



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON NUCLEAR WASTE
WASHINGTON, D.C. 20555-0001
April 28, 2005

MEMORANDUM TO: ACNW Members
ACNW Staff

FROM: *Michele S. Kelton*
Michele S. Kelton
Technical Secretary, ACNW

SUBJECT: CERTIFIED MINUTES OF THE 158TH MEETING OF THE ADVISORY
COMMITTEE ON NUCLEAR WASTE (ACNW) MARCH 15-17, 2005

The proposed minutes of the subject meeting have been certified as the official record of the proceedings for that meeting.

Attachment:
Certified Minutes of the 158th
Meeting, March 15-17, 2005

cc: J. Larkins, ACRS/ACNW
J. Flack, ACNW/ACNW
A. Bates, SECY (O-16C1)
S. Jones, NMSS (T-8A23)
J. Dixon-Herrity, EDO (O-16E15)



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON NUCLEAR WASTE
WASHINGTON, D.C. 20555-0001

MEMORANDUM TO: Michele S. Kelton, Technical Secretary
Advisory Committee on Nuclear Waste

FROM: Michael T. Ryan, Chairman
Advisory Committee on Nuclear Waste

SUBJECT: PROPOSED MINUTES OF THE 158TH MEETING OF THE
ADVISORY COMMITTEE ON NUCLEAR WASTE (ACNW)
MARCH 15-17, 2005

I certify that, based on my review of these minutes¹, and to the best of my knowledge and belief, I have observed no substantive errors or omissions in the record of this proceeding subject to the comments noted below.

Comments:

Michael T. Ryan, Chairman

A handwritten signature in cursive script that reads "Michael T. Ryan".

Date: 4/28/05

⁽¹⁾ Minutes of 158th meeting held on March 15-17, 2005, dated April 26, 2005.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON NUCLEAR WASTE
WASHINGTON, D.C. 20555-0001

April 26, 2005

MEMORANDUM TO: Michael T. Ryan, Chairman,
Advisory Committee on Nuclear Waste

FROM: *Michele S. Kelton*
Michele S. Kelton, Technical Secretary
Advisory Committee on Nuclear Waste

SUBJECT: PROPOSED MINUTES OF THE 158TH MEETING OF THE
ADVISORY COMMITTEE ON NUCLEAR WASTE (ACNW)
MARCH 15-17, 2005

Enclosed are the proposed minutes of the 158th meeting of the ACNW. This draft is being provided to give you an opportunity to review the record of this meeting and provide comments. Your comments will be incorporated into the final certified set of minutes as appropriate. Please provide your corrections and comments to me.

Please note that these minutes are being issued in two parts: (1) main body (working copy form) and (2) appendices. The appendices are being sent only to those members who have requested them.

A copy of the certified minutes with appendices will be forwarded to each member.

Enclosure: As stated

cc w/o Encl. 2: ACNW Members
ACNW Staff
J. Larkins, ACRS/ACNW

CONTENTS

	<u>Page</u>
I. Chairman's Report (Open)	1
II. Preparation for March 16, 2005, Meeting With the NRC Commissioners (Open) .	1
III. Preparation for Visit to the Center for Nuclear Waste Regulatory Analyses (Open)	2
IV. Estimation of Groundwater Recharge at the Watershed Scale: Implications for Model Abstractions and Validations (Open)	2
V. Semiannual Briefing of Office of Nuclear Material Safety and Safeguards Office Director (Open)	3
VI. Status of NRC's Review of USEC Inc.'s License Application for a Gas Centrifuge Uranium Enrichment Facility (Open)	4
VII. Preparation for ACNW May 2005 Visit to Japan (Open)	5
VIII. ACNW White Paper on Low-Level Radioactive Waste Management Issues (Open)	5

APPENDICES

- A *Federal Register* Notice
- B Meeting Agenda
- C Meeting Attendees
- D Future Agenda
- E List of Documents Provided to the Committee and Meeting Notebook Contents

CERTIFIED

4/28/05

By MICHAEL T. RYAN

Issued: 4/28/05

**CERTIFIED MINUTES OF THE 158TH MEETING OF THE
ADVISORY COMMITTEE ON NUCLEAR WASTE
MARCH 15-17, 2005**

The U.S. Nuclear Regulatory Commission (NRC) Advisory Committee on Nuclear Waste (ACNW or the Committee) held its 158th meeting March 15-17, 2005, at Two White Flint North, 11545 Rockville Pike, Rockville, Maryland. The ACNW published a notice of this meeting in the *Federal Register* on March 10, 2005 (70 FR 12022) (Appendix A). This meeting served as a forum for attendees to discuss and take appropriate action on the items in the agenda (Appendix B). The entire meeting was open to public attendance.

