

**MINUTES OF THE 81ST ACNW MEETING
JANUARY 24-26, 1996**

- TABLE OF CONTENTS -

	<u>Page</u>
I. Chairman's Report (Open)	2
II. Meeting with the Executive Director for Operations (Open)	3
III. Design Basis Events (DBEs) for the Geologic Repository Operations Area (GROA) (Open)	8
IV. Technical Training Center (TTC) Programs (Open)	10
V. Site Decommissioning Management Plan (SDMP) (Open)	12
VI. Residual Contamination Background Level Determination	15
VII. Meeting with the Acting Director, Division of Waste Management, NMSS	17
VIII. Insights Into High Level Waste (HLW) Source Term and Natural Analog	18
IX. Executive Session (Open)	20
A. Future Working Group Topics	20
B. Update ACNW Priorities/Task Action Plans	20
C. Future Meeting Agenda	21

- APPENDICES -

- I. Federal Register Notice
- II. Meeting Schedule and Outline
- III. Meeting Attendees
- IV. Future Agenda and Working Group Activities
- V. List of Documents Provided to the Committee

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Paul W. Pomeroy
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Issued: 4/02/96

**MINUTES OF THE 81ST MEETING OF THE
ADVISORY COMMITTEE ON NUCLEAR WASTE
JANUARY 24-26, 1996
ROCKVILLE, MARYLAND**

The 81st meeting of the Advisory Committee on Nuclear Waste was held at Two White Flint North Building, 11145 Rockville Pike, Rockville, Maryland, on January 24-26, 1996. The purpose of this meeting was to discuss and take appropriate actions on the items listed in the attached agenda. The entire meeting was open to public attendance.

A transcript of selected portions of the meeting was kept and is available in the NRC Public Document Room at the Gelman Building, 2120 L Street, N.W., Washington, D.C. [Copies of the transcript are available for purchase from Neal R. Gross and Co. Inc., Court Reporters and Transcribers, 1323 Rhode Island Avenue, N.W., Washington, D.C. 20005.]

Dr. Paul W. Pomeroy, Committee Chairman, convened the meeting at 8:30 a.m. and briefly reviewed the schedule for the meeting. He stated that the meeting was being conducted in conformance with the Federal Advisory Committee Act. He stated that the Committee had not received any requests from persons or organizations desiring to make an oral statement during the meeting. However, he invited members of the public, who were present and had something to contribute, to let the ACNW staff know so that time could be allocated for them to make oral statements.

ACNW members, Drs. Paul W. Pomeroy, B. John Garrick, William J. Hinze and Martin J. Steindler were present. [For a list of other attendees, see Appendix III.]

I. CHAIRMAN'S REPORT (Open)

[Note: Mr. Richard K. Major was the Designated Federal Official for this portion of the meeting.]

Dr. Pomeroy identified a number of items that he believed to be of interest to the Committee, including:

- Dr. Martin Steindler would not be in attendance at the meeting until Thursday afternoon, January 25, 1996.
- There had been a change in the agenda. The session on Residual Contamination Background Level Determination had been changed from 8:45 a.m., on Thursday, January 25, 1996, to 3:00 p.m. on Friday, January, 26, 1996.
- The Committee will not be holding its 83rd meeting, May 1996, in Las Vegas. The 83rd meeting will be held on May 15-17, 1996, in Washington, D. C.
- There will be no February 1996 ACNW full Committee Meeting.
- The Senate confirmed Greta Dicus as an NRC Commissioner on December 22, 1995, and that her term would expire on June 30, 1998. Ms. Dicus will be sworn in as Commissioner on February 15, 1996.
- The NRC held a workshop on January 18 and 19, 1996, to discuss the need for changes in the regulatory program for certain devices containing radioactive

materials. This workshop topic is directly related to the issue addressed by the Committee in its April 28, 1995, letter to the then-Chairman Selin titled, "Regulations Pertaining to Contaminated Steel Smelting Facilities and Disposal of Contaminated Baghouse Dust."

This workshop, which will provide input to a working group, focused on a roundtable discussion among invited representatives from the metal recycling industry and recycled metal consumers, device sellers and users, federal and state regulators, and citizen groups. The working group, which is comprised of seven members from the NRC and the Agreement States, is assessing the need for regulatory changes for improving controls of the devices and ensuring their proper disposal. The working group hopes to complete its work in May.

II. Meeting With the Executive Director for Operations (Open)

[Note: Mr. Richard Major was the Designated Federal Official for this portion of the meeting.]

Mr. James M. Taylor, Executive Director for Operations, discussed the unprecedented situation with regards to the fiscal operations in the Federal Government. He noted that the NRC appropriation was passed on November 13, 1995. Although carryover funds were available, these were not needed to continue operating. The NRC budget request was for \$524 million and the approved budget for fiscal year FY 1996 was \$473 million. The budget for FY 1997 will be the same. The NRC is required to reduce its 1993 FTE (full time equivalent) load 12% by 1999. This is part of a government wide reduction mandated by Congressional action. The EDO has been using early outs and other retirements to reduce FTE loads. There have been no

**Minutes
81st ACNW Meeting
January 24-26, 1996**

4

RIFS and none are planned. He noted that RIFs are expensive and demoralizing to staff. He said that further cuts in Federal discretionary spending programs, such as the NRC, were likely and that possible reductions of 4%-5% each year for the next seven years would result in about a 30% reduction in the NRC by year 2002. He discussed changes in operations that are necessitated by these decreases, including constricted oversight. In addition, items that ACNW recommends be done may not be possible given these budget constraints.

Mr. Taylor also discussed the report of the Advisory Committee for External Regulation of DOE Nuclear Safety, which was issued on the previous Friday, January 19, 1996. He noted that this Advisory Committee recommended that DOE be regulated externally either by the NRC or the Defense Nuclear Facilities Safety Board (DNFSB). The two co-Chairs of the committee, in a separate report to Secretary O'Leary, recommended that NRC be the regulatory agency for DOE. The final decision will be made after a task force headed by Tom Grumbly, DOE, makes recommendations to the Secretary on March 20, 1996. Mr. Taylor indicated that NRC may have some input to that task force. A DOE implementation plan is due in May. Mr. Taylor said that such an undertaking for the NRC would be massive and would require several necessary actions. One, it would have to entail a gradual approach following a prioritization of efforts and facilities.

Mr. Taylor said that NRC oversight of the U.S. Enrichment Corporation (USEC) facilities is providing some preliminary experience in this type of activity. This included a need for rulemaking and the initial rejection of the license application (LA) based upon health and safety issues. He said that the staff knew what was needed, has interacted and worked with USEC personnel, and that the LA revisions are on target. He said that the effort is something of a demonstration of this type of regulatory activity, because the facility has been in operation for more than 40 years. The oversight effort is very challenging because the facility is not starting

from the ground up. Mr. Taylor also discussed the oversight of the vitrification program and development of facilities for the Hanford Tanks waste. This is currently being bid by commercial entities. It is a formidable task for licensing and safely handling that volume of waste. Other possible areas of NRC oversight of DOE include weapons Pu disposition, tritium production, possibly at commercial reactors. There are a large number of issues, including non-technical issues, that need to be resolved.

Dr. Garrick asked what pattern the agency might follow in beginning regulatory oversight of DOE. For example, it might be done in a piece-wise fashion with NRC overseeing things like vitrification facilities and clean-up of the high-level waste tanks, while other aspects are taken by other agencies. Mr. Taylor said that the approach would have to be incremental with a focus on the most important public and worker safety items. The NRC would also need appropriate financial support from the administration, since the agency recovers all of its costs through licensing fees, except from the HLW fund. Dr. Pomeroy voiced concern that the agency may be asked to take on additional responsibilities without receiving additional appropriations. He also noted that such new responsibilities would be a tremendous opportunity for the NRC. Mr. Taylor said it would be a huge change, a watershed event in the NRC. Deputy Executive Director for Operations, H. Thompson, added that the agency position is that any new responsibilities overseeing DOE should not impact ongoing missions to protect public health and safety from the reactor programs or other areas that NRC licenses. Mr. Taylor added that NRC does not want to see any type of commercial reactor accident or large radiological release that provide a threat to public health and safety. NRC must not lose sight of its basic mission. The specific DOE activities that the report said were not to be included in external regulation, such as naval reactors and weapons production was discussed.

