

ACNW-0019

PDR-6/27/90

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APRIL 26-27, 1990

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CERTIFIED

Issued: May 25, 1990

**MINUTES OF THE 19TH MEETING OF THE
ADVISORY COMMITTEE ON NUCLEAR WASTE
APRIL 26-27, 1990
BETHESDA, MARYLAND**

The 19th meeting of the Advisory Committee on Nuclear Waste was convened by Chairman Dade W. Moeller at 8:30 a.m., Thursday, April 26, 1990, at 7920 Norfolk Avenue, Bethesda, Maryland.

[Note: For a list of attendees, see Appendix I. ACNW members, Drs. William J. Hinze, Dade W. Moeller Martin J. Steindler were present. ACNW consultant, Dr. David Okrent, was also present.]

The Chairman said that the agenda of the meeting had been published in the Federal Register. He stated that the meeting was being held in conformance with the Federal Advisory Committee Act and the Government in the Sunshine Act, Public Laws 92-463 and 94-409, respectively. He also noted that a transcript of some of the public portions of the meeting was being made, and would be available in the NRC Public Document Room at the Gelman Building, 2120 L Street, N.W., Washington, D.C.

[Note: Copies of the transcript taken at this meeting are also available from the Ann Riley & Associates, Ltd., 1612 K Street, N.W., Washington, D.C. 20006.]

I. CHAIRMAN'S REPORT (Open)

[Note: Mr. Raymond F. Fraley was the Designated Federal Officer for this portion of the meeting.]

Dr. Moeller announced that the U.S. Department of Transportation (DOE) has asked the U.S. Claims Court for another extension for filing an appeal of a ruling handed down last August that voided DOE's decision to award a 10-year, \$1 billion contract to Bechtel National Inc. to manage the department's high-level nuclear waste program.

Dr. Moeller announced that Dr. John Bartlett has been appointed the Director of the Office of Civilian Radioactive Waste Management at DOE. He also announced that Mr. William Coons is retiring as the first Executive Director of the Nuclear Waste Technical Review Board. Dr. William Barnard will become the Acting Executive Director for four to six months while the Board searches for a permanent Executive Director.

Dr. Moeller noted that the Commission has recommended that the procedures for appointing new ACNW members revert back to

those formerly used. Prior to the end of the term of a current member, a public announcement will be issued inviting nominations of candidates to fill the position. The nominating committee will consider all candidates before recommending a nominee for the position.

Dr. Moeller stated that he had attended a meeting with the NRC staff. The NRC staff is developing comments on the EPA standards, however, they are not ready to share them in a public session.

Dr. Moeller identified a number of reports that he believed worthy of attention.

II. REVIEW OF THE DEPARTMENT OF ENERGY STUDY PLAN FOR THE CHARACTERIZATION OF THE YUCCA MOUNTAIN QUATERNARY REGIONAL HYDROLOGY (8.3.1.5.2.1) (Open)

[NOTE: Ms. Charlotte Abrams was the Designated Federal Officer for this portion of the meeting.]

Dr. Hinze introduced this portion of the meeting. He noted that the status of the NRC staff's review of DOE's study plans was of great interest to the Committee. In addition, he indicated that the Committee was disappointed that they had not received the staff's written comments prior to the meeting. Dr. Hinze noted that the Committee would look forward to receiving the staff's report on this topic.

The lead presenter for this agenda item was Dr. King Stablein, Project Manager, Repository Licensing and Quality Assurance Project Directorate. Dr. Stablein introduced the members of the technical staff responsible for the review. These were: Dr. John Bradbury, Geochemist and Lead Reviewer; Mr. David Brooks, Section Leader of the Hydrologic Transport Section; and Mr. Neil Coleman, Hydrogeologist.

Dr. Moeller noted that DOE had independent consultants to review this Study Plan (SP). Dr. Bradbury explained that these consultants were part of an independent peer review committee selected by DOE to review and comment on the Activity to assess the calcite/silica vein deposits. Dr. Hinze asked if the SP addresses all the concerns of the peer review committee and Dr. Bradbury stated that it appeared so.

Dr. Stablein explained the status of the Study Plan review noting that the first stages of the review were completed in November,

1989, with completion of the Acceptance and Start-work reviews. The staff is still involved in the Detailed Technical Review phase, however, the review will soon be finalized. Their comments and a transmittal letter should be ready within two weeks. At this time, the technical comments are in the management review cycle.

Dr. Hinze noted that the staff had received the Study Plan in June, 1989. The Acceptance and Start-Work reviews had gone to DOE in November, 1989; yet, there was still no finalization of the review. What was the problem? Was there a problem with staff resources, the review process, or the review plan?

Dr. Stablein replied that Dr. Hinze's chronology was correct, but he also noted that during this period there had been no indication from DOE that the lack of the NRC's review was delaying the program. The Acceptance and Start-Work reviews provide NRC's go-ahead for the work on the Study.

Dr. Hinze inquired about the status of DOE's work on Study Plans and the problems with initiating work at the site. Dr. Stablein noted that some work was ongoing, especially on the Activity for calcite/silica vein deposits. Dr. Bradbury added to this discussion by noting that he interprets the recent Site Characterization Plan (SCP) update from DOE to say that NRC is not delaying work.

Dr. Hinze asked if there was a problem in the review process and Dr. Stablein explained that the staff had a limited number of geochemists and there had been other priorities that had required the Lead Reviewer's time such as QA audits at Los Alamos National Laboratory and a recent Technical Exchange on calcite/silica deposits. Also the SP required review expertise from a number of disciplines. The need for coordination of the various reviewers in different disciplines also required extra time.

Dr. Hinze asked if this meant that there was no problem in the review process. Dr. Stablein acknowledged that the draft study plan review plan needs revision. The staff had learned from the review of the first two Study Plans that reviews need to be streamlined. The NRC is allowed a total of six months for each SP review, but future reviews will have to be faster. The staff may ask for assistance from the Center for Nuclear Waste Regulatory Analyses (CNWRA) and the Office of Research (RES). He also noted that those two groups were involved in this review. The staff expects the Study Plans for the volcanism studies to arrive in the near future. Those Study Plans will receive a detailed review. This means that the review process will have to be revised based on the lessons learned thus far.

Dr. Hinze inquired as to how the CNWRA input was managed. Mr. Brooks, Program Element Manager for the CNWRA, addressed this question. According to Mr. Brooks, there are prior arrangements with the CNWRA to place some of the RES work on temporary hold in order to conduct "reactive" jobs such as SP reviews. The staff tries to provide the CNWRA with clear guidance for these duties. They help to decide what expertise is needed from the CNWRA and it is up to Dr. John Russell at the CNWRA to notify the NRC staff if there are any anticipated problems. If a problem or conflict is identified, then Mr. Browning, Director of HLW, will get involved, but to-date this has not been necessary.

Dr. Hinze asked what percent of the reviews are anticipated to need CNWRA assistance. The staff stated that this is difficult to assess at this time. Assistance will be evaluated for each SP during the Acceptance review. Mr. Browning noted that the CNWRA budget is large enough to accommodate both HLW and RES needs, but reactive work has priority over research. If the staff provides specific guidance to the CNWRA, he and Mr. Silberberg, RES, will resolve any problems.