A transcript of selected portions of the meeting is available in the NRC's Public Document Room at One White Flint North, Room 1F19, 11555 Rockville Pike, Rockville, Maryland. Copies of the transcript are available for purchase from Neal R. Gross and Company, Inc., 1323 Rhode Island Avenue, NW., Washington, DC 20005. Transcripts may also be downloaded from, or reviewed on, the Internet at <http://www.nrc.gov/reading-rm/doc-collections/acnw/tr/> at no cost.

ACNW Members, Michael T. Ryan (ACNW Chairman), Allen G. Croff (ACNW Vice Chairman), James H. Clarke, William J. Hinze, and Ruth Weiner attended this meeting. For a list of other attendees, see Appendix C.

I. CHAIRMAN'S REPORT (OPEN)

[Dr. John Larkins was the Designated Federal Official for this portion of the meeting.]

Dr. Michael Ryan, ACNW Chairman, convened the meeting at 10:30 a.m. and briefly reviewed the agenda. He stated that the meeting was being conducted in conformance with the Federal Advisory Committee Act. Dr. Ryan asked members of the public who were present and had something to say to inform the ACNW staff so that time could be allocated for them to speak.

II. PREPARATION FOR MARCH 16, 2005, MEETING WITH THE COMMISSION (OPEN)

[Mr. John Flack was the Designated Federal Official for this portion of the meeting.]

On March 15, 2005, the ACNW Members who would be briefing the Commission went through their presentation slides and notes in final preparation for the meeting, which immediately followed this session. The Members gave each presenter questions and comments to help refine the prepared remarks. Chairman Ryan was to give the introduction and a presentation on the ACNW review of the International Commission on Radiological Protection (ICRP) draft recommendations. Dr. Weiner was to summarize waste research activities. Mr. Croff was to

give an overview of future activities and working groups, and then Dr. Hinze was to talk about igneous activity at Yucca Mountain. Chairman Ryan was to summarize the Action Plan and present closing comments.

III. PREPARATION FOR VISIT TO THE CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES (OPEN)

[Dr. Richard Savio was the Designated Federal Official for this portion of the meeting.]

Committee Members Weiner, Hinze, and Clarke planned to visit the Center for Nuclear Waste Regulatory Analyses (CNWRA) ON April 13–15, 2005. The topics to be discussed were decommissioning, igneous activity, container life, source term, near-field environment, radionuclide retardation, and total system performance, with the primary focus on igneous activity. The Committee discussed and agreed on a number of detailed questions to be included in the discussions. The members participating in the visit were to report back to the ACNW during the April 18–19, 2005, ACNW meeting. Plans for reporting to the Commission on CNWRA the technical assistance sponsored by the Office of Nuclear Material Safety and Safeguards (NMSS) were to be discussed at this time.

IV. ESTIMATION OF GROUNDWATER RECHARGE AT THE WATERSHED SCALE: IMPLICATIONS FOR MODEL ABSTRACTIONS AND VALIDATIONS (OPEN)

[Mr. Neil Coleman was the Designated Federal Official for this portion of the meeting.]

The Committee was briefed about research on groundwater recharge by representatives from NRC's Office of Nuclear Regulatory Research (RES) and from the Agricultural Research Service (ARS) of the U.S. Department of Agriculture (USDA). The work relates to two interagency agreements with the ARS to (1) estimate groundwater recharge using state-of-the-science methods and (2) evaluate model abstraction techniques for estimating water flux and transport in soils. This work can enhance estimates of infiltration and groundwater recharge to support NRC staff evaluations of radionuclide transport at decommissioning or low-level radioactive waste (LLW) sites.