Mr. Taylor also discussed a number of other issues. The strategic assessment and rebaselining Phase 1 effort is nearing completion. The effect of the 50% budget reductions in the High-Level Waste Repository licensing program. The request was for \$22 million and the appropriation was \$11 million. He stated that by using carryover funds, the program is funded at \$17 million for FY 1996, but that the agency will not be able to continue using carryover funds next fiscal year. The agency has requested a \$3 million increase for FY 1997 and must receive an increase otherwise the HLW program will not be able to continue at current levels of activities. Mr. Thompson said that with changes in the DOE program it is important for NRC to get a better picture of the waste isolation strategy, and where NRC's key technical issues relate to DOE's waste isolation efforts. He felt that these are important areas and requested that ACNW provide its views on whether the NRC staff has identified the right issues and is looking at the right areas. He noted that Dan Dreyfus, Office of Civilian Radioactive Waste at DOE, would brief the Commission the following week.

Mr. Taylor also stated that NRC activities with regard to dry storage of spent fuel, cask type applications, multipurpose canisters, and the spent fuel projects office were all important areas for which agency activities will increase in the future. He specifically discussed the need for a "quality" dry cask product to preclude contentious issues with respect to design and fabrication. Mr. Taylor also noted the recent comments to Chairman Jackson by ACNW on the LLW program and said that it is a program that deserves the attention of the Commission. He said that ACNW raised very important questions that have to have the Commission's involvement in terms of the future direction of the low-level waste capabilities. He also discussed the ongoing NRC actions with respect to the disposition of baghouse dust, including the Federal Register Notice and press release, and continuing interactions with agreement states concerning the control of devices.

**Minutes
81st ACNW Meeting
January 24-26, 1996**

7

A series of interrogatories from the Committee to Mr. Taylor and Mr. Thompson followed. Mr. Thompson discussed ongoing NRC activities with respect to the revision of the standards for HLW disposal at Yucca Mountain by the Environmental Protection Agency (EPA). Continued interactions also include a request by DOE for NRC to license Three Mile Island spent fuel storage in Idaho. Mr. Taylor also discussed the Ahearne letter to Secretary O'Leary concerning potential NRC regulation of DOE facilities. Dr. Garrick asked about the relative roles of DOE and NRC and whether NRC should take a proactive stance. Mr. Taylor replied that NRC is not actively seeking a role in external regulation of DOE, and also there are a variety of things that need to be considered in any decision, including: legal, policy, and resource issues. He noted Secretary O'Leary's desire for external regulation and also that Congressional action will be required to modify the Atomic Energy Act and other legislation if the decision is made to have NRC regulate DOE nuclear safety. Dr. Hinze asked about the position of DOE with respect to a new HLW standard and regulation. Mr. Thompson replied that the staff is developing a regulatory approach in parallel with DOE and EPA. He discussed the hope that the standards and regulations will allow a focus on the key technical issues. In response to Dr. Pomeroy's question regarding the length of time to complete a HLW rulemaking effort, Mr. Thompson noted that staff is moving expeditiously and that the typical time is 2 years. There was also some discussion of the process by which ACNW interacts with the Commission and the EDO's Office. Dr. Garrick thanked the EDO for his candid comments about the fiscal climate and discussed the need for a decision-making process to address the most important issues. Mr. Taylor replied that the NRC must react to safety questions first, that he is first a safety official, then a financial official. He noted that he is briefed daily on safety issues and that NRC's first mission is safety. The NRC's concern is with the risk associated with operating nuclear reactors.

Mr. Thompson discussed how the NRC is always reevaluating the way it carries out its safety mission. Some recent changes include reducing the inspection load at plants that are good performers. Mr. Taylor added that they are reducing inspection logs, but that the presence of resident inspectors at reactors will continue. He was also happy to say that the industry is performing far better than five years ago, and far, far better than ten years ago.

III. Design Basis Events (DBE) for the Geologic Repository Operations Area (GROA)
(Open)

[Note: Mr. Howard J. Larson was the Designated Federal Official for this portion of the meeting.]

Dr. Pomeroy noted that the ACNW had commented on the draft DBE rule earlier and that during this session the Committee would be updated on the comments received by the staff as it finalized its proposed rulemaking in this area. He then introduced Mr. Richard W. Weller, NMSS, who provided a brief background and history for this rulemaking effort.

Mr. Weller stated that this proposed rulemaking was in response to an April 1990, DOE Petition for Rulemaking to address what the Department had identified as Part 60 deficiencies. As proposed, the rule:

1. Agreed with the DOE concept for accident dose limit at the boundary of the "preclosure controlled area" (5 rem TEDE),
2. Agreed with the DOE proposal to delete the "at all times" phrase from Part 60.111(a) to clarify the intent of that performance objective,

3. Provided a modified definition of "Important to Safety", though not as suggested by DOE. (DOE had focussed its comment on public safety, whereas the staff believed worker safety of equal import),
4. Provided new definitions for "Preclosure Controlled Area," "Design Bases," and "Design Basis Events," and
5. In general, provided for greater consistency with Part 72. (Both this, and the preceding definitions, were part of the current overall agency effort to harmonize its regulations.)

Dr. Garrick asked whether the staff had missed an opportunity to utilize risk perspectives in this proposed rule and was informed by Mr. Weller that he would expect that DOE would use both probabilistic and deterministic scenarios. Dr. Garrick further noted that the lack of numbers in the proposed rule could perhaps cause license applicants to believe that the NRC is not really serious about adopting a risk-based perspective.

Dr. Hinze asked whether this rule change, if adopted, would still be applicable should Congress legislate that Yucca Mountain was to become a Monitored Retreivable Storage (MRS). Dr. Michael Bell, NMSS, replied affirmatively, indicating that one of the advantages in "harmonized" documents such as this, would be having similar definitions in both Parts 60 and 72. He believed the resultant regulations to be applicable to both the surface facilities for an interim storage facility and for the GROA.

The current staff schedule is to provide the final proposed rulemaking document to the Commission by the end of February 1996, with the objective of obtaining Commission approval for the final rule by April 1996.

The Committee thanked the speakers, stating that it would consider the remarks made during the presentation as to whether it needed to provide further written comments.

IV. Technical Training Center (TTC) Programs

[Note: Ms. Lynn G. Deering was the Designated Federal Official for this portion of the meeting.]

Members of the staff from the Office for Analysis and Evaluation of Operational Data (AEOD) presented an overview of the NRC Technical Training Program (TTP). The AEOD staff presented information on the following topics:

- Overview of the Technical Training Program, including Mission
- Technical Training Resources
- Methods of Providing Technical Training
- Staff Qualifications and Training Programs
- Materials Radiation Specialist Inspector
- Technical Training Course Trends for Reactor Technology and Specialized Technical Training
- Technical Training Curriculum Areas
- Reactor Technology Training
- PRA Training

- **Engineering Support Training**
- **Radiation Protection Training**
- **Fuel Cycle Training**
- **Safeguards Training**
- **Regulatory Skills Training**
- **Modifications to Course Curriculum**
- **New PRA**
- **Other Initiatives**

Highlights from this briefing included:

- **The Technical Training Program is organizationally part of Headquarters, but located in Atlanta.**
- **The training budget includes \$2.6 million this year for Reactor Technology, and about \$1.0 million for Specialized Technical Training.**
- **Methods of providing training include: customized courses taught by in-house experts, workshops using in-house experts, customized courses using contractors and other agencies, and individual training through universities and industry.**
- **Currently capacity for Reactor Technology Training is not being utilized.**
- **Technology Curriculum Areas include Reactor Technology, PRA, Engineering Support, Radiation Protection, Fuel Cycle, Safeguards, and Regulatory Skills.**

- New PRA initiatives include special PRA Presentations, thus far to include a course on HLW Performance Assessment Techniques, and a Seminar on Poison and Binomial Updating., Potential PRA courses for NMSS include Probability and Statistics for Performance Assessment, Monte Carlo Analysis, Seminar on Regression Theory and Applications.
- Included among the new initiatives is Radiological Surveys in Support of Decommissioning. The AEOD staff recognized the need for training on Monitored Retrievable Storage, and Dry Cask Storage.