Dr. Stablein stated that the Study Plan Review Plan will be revised and this was his responsibility. Also schedules will be established. The Level of Detail Agreement (LOD) is still considered important and recent QA audits have shown that DOE has embedded the LOD in their review process. Dr. Bradbury explained that one of the review criteria was whether the LOD had been met. For example, the staff expects a list of planned tests to be in each SP. NRC staff will evaluate whether those tests will allow the Study to meet its objectives, but at this time there is no way to tell where the test results will lead, especially in the case of state-of-the-art tests. This SP generally meets the staff's expectations. It describes how the data will be used in a general way.

Dr. Hinze noted that the Study Plan on Characterization of Quaternary Regional Hydrology lacked detail on the electromagnetic studies. Dr. Bradbury stated that the staff had noted that and had similar concerns about other approaches. The staff is concerned with how information gathered will be used. The Study Plan only explains this very generally. He used the calcite/silica Activity as an example where it appears that the primary focus is to look at Trench-14 deposits and compare those with analogs. Although the Study Plan provides the information necessary to meet the LOD, it may not be sufficient enough for scientists. However, the Study Plan has met the LOD and has provided a rationale for tests to be conducted.

Dr. Hinze expressed concern that two of the five Activities of the

SP were not included. He asked how this problem was handled by the staff. Dr. Stablein said that in the Acceptance letter to the DOE, the NRC staff was careful to point out the limitations of their review due to the omission of two of the Activities. The DOE is not required to provide an answer to the letter, or to SP and SCP Objections, Comments, or questions. The NRC is concerned about the perception of what an Acceptance review means and believes that the DOE needs to understand the importance of concerns identified as a result of the Detailed Technical Review. These concerns do impact DOE's gathering of information for licensing. If DOE does not consider NRC's review comments, they may lack appropriate information at the time for formal licensing review.

Dr. Bradbury stated that, due to the two missing Activities, the staff had to revise their criteria for the review to address the objectives of individual Activities, rather than the overall Study Plan objectives. In addition, the staff also reviewed the SP as a whole, making certain assumptions about what will be in the missing Activities.

In response to Dr. Hinze's question of whether the staff will review the SP in its entirety when all portions are available, Dr. Stablein stated that the staff will revisit the entire SP to see if the five Activities fit together. DOE will provide the NRC with Revision 1 when it is available.

Dr. Hinze asked Dr. Bradbury what were the two most critical technical concerns in the SP? According to Dr. Bradbury these are:

- 1) The concern with the age determination techniques to be used, because of their developmental stage. He specifically noted concern with the U-Series and U-trend dating techniques. These are considered important tests, but they are of concern due to the early stage of their development.
- 2) The SP focuses on near surface deposits and proposes to determine where the groundwater table was located in the past. Dr. Bradbury is concerned that the work as proposed may miss key information to evaluate this.

Dr. Okrent asked if the planned studies would be significantly reduced under a relaxed U. S. Environmental Protection Agency (EPA) standard. Would that change what had to be studied? Dr. Bradbury replied that the longer information needs to be extrapolated, the greater the uncertainty. Mr. Brooks commented that the data would still be needed for characterization, regardless of the EPA standard. Dr. Okrent noted that the needs for site characterization are driven by Part 60.

Dr. Moeller noted that the SP title stated the Quaternary time period, but there was emphasis in the SP on the last 20,000 years. Then he also saw a reference to 100,000 years in the SP; therefore, what is the time period of concern in this SP? Dr. Bradbury said that the regulations cite the Quaternary, 1.6 million years, as important.

Dr. Moeller also noted that this SP stated that it was one of eight SP's to address paleoclimate concerns at the site. He asked if the staff had seen any of these eight other SPs and if they could assess this plan without seeing them. Dr. Bradbury stated that the SCP provided some overall information on how the eight SP's fit together, but he would be more comfortable after he sees all eight SP's for purposes of how they all integrate.

Dr. Hinze asked if the staff planned to see revisions of SPs. Dr. Stablein commented that the SP review is an iterative process involving SPs and SCP progress reports. The staff will look back at old SPs and the SCP when they receive new SPs. There will also be Technical Exchanges with the DOE to discuss the SP reviews.

Dr. Moeller noted that some tests will take lengthy time periods to complete and Dr. Bradbury acknowledged this concern and stated that also some tests have yet to be developed.

Dr. Steindler voiced a concern with how studies directed toward the collection of data from features near the surface at Yucca Mountain will relate to the information needed at the repository horizon. What connects the data gathered from surface features to the repository horizon? A question may be resolved for the area studied (e.g., past groundwater levels), but this question will still have to be addressed at the repository level. Dr. Bradbury acknowledged that if material in Trench-14 indicates one set of information at that level, they will have only eliminated the concern in one local area and the concern may still remain for the repository horizon.

Dr. Hinze asked if Dr. Bradbury would suggest any other tests be conducted as part of this study. Dr. Bradbury stated that the staff has a draft comment concerning evidence in existing cores such as zeolites. The presence of these zeolites may provide evidence for a higher water table. Tests to address this problem may be in another SP, but the staff cannot be assured of this.

Dr. Hinze questioned the staff as to whether the Committee will hear from the staff on the revision of the SP review plan and the finalized comments on the SP. Dr. Stablein stated that he is currently working on the revision of the SP Review Plan and will

keep the Committee informed. Dr. Moeller requested that the Committee see the revised plan when it is complete.

Mr. Browning stated that they wished to determine whether DOE's system for generation and implementation of the SPs is working. They will try to examine 100 percent of the SPs, but probably will only be able to do a sample. They definitely will review the SPs on volcanism. They will continue to check how the SPs are implemented, possibly in QA audits where the focus can be on key procedures and their implementation. Implementation will be examined in a broad context, rather than focusing on individual SPs.

Dr. Stablein restated that the Detailed Technical Review of this SP would be ready to send to the DOE in approximately two weeks. Mr. Browning stated that he is concerned with the number of SP's that the ACNW wishes to review and is retiscent to send the staff's comments to the ACNW prior to transmitting them to DOE. There is currently no production pressure on the staff due to the problems in DOE's schedule, but he would like to send the SP comments to the DOE and if the ACNW has additional comments the staff will deal with those separately.

Dr. Hinze and the Committee agreed that the staff could go forth with their comments on this Study Plan and if the ACNW has additional comments they will get together with the staff. He also noted that there are some SPs that are more important than this one and for those the Committee would wish to see the staff's comments on those prior to transmittal to DOE.

Dr. Steindler expressed the concern that his impression was that if DOE did what they plan in the SP, they still would not have the data necessary for licensing, yet the staff is signing off on the Plan. He asked if the staff was convinced that this study can provide repository relevant information? Dr. Bradbury replied that he shared Dr. Steindler's concern, but for some DOE approaches there are many assumptions made and extrapolation is needed to show the relationship to repository conditions.

Dr. Stablein noted that the NRC staff is attempting in the prelicensing period to identify licensing concerns as soon as possible to avoid non-repository relevant data collection. They will not review 100 percent of the SP's, but they will indicate to DOE the kinds of things that could be problems. He emphasized that they are not signing off on a license application at this time.

Dr. Hinze closed with the question of when the Committee would see the staff's complete review. The Committee decided that if they had problems with the staff's review they would submit their

had problems with the staff's review they would submit their concerns to the staff. The Committee also stated that they wished to see Revision 1 of this SP when it is available and talk with the staff at that time if the staff has problems with that Revision of the SP.