The presentations addressed field studies at the watershed scale that are currently being performed at a well-instrumented site in Beltsville, Maryland, operated by the USDA researchers. The presentations also provided information on earlier experiments in well-controlled environments confirming the approaches to estimating groundwater recharge being used at the Beltsville site. Ground-penetrating radar has been used successfully at the Beltsville site to help detect locations of preferred subsurface pathways for infiltrating groundwater. This information can help to improve the understanding and prediction of water fluxes and travel times.

Chairman Ryan asked for several examples of how this research applies to decommissioning sites. Dr. Thomas Nicholson (RES) said that what he is learning from this project includes where to look and how to look in site characterization. For example, if a site has a fractured-clay horizon, how important is the fracture pattern in the clay and does it give rise to both a vertical and a horizontal preferential flow? There may be some natural-soil textural class that indicates possible "perching" of groundwater in the soil column. With local saturation, water is locally concentrated and can move relatively quickly along vertical fractures that can serve as preferential pathways. Dr. Nicholson also noted that most sites have some complexities with respect to

features and processes. The question is, "How relevant are these complexities to water flux and transport?" A key point of model abstraction is to assess how much simplification can be applied and still capture the natural processes and features important for site characterization and modeling. The research will help the Committee to better understand how to conceptualize and model water flow and transport in complex, heterogeneous sites.

The information from field tests at the watershed scale can be used to evaluate alternative conceptual models and greatly improve the selection of the best model abstraction by helping to identify the most important model components and processes. The Beltsville facility provides opportunities for field-scale testing on a watershed scale and in a highly instrumented environment. This research setting permits an event-driven approach. The incorporation of dynamic conditions gives more realistic estimates of groundwater recharge.

V. SEMIANNUAL BRIEFING OF OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS OFFICE DIRECTOR (OPEN)

[Ms. Sharon Steele was the Designated Federal Official for this portion of the meeting.]

The Committee was addressed by Mr. Jack Strosnider, Director of NRC's Office of Nuclear Materials Safety and Safeguards. To help respond to Committee questions, Mr. Strosnider was accompanied by the NMSS Division Directors who manage the respective NMSS programs. He focused on new programmatic developments in NMSS since the last meeting with the Committee and highlights of the NMSS briefing to the Commission on February 15, 2005.

Mr. Strosnider noted the importance of acknowledging ACNW's role in providing independent advice to the Commission and the need for NMSS to support that role. He mentioned an example from the March 16th ACNW briefing of the Commission. At that briefing, a Commissioner talked about the need to get timely input from ACNW ON the disposition of solid materials. Mr. Strosnider discussed the need to communicate and coordinate with ACNW on these kinds of activities. He said that NMSS gets a great deal back from ACNW in return. For example, feedback from ACNW helped to improve the technical quality of NMSS products and programs.

Mr. Strosnider noted the importance of communication between NMSS and the ACNW. He has been pondering ways to integrate interactions with ACNW into the NMSS operating plans. This integration has not yet been achieved across the board but it would help to improve communications. He listed key areas of work where NMSS wants ACNW review: the waste incidental to reprocessing; the potential Yucca Mountain repository, including 10 CFR Part 63; decommissioning of complex sites; review of the ICRP recommendations; and fuel cycle facilities.

Mr. Strosnider asked about the Committee's participation in the decommissioning guidance workshop that NMSS is holding April 20– 21, 2005. Chairman Ryan said that ACNW representatives would attend as observers. Mr. Strosnider said he appreciates the efficiency of this approach in terms of impact on NMSS staff and that ACNW would have the opportunity to hear firsthand from stakeholders attending the workshop.

With respect to an ACNW working group on West Valley, Mr. Strosnider said NMSS would welcome feedback or suggestions from ACNW on the environmental impact statement (EIS) and decommissioning plan that DOE is developing. Chairman Ryan said the Commission has also encouraged ACNW to examine several decommissioning case studies and to come up with lessons learned, which may contribute to the decommissioning of more complex sites. Mr. Dan Gillen said the April 20–21 workshop would include a panel on lessons learned from decommissioning stakeholders.

Mr. Charles Miller, Director of the Division of Industrial and Medical Nuclear Safety, commented on the proposed rule for disposition of solid materials. After the rule has been issued for public comment, NMSS wants ACNW to review the public comments received and make recommendations for the final rulemaking.