The staff summarized the briefing with an invitation to visit the Center and attend courses offered in radiation protection and waste. They indicated that they would appreciate ACNW interest and comments, and would like to schedule follow-on briefings with the ACNW. The Committee emphasized its interest in a continued dialogue on programs designed to support NMSS.

V. Site Decommissioning Management Plan (SDMP) (Open)

[Note: Mr. Howard J. Larson was the Designated Federal Official for this portion of the meeting].

Dr. Pomeroy introduced this topic, indicating that the Committee had an interest in the techniques used by the staff in its performance assessment evaluations of sites on the agency's Site Decommissioning Management Plan (SDMP). The presentation at this meeting would be the first such SDMP facility evaluation provided to the ACNW.

Dr. Pomeroy next introduced Mr. M. Thaggard, NMSS, who discussed the Shieldalloy facility, noting that the site was located in Cambridge, Ohio - some 80 miles east of Columbus. The site, which originally was owned by the Vanadium Corporation of America, commenced production in 1953. In 1967 it merged with Foote Mineral Corporation and in 1973 it ceased using licensable material (niobium). In 1975 the operating license was allowed to expire and was not renewed. In 1987 the Shieldalloy Metallurgical Corporation took over operation and in 1988 decommissioning work began.

The waste volume of contaminated material at the site is ~6.96 million cubic feet and is contained in two piles (with the west pile covering ~8 acres and the east pile covering ~2 acres).

Mr. Thaggard then proceeded to discuss the concentration of radionuclides, the site layout, and various site cross-sections of value in understanding site geology. He indicated that the licensee had proposed to stabilize the material on-site and cap the two piles. Eight alternatives were evaluated by the staff (of which two were declared infeasible).

The general strategy utilized in the performance assessment was to:

1. consider only post-remediation (long-term impacts),
2. limit the assessment period for 1000 years,
3. evaluate only human impacts,
4. evaluate the impacts from both radionuclides and metals,

5. utilize the insights developed by Sandia National Laboratories (Sandia) and the NRC from recent performance assessment (PA) work, and
6. utilize a deterministic analysis since the need for expedited analyses precluded sufficient time to develop an automatic system code.

A discussion of the various scenarios; conceptual air, ground water and surface water models; source term estimation and concentrations at receptor locations, was next presented. Among the lessons learned from this effort was that the performance assessment model developed for LLW is amendable for helping with the decisions for the disposition of SDMP sites (although it will probably be another year before a code is developed), and, insofar as the Shieldalloy site, it may be possible to demonstrate the acceptability of on-site disposal.

The Committee asked several questions but was principally interested in why the code discussed in the Branch Technical Position for LLW PA could not be used. It was explained that each SDMP site was different and that the code development had centered around the concept of a typical LLW disposal facility, not the atypical facilities in the SDMP. The staff noted that it hoped that the current model and code work underway by Sandia would result in a more adaptable version by the end of the year.

The Committee thanked the staff for its presentation and noted its advocacy of the agency's avowed risk-based regulation position. It also indicated its intention to continue to closely follow progress made in the LLW PA area and its application to the SDMP sites.

VI. Residual Contamination Background Level Determination (Open)

[Note: Mr. Howard J. Larson was the Designated Federal Official for this portion of the meeting.]

Dr. Steindler introduced Dr. John Glenn, RES, who indicated that he would first discuss a January 16-18, 1996, table-top exercise for a thorium processing facility, after which he would turn the presentation over to Mr. George Powers, RES, who would discuss a recently conducted demonstration survey of a uranium facility with surface soil contamination.

Dr. Glenn stated that the tabletop exercise, while involving real data, did not utilize data collected using the guidance in NUREGs 1505, 1506 or 1507. The purpose of the exercise was to test the decision-making process rather than any specific detection capability. After discussing some of the insights gained, he then discussed several (9) implementation issues, which were perceived as covering most of the implementation issues likely to be associated with such sites.

The site used for the exercise was a severely disturbed site which had an old refinery plus a uranium-thorium processing capability. The background level variation was minimal and was an order of magnitude too low to scan. Thus, although not perhaps a "typical" site, it was a good one from the perspective that it "brought home" quite effectively the difficulty in finding a really appropriate background reference site. Dr. Glenn also noted that while thorium contamination is relatively easy to measure, uranium contamination is not.

Mr. G. Powers next discussed the test conducted to demonstrate that the 15 mrem/y criteria is detectable at a site contaminated with uranium in the presence of a variable background. He discussed the site characteristics, the limited scoping survey, the challenges presented by the site, and selected survey implementation issues. The final conclusion was that while the site did contain residual radioactivity above background, it did not contain residual activity above the decommissioning criteria.

Dr. Steindler next introduced Mr. Anthony Thompson, an attorney with Shaw, Pittman, Potts and Trowbridge, who was representing the National Mining Association (NMA). Mr. Thompson discussed particularly the impact that an interpretation of the rule as currently proposed could have on the viability of in-situ uranium mining, a major concern of the NMA's constituency. He discussed the wording the NMA has proposed to the staff which requests that the proposed criteria only apply to the decommissioning of a facility but not to the disposal of the U mill tailings or to the soil cleanup resulting from the bleed off of excess water in the processing circuit.

Dr. Steindler also noted the receipt of a letter from the Nuclear Energy Institute (NEI) which commented that "As a minimum we suggest that the rule not be finalized before a practical way of guiding decontamination and assessing compliance with the rule is demonstrated". He asked the NEI representative at the meeting (Ms. L. Hendricks) whether further comment was desired. She stated that NEI would prefer to see a more generically applicable rule since having each U- and/or Th-contaminated site prepare and implement its own Environmental Impact Statement could result in very expensive and protracted decontamination operations. Dr. Steindler noted that whether or not the system is amenable to a generic analysis is a real issue.

After noting that the Committee intends to follow this topic and will continue to be most interested in the final staff guidance, Chairman Pomeroy closed the session.

VII. Meeting with the Acting Director, Division of Waste Management, NMSS

[Richard K. Major was the Designated Federal Official for this portion of the meeting.]

Ms. Margaret Federline, Acting Director, Division of Waste Management, discussed a number of items of current interest with the Committee. She began by discussing a recent reorganization of the division. Reductions in the High-Level Waste program have forced staff cuts; although these people have been relocated in the agency. The division is being streamlined. The number of matrix activities have been reduced, and so have the number of branches in the division. There are now three branches.

Ms. Federline shared some of the details from a recent NRC/DOE management meeting that took place on January 19, 1996. The NRC staff has proposed an issue resolution process to DOE. The staff will brief the ACNW on this process in March of 1996. DOE is focussed on their viability assessment. The intent is to come to a decision on the suitability of the Yucca Mountain site for waste disposal in the face of budget constraints. In addition, the number of NRC/DOE interactions will be reduced. There will be increased use of teleconferencing and videoconferencing. Each meeting will have clear objections that must be met by the end of the meeting.

Dr. Michael Bell, Chief, Engineering and Geosciences Branch, discussed DOE's issue resolution process. The staff will be using tools such as issue resolution reports and preliminary safety evaluation reports to highlight differences between DOE and NRC. Focus will be placed on

issues in need of resolution. A course towards resolution will be provided. This process will parallel the reactor licensing process of the Agency where open issues and confirmatory items are tracked and resolved.

The issue resolution process will allow the NRC to comment on the viability assessment. Should Congress ask the Agency for its views on the credibility of the viability assessment, it will be in a position to fully respond in a quantitative manner.

Dr. Bell gave an update on DOE's progress at the Yucca Mountain site. The tunnel-boring machine is two and a half miles into the main drift of the potential repository. This is a full mile ahead of their schedule. Work has begun on the construction of the thermal test alcove. The tunnel-boring machine is expected to reach the Ghost Dance Fault in the next week.

VIII. Insights Into High-Level Waste (HLW) Source Term and Natural Analog

[Ms. Lynn G. Deering was the Designated Federal Official for this portion of the meeting.]

Dr. Rodney Ewing, ACNW consultant introduced himself as a geologist and a materials scientist. He presented his views on using mineralogy and materials science concepts to evaluate the long-term durability of waste form materials.

