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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FEB 08 1989

Dade W. Moeller, Chairman
Advisory Committee on Nuclear Waste
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Dr. Moeller:

I am responding to your January 4, 1989, memorandum regarding topics raised by your Committee during the October 27, 1988 meeting with the Commission. Included in these topics were: (1) acceptance criteria for Savannah River high-level waste; (2) problems associated with the expanding number of low-level waste disposal sites; (3) need for a central bank of information about low-level waste generation and disposal; (4) the Committee's limited resources for assessing both the high-level waste and the low-level waste project and research activities; (5) revisions planned for 10 CFR Part 20; (6) need for reports of unusual events related to solidified low-level waste; (7) need to improve handling of low-level waste at nuclear power plants; and (8) problems associated with NRC's and EPA's overlapping responsibilities for mixed wastes.

The topics raised at the Commission meeting and communicated in your memorandum are pertinent and timely. Comments on all topics, except for Topics 4 and 5, are enclosed in response to your memorandum. Topic 4 is not addressed because it pertains to matters internal to the Committee, and Topic 5 relates to the Committee's agreement with the NRC staff position on Section 20.205 of 10 CFR Part 20, so no response is needed.

Sincerely,

Victor Stello, Jr.
Executive Director
for Operations

Enclosure:
As stated

cc: Chairman Zech
Commissioner Roberts
Commissioner Carr
Commissioner Rogers
Commissioner Curtiss

LSECY

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PDR COMMS NRCC
CORRESPONDENCE PDR

RESPONSE TO TOPICS AT OCTOBER 27, 1988 ADVISORY COMMITTEE ON
NUCLEAR WASTE (ACNW) MEETING WITH COMMISSIONERS

Topic 1 The DOE contractor staff involved with waste-related activities at Savannah River facilities has noted some difficulty in communicating with the NRC staff on acceptance criteria for Savannah River high-level, solidified waste. We believe this is an issue internal to DOE, not with the NRC staff, but it should be rectified to ensure the acceptability for disposal of the Savannah River waste product.

Response

The staff agrees that there is a communication difficulty and that it is an issue internal to DOE. The Division of High-Level Waste Management has formally notified DOE's Office of Civilian Radioactive Waste Management (OCRWM), the potential licensee for the repository, of this concern. OCRWM agrees that it is the DOE office responsible for overall internal DOE integration of the acceptability of the high-level waste (HLW) forms to be produced at Savannah River and West Valley for disposal in the repository. OCRWM has committed to ensure that this concern will be addressed by taking the lead for planning and scheduling appropriate interface meetings among DOE, Savannah River, West Valley, and NRC, as needed.

Topic 2 The effect of the Low-Level Radioactive Waste Policy Amendments Act of 1985 in expanding the number of LLW disposal sites may lead to a situation where it could be difficult for some of the sites to be economically viable. If this proves to be true, the NRC staff may want to monitor the situation closely to ensure that matters pertaining to public health and safety in the operation of such facilities are not neglected.

Response

The staff recognizes the increasing number of potential LLW disposal sites and notes that this situation is a reflection of implementation of the LLRWPA. At the same time, LLW volumes are declining nationally, thereby driving up the unit costs for disposal at the new sites. The staff intends to continue to monitor this trend from the standpoint of assuring public health and safety.

Enclosure

Topic 3 Representatives of the State of South Carolina have suggested that the development of a national central information bank related to the generation and disposal of low-level waste would be useful. Consideration should be given to the establishment of such a system.

Response

The staff agrees. Development of such a data base involves a rule change that would require licensees to provide waste manifest information to NRC in electronic format. A rulemaking justification package to initiate a rulemaking to develop such a data base is being prepared. Based on approval to initiate the rulemaking in March 1989, a proposed rule is scheduled for publication in the Federal Register in October 1989.