With regard to a Yucca Mountain license application (LA), Mr. Strosnider said the U.S. Department of Energy (DOE) plans to submit an LA by December 2005 but hadn't committed to this schedule. There are uncertainties about certification of the licensing support network and development of a revised U.S. Environmental Protection Agency (EPA) standard. EPA plans to release a revised environmental standard sometime this summer. NMSS is following the revision closely because NRC's 10 CFR Part 63 must be revised to reflect the EPA standard.

VI. STATUS OF NRC'S REVIEW OF USEC INC.'S LICENSE APPLICATION FOR A GAS CENTRIFUGE URANIUM ENRICHMENT FACILITY (OPEN)

[Dr. Latif Hamdan was the Designated Federal Official for this portion of the meeting.]

The NMSS staff from briefed the Committee on the status of the ongoing licensing reviews of USEC Inc.'s application for a proposed project to enrich uranium using a gas centrifuge process at DOE's Portsmouth site in Piketon, Ohio. The August 2004 license application requested authorization for ²³⁵uranium enrichment of up to 10 percent. Mr. Yawar Faraz, Senior Project Manager, Division of Fuel Cycle Safety and Safeguards, talked about the ongoing reviews pertaining to safety and safeguards. Mr. Matthew Blevins, Senior Environmental Reviewer, Division of Waste Management and Environmental Protection, talked about the ongoing environmental reviews.

The NMSS staff told the Committee that on October 7, 2004, the Commission issued an order accepting USEC's application for formal review. The order initiated the licensing reviews and provided an opportunity for the public to petition to intervene. The order set a 30-month licensing review schedule for (1) staff safety and safeguards review, including preparation of a safety evaluation report, and an environmental review including preparation of a final EIS, both to be completed by February 2006; (2) licensing board hearing to be completed by October 2006; and (3) Commission licensing decision by February 2007. Other regulatory requirements include preoperational inspection and liability insurance.

The staff told Committee that two petitions have been received and that the petitions raised both safety and environmental contentions. The Committee was also told that the staff has issued requests for additional information (RAIs) pertaining to safety and the environmental report in USEC's application and that USEC has responded to the RAIs. In addition, the staff said that USEC used a semiquantitative risk index method recommended in the standard review plan for

fuel cycle facilities (NUREG-1520) in its integrated safety analysis, and did not perform a probabilistic risk assessment, since one is not required for fuel cycle facilities. Finally, the staff said that NRC and DOE staffs are working to develop a memorandum of understanding to define each agency's regulatory oversight responsibilities and to avoid dual regulation.

Committee members and ACNW staff asked questions about the enrichment process, the safety analysis approach to the 10 percent uranium-235 enrichment, and contentions.

The Committee expressed appreciation for the update and indicated that it will continue following up on staff licensing activities, including the draft EIS scheduled for completion this summer.

VII. PREPARATION FOR ACNW MAY 2005 VISIT TO JAPAN (OPEN)

[Mr. Neil Coleman was the Designated Federal Official for this portion of the meeting.]

The Committee decided that, instead of the full committee, a subcommittee of three members accompanied by one staffer would travel to Japan to visit nuclear facilities and meet with regulators and industry representatives. Extensive background materials for the trip had been provided to the members prior to this meeting.

Locations to be visited were shown on a map of Japan. The travelers will arrive in Japan on May 15, 2005. The first meeting will be held on May 16 in Tokyo, where each traveler will give a presentation. The final list of topics is being coordinated with Dr. Yoshio Murao, Technical Counsellor of the Secretariat of the Nuclear Safety Commission of Japan. Presentations will also be given by the Japanese host organizations. On May 17 the ACNW members will fly to Wakkanai in northern Hokkaido. They will visit the Japanese high-level waste demonstration project the following day and then fly back to Tokyo. On May 19 the members will fly to Misawa to visit the nuclear complex at Rokkasyo in northern Honshu and on May 20 they will visit nuclear facilities at Tokai-Mura.

The members were given a brief history of nuclear programs in Japan, starting with the construction and operation of the first Japanese commercial nuclear power plant in 1966. The Committee decided to defer additional overviews for the Japan trip until the April meeting, at which time briefing books will be available for the May trip and the final travel itinerary should be available from the coordinating Japanese organizations.

VIII. ACNW WHITE PAPER ON LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT ISSUES (OPEN)

[Ms. Sharon Steele was the Designated Federal Official for this portion of the meeting.]