Dr. Ewing presented a case for why he believes that emphasis is better placed on evaluating the containment capability of the materials science portion of the problem rather than on the geology. He outlined his concern that modeling geology allows for decay, dilution, and retardation but seldom considers processes that reconcentrate nuclides, which can be important

when dealing with fissile materials. He noted that the models used to evaluate the geosphere are boundary-sensitive, thus are dependent on assumptions such as climate. He proposed that modeling the physics and chemistry of a waste form is easier than modeling groundwater flow and transport, is more easily validated, and can be performed with greater confidence. He added that natural analog can be used to study long-term behavior of waste forms because many materials in nature have been corroded.

Dr. Ewing discussed several examples of how materials science and natural analog can be used to increase confidence and reduce uncertainty in looking at the corrosion products of UO_2 . He presented an approach that relies on using uranyl sheet anion topologies to reduce a possible 105 different sheet structures to 26 nets. From here one can calculate the thermodynamic stability at the end members of sheet structures, and bound the values for the thermodynamic parameters of the products, thereby combining material science with knowledge of long-term durability of analog phases.

Dr. Ewing then discussed natural analog. He described a project at the Oklo natural analog at Gabon, Africa, where many small-scale, natural reactors exist in a uranium deposit, all in different geochemical states. The project looks at uraninite as an analog for spent nuclear fuel. It involves looking at many different stages of corrosion of actinides under reducing conditions, and examining uraninite transport and its interaction with clays. He described an example of performing experiments using the natural materials to bound the effects of radiation damage on certain ceramic waste forms, i.e., how materials amorphize as a function of temperature.

Dr. Ewing concluded his talk after responding to several questions from the Committee on topics, including his insights on the likelihood of reconstitution of radionuclides, reasonable time frame of performance, and use of natural analog to understand long-term behavior of glass.

IX. EXECUTIVE SESSION (Open/Closed)

[Note: Mr. Richard K. Major was the Designated Federal Official for this portion of the meeting.]

A. Future Working Group Topics (Open)

The members discussed possible working groups. It was agreed that A. Campbell would outline a working group on the Issue of Regulatory Time Frame of Concern, which is scheduled for March 27, 1996.

B. Update ACNW Priorities/Task Action Plans (Open)

The Committee discussed the current list of priority issues and whether to add source term as a new item. The members agreed to add source term to the list, and to include defense waste with this item. The members also agreed to add the concept of incremental risk. J. Larkins agreed to bring a description of these two items with him for discussion during his next visit with Chairman Jackson. It was agreed that the descriptions of the two items needed to be shortened to be consistent with the other priority items. L. Deering was assigned this task.

Dr. Pomeroy asked members and staff to look at the larger list of priority issues for other possible additions. He indicated he wanted to keep the list to no more than 12 items.

Dr. Pomeroy requested that each member choose at least one priority topic from the current list and work with the ACNW staff to develop a Task Action Plan.

C. Future Meeting Agenda

Appendix IV summarizes the proposed items endorsed by the Committee for the 82nd ACNW Meeting, Rockville, Maryland, March 27-29, 1996, and future Working Group meetings.

The meeting was adjourned at 2:30 p.m., Friday, January 26, 1996.

APPENDICES

- I. Federal Register Notice
- II. Meeting Schedule and Outline
- III. Meeting Attendees
- IV. Future Agenda and Working Group Activities
- V. List of Documents Provided to the Committee

Neck Plant to avoid loss of full-core-discharge capability. CYAPCO evaluated spent fuel storage alternatives that have been licensed by the NRC and that are currently feasible for use at the Haddam Neck site. The result of this evaluation is that a rerack of the spent fuel pool is the most cost-effective alternative. This TS change is necessary for support of the rerack of the Haddam Neck spent fuel pool.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed revision to the TS. The staff has concluded the following for the various design considerations of the rerack of the Haddam Neck spent fuel pool (SFP):

1. The staff finds the criticality aspects of the proposed increase in the storage capacity of the Haddam Neck spent fuel pool storage racks are acceptable and meet the requirements of General Design Criterion 62 for the prevention of criticality in fuel storage and handling.

2. The staff has reviewed the licensee's rationale for SFP cooling, performed confirmatory decay heat load calculations, reviewed the effects of SFP boiling, and the heavy load capability of the SFP building cranes, and concludes that the above issues relating to the increase in the SFP storage capacity from 1168 to 1480 fuel assemblies are acceptable.

3. The staff concludes that the materials selected for the Haddam Neck Plant spent fuel rack modifications have been carefully and satisfactorily thought out and no occurrence of degradation of the material selected for the rack modification is expected. The racks are constructed from a type 304 stainless steel and fabricated according to an approved ASME specification. The choice of Boral as a poison material will ensure reliable criticality control. The design of the fuel racks accounts for the possibility of hydrogen production by corrosion of Boral and provides ventilation outlets that would relieve hydrogen pressure which otherwise could cause deformation of the rack cells.

4. The Boral Surveillance Program will provide a reliable method of assessing the potential degradation of Boral panels which are exposed to radiation in the spent fuel area over time. The staff concludes that the licensee's selection of structural, welding and poison materials meets current industry and regulatory standards. These materials are acceptable for construction of the new rack modules because they meet the

requirements of General Design Criterion 62, as it applies to providing physical systems for prevention of criticality in fuel storage.

5. The staff concludes that CYAPCO's structural analysis and design of the spent fuel rack modules and the spent fuel pool structure are adequate to withstand the effects of the required loads. The analysis and design are in compliance with the current licensing basis set forth in the Updated Final Safety Analysis Report and applicable provisions of the Standard Review Plan, and are therefore acceptable.

The TS change will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with this proposed TS amendment.

With regard to potential nonradiological impacts, the proposed amendment involves features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

Alternatives to the Proposed Action

Since the Commission has concluded there is no measurable environmental impact associated with the proposed amendment, any alternatives with equal or greater environmental impact need not be evaluated. The principal alternative to the amendment would be to deny the amendment request. Such action would not enhance the protection of the environment and would result in unjustified cost to the licensee.

Alternative Use of Resources

This action does not involve the use of resources not considered previously in the Final Environmental Statement for the Haddam Neck Plant.

Agencies and Persons Consulted

In accordance with its stated policy, on January 5, 1996, the staff consulted with the Connecticut State official, Alan B. Wang of the U. S. Nuclear Regulatory Commission, regarding the environmental impact of the proposed action. The State official had no comments.

Finding of No Significant Impact

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed amendment.

For further details with respect to this proposed action, see the licensee's letter dated March 31, 1995, as supplemented by letter dated November 14, 1995, which are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Russell Library, 123 Broad Street, Middletown Connecticut.

Dated at Rockville, Maryland, this 11th day of January 1996.

For the Nuclear Regulatory Commission,
Phillip McKee,
Director, Project Directorate I-3, Division of
Reactor Projects—VII, Office of Nuclear
Reactor Regulation.
[FR Doc. 96-702 Filed 1-19-96; 8:45 am]
BILLING CODE 7890-01-9

Advisory Committee on Nuclear Waste; Notice of Meeting

The Advisory Committee on Nuclear Waste (ACNW) will hold its 81st meeting on January 24, 25 and 26, 1996, Room T-2B3, at 11545 Rockville Pike, Rockville, Maryland. The date of this meeting was previously published in the Federal Register on Wednesday, December 6, 1995 (60 FR 62485).

The entire meeting will be open to public attendance.

The agenda for this meeting shall be as follows:

Wednesday, January 24, 1996—8:30 A.M. until 6:00 P.M.

Thursday, January 25, 1996—8:30 A.M. until 6:00 P.M.

Friday, January 26, 1996—8:30 A.M. until 4:00 P.M.

During this meeting the Committee plans to consider the following:

A. *Design Bases Events for Geologic Repository Operations Area*—The Committee will hear a presentation by the staff on the proposed resolution of public comments on changes to Part 60 relevant to design basis events for a proposed geologic repository operations area.

B. *Meeting with the Executive Director for Operations*—The Committee will meet with the Executive Director for Operations to discuss items of current interest, e.g., status of the Phase 1 rebaselining effort, anticipated impact of

resource limitations, staff interactions with the ACNW, and recent Committee reports.

C. Technical Training Center Developments—The Committee will hear a presentation by representatives of the Technical Training Center (TTC) on TTC programs relevant to the Committee's areas of priority.