This briefing was for information only. No Committee action was taken.

III. WASTE CONFIDENCE REVIEW GROUP'S CONCLUSION AND RECOMMENDATIONS (Open)

[Note: Ms. Charlotte Abrams was the Designated Federal Officer for this portion of the meeting.]

Dr. Moeller introduced this portion of the meeting. Mr. Stewart Treby, Office of the General Counsel (OGC), Ms. Julia Corrado, Division of High-Level Waste Management (NMSS), and Mr. John Roberts, Division of Industrial and Medical Nuclear Safety (NMSS), were the presenters. They were assisted by Ms. Kathryn Winsberg, Office of the General Counsel. Mr. Treby, Chairman of the Waste Confidence Review Group, opened the discussion.

Mr. Treby provided background information for the Committee. He explained that the document on which the Committee was being briefed was the product of the Waste Confidence Review Group that was established by the Commission in August, 1988. The Review Group's task was to review the findings in the waste confidence decision of 1984. The Commission directed that the group be chaired by a senior manager from OGC and include senior managers from NMSS, RES, and NRR. Mr. Martin Malsch, OGC, was initially the chairman. The senior managers included Messrs. Robert Bernero, NMSS, Frank Gilespe, NRR, and Denwood Ross, RES. Mr. Treby noted that, at the 9th meeting on April 26, 1989, the Review Group reached agreement on the 1989 Waste Confidence Decision and the proposed waste confidence decision was published for public comment. That draft of the report was discussed with the Committee in April, 1989. The document before the Committee at the 19th ACNW meeting included the responses to the public comments. Mr. Treby also noted that the waste confidence decision was a collegial effort and that there was unanimous agreement of the group on the document being presented to the ACNW.

Mr. Treby summarized some of the history of the waste confidence finding. In October, 1979, the Commission initiated a generic rulemaking to assess whether radioactive waste could be safely disposed, to determine when a disposal site would be available, and to assess whether the waste could be safely stored on-site after

the final waste confidence decision which consisted of five findings and made a commitment to review those findings every five years or sooner if there was an occurrence of events that could impact those findings.

In August 1989, five years later, the Commission established the current group to review the five findings:

- 1) Disposal of radioactive waste in a geologic repository is feasible.
- 2) At least one repository will be available by 2007-09 and significant repository capacity will be available within 30 years beyond expiration of any reactor operating license to dispose of commercial high-level waste generated.
- 3) Spent-fuel and high-level waste will be safely managed until that waste can be disposed in a repository.
- 4) Spent fuel can be safely stored for at least 30 years beyond the expiration of the reactor's operating license.
- 5) Significant onsite or offsite storage will be made available if such storage capacity is needed.

Findings 1, 3 and 5 were reviewed by the group and remain unchanged in the final decision. The second finding was reviewed and the time period was modified to be within the first quarter of the 21st century. The group believes that this will provide sufficient time for site characterization activities at Yucca Mountain, and if that site is found unacceptable, there will be sufficient time to examine a second site.

The fourth finding was reviewed and modified to add 30 years to the term of a revised license. Mr. Treby noted that the Commission was considering a proposed rule for renewal of existing licenses. Adding 30 years would extend the safe storage period from 70 to 100 years. Also, this finding was revised from the draft to say "revised or renewed license."

There were eleven comments received on the draft waste confidence decision from the public, the nuclear industry, a federal agency, and a state. Most of the comments were favorable. The comments were consolidated into 21 issues.

Dr. Hinze asked who was the intended audience for the waste confidence decision. Mr. Treby said that the waste confidence is in response to a Court's decision, but also is directed toward the intervenors in the waste confidence proceedings. There was also

intervenors in the waste confidence proceedings. There was also a modification to 10 CFR Part 51 to indicate that, as a result of the generic findings on waste confidence, there will not be individual proceedings on whether waste can be stored safely. Dr. Hinze stated that he believed the document before the Committee was important enough that it should be made easy to follow with the inclusion of illustrative materials. Mr. Treby stated that the group would consider that suggestion. He also stated that he did not believe that the document was written to educate the public, but to confirm the confidence that waste can be safely stored.

Dr. Moeller noted that finding 4 stated that there was reasonable assurance that waste could be stored safely; although this had already been demonstrated. Mr. Roberts responded that when the findings were initiated in 1984 independent spent fuel storage installations had not yet been licensed. The finding also extends through the 40 years of reactor operation, a possible 30 more years of operation, and then 30 years beyond that. Therefore finding 4 is a projection for the future.

Ms. Corrado discussed the issues related to findings 1 and 2. She directed the Committee's attention to the handout and the names of the commenters. The first issue she discussed was the question of technical feasibility. One commenter believed that it has not been demonstrated that there is complete assurance that disposal is feasible. Ms. Corrado stated that the group's view was that this comment related to the sufficiency of data for licensing a site and that those data will be collected as part of site characterization. The group has reasonable assurance that geologic disposal is feasible. Ms. Corrado pointed out that the United States is not the only country to consider it to be so.

The issue of the difficulty in predicting repository performance over a long time period was the second issue addressed by Ms. Corrado. A commenter had pointed out the difficulties in conducting long-term performance assessments. Waste Isolation Pilot Plant (WIPP) was used as an example where there has been unexpected occurrences in the natural system. The group believes that long-term performance assessments are a problem, but that through existing models a basis for decisions can be provided. They also recognize the importance of data to conduct iterative performance assessments as there is progress on the site. If Yucca Mountain proves to be unsuitable as a site, the group does not interpret this as meaning that geologic disposal is not feasible, but that a different site should be explored.

The third issue concerned the BEIR V report, "Health Effects of Exposure to Low-Levels of Ionizing Radiation", and a commenter's conclusion that the waste confidence decision should be deferred

until a complete evaluation of the impact of that report could be conducted. The group's opinion was that the BEIR V report would only have an effect if it were to impact the EPA standard. BEIR V would not significantly change the EPA standard because the risk coefficient in the EPA standard was larger than what others are using.

Ms. Corrado proceeded to address the issues that related to finding 2. This finding related to the timing of repository availability. Commenters believed was not justified due to the delays in DOE's schedule and the Yucca Mountain program. The group believes that it is still reasonable to expect that, if Yucca Mountain is found to be a suitable site, it can be ready to accept waste in the first quarter of the next century. The group also believes that, if Yucca Mountain is found to be unsuitable another site can be ready by 2025. This is based on the expectation that surface-based testing will begin on schedule, next year, and that DOE will focus on issues that could impact the suitability of the site.

Dr. Hinze asked if work and experience at WIPP could be used to shorten the time needed. Ms. Corrado said that the 1988 draft DOE Mission Plan Amendment stated that it would take approximately 25 years, from start to finish, to identify a second repository site. The 25 years does not account for experience gained and is, therefore, a conservative estimate. Ms. Corrado also added that the timing of repository availability is not a health and safety issue at this time.

Another commenter requested a clarification of NRC's role in the licensing support system. A change was made in the document to respond to this suggestion.

There was an issue related to the uncertainties of spent fuel shipments. The group's response was that this will be considered on a case-by-case basis. In the event that a nuclear power plant's operating license expired and the 30 years post operating license has also expires, then the group identified the possibility of shipping spent fuel to other power plants of the same licensee or to a monitored retrievable storage (MRS) facility. There were also concerns over hazards from reracking of spent fuel pool densification. All of this will be looked at on a case-by-case basis.