Topic 6 We endorsed the desirability of requiring vendors, utilities, and disposal site operators to submit reports of unusual events related to solidified LLW. We are pleased to note that Chairman Zech has requested an evaluation of such a requirement.

Response

The staff agrees that unusual events related to solidified LLW should be reported by vendors, utilities, and disposal site operators. Communication channels potentially capable of providing information on these events have been identified, and work is underway to define LLW preparation and packaging problems that should be reported.

Topic 7 Based on recently reported events, it appears that additional emphasis needs to be directed to the review, evaluation, and inspection of the processing, solidification, and handling of LLW at nuclear power plants. We believe that this can be addressed through improved coordination between NRR and NMSS, but may require enlarging the scope of activities of either or both groups.

Response

Coordination between NRR and NMSS in the area of LLW processing at nuclear power plants has been improved as evidenced by the following actions:

1. High Density Polyethylene (HDPE) High Integrity Containers (HIC) Notification - After NMSS staff's disapproval of three topical reports dealing with HDPE HICs, NRC regional offices and resident inspectors were immediately notified of the decision by means of a notice transmitted by NRR's Plant Systems Branch.
2. Topical Report Information Notice - An Information Notice informing NRC licensees of the status of NMSS and NRR LLW topical report reviews and of the significance of the reports and limitations on the use of approved HICs and solidification media is in preparation and is expected to be released in early February. Both offices are participating in the preparation of the Information Notice.
3. Process Control Plan (PCP) Area Consolidation - NRR's Plant Systems Branch and NMSS' Technical Branch are taking steps to consolidate the review of PCPs. Under the process currently envisioned, NRR would continue to have primary review responsibility for areas related to occupational exposure (Part 20) and plant interface (Part 50) issues, while NMSS would have primary responsibility for waste form stability (Part 61) determinations. In applications where both review areas exist, technical evaluations, including assessments of the adequacy of process control procedures, would require joint concurrence from both Branches.
4. Cement Solidification Workshop - Plans are being formulated for an agency-sponsored workshop on the use of cement for stabilization of Class B and Class C wastes. In developing the workshop, input is being solicited from NRR, as well as the Office of Nuclear Regulatory Research (RES). It is anticipated that NRR licensees and RES contractors will participate in the workshop.
5. Notifications of Waste Preparation Mishaps - NMSS and NRR are discussing the desirability of developing requirements for notifications of waste preparation mishaps in conjunction with a proposed rule change regarding 10 CFR Part 20 (Section 20.403, "Notification of Incidents") (see Topic 6).
6. Briefing of NRR Project Managers and Resident Inspectors - Plans are in the conceptual stage for developing a briefing package for NRR Project Managers and Resident Inspectors concerning LLW technical review activities engaged in by NMSS and NRR and the significance of those reviews with respect to nuclear power plant operation and NRC inspector responsibilities.
7. Inspection Module for LLW Activities of Nuclear Power Plants - Plans are in the conceptual stage for developing, within the current calendar year, an inspection module that would address the processing, solidification, handling, and certification of LLW at nuclear power plants. The module will be developed jointly by NRR and NMSS technical staffs.

Topic 8 Dr. Smith noted the problems associated with overlapping responsibilities between NRC and the EPA, for the disposal of mixed wastes. Concern was expressed about the possible implications of this arrangement to the disposal of high-level and transuranic wastes.

Response

DOE is responsible for assuring compliance with both NRC regulations for repository licensing and EPA regulations for hazardous waste disposal, under the Resource Conservation and Recovery Act (RCRA). DOE is currently working with EPA and affected State agencies authorized for RCRA enforcement, to achieve and maintain compliance with applicable RCRA requirements at DOE nuclear installations. DOE will inform both agencies when and if it becomes aware that compliance with applicable EPA requirements for disposal of any mixed wastes in a repository might interfere with compliance with applicable NRC requirements.