D. Facility Decommissioning—The Committee will hear a presentation by the NRC staff on the current disposition of a facility listed on the Site Decommissioning Management Plan (SDMP). A proposal for permanent on-site disposal, as well as performance assessment considerations, are among the relevant issues to be discussed.

E. Residual Contamination Background Level Determination—The Committee will hear a report from the Office of Research on its recent field study demonstration project intended to verify the efficacy of the background level determination process proposed in the draft Residual Contamination Level for Decommissioning rule.

F. High-Level Waste Source Term—The Committee will hear a consultant presentation on a high-level waste source term.

G. Meeting with the Director, NRC's Division of Waste Management, Office of Nuclear Materials Safety and Safeguards—The Director will discuss items of current interest related to Division of Waste Management programs. Among the topics which may be discussed are: A proposed high-level waste issue resolution process, an overview of a recent decommissioning exercise, and current activities related to the use of expert judgment in the licensing process.

H. Committee Activities/Future Agenda—The Committee will consider topics proposed for future consideration by the full Committee and Working Groups. The Committee will also discuss ACNW-related activities of individual members.

I. Miscellaneous—The Committee will discuss miscellaneous matters related to the conduct of Committee activities and organizational activities and complete discussion of matters and specific issues that were not completed during previous meetings, as time and availability of information permit.

Procedures for the conduct of and participation in ACNW meetings were published in the Federal Register on September 27, 1995 (60 FR 49924). In accordance with these procedures, oral or written statements may be presented by members of the public, electronic recordings will be permitted only during those portions of the meeting that are open to the public, and

questions may be asked only by members of the Committee, its consultants, and staff. Persons desiring to make oral statements should notify the Chief, Nuclear Waste Branch, Mr. Richard K. Major, as far in advance as practicable so that appropriate arrangements can be made to allow the necessary time during the meeting for such statements. Use of still, motion picture, and television cameras during this meeting may be limited to selected portions of the meeting as determined by the ACNW Chairman. Information regarding the time to be set aside for this purpose may be obtained by contacting the Chief, Nuclear Waste Branch, prior to the meeting. In view of the possibility that the schedule for ACNW meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with Mr. Major if such rescheduling would result in major inconvenience.

Further information regarding topics to be discussed, whether the meeting has been cancelled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor can be obtained by contacting Mr. Richard K. Major, Chief, Nuclear Waste Branch (telephone 301/415-7366), between 8:00 A.M. and 5:00 P.M. EDT.

ACNW meeting notices, meeting transcripts, and letter reports are now available on FedWorld from the "NRC MAIN MENU." Direct Dial Access number to FedWorld is (800) 303-9672; the local direct dial number is 703-321-3339.

Dated: January 11, 1996.

Andrew L. Bates,
Advisory Committee Management Officer.
[FR Doc. 96-670 Filed 1-19-96; 8:45 am]
BILLING CODE 7550-01-P

Advisory Committee on Reactor Safeguards; Meeting of the Subcommittee on Individual Plant Examinations; Notice of Meeting

The ACRS Subcommittee on Individual Plant Examinations (IPEs) will hold a meeting on January 26, 1996, in Room T-2B1, 11545 Rockville Pike, Rockville, Maryland.

The meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Friday, January 26, 1996—8:30 a.m. until the conclusion of business.

The Subcommittee will discuss the extent to which the current spectrum of IPEs can be used in the regulatory process and other related matters. The

purpose of this meeting is to gather information, analyze relevant issues and facts, and to formulate proposed positions and actions, as appropriate, for deliberation by the full Committee.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Committee. Electronic recordings will be permitted only during those portions of the meeting that are open to the public, and questions may be asked only by members of the Subcommittee, its consultants, and staff. Persons desiring to make oral statements should notify the cognizant ACRS staff engineers named below five days prior to the meeting, if possible, so that appropriate arrangements can be made.

During the initial portion of the meeting, the Subcommittee, along with any of its consultants who may be present, may exchange preliminary views regarding matters to be considered during the balance of the meeting.

The Subcommittee will then hear presentations by and hold discussions with representatives of the NRC staff, its consultants, and other interested persons regarding this review.

Further information regarding topics to be discussed, whether the meeting has been cancelled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor can be obtained by contacting the cognizant ACRS staff engineers, Dr. Medhat El-Zeftawy (telephone 301/415-6889) or Mr. Michael Markley (telephone 301/415-6885) between 7:30 a.m. and 4:15 p.m. (EST). Persons planning to attend this meeting are urged to contact the above named individuals one or two working days prior to the meeting to be advised of any potential changes in the proposed agenda, etc., that may have occurred.

Dated: January 11, 1996.

Sam Duraiswamy,
Chief, Nuclear Reactors Branch.
[FR Doc. 96-672 Filed 1-19-96; 8:45 am]
BILLING CODE 7550-01-P

Disposition of Cesium-137 Contaminated Emission Control Dust and Other Incident-Related Material; Proposed Staff Technical Position

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice: Proposed Staff Technical Position.



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

Rev. 3: January 23, 1996

SCHEDULE AND OUTLINE FOR DISCUSSION
81ST ACNW MEETING
JANUARY 24-26, 1996
TWO WHITE FLINT NORTH
ROCKVILLE, MARYLAND

Wednesday, January 24, 1996, Two White Flint North, Room T-2 B3,
11545 Rockville Pike, Rockville, MD

- 1) 8:30 - 8:45 A.M. Opening Remarks by the ACNW Chairman
 - 1.1) Opening Statement (PWP/RKM)
 - 1.2) Items of Current Interest (PWP/RKM)
- 2) 8:45 - 9:45 A.M. Meeting with the Executive Director of Operations (Open) (PWP/ACC)

Discussion with the EDO - J. Taylor

 - 2.1) Possible topics include a discussion of the status of the Phase 1 rebaselining effort, agency resource limitations, staff interactions with the ACNW, and recent Committee reports

9:49 10:03
9:45 - ~~10:00~~ A.M. * * * BREAK * * *
- 3) ~~10:00 - 11:00~~ A.M. Design Basis Events (DBE) for the Geologic Repository Operations Area (GROA) (Open) (MJS/HJL)

10:03 10:53

 - 3.1) Presentation by the staff on the proposed changes to Part 60 resulting from resolution of public comments on the DBE's for the GROA
- 4) 11:00 - ~~Noon~~ ^{12:05 PM} Preparation of ACNW Reports (Open)

Discuss possible proposed reports on:

 - 4.1) DBEs for GROA (MJS/HJL)
 - 4.2) NAS Report on Technical Bases for Yucca Mountain Standards (TBYMS) (BJG/HJL)
 - 4.3) Key Technical Uncertainties (KTUs) (WJH/ACC)
 - 4.4) Use of Expert Elicitation (BJG/ACC)
 - 4.5) Elements of a LLW Program (MJS/HJL)

81st ACNW Agenda

2

12:05 1:05

~~12:00 - 1:00~~ P.M. * * * L U N C H * * *

1:05 - 2:45

- 5) ~~1:00 - 2:30~~ P.M. Technical Training Center (TTC) Programs
(Open) (PWP/LGD)
5.1 Presentation by representatives of the TTC on current programs relevant to the Committee's areas of responsibility.

2:45 2:55

~~2:30 - 2:45~~ P.M.

* * * BREAK * * *

2:55 3:58

- 6) ~~2:45 - 4:15~~ P.M. Site Decommissioning Management Plan
(SDMP) (Open) (PWP/HJL)
6.1) Presentation by the staff on the recent decommissioning activities at the Shieldalloy facility. Included will be a discussion of the facility's past history, licensee proposed action, initial staff evaluation of alternatives, and lessons learned that may bear on future similar activities.

3:58 - 4:05

BREAK

- 7) ~~4:15 - 6:00~~ P.M.
4:05 Preparation of ACNW Reports (Open)
Continues discussion of proposed ACNW reports listed under item 4 above, plus possible reports on:
7.1) Technical Training Center programs (PWP/LGD)
7.2) Site Decommissioning Management Plan PA (PWP/HJL)

6:00 P.M.