Dr. Hinze asked if there was a concern about how much waste could be handled at the waste handling facilities for the repository and if there was a potential for back-up of waste when the repository opens. Ms. Corrado stated that she had considered data on the rate of acceptance of waste at a repository, although, the group had not addressed transportation issues but focused on the original court

remand. Mr. Roberts elaborated that DOE plans to submit designs for casks within two years and is examining the transportation interface concerns. Mr. Treby added that this topic was an area in which the NRC has limited jurisdiction. The NRC is concerned with the certification of the casks, but transportation routes and means are under the jurisdiction of the Department of Transportation and the Department of Energy.

Dr. Moeller asked to be reappraised of the capacity of the Yucca Mountain repository. Ms. Corrado stated that the Nuclear Waste Policy Act (NWPAA) limits the repository to 70,000 metric tons. If the repository receives 3,000 to 4,000 tons per year it would be filled in approximately 20 years. DOE, under the NWPAA, also has to identify a second repository by 2010. Therefore a second repository could be ready by 2035 to accept waste.

Dr. Hinze referred to a statement in the waste confidence decision review that says, "the Commission believes that Congress will continue to provide institutional support for adequate repository capacity." He questioned on what evidence that conclusion was based. Ms. Corrado stated that there will be approximately 90,000 metric tons of waste by 2020. It is DOE's responsibility to inform Congress of the need for a second repository. Congress, by law, will have to address this need.

Dr. Hinze also asked whether it was planned for Greater-than-Class C (GTCC) waste to go into the repository. Ms. Corrado stated that it was the group's understanding that GTCC waste will not have a major impact on repository capacity because it can be concentrated more than spent fuel. Mr. Dan Fehringer added that GTCC waste does not generate much heat; therefore, it does not need the spacing that spent fuel would need. He referred to a report by the Congressional Office of Technology Assessment that estimated the volume of GTCC waste to be only about one percent of the repository volume.

On the topic of GTCC wastes, Mr. Robert Browning added that Mr. Duffey of DOE, in his presentation to the Commissioners, indicated that there was a DOE concern with the need for storage of GTCC waste in the repository. The NRC staff does not understand that concern. Oak Ridge National Laboratory reports confirm the estimates that GTCC will constitute a very low volume. The Commission has asked DOE to provide additional information on this topic and the source of DOE's concern. NRC staff has also written several letters requesting the background technical information on this topic from the DOE. Dr. Hinze asked that the Committee be kept informed of progress on the topic of GTCC waste.

Ms. Corrado discussed the issue of Nuclear Waste Fund monies. One

commenter was concerned about the DOE continuing to accept waste if a utility went bankrupt. Several considerations of the group were: Was the DOE barred from accepting waste if a utility has not made all of its payments into the fund and who pays for disposal of spent fuel from a bankrupt utility? NWPA does not prevent DOE from accepting waste from a utility that has not made all of its payments. Also utilities have to be up-to-date on their payments. The only problem the group saw was that when the NWPA was enacted utilities could elect to pay for spent fuel generated prior to 1983 in a one-time payment or they could defer that payment until the fuel was transferred to DOE. If a utility that has deferred that payment goes bankrupt then they would default on those monies. Ms. Corrado also stated that those monies were a small amount in comparison to the fund.

A commenter wanted NRC to address the issue of who would be responsible for costs after 1998. The group did not consider this a waste confidence issue, but, instead, an issue between the DOE and the licensees.

The last comment by Ms. Corrado was on the discussion of the period of safe storage at the Dresden Unit 1 Nuclear Power Plant. The group believes that the period of safe storage is covered by the 40 years operating license plus the 30 years of safe storage.

Mr. Roberts discussed comments on findings 3 and 4. The group believes that comments on finding 3 were peripheral to the finding. In response to the commenter the group withdrew wording on contractual conflicts because it was not germane to waste confidence. Also, wording on the responsibility of the utilities to store spent fuel until DOE accepts it is unnecessary as it is addressed in 10 CFR Parts 51 and 72. Finding 4 extends the time for reasonable assurance of the safe storage of spent fuel at a nuclear power plant for the original 40 years of operating time plus the 30 years for a renewed license.

Dr. Hinze asked if there is verification of that time. Mr. Roberts referred to work in NRR on reactor aging. He also referred to Part 72 and the MRS which give 20 and 40 years, respectively, for storage.

Mr. Roberts discussed a comment from DOE on the cumulative impacts on National Environmental Policy Act (NEPA) documentation for license renewals. DOE expressed a concern and wanted the Commission to be aware that more spent fuel will be generated if licenses are renewed. Mr. Roberts stated that the original projection for the year 2000 was 58,000 metric tons of spent fuel and now that estimate is 40,200 metric tons for the same time period, so that the group believes the concern to be addressed.

Virginia Electric Power Co. made a comment on the need for NRC to facilitate independent spent fuel storage installation license extensions to reflect finding 4. The group believes that Virginia Electric Power's present license will carry them to 2006 and a license renewal will bring them within the time frame of a repository.

Mr. Roberts discussed comments on safety in the spent fuel storage pools at nuclear power plants. The group believed this to be addressed in an earlier report by RES. Other commenters wanted an NRC requirement for dry storage instead of storage in pools. The Commission believes that regulations under 10 CFR Part 50 show that storage in pools can be successful and dry storage is not required. The focus of the group was on safe storage.

Ms. Corrado stated that the proposed waste confidence decision review was issued in fall, 1989. When the proposed decision review was issued there were two utilities who had requested permission to rerack. These utilities operate Prairie Island and Vermont Yankee. The group noted that the Prairie Island Nuclear Power Plant had been granted an extension and assumed Vermont Yankee Nuclear Power Plant would receive one also. The State of Vermont intervened and the situation has not been resolved, but those problems did not impact the group's finding of 2025.

Ms. Corrado stated that in October, 1989, the NRC staff was made aware that 13 to 17 utilities elected to defer payment into the Nuclear Waste Fund of the one-time fee for spent fuel generated prior to April 1983. Some of those utilities have been audited and there is a question of a need for financial surety for the fund. The NRC has met with the DOE and DOE is working on this concern. The group believes that the amount of money of concern is small and it does not affect the group's confidence decision.

Dr. Hinze stated that he failed to see any criteria upon which a decision to revisit the waste confidence decision would be made. He acknowledged that the document does state that it will be revisited, however, it does not state by what criteria. Mr. Treby answered that the revisit decision will be made by the Commission. The Commission has a 10-year commitment to revisit the findings; however, they do state that it will be revisited sooner if information becomes available to make it important to do so. There is enough flexibility to require a review of the decision earlier if circumstances warrant. He stated that Dr. Hinze's concern would be considered.

In conclusion, Mr. Treby discussed the amendment to 10 CFR Part 51. He stated that Part 51.23 addresses the five findings in the waste

confidence decision and, because findings 2 and 4 were modified, it was necessary to amend that part of the regulations.

IV. EXECUTIVE SESSION (Open/Closed)

A. Reports, Letters and Memoranda

1. Critique of the Environmental Protection Agency's Standards for Disposal of High-Level Wastes

The Committee provided comments on the standards with emphasis on (a) the need for the use of a hierarchical structure in the organization of the standards, (b) structuring the standards as to apply to the disposal facility as a system, (c) the limitations on the application of PRA methodology, and (d) the desirability of clearly separating out the impacts and assessments of human intrusion, thus permitting this contributor to risk to be directly addressed. [The report on the EPA Standards for disposal of high-level wastes was sent to Chairman Carr on May 1, 1990.]