With regard to disposal of spent fuel and high-level vitrified wastes, DOE is working to demonstrate to both DOE's and EPA's satisfaction that these wastes are not "mixed wastes." NRC plans to keep informed of the progress of this effort through periodic meetings with either DOE and/or EPA.



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

January 4, 1989

MEMORANDUM FOR: Victor Stello, Jr.
Executive Director for Operations

FROM: Dade W. Moeller, Chairman
Advisory Committee on Nuclear Waste

SUBJECT: TOPICS RAISED BY ACNW DURING THE OCTOBER 27, 1988, MEETING
WITH THE COMMISSIONERS

As a follow up to our meeting with the Commissioners on October 27, the Secretary of the Commission has requested (November 8, 1988) that we transmit to you topics or items that were raised with them during our meeting but had not been documented previously in written reports to the Commission. The following is a list of those topics:

1. The DOE contractor staff involved with waste-related activities at the Savannah River facilities has noted some difficulty in communicating with the NRC staff on acceptance criteria for Savannah River high-level, solidified waste. We believe this is an issue internal to DOE, not with the NRC staff, but it should be rectified to ensure the acceptability for disposal of the Savannah River waste product.
2. The effect of the Low-Level Radioactive Waste Policy Amendments Act of 1985 in expanding the number of LLW disposal sites may lead to a situation where it could be difficult for some of the sites to be economically viable. If this proves to be true, the NRC staff may want to monitor the situation closely to ensure that matters pertaining to public health and safety in the operation of such facilities are not neglected.
3. Representatives of the state of South Carolina have suggested that the development of a national central information bank related to the generation and disposal of LLW would be useful. Consideration should be given to the establishment of such a system.
4. The Committee indicated its inability, because of resource limitations, to conduct a comprehensive, in-depth review of the project and research activities of either of the High- or Low-Level Waste Divisions but noted that selected portions of their activities will be assessed or evaluated in connection with our review of specific technical issues.
5. Dr. Moeller noted the revisions planned for 10 CFR Part 20. The Committee has provided additional comments to Chairman Zech regarding this matter (see ACNW report dated December 30, 1988).

89-1176447

January 4, 1989

6. We endorsed the desirability of requiring vendors, utilities, and disposal site operators to submit reports of unusual events related to solidified LLW. We are pleased to note that Chairman Zech has requested an evaluation of such a requirement.
7. Based on recently reported events, it appears that additional emphasis needs to be directed to the review, evaluation, and inspection of the processing, solidification, and handling of LLW at nuclear power plants. We believe that this can be addressed through improved coordination between NRR and NMSS, but may require enlarging the scope of activities of either or both groups.
8. Dr. Smith noted the problems associated with overlapping responsibilities between NRC and the EPA for the disposal of mixed wastes. Concern was expressed about the possible implications of this arrangement to the disposal of high-level and transuranic wastes.

Other items on which we have commented, and which were also mentioned during the meeting with the Commissioners, included:

1. Definition of Anticipated Processes and Events and Unanticipated Processes and Events (see ACKW letter dated December 30, 1988 for additional information on this subject)
2. Below Regulatory Concern
3. Branch Technical Position on Monitoring of LLW Sites

Dade W. Moeller

Dade W. Moeller
Chairman

cc: Chairman Zech
Commissioner Roberts
Commissioner Carr
Commissioner Rogers
Commissioner Curtiss
S. J. Chilk, SECY
H. L. Thompson, NMSS
E. S. Beckford, RES
T. E. Murley, NRR
ACNW Members/Staff

RICHARD BRYAN
NEVADA

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COMMITTEES:
BANKING, HOUSING,
URBAN AFFAIRS
COMMERCE, SCIENCE
TRANSPORTATION
JOINT ECONOMIC

United States Senate

WASHINGTON, DC 20510

June 2, 1989

Mr. Lando W. Zech, Jr.
Chairman
Nuclear Regulatory Commission
1717 H Street NW
Washington, D.C. 20555

Dear Mr. Chairman:

