No. 92-147 Tel. 301/504-2240 FOR IMMEDIATE RELEASE (Wednesday, October 7, 1992)

NOTE TO EDITORS:

The Nuclear Regulatory Commission has received from its independent Advisory Committee on Nuclear Waste (ACNW) the attached letter-type report on a program plan of anticipated ACNW activities.

In addition, the ACNW has sent to the NRC's Executive Director for Operations a letter report on draft Regulatory Guide 8013, "ALARA Radiation Protection Program for Effluents from Materials Facilities."

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Attachments: As stated

September 30, 1992

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. We view these letters as a convenient avenue for us to share information on where we intend to focus our efforts. This letter covers our proposed plans for the time period, October 1992 through January 1993. We look forward to your comments.

In preparing this program plan, we have considered the list of 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 members. The priority for each proposed issue is 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 views on how to deal with these issues effectively. As a result, it is anticipated that certain aspects of the plan will need to be revised.

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

| 47th Meeting | - | October 21-23, 1992, Meeting and |
|--------------|---|----------------------------------|
| | | Site Visits (Las Vegas, Nevada) |
| 48th Meeting | _ | November 19-20, 1992 |
| 49th Meeting | - | December 17-18, 1992 |
| 50th Meeting | - | January 27-28, 1993 |

In addition, we will hold working group meetings as necessary to facilitate full Committee review and action on specialized topics.

Specific topics to be covered during these meetings are described below.

October 21-23, 1992 (Meeting and Site Visits)

The Committee will meet in Las Vegas, Nevada, and visit the Yucca Mountain site and related facilities. Current plans include the following:

- Wednesday, October 21, 1992 47th ACNW Meeting
 - The Committee will continue discussions of a supplemental request from Chairman Selin on a systems analysis approach to reviewing the overall high-level waste program. (High Priority)
 - The Committee will receive comments on the proposed high-level waste repository from State, Local and Indian Tribe representatives. (High Priority)
 - The Committee will invite DOE to discuss work in progress, results and strategy for setting priorities at the proposed Yucca Mountain High-Level Waste Repository site. (High Priority)
 - The Committee will be briefed by DOE and its contractors on the Accelerated Seismic Initiative, and be provided information on the June 29, 1992, earthquake that occurred near the proposed Yucca Mountain High-Level Waste Repository site. (High Priority)
 - The Committee will hear a report from the Chairman of the ACNW Natural Resources Working Group on a meeting to be held on October 20, 1992.
- Thursday, October 22, 1992 (Site Visits)
 - The Committee will visit and be briefed on the DOE Geographic Information System (GIS). The GIS is a digital database of Yucca Mountain which describes the geoscience characteristics of the Yucca Mountain site.
 - The Committee will visit and be briefed on the remote sensing laboratory in north Las Vegas.
- <u>Friday, October 23, 1992 (Site Visit)</u>
 - Members will be briefed on the Climax Mine test and tour the Climax Mine Model.
 - Members will tour the proposed Yucca Mountain highlevel waste site. They will be briefed on drill rig operations and a tour of the LM-300 drill rig.

- The Members will be briefed on and tour Midway Valley Trench 14-C and 14-D and discuss new geophysical work from Exile Hill.
- Members will tour and be briefed on the Hydrologic Research Facility.
- Members will visit the Sample Management Facility and Geoscience Laboratory.
- Members will review the integrity of the tunnels at Little Skull Mountain following the recent earthquake.
- Members will visit the Ghost Dance Fault.

November 19-20, 1992 - 48th ACNW Meeting

- The Committee will complete preparation of a response to the supplemental request from Chairman Selin on a systems analysis approach to reviewing the overall high-level waste program. (High Priority)
- The Committee will hold discussions with a representative of the State of Connecticut, Department of Health Services, regarding the State's role and perspectives in the siting of a low-level waste disposal facility. This will include discussions of State regulations for these facilities. (Medium Priority)
- The Committee will review and comment on a staff technical position on fault avoidance. (High Priority)
- The Committee will be briefed on the recently completed national profile on mixed waste and its implications for future actions. (Medium Priority)
- The Committee will be briefed on the Enhanced Participatory Rulemaking Process on the Radiological Criteria for Decommissioning. (Medium Priority)
- The Committee will consider potential impacts that different waste forms (spent fuel, vitrified wastes from different sources) could have on repository performance. (High Priority)
- The Committee will meet with the Director General of the British Nuclear Forum to discuss items of mutual interest.

December 17-18, 1992 - 49th ACNW Meeting

• The Committee will meet with the Commission to discuss items of mutual interest. (High Priority)

- The Committee will be briefed by the NRC staff on its evaluation of DOE's proposed resolution of Site Characterization Analysis Objection #1 (Exploratory Studies Facility design and design control process). (Medium Priority)
- The Committee will be briefed by the CNWRA on the results of geological cross-section balancing activities and their implications. (Medium Priority)

January 27-28, 1993 - 50th ACNW Meeting

- The Committee will review and comment on the development of a staff branch technical position on guidance for performance assessment of low-level waste disposal facilities. (High Priority)
- The Committee will be briefed on the role of engineered barriers versus natural barriers.
- The Committee will be briefed on the scope of the Regulatory Impact Survey for Fuel Cycle and Material Licensees. (Medium Priority)
- The Committee will review the activities of the CNWRA including the use of natural analogues in model development. (High Priority)
- The Committee will explore the creation of a performance indicator or event reporting system that would monitor the current status of the management and disposal of low-level waste. (High Priority)
- The Committee will review and comment on the revised draft NRC High-Level Radioactive Waste Research Program Plan. In addition, it will be briefed on the complementary technical assistance program. (High Priority)

<u>Other Topics</u>: (Will be considered as documents and time become available consistent with priorities noted.)