2. Program Plan for the Advisory Committee on Nuclear Waste

The Committee provided its program plan for the activities that the Committee expects to engage in during the next four months. [The report on the program plan was sent to Chairman Carr on May 1, 1990.]

3. Waste Confidence Decision Review

The Committee endorsed the findings of the Waste Confidence Review Group. The Committee suggested that consideration be given to adding a brief discussion to the statement of the findings of the Review Group which would describe the criteria that would be used to prompt a reevaluation of the current findings sooner than the scheduled ten year review cycle. [The report on the final waste confidence decision review was sent to Chairman Carr on May 1, 1990.]

B. ACNW Critique of EPA's Proposed Revisions in the Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes

The Committee continued their review of the EPA HWL Standards. Dr. Okrent suggested that copies of a National Academy of Sciences report on the EPA standards be distributed to the members when published.

C. Appointment of New Members (Closed)

The Committee discussed the qualifications of candidates proposed for nomination to the ACNW. [A memorandum had been forwarded to the Commission on April 5, 1990.]

D. Four Month Program Plan for ACNW

The Committee discussed the anticipated ACNW activities during the four month period of May - August 1990.

E. Paper on the Incineration of Low-Level Waste

Dr. Moeller informed the Committee that he had been invited by the Program Chairman of the 21st DOE/NRC Nuclear Air Cleaning Conference to present a paper on "Air Cleaning Methodologies Involved in the Management and Disposal of Radioactive Wastes". The Committee had no objections to Dr. Moeller accepting this invitation.

F. ACNW Bylaws

The Committee discussed the questions: How many ACNW members are required to have a quorum? Can two ACNW members meet with Chairman Carr for informal discussions? And, how many ACNW members are required to make major decisions? Dr. Moeller requested that the ACNW staff investigate these questions and if necessary, propose a revision to the ACNW Bylaws.

G. ACNW Future Activities

1. Future Reviews of the Study Plans for Site Character-ization

The Committee discussed the scope and nature of

Committee reviews of the DOE Study Plans for Yucca Mountain and the NRC review of the Study Plans. Dr. Hinze recommended that the ACNW letter reports regarding the study plans include the disclaimer statement, "Based on our limited review of this study plan and based on our discussion with the NRC staff, we believe the review by the NRC staff has been adequate". Dr. Steindler agreed that there should be a disclaimer in future ACNW Letter Reports that states that we are not approving the study plan nor endorsing the usefulness of the study plan results in the licensing proceeding.

2. Center for Nuclear Waste Regulatory Analyses (CNWRA)

Dr. Hinze recommended that the Committee review the distribution of CNWRA activities that are devoted to technical assistance as contrasted to research. Dr. Hinze also recommended that the Committee should be briefed on the recently completed CNWRA reports on the program architecture regarding requirements for a high-level waste repository.

3. Human Intrusion and Carbon-14 Issues

Dr. Hinze recommended that it would benefit the Committee to have a briefing on the 40 CFR 191 approach to human intrusion and concerns with EPA release limits for carbon-14 at the proposed high-level waste repository. Dr. Hinze requested the ACNW staff to identify who is doing work in these areas (USGS has lead on Study Plan for Natural Resources Assessment and how it impacts potential human intrusion) and to schedule a working group meeting.

Dr. Steindler requested that copies of a Brookhaven National Laboratory report on hazards resulting from carbon-14 generation be distributed to the members.

He also mentioned a report by the Arthur D. Little, Corp. regarding this subject, published about 1980.

4. Low-Level Radioactive Waste Compacts

Dr. Steindler recommended that the Committee receive periodic updates on the site selection activities of the state LLW compacts.

5. EPRI Study on Probabilistic Risk Assessment for the Proposed Yucca Mountain High-Level Waste Repository

Dr. Hinze suggested that the Committee invite representatives from EPRI to provide a briefing on the status of their study on the application of PRA to the proposed Yucca Mountain repository after it is issued. The report is expected to be issued in September and a briefing will be scheduled shortly thereafter.

6. Status of Rulemaking Activities

Dr. Moeller expressed interest on the latest status of NRC rulemaking activities, such as the rulemaking on accident dose rate.

7. EPA's Standards

The Committee discussed a letter from Dr. Floyd Galpin, EPA, to Dade Moeller that suggests future dialogue with the representatives of EPA on proposed revisions to 40 CFR Part 191. Dr. Moeller recommended that Mr. Galpin be invited to a future meeting.

8. Discussion on the Use of the Term "representativeness"

Dr. Hinze recommended that the Committee meet with the NRC staff to discuss the use of the term "representativeness" as it pertains to NRC staff's review of DOE's methodology for three-dimensional characterization of the proposed Yucca Mountain repository site.

H. Future Agenda

Appendix II summarizes the tentative agenda items that were proposed for future meetings of the Committee. This list includes items proposed by the NRC staff as well as the ACNW members.

The 19th ACNW meeting was adjourned at 11:08 a.m. on April 27, 1990.

[Docket Nos. 50-361 and 50-362]

Supplement to Environmental Assessment and Finding of No Significant Impact Relating to Spent Fuel Pool Reracking

In the matter of Southern California Edison Co., San Diego Gas and Electric Company, the City of Riverside, California, the City of Anaheim, California.

Background

On February 27, 1990, the NRC staff issued an Environmental Assessment related to the license amendment that would increase the maximum storage capacity of the spent fuel pools at San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. An Issuance of Environmental Assessment and Finding of No Significant Impact was published in the Federal Register on March 7, 1990 (55 FR 8248).

An error was detected in the Environmental Assessment in regard to Section 3.0, "Radiological Impact Assessment." The staff determined that an additional review of the available documentation was necessary in order to determine if the conclusions of the original Environmental Assessment remained valid.

This supplement to the Environmental Assessment reflects the results of the staff's review. The staff has determined that the conclusions of the original Environmental Assessment remain valid. Moreover, the original finding of no significant impact remains valid also.

However, this supplement will correct the error that was detected in the Environmental Assessment. Section 3.0, entitled "Radiological Impact Assessment," has been corrected to reflect the modified information. Section 3.0 is corrected to read as follows:

Radiological Impact Assessment

The occupational exposure for the proposed modification of the SFPs is estimated by the licensee to be less than 41 person-rems per unit based on the detailed breakdown of occupational dose for each phase of operation. This dose is approximately 12 percent of the average annual occupational dose person-rem experienced at PWRs in the United States, which is currently about 340 person-rems per unit. The total dose incurred during the reracking of the SFPs is expected to be a small fraction of the total occupational radiation dose incurred from operating San Onofre Units 2 and 3.

Additionally, we have evaluated the increase in onsite occupational dose during normal operations, after pool

modifications, resulting from the proposed increase in the number of fuel assemblies stored in the pool. Based on the present and projected operations in the SFP areas, we estimate that the proposed modifications will increase the total annual occupational exposure at both units by less than one percent.

The licensee intends to take ALARA considerations into account, and to implement reasonable dose-saving activities. We conclude that the licensee will be able to maintain individual occupational exposures within the applicable limits of 10 CFR part 20, and maintain doses ALARA, consistent with the guidelines of Regulatory Guide 8.8.