* * * RECESS * * *

Thursday, January 25, 1996, Two White Flint North, Room T-2 B3,
11545 Rockville Pike, Rockville, Md

- 8) ~~8:30~~ ^{8:35} - 8:45 A.M. Opening Remarks by ACNW Chairman (Open)
- 9) 8:45 - 12:00 A.M. Preparation of ACNW Reports (Open)
Continue discussion/preparation of ACNW reports listed above.
Recess
- 10:05 - NOON
- Noon - ~~1:00~~ P.M.
1:05 * * * LUNCH * * *
- 10) ~~1:00 - 2:45~~ P.M.
1:05 - 2:54 Committee Activities/Future Agenda
(Open) (PWP/RKM)
10.1) Set Agenda for 82nd Full Committee Meeting, March 20-22, 1996
10.2) Review Items for the Out Months

81st ACNW Agenda

3

- 10.3) Future Working Group Topics
- 10.4) Update ACNW Priorities/Task Action Plans
- 10.5) Finalize Joint working Group Meeting with ACRS
- 10.6) Proposed Agenda Items for ACNW from EDO (Blaha) List of Future Topics
- 10.7) Response to RSK Letter
- 10.8) Ratification of Bylaws
- 10.9) Resolve Yucca Mountain Visit (May Las Vegas Visit)
- 10.10) Other Outside Meetings Members will attend
- 10.11) Reconcile EDO Responses to Committee Letters

- 2:54
~~2:45~~ - 3:00 P.M.
- 11) 3:00 - ^{4:25}~~4:15~~ A.M.

* * * BREAK * * *

Residual Contamination Background Level Determination (Open) (MJS/HJL)

- 11.1) Presentation by the staff on its recent field study demonstration project to verify the efficacy of the background radiation determination process proposed in the draft Residual Contamination Level for Decommissioning rule

- 4:25 - 4:35
- 12) ~~4:15~~ - 6:00 P.M.
4:35

BREAK

- Preparation of ACNW Reports (Open)
Continue discussion/preparation of ACNW reports listed above, plus:
- 12.1) Residual Contamination Level Background Determination Demonstration

6:00 P.M.

* * * RECESS * * *

Friday, January 26, 1996, Two White Flint North, Room T-2 B1*, 11545 Rockville Pike, Rockville, Md.

- 8:00
- 13) ~~8:30~~ - 8:45 A.M.
- 14) 8:45 - 9:30 A.M.

Opening Remarks by ACNW Chairman (Open)

- Meeting with the Director, Division of Waste Management, NMSS (Open) (PWP/RKM)
A question and answer session with the Acting Director - Margaret Federline.
Topics to be discussed:
- 14.1) HLW Issue Resolution Process
 - 14.2) Overview of Decommissioning Exercise

81st ACNW Agenda

4

14.3) HLW Management Interactions with DOE

14.4) Recent Expert Judgment related activities

~~9:30 - 9:45 A.M.~~

~~*** BREAK ***~~

15) ~~9:45 - 11:30~~
~~9:30 - 10:30~~

Insights into High-Level (HLW) Source Term and Natural Analogs (Open)
(WJH/LGD)

15.1) The Committee will hear a presentation by Dr. R. Ewing on natural analogs and a source term for HLW

~~10:30 - 10:45~~

~~BREAK~~

~~11:30 - 12:30 P.M.~~

~~*** LUNCH ***~~

~~10:45 - 12:30~~

16) ~~12:30 - 2:00 P.M.~~

Report on Outside Meetings (Open)
Presentation by Members and Staff of various technical meetings recently attended, such as:

16.1) PSA 5, Korea (BJG)

16.2) January NWTRB (WJH)

16.3) ACRS PRA (ACC)

16.4) Others: Volcanic Hazards (PWP/WJH), AGU (WJH/LGD), Mat'ls Research Society and DOE/LLW Conference (ACC)

Cancelled

17) ~~2:00 - 4:00 P.M.~~

Preparation of ACNW Reports (Open)
Complete preparation and approve proposed ACNW reports listed above

~~2:30~~

~~4:00 P.M.~~

~~*** ADJOURN ***~~

* small conference room

NOTE:

- Presentation time should not exceed 50 percent of the total allocated for a specific item. The remaining 50 percent of the time is reserved for discussion.
- Number of copies of the presentation materials to be provided to the ACNW - 40

APPENDIX III: MEETING ATTENDEES

81ST ACNW MEETING JANUARY 24-26, 1996

<u>ACNW MEMBERS</u>	<u>1st Day</u>	<u>2nd Day</u>	<u>3rd Day</u>
Dr. Paul W. Pomeroy	<u>X</u>	<u>X</u>	<u>X</u>
Dr. William J. Hinze	<u>X</u>	<u>X</u>	<u>X</u>
Dr. B. John Garrick	<u>X</u>	<u>X</u>	<u>X</u>
Dr. Martin J. Steindler		<u>X</u>	<u>X</u>

<u>ACNW STAFF</u>	<u>1st Day</u>	<u>2nd Day</u>	<u>3rd Day</u>
Dr. Andrew Campbell	<u>X</u>	<u>X</u>	<u>X</u>
Ms. Lynn F. Deering	<u>X</u>	<u>X</u>	<u>X</u>
Mr. Howard J. Larson	<u>X</u>	<u>X</u>	<u>X</u>
Mr. Richard K. Major	<u>X</u>	<u>X</u>	<u>X</u>
Dr. John T. Larkins	<u>X</u>	<u>X</u>	<u>X</u>
Dr. Richard P. Savio	<u>X</u>	<u>X</u>	<u>X</u>
Ms. Michele S. Kelton	<u>X</u>	<u>X</u>	<u>X</u>

ATTENDEES FROM THE NUCLEAR REGULATORY COMMISSION

January 24, 1996

B. Ibrahim	NMSS
R. Bangart	OSP
E. O'Donnell	RES
D. Dancer	NMSS
K. Stablein	EDO
M. Bell	NMSS
K. McConnell	NMSS
S. Arndt	AEOD
R. Anderson	AEOD

ATTENDEES FROM THE NUCLEAR REGULATORY COMMISSION (CONT'D)

January 24, 1996 (Cont'd)

P. Knapp	AEOD
J. Firth	NMSS
J. Austin	NMSS
J. Kennedy	NMSS
P. Reed	RES
R. Neel	NMSS

January 25, 1996

R. Johnson	NMSS
K. Stablein	AEOD
B. Meck	RES

January 26, 1996

R. Johnson	NMSS
E. O'Donnell	RES
L. Kovach	RES

ATTENDEES FROM OTHER AGENCIES AND GENERAL PUBLIC

January 24, 1996

R. Wallace, Jr.	USGS
J. Russell	CNWRA
J. York	Weston
S. Hanauer	DOE
R. Lanza	ICF Kaiser
G. Roseboom	USGS (retired)
R. Andersen	NEI
M. Barenti	NWW
C. Scott Eves	Shieldalloy Metallurgical Inc.
C. Berger	IEM

ATTENDEES FROM OTHER AGENCIES AND GENERAL PUBLIC (CONT'D)

January 25, 1996

F. Galpin	Rogers & Assoc. Eng.
T. Sutter	Bechtel
F. Killar, Jr.	NEI
L. Neal	NEI
L. Hendricks	NEI
A. Thompson	Shaw, Pittman (for NMA)

January 26, 1996

R. Wallace, Jr.	USGS
R. Ewing	UNM
J. York	Weston
D. Fenster	DOE/M&O/WCFS
F. Rodgers	DOE
J. Russell	CNWRA
R. Andersen	NEI
S. Hanauer	DOE
B. Leslie	EPA
C. Henkel	NEI
G. Roseboom	USGS (retired)

APPENDIX IV: FUTURE AGENDA

The Committee agreed to consider the following during the 82nd ACNW Meeting, March 27-29, 1996:

- **Time Frames for Regulatory Concern** - The Committee will review time frames for regulatory compliance in the disposal of high-and low-level radioactive waste.
- **NRC Staff Issue Resolution Process** - The Committee will review various NRC staff initiatives that will be used to bring about closure on issues raised in its review of DOE's high-level waste program.
- **Meeting with the Director, NRC's Division of Waste Management, Office of Nuclear Materials Safety and Safeguards** - The Director will discuss items of current interest related to the Division of Waste Management programs which may include: progress at the Yucca Mountain site, comments on DOE's Total System Performance Assessment, and a draft technical position on expert elicitation.
- **Alternatives for NRC's LLW Program** - The Committee will review the NRC staff's final position on alternatives for NRC's low-level waste program.
- **Joint ACRS/ACNW Subcommittee Meeting on Spent Fuel Storage** - The Committee will hear a report from two of its members who participated in the subcommittee meeting.
- **Committee Activities/Future Agenda** - The Committee will consider topics proposed for future consideration by the full Committee and Working Groups. The Committee will discuss ACNW-related activities of individual members. The Committee will also consider potential new ACNW members.