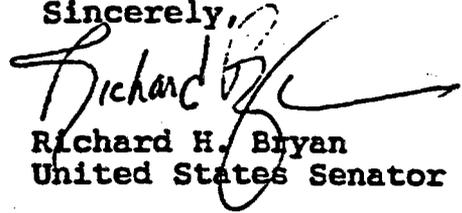
I am enclosing a copy of a letter I sent today to the Secretary of Energy concerning the Yucca Mountain high level nuclear waste dump project. As you may be know, recent information of which your agency is already aware indicates that there may be earthquake faults in the area of the proposed exploratory shafts that DOE will utilize during the site characterization process.

Although my purpose in writing is mainly to alert you to my concerns about this development, I would also appreciate your providing to me any additional information or analysis about the faults that may be available to your agency.

I have continuing concerns that the Nation is not well served by a pursuing a single nuclear waste disposal strategy that I believe is likely to fail for technical reasons. It is my understanding that the NRC has expressed its concerns to DOE on the fault issue, and I would appreciate copies of any written reports or correspondence that may be available.

I would appreciate any information or insight that your agency staff is at liberty to share on this issue.

Sincerely,



Richard H. Bryan
United States Senator

6/7...To EDO to Prepare Response for Signature of
Chairman.....Date due: June 20..OCA to Ack, RF
GPA...89-0535

~~89-0712-188~~

United States Senate

WASHINGTON, DC 20510

June 1, 1989

James D. Watkins
Admiral, U.S. Navy (Retired)
Secretary of Energy
1000 Independence Avenue SW
Washington, D.C. 20585

Dear Mr. Secretary:

I am writing concerning your agency's newly disclosed investigation of earthquake faults near Yucca Mountain.

According to Carl Gertz of your Las Vegas office, as quoted in today's Las Vegas Review-Journal, DOE began a month ago to investigate possible faulting in the area where you plan to dig exploratory shafts for characterization of the dump site. As you know, the State of Nevada has long expressed serious concerns about possible faulting in the Yucca area which would affect the safety of the repository if, in fact, the project goes forward.

I believe this development is significant for non-technical reasons as well. As you know I met with Leo Duffy of your staff to discuss the Yucca project on May 2, 1989, and met with you, along with the Governor and the other members of the Nevada delegation, on May 22, 1989, to discuss the dump project. In neither meeting did DOE reveal that a new investigation into possible faults was contemplated. Thus, despite DOE's commitment to be more forthcoming with such information than it has been in the past, an important new development was not revealed until the media became aware of a new problem with the dump program.

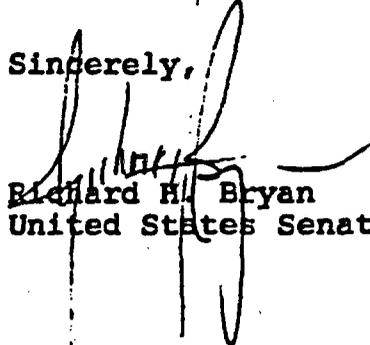
In this context, I am requesting your answer to the following questions:

- 1) Did the potential problem with the faults contribute to your decision to conduct preliminary drilling on the Nevada Test Site rather than at the proposed location of the exploratory shafts?
- 2) Why did DOE not reveal the additional studies of the exploratory shaft area for earthquake faults during the May 2 or May 22, 1989, meetings?
- 3) If the presence of the faults is confirmed by the additional investigation, what is DOE's timetable for relocating the exploratory shaft location, and what delay in the program may be caused by the relocation of the exploratory shafts?
- 4) How long will the additional studies take, how will they

be conducted, and will all of the technical information that is derived from the additional studies be made available to the state?

I would appreciate your prompt attention to these questions and I would appreciate being closely advised of the results of your additional investigation into faulting near the Yucca Mountain dump site.

Sincerely,



Richard H. Bryan
United States Senator