Thus, we conclude that the proposed storage of spent fuel in the modified SFP will not result in any significant increase in doses received by workers.

Finding of no Significant Impact

The staff has reviewed the proposed spent fuel pool expansion to the facility relative to the requirements set forth in 10 CFR part 51. Based on this assessment, the staff concludes that there are no significant radiological impacts associated with the proposed action and that the issuance of the proposed amendment to the license will have no significant impact on the quality of the human environment. Therefore, pursuant to 10 CFR 51.31, no environmental impact statement needs to be prepared for this action.

For further details with respect to this action, see (1) the application for amendment dated March 10, 1989, as supplemented by letters dated April 19, May 4, May 19, June 1, June 2, September 22, November 2, and November 9, 1989, and January 18, February 9, February 16, 1990 and March 20, 1990; (2) the FGEIS on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575); (3) the FES for SONGS 2/3 dated April 1981; and (4) the Environmental Assessment dated February 27, 1990 (55 FR 8248).

These documents are available for public inspection at the Commission's Public Document Room, 2120 L Street, NW., Washington, DC 20555 and at the General Library, University of California, P.O. Box 19557, Irvine, California 92713.

Dated at Rockville, Maryland, this 2nd day of April 1990.

For the Nuclear Regulatory Commission,
Charles M. Trammell III,
Acting Director, Project Directorate V,
Division of Reactor Projects—III, IV V and
Special Projects, Office of Nuclear Reactor
Regulation.

[FR Doc. 90-7986 Filed 4-5-90; 8:45 am]

BILLING CODE 7530-01-M

Advisory Committee on Nuclear Waste; Meeting

The Advisory Committee on Nuclear Waste (ACNW) will hold its 19th meeting on April 26 and 27, 1990, Room P-110, 7920 Norfolk Avenue, Bethesda, MD, 8:30 a.m. until 5:00 p.m. each day. Portions of this meeting will be closed to discuss information the release of which would represent a clearly unwarranted invasion of personal privacy 5 U.S.C. 552b(c)(6).

The purpose of the meeting will be to review and discuss the following topics:

A. Review and comment on Characterization of the Yucca Quaternary Regional Hydrology Study Plan (Open).

B. Review results of the waste confidence review group's final review report which includes the disposition of public comments (Open).

C. Briefing on the recent BEIR V report regarding, "Health Effects of Exposure to Low Levels of Ionizing Radiation" (Open).

D. Continue ACNW considerations of EPA's High-Level Radioactive Waste Standards, as appropriate (Open).

E. Prepare a four month program plan of ACNW activities for the Nuclear Regulatory Commission (Open).

F. Appointment of ACNW members, discuss the qualifications of candidates proposed for ACNW membership (Open/Closed).

G. Committee Activities—The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate (Open).

Procedures for the conduct of a participation in ACNW meetings were published in the Federal Register on June 6, 1988 (53 FR 20699). In accordance with these procedures, oral or written statements may be presented by members of the public, recordings will be permitted only during those portions of the meeting when a transcript is being kept, and questions may be asked only by members of the Committee, its consultants, and staff. The office of the ACRS is providing staff support for the ACRS. Persons desiring to make oral statements should notify the Executive Director of the office of the ACRS as far in advance as practical 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 ACRS Chairman. Information regarding the time to be set aside for this purpose may be obtained

by a prepaid telephone call to the Executive Director of the office of the ACRS, Mr. Raymond F. Fraley (telephone 301/492-4516), prior to the meeting. In view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with the ACRS Executive Director or call the recording (301/492-4600) for the current schedule if such rescheduling would result in major inconvenience.

Dated: April 2, 1990.

John C. Hoyle,

Advisory Committee Management Officer.

[FR Doc. 90-7987 Filed 4-5-90; 8:45 am]

BILLING CODE 7530-01-M

Advisory Committee on Reactor Safeguards; Subcommittees on Thermal Hydraulic Phenomena and Core Performance; Meeting

The Subcommittees on Thermal Hydraulic Phenomena and Core Performance will hold a joint meeting on April 27, 1990, in the Pennsylvania Room at the Holiday Inn, 8120 Wisconsin Avenue, Bethesda, MD.

The entire meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Friday, April 27, 1990—8:30 a.m. until the conclusion of business

The Subcommittees will continue their review of boiling water reactor core power stability pursuant to the core power oscillation event at LaSalle County Station, Unit 2.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairmen; written statements will be accepted and made available to the Committee. Recordings will be permitted only during those portions of the meeting 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 ACRS staff member named below as far in advance as is practicable so that appropriate arrangements can be made.

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

The Subcommittees will then hear presentations by and hold discussions with representatives of the NRC staff, the Boiling Water Reactor Owners

Group, their consultants, and other interested persons regarding this review.

Further information regarding topics to be discussed, the scheduling of sessions open to the public, 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 therefore can be obtained by a prepaid telephone call to the cognizant ACRS staff member, Mr. Paul Boehmert (telephone 301/492-8558) between 7:30 a.m. and 4:15 p.m. Persons planning to attend this meeting are urged to contact the above named individual one or two days before the scheduled meeting to be advised of any changes in schedule, etc., which may have occurred.

Dated: April 1, 1990.

Gary R. Quittschreiber,

Chief, Nuclear Reactors Branch.

[FR Doc. 90-7988 Filed 4-5-90; 8:45 am]

BILLING CODE 7530-01-M

Advisory Committee on Reactor Safeguards; Subcommittees on Advanced Pressurized Water Reactors and Advanced Boiling Water Reactors; Meeting

The Subcommittees on Advanced Pressurized Water Reactors and Advanced Boiling Water Reactors will hold a joint meeting on April 26, 1990, in the Pennsylvania Room at the Holiday Inn, 8120 Wisconsin Avenue, Bethesda, MD.

The entire meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Thursday, April 26, 1990—8:30 a.m. until the conclusion of business

The Subcommittees will discuss the licensing review basis documents for CE System 80+ and GE ABWR designs.

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. Recordings will be permitted only during those portions of the meeting 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 ACRS staff member named below as far in advance as is practicable so that appropriate arrangements can be made.

During the initial portion of the meeting, the Subcommittees, along with any of their consultants who may be present, may exchange preliminary views regarding matters to be

considered during the balance of the meeting.

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

Further information regarding topics to be discussed, the scheduling of sessions open to the public, 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 therefore can be obtained by a prepaid telephone call to the cognizant ACRS staff member, Mr. Medhat M. El-Zeftawy (telephone 301/492-8901) between 7:30 a.m. and 4:15 p.m. Persons planning to attend this meeting are urged to contact the above named individual one or two days before the scheduled meeting to be advised of any changes in schedule, etc., which may have occurred.

Dated: April 2, 1990.

Gary R. Quittschreiber,

Chief, Nuclear Reactors Branch.

[FR Doc. 90-7989 Filed 4-5-90; 8:45 am]

BILLING CODE 7530-01-M

OFFICE OF MANAGEMENT AND BUDGET

Request for Comment on Study of Federal Information Inventory and Locator Systems

AGENCY: Office of Management and Budget.

ACTION: Notice.

SUMMARY: The Office of Management and Budget requests public comment for a research study entitled "Federal Information Inventory and Locator Systems: Policy Review and Recommendations."

