMITTEE

1. ACNW Planning and Procedures

On February 27 through March 1, 2002, the Committee will hold a Planning Procedures Subcommittee meeting in Tucson, Arizona. During this meeting, the Committee plans to discuss (1) the adequacy of the process for conducting ACNW business, including a facilitated discussion on improving Committee effectiveness and efficiency; (2) insights gained from the Waste Management 2002 Conference; (3) the issues that the ACNW should address in 2002; (4) ACNW's existing mission, objectives, and effectiveness during the past year; and (5) possible process improvements that could result in increased effectiveness during 2002. The Committee will also summarize its consensus on issues, consider its draft report on the NRC's Safety Research Program, and finalize its presentation for the Commission briefing to be held on March 20, 2002.

The Committee also approved the following topics for discussion during its 133rd meeting, scheduled for March 19–21, 2002:

- ACNW Action Plan Update
- ACNW Briefing of the Commission
- Yucca Mountain Review Plan
- Annual Research Report

2. Meeting with the NRC's Executive Director for Operations (EDO) and the Office Directors of Nuclear Reactor Regulation (NRR), Nuclear Material Safety and Safeguards (NMSS), and Nuclear Regulatory Research (RES)

George Apostolakis, Chairman of the Advisory Committee on Reactor Safeguards (ACRS), and B. John Garrick, Acting Chairman of the ACNW, welcomed William Travers, the NRC's EDO, Martin Virgilio, Director of NMSS, Samuel Collins, Director of NRR, and Ashok Thadani, Director of RES. Dr. Apostolakis noted that this was the first time there had been a joint meeting of both Advisory Committees with the EDO and the Office Directors.

The participants discussed many topics, with Dr. Travers opening the meeting with a discussion of topics that the NRC staff believed benefitted from either ACRS or ACNW review.

Dr. Virgilio discussed the high-level waste repository program and related transportation issues, decommissioning and site cleanup, initiatives to risk-inform the NMSS regulatory approach, and relevant confirmatory and anticipatory research.

Dr. Collins focused on three issues of particular interest, including new reactor licensing; NRR risk-informed initiatives (i.e., technical specification and rulemaking activities); and licensing issues associated with power uprates, license renewals, and potential plant reactivations.

Dr. Thadani discussed eight major issues that RES intends to address during 2002–2004, including advanced reactor designs, risk-informed initiatives, fuel behavior, thermal- hydraulic codes, material engineering issues, waste issues, September 11 event followup activities, and research coordination.

In closing (and in response to a question from the Committees), Dr. Travers stated that the NRC staff had no negative comments on Committee letters, noting that, in many areas, the staff has implemented many of the Committees' recommendations. It was mutually agreed that the presentations and followon discussions were worthwhile, and the participants agreed to consider another such meeting in the near future.

Committee Action

The briefing was for information only, and it was noted that this briefing was of significant benefit to each Committee as they plan their work for the next several years.

3. Update on Igneous Activity, Including Performance Assessment Analyses

The staffs of the NRC and Center for Nuclear Waste Regulatory Analyses provided an information briefing on staff activities aimed at resolving the igneous activity key technical issue (KTI). The briefing addressed two KTI subissues, including (1) the probability of an igneous intrusion into a repository over the next 10,000 years and (2) the probability-weighted consequences of such an intrusive event. The consequences discussed included magma interactions with a repository, with waste packages, and with waste forms. Also discussed

were redistribution of contaminated volcanic ash after an eruptive event and inhalation exposures to the “reasonably maximally exposed individual.” The NRC staff provided a performance assessment perspective on addressing probability and consequences in the NRC’s total system performance assessment code. The staff also discussed U. S. Department of Energy and Nevada perspectives, risk insights, and the path forward for resolution of each subissue.

Committee Action

The ACNW will consider this information in future reports to the Commission on the igneous activity key technical issue.

Sincerely,

/RA/

George M. Hornberger
Chairman