Dr. Ryan began by providing some history of the evolution of the current LLW practices and regulations. After reading through the first-draft outline, the members made several recommendations:

- Add a discussion on "time of compliance" to Section 2, "Elements of the regulations that could be improved"

- Add a discussion on "intruder probability" under Section 2.c
- Add a discussion on "period for monitoring, period for concern after operation ceases" in Section 2
- Update Section 3.c to reflect an earlier revision of the Branch Technical Position on Waste Form.
- Add a fourth section on Regulatory Interface Issues

Dr. Ryan agreed to revise the white paper and redistribute it to the Committee for further comments. Members and staff agreed to provide detailed comment on various sections of the paper. Discussions on the revisions and update were to be facilitated during the 159th meeting in April.

APPENDIX A

12022

Federal Register / Vol. 70, No. 46 / Thursday, March 10, 2005 / Notices

NUCLEAR REGULATORY COMMISSION

[Docket No. 52-007]

Exelon Generating Company, LLC; Notice of Availability of the Draft Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site and Associated Public Meeting

Notice is hereby given that the U.S. Nuclear Regulatory Commission (NRC, the Commission) has published NUREG-1815, "Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site: Draft Report for Comment." The site is located near the town of Clinton in DeWitt County, Illinois. The application for the ESP was submitted by letter dated September 25, 2003, pursuant to Title 10 Code of the Federal Regulations Part 52 (10 CFR part 52). The application included a site redress plan in accordance with 10 CFR 52.17(c) and 52.25. If the site redress plan is incorporated in an approved ESP, then the applicant may carry out certain site preparation work and preliminary construction activities. A notice of receipt and availability of the application, which included the environmental report (ER), was published in the *Federal Register* on October 24, 2003 (68 FR 61020). A notice of acceptance for docketing of the application for the ESP was published in the *Federal Register* on October 30, 2003 (68 FR 61835). A notice of intent to prepare an environmental impact statement and to conduct the scoping process was published in the *Federal Register* on November 25, 2003 (68 FR 66130).

The purpose of this notice is to inform the public that NUREG-1815, "Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site: Draft Report for Comment," is available for public inspection in the NRC Public Document Room (PDR) located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland 20852, or from the Publicly Available Records (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS), and will also be placed directly on the NRC Web site at <http://www.nrc.gov>. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the PDR reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr@nrc.gov. In addition, the

Vespasian Warner Public Library, located at 310 North Quincy Street, Clinton, Illinois 61727, has agreed to make the DEIS available for public inspection.

The NRC staff will hold a public meeting to present an overview of the DEIS and to accept public comments on the document. The public meeting will be held at the Vespasian Warner Public Library, located at 310 North Quincy Street, Clinton, Illinois 61727, on Tuesday, April 19, 2005. The meeting will convene at 7 p.m. and will continue until 10 p.m., as necessary. The meeting will be transcribed and will include: (1) A presentation of the contents of the DEIS, and (2) the opportunity for interested government agencies, organizations, and individuals to provide comments on the draft report. Additionally, the NRC staff will host informal discussions one hour before the start of the meeting at the library. No formal comments on the DEIS will be accepted during the informal discussions. To be considered, comments must be provided either at the transcribed public meeting or in writing. Persons may register to attend or present oral comments at the meeting by contacting Ms. Jennifer Davis, by telephone at 1-800-368-5642, extension 3835, or by Internet to the NRC at ClintonEIS@nrc.gov no later than April 13, 2005. Members of the public may also register to speak at the meeting within 15 minutes of the start of the meeting. Individual oral comments may be limited by the time available, depending on the number of persons who register. Members of the public who have not registered may also have an opportunity to speak, if time permits. Ms. Davis will need to be contacted no later than April 13, 2005, if special equipment or accommodations are needed to attend or present information at the public meeting, so that the NRC staff can determine whether the request can be accommodated.

Members of the public may send written comments on the DEIS concerning the Exelon ESP application to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this *Federal Register* Notice. Comments may also be delivered to Room T-6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland 20852, from 7:30 a.m. to 4:15 p.m. during Federal workdays. To be considered, written comments should be postmarked by May 25, 2005. Electronic comments may

be sent by the Internet to the NRC at ClintonEIS@nrc.gov. Electronic submissions should be sent no later than May 25, 2005. Comments will be available electronically and accessible through the NRC's PERR link at <http://www.nrc.gov/reading-rm/adams.html>.