DATES: Comments from the public should be submitted no later than May 21, 1990.

ADDRESSES: Comments should be addressed to: J. Timothy Sprehe, Office of Information and Regulatory Affairs, Room 3235 New Executive Office Building, Office of Management and Budget, Washington, DC 20503. Telephone: (202) 395-4814.

FOR FURTHER INFORMATION CONTACT: Professor Charles R. McClure, School of Information Studies, Room 4-218 Center for Science and Technology, Syracuse University, Syracuse, New York 13244-4100. Telephone: (315) 443-2911.

SUPPLEMENTARY INFORMATION: The Office of Management and Budget (OMB) requests public comment

55
5) 1:00 - 1:45 P.M.

Appointment of ACNW Members (Open/Closed)
5.1) Discuss the qualifications of candidates proposed for ACNW Membership (DWM/MFL)

(NOTE: Portions of this session will be closed as necessary to discuss information the release of which would represent a clearly unwarranted invasion of personal privacy.)

55
6) 1:45 - 5:00 P.M.

TAB 6-----

3:15 - 4:15 p.m. Break

4:45

5:00 P.M.

EPA High-Level Waste Standards (Open)

6.1) Continue deliberations and the preparation of ACNW comments on 40 CFR 191 - "Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Waste" (MJS/HJL)

RECESS

Friday, April 27, 1990, Room P-110, 7920 Norfolk Avenue, Bethesda, MD

55
8:30 - 10:30 A.M.

TAB 7-----

Review Results of Waste Confidence, Review Group (WJH/CEA)

7.1) Overview of Process/History
7.2) Results of Current Review
7.3) Public Comments
7.4) Conclusions

55
10:30 - 10:45 A.M.

BREAK

55
8) 10:45 - 12:15 P.M.

EPA High-Level Waste Standards (Open)

8.1) Continue deliberations and the preparation of ACNW comments on the EPA Standards (MJS/HJL)

12:15 - 1:15 P.M.

LUNCH

9) 1:15 - 5:00 P.M.

Preparation of ACNW Reports (Open)

9.1) Discuss proposed ACNW reports to NRC:
9.1-1 EPA High-Level Waste Standards (MJS/HJL)
9.1-2 Waste Confidence Review (DWM/CEA)
9.1-3 ACNW Program Plan (DWM/RKM)

11:08 a.m.

5:00 P.M.

ADJOURN

[= This portion of the meeting was transcribed.

APPENDIX I: MEETING ATTENDEES

19TH ACNW MEETING
APRIL 26-27, 1990

ACNW MEMBERS

	<u>1st Day</u>	<u>2nd Day</u>
Dr. William J. Hinze	<u> X </u>	<u> X </u>
Dr. Dade W. Moeller	<u> X </u>	<u> X </u>
Dr. Martin J. Steindler	<u> X </u>	<u> </u>

CONSULTANTS

Dr. David Okrent	<u> X </u>	<u> </u>
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NRC STAFF

Abraham A. Eiss
King Stablein
David Brooks
John Bradbury
Neil Coleman
Robert B. Neel
Clark Prichard
James Wolf
Seth M. Coplan
Donald Chery

DOE AND CONTRACTORS

Edward Regnier - DOE
Jane Stockey - DOE
D. T. Oakley - DOE/LANL

EPA

Ray Clark
Priscilla Bunton

U.S. GEOLOGICAL SURVEY

Peter Stevens
Ray Wallace
Gene Roseboom

GAO

Vic Sgobba
Dwayne Weigel

OTHER AGENCIES AND PUBLIC

P. Krishna - Battelle
Stan Neuder - Battelle
Jack Parry - Nuclear Waste Technical Review Board (NWTRB)
James K. Channell- New Mexico Environmental Evaluation Group
Peter B. Myers - National Academy of Sciences
Warner North - NWTRB
Leon Reiter - NWTRB
G. H. Daly - BDM
Andy Muir - ICF
Steven Oston - TASC
Linda Lehman - State of Nevada
Stan Echols - Bishop Cook Purcell & Reynolds
D. M. Wentner - Defense Nuclear Facilities Safety Board
Thomas Cotton - JK Research Associates
Ruth Weiner - Center for Nuclear Waste Regulatory Analyses
Dave Benok - U.S. House of Representatives
P. Austin - SAIC
Gudrun Scott - Consultant
Chris Henkel EEI/UWaste
Joe Klinger - Illinois Department of Nuclear Safety
Brian McIntyre - Westinghouse
D. R. Anderson - Sandia Labs
Jim Martin - U of MI/ACNFS DOE
Charles F. Eason - U.S. Ecology, Inc.

APPENDIX II. FUTURE AGENDA

May 24-25, 1990 (Tentative Agenda)

Technical Position on Soil Erosion (Open) - The Committee will review and comment on the final Technical Position on the Design of Erosion Protection Covers for Stabilization of Uranium Mill Tailings Sites. The NRC staff hopes to complete this Technical Position by the end of May 1990.

Center for Nuclear Waste Regulatory Analyses (Open) - The Committee will be briefed on the systematic regulatory analysis (Program Architecture) for the high-level waste repository.

Licensing Support System (Open) - The Committee will be briefed on the status of the LSS in light of DOE schedule changes.

Committee Activities (Open) - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate.

June 28-29, 1990 (Tentative Agenda)

Definition of the Term "Representativeness" (Open) - The Committee will be briefed on the definition of "representativeness" as it pertains to NRC staff's review of DOE's methodology for three-dimensional characterization of the proposed Yucca Mountain repository site.

Alternative Exploratory Shaft Facility Construction Techniques (Open) - The Committee will be briefed on alternative exploratory shaft facility construction techniques from both engineering and geoscience perspectives.

Pathfinder Atomic Power Plant Dismantlement (Open) - The Committee will review the NRC staff's Safety Evaluation Report. The final SER is expected to be issued by the end of May 1990. ACNW comments are requested.

Low-Level Waste Research Program Plan Update (Open) - The Committee will be briefed on the draft updated LLW Research Program Plan. A copy of the draft updated plan is scheduled to be provided to the Committee in May 1990.

Status of Proactive Work (Open) - The Committee will be briefed by the NRC staff on the status of proactive work (technical positions and rules) in the Division of HLWM and on NRC programmatic response to changes in the DOE program.

BEIR V Report (Open) - The Committee will be briefed by a representative of the National Research Council on the BEIR V Report, "Health Effects of Exposure to Low-Levels of Ionizing Radiation".

Iodine-129 Source Term (Open) - The Committee will be briefed by representatives of EPRI and NUMARC on a methodology for predicting the iodine-129 source term for low-level radioactive waste sites.

NRC Comments on EPA Standards (Open) - The Committee will be briefed by the NRC staff on the comments on proposed EPA standards for the geologic disposal of high-level radioactive waste.

Committee Activities (Open) - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate.

Working Group Meeting (Date to be announced)

Migration of Carbon-14 (Open) - The Working Group will be briefed on the potential problems that could arise at a high-level repository as a result of carbon-14 migration. This will include a discussion of concerns with EPA release limits for carbon-14.

Human Intrusion (Open) - The Working Group will be briefed on the 40 CFR Part 191 approach to human intrusion at a high-level waste repository. This will be designed to explore the range of current thinking from various groups in the U.S. and other countries.