- The Committee will be briefed by the high-level waste staff on its position on penetration of the Calico Hills tuff and its review of DOE's Calico Hills/Risk-Benefit Analysis. (High Priority)
- The Committee will be briefed by the NRC staff on its review of the DOE reports on the Exploratory Studies Facility Alternatives Study. (High Priority)
- The Committee will be briefed by the NRC staff on its review of a DOE topical report entitled "Erosion Rates at the Yucca

Mountain Geologic Setting: Methodology and Results." (Medium Priority)

- The Committee will be briefed on the current status of the Systematic Regulatory Analysis being conducted at the CNWRA.
- The Committee will be briefed on the compatibility between NRC and Agreement State regulations for low-level waste disposal facilities. (Medium Priority)
- The Committee will be briefed by the NRC staff on its plans for guidance development (BTPs and regulatory guides) for the high-level waste and low-level waste programs. (Medium Priority)
- The Committee will be briefed on decommissioning plans for the Shoreham nuclear power plant.

WORKING GROUP MEETINGS

ACNW Working Group on the Potential for the Presence of Natural Resources at a High-Level Repository Site, October 20, 1992, St. Tropez Hotel, 455 East Harmon Avenue, Las Vegas, Nevada, 8:30 a.m. - 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 future exploration for such resources and the potential for human intrusion will be emphasized.

The Impact of Long-Range Climate Change in the Area of the Southern Basin and Range, November 18, 1992, Bethesda, Md. - The working group will discuss the significance of climate change as it may impact the performance of the proposed Yucca Mountain repository over the next 10,000 years. Specific topics include data identification, acquisition and interpretation, which can be used to predict potential changes to natural conditions at the site. Quality assurance and use of data in developing and validating computer models for predicting global and regional climate, as well as for characterizing the uncertainty in such predictions will also be discussed. Models and their evolution will be discussed along with the procedures and opportunities for their validation.

ACNW Working Group on Phase 2 of the High-Level Waste Iterative <u>Performance Assessment (IPA)</u>, December 16, 1992, Bethesda, Md. -The working group will discuss the progress of Phase 2 of the high-level waste Iterative Performance Assessment effort by NRC. The Group will also be briefed by DOE representatives regarding the status of the DOE's Total System Performance Assessment.

<u>Synergistic Data Needs for Resolving Volcanic and Tectonic</u> <u>Concerns at Yucca Mountain</u>, (early 1993) - The working group will attempt to determine what data are necessary to resolve and/or move toward closure in the subject areas. It will also attempt to determine how and by whom these data will be analyzed.

This list represents our best estimate of the topics to be considered through January 1993. 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 Commissioner de Planque Samuel J. Chilk, SECY James M. Taylor, EDO Robert M. Bernero, NMSS Eric S. Beckjord, RES

September 30, 1992

Mr. James M. Taylor Executive Director for Operations U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dear Mr. Taylor:

SUBJECT: DRAFT REGULATORY GUIDE 8013, "ALARA RADIATION PROTECTION PROGRAM FOR EFFLUENTS FROM MATERIALS FACILITIES"

During its 46th meeting, September 22 and 25, 1992, the Advisory Committee on Nuclear Waste met with the NRC staff to review draft Regulatory Guide 8013, "ALARA Radiation Protection Program for Effluents From Materials Facilities." On the basis of this review, we offer the following comments:

1. One of the primary objectives of the regulatory guide is to offer recommendations for limiting radionuclide releases and accompanying radiation exposures to members of the public. Since the goal is to limit the effective dose to the individual likely to be most highly exposed, we believe it would be useful to elaborate on the process used to identify this person. The approach recommended by the International Commission on Radiological Protection is to identify a critical group within the exposed population who, because of its location and living habits, would receive the highest dose. Since it is often difficult to identify the single individual receiving the highest dose, it is generally assumed that protection of the critical group as a whole will provide adequate protection to the most highly exposed individual within that group. We recommend that licensees be permitted a similar approach.

2. To assist in demonstrating compliance with the requirements of 10 CFR Part 20, the guide recommends that licensees set ALARA goals for radionuclide concentrations in effluents at 10 to 20 percent of the regulatory limits. Although we understand that these percentages were selected to ensure that NRC licensees meet the Environmental Protection Agency's (EPA's) National Emission Standards for Hazardous Air Pollutants (NESHAPs), we believe the recommendation is too specific and that the new lower limits could, in time, become de facto regulations. To avoid this, we suggest that the regulatory guide recommend that ALARA goals be set at a "small fraction" of the regulatory limits. This will, in our opinion, accomplish the same purpose while avoiding any regulatory misinterpretation. Surveys can be conducted periodically, as is the case now, to ensure that materials facilities licensed by the NRC meet the EPA's NESHAPs.

We trust that these comments will be helpful. We recommend that the regulatory guide be issued as soon as practicable.

Sincerely,

Dade W. Moeller, Chairman Advisory Committee on Nuclear Waste

<u>Reference</u>:

U.S. Nuclear Regulatory Commission, Office of Nuclear Regulatory Research, Draft Regulatory Guide 8013, "ALARA Radiation Protection Program for Effluents From Materials Facilities," August 18, 1992, transmitted by memorandum dated August 20, 1992 from C. J. Heltemes, RES, to R. F. Fraley, ACRS