FOR FURTHER INFORMATION, CONTACT: Jennifer Davis, License Renewal and Environmental Impacts Program, Division of Regulatory Improvement Programs, U.S. Nuclear Regulatory Commission, Washington, DC, 20555-0001. Ms. Davis may be contacted at the aforementioned telephone number or e-mail address.

Dated at Rockville, Maryland, this 2nd day of March, 2005.

For the Nuclear Regulatory Commission.

Pao-Tsin Kuo,

Program Director, License Renewal and Environmental Impacts Program, Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation.

[FR Doc. 05-4669 Filed 3-9-05; 8:45 am]

BILLING CODE 7590-01-P

NUCLEAR REGULATORY COMMISSION

* Advisory Committee on Nuclear Waste; Notice of Meeting

The Advisory Committee on Nuclear Waste (ACNW) will hold its 158th meeting on March 15-17, 2005, Room T-2B3, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland. The date of this meeting was previously published in the *Federal Register* on Wednesday, December 8, 2004 (69 FR 71084).

The schedule for this meeting is as follows:

Tuesday, March 15, 2005

10:30 a.m.-10:40 a.m.: Opening Statement (Open)—The ACNW Chairman will make opening remarks regarding the conduct of today's sessions.

10:40 a.m.-11:40 a.m.: Preparation of ACNW Reports (Open)—The Committee will discuss potential letter report on the Status of High-Significant Agreements Associated with the Proposed HLW Repository. Other potential letter reports may be discussed.

1 p.m.-3 p.m.: Preparation for the March 16, 2005 Briefing with NRC Commissioners (Open)—The Committee will review the briefing materials to be discussed with the Commission on March 16, 2005.

3 p.m.-5 p.m.: Preparation for Visit to the Center for Nuclear Waste Regulatory Analyses (CNWRA) (Open)—The

Committee will review its preparation for its planned visit to the CNWRA in San Antonio, Texas on April 14–15, 2005. The purpose of this visit is to review the technical assistance work being performed on behalf of the NRC's Office of Nuclear Material Safety and Safeguards.

Wednesday, March 16, 2005

8:30 a.m.–9 a.m.: *Final Preparation for Commission Briefing* (Open).

9:30 a.m.–11:30 a.m.: *Meeting with the NRC Commissioners* (Open)—The Committee will meet with the NRC Commissioners in the Commission's Conference Room, One White Flint North. The outline for this proposed meeting is as follows:

- Introductory Remarks.
- Working Group Meetings.
- ICRP Draft Recommendations.
- Waste Management Research Review.
- Future Activities/Working Groups.
- 2005 ACNW Action Plan.

1 p.m.–1:10 p.m.: *Opening Statement* (Open)—The ACNW Chairman will begin the meeting with brief opening remarks, outline the topics to be discussed, and indicate items of interest.

1:10 p.m.–2:40 p.m.: *Estimation of Groundwater Recharge at the Watershed Scale: Implications for Model Abstractions and Validations* (Open)—The ACNW will hear presentations by and hold discussions with representatives of the Office of Nuclear Regulatory Research and Department of Agriculture/Agricultural Research Service staff on field studies to test and evaluate groundwater recharge estimation techniques, methods, and their uncertainties.

2:40 p.m.–3:40 p.m.: *NMSS Office Director Semi-Annual Briefing* (Open)—The Committee will be briefed by the Director of the Office of Nuclear Material Safety and Safeguards on recent activities of interest to the Committee.

4 p.m.–5 p.m.: *Status of NRC's Review of USEC Inc.'s License Application for a Gas Centrifuge Uranium Enrichment Facility* (Open)—The Committee will receive a briefing by an NMSS representative on the status of the license application for the proposed facility in Piketon, Ohio.

5 p.m.–6 p.m.: *Preparation of ACNW Reports* (Open)—The Committee will discuss potential reports on the Estimation of Groundwater Recharge Techniques and Status of USEC Inc.'s License Application for a Gas Centrifuge Uranium Enrichment Facility.

Thursday, March 17, 2005

8:30 a.m.–8:40 a.m.: *Opening Statement* (Open)—The ACNW Chairman will make opening remarks regarding the conduct of today's sessions.