July 30-31, 1990 (Tentative Agenda)

Technical Position on Stabilization/Waste Forms (Open) - The Committee will be briefed by the NRC staff and will prepare comments on modifications to the Technical Position on LLW Stabilization/Waste Forms.

NRC Research Program (Open) - The Committee will discuss with representatives of NRC's Nuclear Safety Research Review Committee, the NRC research program on the management and disposal of radioactive wastes.

High-Level Waste Research Program Plan Update (Open) - The Committee will be briefed on the updated draft HLW Research Program Plan. A copy of the draft updated plan is scheduled to be provided to the Committee in June 1990.

Trip Report (Open) - Dr. Linda Lehman, Lehman and Associates, will brief the Committee on her recent visits to the Soviet Union to review radioactive waste management activities.

Quality Assessment Activities (Open) - The Committee plans to meet with NRC staff to receive an update on QA activities associated with the HLW repository.

Committee Activities (Open) - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate.

August 29-31, 1990 (Tentative Agenda)

Rulemaking on LLW Shipment Manifest System (Open) - The Committee will review and comment on the proposed rulemaking on the LLW Shipment Manifest System.

Accident Dose Criteria (Open) - The Committee will be briefed by the NRC staff on the status of the proposed rulemaking on postulated accident dose criteria for HLW repository operations.

EPA Standards (Open) - The Committee will continue discussion on EPA standards for high-level radioactive waste disposal in a geologic repository (per memorandum from Galpin, EPA, to Moeller, ACNW). Working draft #3 of the standard is expected to be issued prior to this meeting.

Committee Activities (Open) - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate.

APPENDIX III. DOCUMENTS RECEIVED

A. Documents Received from Presenters and ACNW Staff

AGENDA ITEM NO.	DOCUMENT
1	1. Memorandum to ACNW Members and Staff from Charlotte Abrams, dated April 24, 1990, regarding Nuclear Waste Technical Review Board Staff's Visit and Discussion with the Commissioners' Technical Assistants [Handout 1] [Official Use Only]
2	2. Memorandum to William Hinze from Charlotte Abrams, undated, regarding Status Report on the Characterization of the Yucca Mountain Quaternary Regional Hydrology Study Plan [Handout 2.1]
3	3. Memorandum to ACNW Members and Staff from Charlotte Abrams, dated April 24, 1990, regarding ACNW Consultant Comments on the Quaternary Regional Hydrology Study Plan, with attachment [Handout 2] [Official Use Only]
	4. Memorandum to Dade Moeller from William Hinze, dated April 25, 1990, regarding Comments on Recent Concerns of ACNW Date: 4-18-90
6	5. Letter to Dade Moeller from Floyd Galpin, dated April 17, 1990, regarding EPA's High-Level Waste Standards
7	6. Final Waste Confidence Decision Review, dated April 27, 1990, by Stuart Treby etal

B. Meeting Notebook Contents Listed by Tab Number

<u>TAB</u>	<u>CONTENTS</u>
1	1. Introductory Statement by ACNW Chairman for April 26-27, 1990
2	2. Tentative Agenda
	3. Table of Contents
	4. Status Report on Study Plan for Characterization of the Yucca Mountain Quaternary Regional Hydrology (Study Plan 8.3.1.5.2.1)
	5. <u>Characterization of the Yucca Mountain Quaternary Regional Hydrology</u> , Study Plan for Study 8.3.1.5.2.1, Revision 0, June 1989, U.S. Department of Energy
	6. Letter to Ralph Stein, DOE, from John Linehan, NRC, dated November 24, 1989, regarding the results of the staff's Acceptance and Start-Work Reviews of the Study Plan
	7. Staff's Detailed Technical Review comments on the Study Plan
	8. Memorandum to ACNW Members and Staff from Charlotte Abrams, dated March 7, 1990, regarding NRC/DOE Technical Exchange on Calcite-Silica Vein Deposits, with attachments
	9. Letter from Maxwell Blanchard, dated November 10, 1987, regarding distribution of the Final Summary Report on the Calcite and Opaline-Silica Deposits in the Yucca Mountain Area by the Peer Review Panel, with attachments
	10. Memorandum to King Stablein from Donald Chery, dated September 12, 1989, regarding Acceptance Review of Study Plan for Characterization of the Quaternary Regional Hydrology
	11. Pages 1 - 7 of the Draft Review Plan for NRC Staff Review of DOE Study Plans and Procedures
3	12. List of Items Proposed for ACNW Review
	13. Memorandum to Raymond Fraley from James Blaha, dated March 30, 1990, regarding Proposed Agenda Items for the ACRS and the ACNW, with attachment
	14. Memorandum to Richard Major from Dade Moeller, dated April 12, 1990, regarding Revised Version of Air Cleaning Paper, with attachment
4	15. Status Report on ACNW Program Plan
	16. Draft Committee Report for Second Program Plan, dated April 17, 1990 [Official Use Only]

17. ACNW Letter to Chairman Carr, dated December 29, 1989, regarding Program Plan for the Advisory Committee on Nuclear Waste
 18. Memorandum to Forrest Remick from Chairman Carr, dated November 6, 1989, regarding Division of Responsibilities Between the ACRS and ACNW, with attachment
- 6
19. Status Report on 40 CFR 191
 20. Highlights of the presentations made to the ACNW on March 23, 1990
 21. Portion of the draft minutes from the 18th ACNW meeting on EPA Standards for High-Level Radioactive Waste
 22. Draft ACNW Letter to Chairman Carr, dated April 10, 1990, regarding Critique of EPA Standards for Disposal of High-Level Wastes [Official Use Only]
 23. Dr. Okrent's "first set of suggestions" on the Draft Letter on EPA Standards, undated
 24. ACNW Letter to Chairman Carr, dated December 21, 1989, regarding Comments on Proposed Revisions of EPA's High-Level Waste Standards
 25. Memorandum to ACNW Members from Richard Major, dated April 10, 1990, regarding Fundamental Assumptions Supporting EPA and NRC HLW Criteria, with attachment [Official Use Only]
 26. Working Draft 2 of 40 CFR Part 191, dated January 31, 1990
 27. Letter to Honorable Watkins from John Ahearne, Chairman, Advisory Committee on Nuclear Facility Safety, dated December 11, 1989, regarding Review of Waste Isolation Pilot Plant (WIPP)
 28. ACRS/ACNW Comments on 40 CFR 191 [13 memoranda]
 29. Letter to Dade Moeller from Melvin Carter, Nuclear Waste Technical Review Board, dated March 24, 1990, regarding EPA's High-Level Waste Standards
- 7
30. Status Report on Waste Confidence Decision Review, April 27, 1990
 31. Memorandum to Raymond Fraley from Robert Bernero and Stuart Treby, dated April 12, 1990, regarding Draft Final Waste Confidence Decision Review and Conforming Amendment to 10 CFR Part 51, with attachment [Official Use Only]
 32. Copies of public comments on the proposed Waste Confidence Decision Review

Appendix III
19th ACNW Meeting

4

33. ACNW Letter to Chairman Zech, dated May 3, 1989, regarding Proposed Waste Confidence Decision By the Waste Confidence Review Group
34. SECY-88-343, Plan for Five-Year Review of Waste Confidence Findings, dated December 15, 1988
35. ACRS Letter to Chairman Ahearne, dated December 10, 1980, regarding Waste Confidence Rulemaking - Storage and Disposal of Nuclear Waste