APPENDIX V
LIST OF DOCUMENTS PROVIDED TO THE COMMITTEE

[Note: Some documents listed below may have been provided or prepared for Committee use only. These documents must be reviewed prior to release to the public.]

MEETING HANDOUTS

AGENDA
ITEM NO.

DOCUMENTS

- 3 Design Basis Events (DBE) for the Geologic Repository Operations Area (GROA)**
- 1. Letter from John F. Ahearne, Advisory Committee on External Regulation of Department of Energy Nuclear Safety, to The Honorable Hazel R. O'Leary, Secretary, U.S. Department of Energy, regarding which agency should be given the responsibility for regulating the safety of DOE facilities, dated January 19, 1995**
 - 2. Letter from Hazel R. O'Leary, Secretary of Energy, to Dr. John F. Ahearne, Lecturer in Public Policy, Duke University and Director of Sigma Xi Center, and Mr. Gerard F. Scannell, President, National Safety Council, commending and thanking the Advisory Committee on External Regulation for meeting its challenge on schedule, dated January 11, 1995**
 - 3. Final Report, Improving Regulation of Safety at DOE Nuclear Facilities, Advisory Committee on External Regulation of Department of Energy Nuclear Safety, dated December 1995**
 - 4. Design Basis Events (DBE) Rulemaking presented by Rick Weller, NMSS [Viewgraphs]**
- 5 Technical Training Center (TTC) Programs**
- 5. NRC Technical Training Program presented by Denwood F. Ross, Kenneth A. Raglin, and Russell L. Anderson, AEOD [Viewgraphs]**
 - 6. Technical Training Division Course Catalog, September 1995**
- 6 Site Decommissioning Management Plan**
- 7. Performance Assessment of Shieldalloy Metallurgical Corporation SDMP Site presented by Mark Thaggard, NMSS [Viewgraphs]**
- 10 Committee Activities/Future Agenda**
- 8. Committee Activities/Future Agenda: Ratification of Bylaws [Handout #1]**

MEETING HANDOUTS

AGENDA
ITEM NO.

DOCUMENTS

10

9. United States Nuclear Waste Technical Review Board, Agenda, Winter Board Meeting January 10-11, 1996 Handouts

11 **Residual Contamination Background Level Determination**

10. Tabletop Exercise for a Thorium Processing Facility presented by John E. Glenn, NMSS [Viewgraphs]
11. Demonstration Survey, Generic Uranium Facility (Survey Unit with Surface Soil Contamination) presented by George E. Powers, NMSS [Viewgraphs]
12. Letter from John F. Schmitt, Nuclear Energy Institute, to Dr. Martin J. Steindler, Chair, ACNW re implementation issues associated with the proposed site cleanup rule dated January 23, 1996
13. Letter from Richard L. Lawson, National Mining Association, to The Honorable Shirley A. Jackson, Chairman, NRC: Proposed Decommissioning Rule dated November 3, 1995
14. Comments on the Nuclear Regulatory Commission's Proposed rule for Radiological Criteria for Decommissioning (59 Fed. Reg. 43,200) prepared by Shaw, Pittman, Potts & Trowbridge, dated January 20, 1996 [Viewgraphs]

14 **Meeting with the Director, Division of Waste Management, NMSS**

15. Organizational Chart, Division of Waste Management, dated December 19, 1995

15 **Insights into High-Level (HLW) Source Term and Natural Analogs**

16. Multibarrier System, presented by Dr. Rodney Ewing [Viewgraphs]

MEETING NOTEBOOK CONTENTS

TAB

NUMBER

DOCUMENTS

1 Opening Remarks by ACNW Chairman

1. Introductory Statement by the ACNW Chairman, dated January 24, 1996
2. Items of Current Interest, undated
3. Introductory Statement by the ACNW Chairman, dated January 26, 1996

2 Meeting with Executive Director for Operations

4. Table of Contents
5. Status Report
6. Remarks by James M. Taylor, Executive Director for Operations, NRC, at the Nuclear Energy Institute, Strategic Issues Advisory Committee, Washington, DC, dated November 9, 1996

3 Design Basis Events - Part 60 - Proposed Changes

7. Table of Contents
8. Status Report
9. Letter from Martin J. Steindler, Chairman, ACNW, to The Honorable Ivan Selin, Chairman, NRC: Draft Notice of Proposed Rulemaking on Design Basis Events for the Geologic Repository Operations Area, dated July 13, 1994
10. Memorandum from James M. Taylor, Executive Director for Operations, NRC, to Martin J. Steindler, Chairman, ACNW: Proposed Rulemaking on Design Basis Events for the Geologic Repository Operations Area, dated September 14, 1994
11. Memorandum from H. J. Larson, Senior Staff Engineer, ACNW, to ACNW Members: Changes to Part 60 Proposed Rule, Design Basis Events, dated November 8, 1995, with Attachments
12. Federal Register Notice, Vol. 60, No. 55, p. 15180, proposed rule, "Disposal of High-Level Radioactive Wastes in Geologic Repositories; Design Basis Events," dated March 22, 1995

MEETING NOTEBOOK CONTENTS

TAB

NUMBER

DOCUMENTS

4.3 Preparation of ACNW Reports

Letter on Vertical Slice Approach

13. Table of Contents
14. Status Report
15. Letter from Joseph J. Holonich, Chief, High-Level Waste and Uranium Recovery Projects Branch, NMSS, to Mr. Ronald A. Milner, Director for Program Management and Integration, Office of Civilian Radioactive Waste Management, DOE: Nuclear Regulatory commission's Vertical Slice Approach, dated September 1, 1995, with Enclosure
16. Strategy for Waste Containment and Isolation for the Yucca Mountain Site, Preliminary YMSCO Review Draft, prepared by TRW Environmental Safety Systems Inc., dated October 9, 1995
17. Advisory Committee on Nuclear Waste, Draft Meeting Minutes, Key Technical Uncertainty Integration and Resolution of Key Technical Issues, 79th ACNW, November 15, 1995 [Prepared for Internal committee Use]
18. Memorandum from Andy Campbell, Senior Staff Scientist, ACNW, to ACNW Members: Meeting Report on NRC-DOE Technical Exchange on Key Issues for a Geological Repository at Yucca Mountain, Video-Conference: Washington, DC and Las Vegas, NV, November 17, 1995, dated December 8, 1995
19. Scope, Significance, and FY 1996 Activities for Key Technical Issues, dated December 7, 1995 [Prepared for Internal Committee Use]
20. Memorandum from Howard J. Larson, ACNW, to ACNW Members: Meeting of NWTRB/NMSS Staff, dated January 5, 1996
21. Repository Program Activities, Margaret Federline, NMSS, dated January 4, 1996 [Viewgraphs]
22. Draft Example for Implementing the Issue Resolution Procedure KTI #3, Ambient Isothermal Groundwater Flow
23. ACNW Letter on the Staff's Presentation on Key Technical Issues, Views from B. John Garrick, ACNW, dated January 3, 1996 [Facsimile]
24. Memo from Martin Steindler, ACNW, to William Hinze, ACNW: Issues Regarding the Vertical Slice Approach, dated January 4, 1996 [Pre-decisional Draft - For Internal ACNW Use Only] [Facsimile]
25. Comments on Vertical Slice/KTI, Draft 0, by L. Deering, ACNW, dated January 15, 1996

MEETING NOTEBOOK CONTENTS

TAB

NUMBER

DOCUMENTS

4.4 Letter on the Draft Branch Technical Position on the Formal Use of Expert Judgment in the High-Level Radioactive Waste Program