8:40 a.m.–11 a.m.: *Preparation for ACNW May 2005 Visit to Japan* (Open)—The Committee will review preparations for its planned visit to Japan on May 14–21, 2005. The purpose of this visit is to meet with representatives of the Japan Nuclear Safety Commission (Tokyo). In addition, the Committee will meet with the operators of the Rokkasho-Mura low-level radioactive waste reprocessing and disposal facility. Members will also meet with representatives of the Japan Atomic Energy Research Institute, the Japan Nuclear Cycle Development Institute, the Nuclear and Industrial Safety Agency, Japan Nuclear Fuel Limited, and the Nuclear Waste Management Organization of Japan.

1 p.m.–1:30 p.m.: *ACNW White Paper on Low-Level Radioactive Waste Management Issues* (Open)—The Committee will discuss the format and content of a potential ACNW White Paper addressing technical issues in the management of civilian low-level radioactive waste.

1:30 p.m.–3 p.m.: *Miscellaneous* (Open)—The Committee will discuss matters related to the conduct of ACNW activities, and specific issues that were not completed during previous meetings, as time and availability of information permit. Discussions may include future Committee Meetings.

Procedures for the conduct of and participation in ACNW meetings were published in the *Federal Register* on October 18, 2004 (69 FR 61416). 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. Persons desiring to make oral statements should notify Ms. Sharon A. Steele, (Telephone 301–415–6805), between 7:30 a.m. and 4 p.m. ET, as far in advance as practicable so that appropriate arrangements can be made to schedule the necessary time during the meeting for such statements. Use of still, motion picture, and television cameras during this meeting will be limited to selected portions of the meeting as determined by the ACNW Chairman. Information regarding the time to be set aside for taking pictures may be obtained by contacting the ACNW office 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 notify Ms. Steele as to their particular needs.

Further information regarding topics to be discussed, whether the meeting has been canceled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted, therefore can be obtained by contacting Ms. Steele.

ACNW meeting agenda, meeting transcripts, and letter reports are available through the NRC Public Document Room at pdrr@nrc.gov, or by calling the PDR at 1–800–397–4209, or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS) which is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> or <http://www.nrc.gov/reading-rm/doc-collections/lacrsl> & ACNW Mtg schedules/agendas).

Video Teleconferencing service is available for observing open sessions of ACNW meetings. Those wishing to use this service for observing ACNW meetings should contact Mr. Theron Brown, ACNW Audiovisual Technician (301–415–8066), between 7:30 a.m. and 3:45 p.m. ET, at least 10 days before the meeting to ensure the availability of this service. Individuals or organizations requesting this service will be responsible for telephone line charges and for providing the equipment and facilities that they use to establish the video teleconferencing link. The availability of video teleconferencing services is not guaranteed.

Dated: March 4, 2005.

Annette Viatti-Cook,

Secretary of the Commission.

[FR Doc. 05–4667 Filed 3–9–05; 8:45 am]
BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Sunshine Act; Meeting

AGENCY HOLDING THE MEETING: Nuclear Regulatory Commission.

DATE: Week of March 7, 2005.

PLACE: Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

STATUS: Public and Closed.

Matters to be Considered

Week of March 7, 2005

Monday, March 7 2005

11:30 a.m. Discussion of Security Issues (Closed— Ex. 1).



APPENDIX B

UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON NUCLEAR WASTE
WASHINGTON, D.C. 20555-0001