- 26. Table of Contents
- 27. Status Report
- 28. Branch Technical Position on the Formal Use of Expert Judgment in the High-Level Radioactive Waste Program, by J. P. Kotra, M.P. Lee, N. A. Eisenberg, NMSS, NRC, and A.R. DeWispelare, CNWRA, Draft Manuscript Completed January 1996
- 29. Memorandum from Bill Hinze, ACNW, to Paul Pomeroy, Chairman, ACNW/NRC: January 10-11, 1996 Nuclear Waste Technical Review Board Meeting, dated January 13, 1996 [Facsimile]

5 Technical Training Center (TTC)

- 30. Table of Contents
- 31. Status Report
- 32. Note from Ken Raglin, AEOD, to L. Deering, ACNW: Technical Training Briefing of ACNW, dated January 12, 1996 [E-mail]

6 Site Decommissioning Management Plan (SDMP)

- 33. Table of Contents
- 34. Status Report
- 35. Memorandum from John C. Hoyle, Secretary, NRC, to James M. Taylor, Executive Director for Operations, NRC: Staff Requirements - Briefing on Site Decommissioning Management Plan (SDMP) Program and Policy Issues, May 19, 1995, dated May 30, 1995
- 36. Letter from Paul W. Pomeroy, Chairman, ACNW, to The Honorable Shirley A. Jackson, Chairman, NRC: Comments on Streamlining the Site Decommissioning Management Plan Program, dated September 28, 1995
- 37. Excerpt from the Minutes of the 76th ACNW Meeting, July 26-28, 1995: NRC Staff Presentation/Update on Site Decommissioning Management Plan (SDMP) Streamlining Activities
- 38. Streamlining NRC Oversight of Decommissioning, Division of Waste Management, NMSS, ACNW Brief, dated July 27, 1995 [Viewgraphs]
- 39. Except, Enclosure B, "Report to Commissioners," December 15, 1995
- 40. Environmental Impact Statement, Decommissioning of the Shieldalloy Metallurgical Corporation, Cambridge, Ohio, Facility, Preliminary Draft, October 30, 1995

MEETING NOTEBOOK CONTENTS

TAB

NUMBER

DOCUMENTS

9 Residual Contamination Background Level Determination

- 41. Table of Contents
- 42. Status Report
- 43. Industry Concerns with NRC's Implementation Guidance Radiological Criteria for Decommissioning, prepared by Lynnette Hendricks, NEI, dated October 24, 1995 [Viewgraphs]
- 44. Letter from Martin J. Steindler, Chairman, ACNW, to The Honorable Ivan Selin, Chairman, NRC: The U.S. EPA Preproposal Draft of 40 CFR Part 193 and the NRC's Proposed Radiological Criteria for Decommissioning, dated April 28, 1995
- 45. Federal Register Notice, Vol. 59 No. 161, p. 43200, Proposed Rule, Radiological Criteria for Decommissioning, dated August 22, 1994
- 46. Memorandum from James M. Taylor, Executive Director for Operations, NRC, to The Commissioners, NRC: Draft Proposed Rule on "Radiological Criteria for Decommissioning," SECY-94-150, dated May 31, 1994
- 47. Memorandum from John C. Hoyle, Acting Secretary, NRC, to James M. Taylor, Executive Director for Operations, NRC: SECY-94-150 - Draft Proposed Rule on "Radiological Criteria for Decommissioning," dated June 30, 1994
- 48. Memorandum from James M. Taylor, Executive Director for Operations, to The Chairman and Commissioners, NRC: Calculations in Support of a 15 MREM/YR Limit for Unrestricted Use, dated June 15, 1994, with Enclosure
- 49. Excerpt from the Minutes of the 78th ACNW Meeting, October 24-26, 1995: Residual Levels for Decontamination
- 50. Memorandum from Martin J. Steindler, ACNW, to Distribution: Items for Consideration by the ACNW, dated January 9, 1996 [Fore Internal ACNW Use Only - Pre-decisional Draft][Facsimile]

11 Committee Activities/Future Agenda

- 51. Table of Contents
- 52. Set Agenda for 82nd ACNW Meeting, March 27-29, 1996
- 53. Review Items for the Out Months
- 54. Future Working Group Topics

MEETING NOTEBOOK CONTENTS

TAB

NUMBER

DOCUMENTS

11.4 Update ACNW Priorities/Task Action Plans

- 55. Table of Contents
- 56. Status Report
- 57. Memorandum from Paul W. Pomeroy, Chairman, ACNW, to Chairman Jackson, NRC: Revision of ACNW Priority Issues, dated December 28, 1995, with Attachment

11.5 Finalize Joint Working Group Meeting with ACRS

- 58. Status Report on Joint ACNW/ACRS Working Group on Spent Fuel Storage and Decommissioning

11.6 Proposed Agenda Items for ACNW from EDO List of Future Topics

- 59. Attachment I from EDO List of Future Topics

11.7 Response to RSK Letter

- 60. Status Report on Response to RSK Letter, dated September 7, 1995

11.8 Ratification of Bylaws

- 61. Status Report on Bylaws
- 62. Memorandum from Martin J. Steindler, ACNW, to Distribution: Comments on the By-Laws Distributed at the 80th ACNW Meeting (Handout 1, Agenda Item 5, From R. Major), dated January 14, 1996 [Facsimile]

11.9 Resolve Yucca Mountain Visit

- 63. Status Report on Yucca Mountain Visit

11.11 Reconcile EDO Responses to Committee Letters

- EDO Response to Committee on Lessons Learned from Ward Valley
- 64. Table of Contents
- 65. Status Report

11.11 Reconcile EDO Responses to Committee Letters

- **EDO Response to Committee on Lessons Learned from Ward Valley (Cont'd)**
 - 66. Letter from Paul W. Pomeroy, Chairman, ACNW, to The Honorable Shirley A. Jackson, Chairman, NRC: Lesson Learned from the Ward Valley, California, Low-Level Waste Disposal Facility Siting Process, dated August 10, 1995
 - 67. Article from LLW Forum Notes entitled, "Refining the Siting Process," September 1995
 - 68. Letter from James M. Taylor, Executive Director for Operations, NRC, to Dr. Paul W. Pomeroy, Chairman, ACNW: Lessons Learned from the Ward Valley, California, Low-Level Waste Disposal Facility Siting Process, dated September 21, 1995
- **EDO Response to Committee Letter on Streamlining the Site Decommissioning Management Plan Program**
 - 69. Table of Contents
 - 70. Status Report
 - 71. Letter from Paul W. Pomeroy, Chairman, ACNW, to The Honorable Shirley A. Jackson, Chairman, NRC: Comments on Streamlining the Site Decommissioning Management Plan Program, dated September 28, 1995
 - 72. Letter from James M. Taylor, Executive Director for Operations, NRC, to Paul W. Pomeroy, Chairman, ACNW: Comments on Streamlining the Site Decommissioning Management Plant Program, dated October 26, 1995
- **EDO Response to Letter on High-Level Radioactive Waste Research Program in Hydrology**
 - 73. Table of Contents
 - 74. Status Report
 - 75. Letter from James M. Taylor, Executive Director for Operations, NRC, to Dr. Paul W. Pomeroy, Chairman, ACNW: Comments on the High-Level Radioactive Waste Research Program in Hydrology, dated December 22, 1995, with Enclosures
 - 76. Letter from Paul W. Pomeroy, Chairman, ACNW, to The Honorable Shirley A. Jackson, Chairman, NRC: Comments on the High-Level Radioactive Waste Research Program in Hydrology, dated November 6, 1995
- 77. 1996 Calendar

14 Meeting with the Director, Division of Waste Management, NMSS

78. Status Report

15 Insights into High-Level Waste (HLW) Source Term and Natural Analogs

79. Status Report

80. Table of Contents

81. Professional Experience Biography of Dr. Rodney Ewing

82. List of Research Interests of Dr. Rodney Ewing

83. Article from MRS Bulletin, entitled "Materials Science of Radioactive Waste Forms," by R. C. Ewing and W. Lutze, Guest Editors, December 1994

16 Report on Outside Meetings

84. Memorandum from Bill Hinze, ACNW, to Paul Pomeroy, Chairman, ACNW: January 10-11, 1996 Nuclear Waste Technical Review Board Meeting, dated January 13, 1996 [Facsimile]