March 2, 2005

AGENDA
158th ACNW MEETING
MARCH 15-17, 2005

TUESDAY, MARCH 15, 2005, CONFERENCE ROOM T-2B3, TWO WHITE FLINT NORTH,
ROCKVILLE, MARYLAND

- 1) 10:30 - 10:40 A.M. Opening Remarks by the ACNW Chairman (Open) (MTR/JTL)
The Chairman will make opening remarks regarding the conduct of today's sessions.
- 2) 10:40 - 11:40 A.M. Preparation of ACNW Reports (Open) (All)
The Committee will discuss potential reports on:
 - 2.1) Status of High-Significant Agreements Associated with the Proposed HLW Repository (MTR/LSH)
 - 2.2) Time-Period of Compliance for a Proposed High-Level Waste Geologic Repository (WJH/MPL) (Tentative)
- 11:40 - 1:00 P.M. ***LUNCH***
- 3) 1:00 - ~~3:00~~^{2:15} P.M. Preparation for the March 16, 2005 Briefing with NRC Commissioners (Open)
The Committee will review the briefing materials to be discussed with the Commission on March 16, 2005.
- 4) ~~3:00~~^{2:40} - ~~5:00~~^{4:40} P.M. Preparation for Visit to the Center for Nuclear Waste Regulatory Analyses (CNWRA) (Open) (RFW/RPS)
(4:00-4:15 P.M. - BREAK)
The Committee will review its preparation for its planned visit to the CNWRA in San Antonio, Texas on April 14-15, 2005. The purpose of this visit is to review the technical assistance work being performed on behalf of NRC's Office of Nuclear Material Safety and Safeguards.
- ~~5:00~~^{4:40} P.M. Adjourn

WEDNESDAY, MARCH 16, 2005, CONFERENCE ROOM T-2B3, TWO WHITE FLINT NORTH,
ROCKVILLE, MARYLAND

- 5) 8:30 - 9:00 A.M. Final Preparation for Commission Briefing (Open) (All)

- 6) ^{11:00} 9:30 - ~~11:30~~ A.M. Meeting with the NRC Commissioners (Open) (MTR/JTL et al.)
The Committee will meet with the NRC Commissioners in the Commission's Conference Room, One White Flint North. The proposed outline for this meeting is as follows:
- Introductory Remarks
 - Working Group Meetings
 - ICRP Draft Recommendations
 - Waste Management Research Review
 - Future Activities/Working Groups
 - 2005 ACNW Action Plan
- ^{11:00}
~~11:30~~ - 1:00 P.M. *****LUNCH*****
- 7) 1:00 - 1:10 P.M. Opening Statement (Open) (MTR/JTL)
The Chairman will begin the meeting with brief opening remarks, outline the topics to be discussed, and indicate items of interest.
- 8) 1:10 - 2:40 P.M. Estimation of Groundwater Recharge at the Watershed Scale: Implications for Model Abstractions and Validations (Open) (JHC/NMC)
Briefing by and discussions with Office of Nuclear Regulatory Research and Department of Agriculture/Agricultural Research Service staff on field studies to test and evaluate groundwater recharge estimation techniques, methods, and their uncertainties.
- 9) 2:40 - ~~3:40~~ P.M. NMSS Office Director Semi-Annual Briefing (Open) (MTR/SAS)
^{3:30}
The Committee will be briefed by the Director of the Office of Nuclear Material Safety and Safeguards on recent activities of interest to the Committee.
- ^{3:30}
~~3:40~~ - 4:00 P.M. *****BREAK*****
- 10) 4:00 - ~~5:00~~ P.M. Status of NRC's Review of USEC Inc.'s License Application for a Gas Centrifuge Uranium Enrichment Facility (Open) (AGC/LSH)
^{4:40}
The Committee will receive a briefing by an NMSS representative on the status of the license application for the proposed facility in Piketon, Ohio.

- 11) ~~5:00 - 6:00 P.M.~~ 4:40
~~6:00 P.M.~~ **Adjourn**
- Preparation of ACNW Reports (Open) (All)
 Discussion of proposed ACNW reports on:
- 11.1) Estimation of Groundwater Recharge Techniques (JHC/NMC)
 - 11.2) Status of USEC Inc.'s License Application for a Gas Centrifuge Uranium Enrichment Facility (AGC/LSH)
 - 11.3) Time-Period of Compliance for a Proposed High-Level Waste Geologic Repository (WJH/MPL) (Tentative)

THURSDAY, MARCH 17, 2005, CONFERENCE ROOM T-2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 12) ~~8:30 - 8:40 A.M.~~ 8:34
Opening Remarks by the ACNW Chairman (Open) (MTR/JTL)
 The Chairman will make opening remarks regarding the conduct of today's sessions.
- 13) ~~8:40 - 11:00 A.M.~~ 11:30 11:50
Preparation for ACNW May 2005 Visit to Japan (Open) (MTR/NMC)
 The Committee will review preparations for its planned visit to Japan on May 14-21, 2005. The purpose of this visit is to meet with representatives of the Japan Nuclear Safety Commission (Tokyo). In addition, the Committee will meet with the operators of the Rokkasyo-Mura low-level radioactive waste reprocessing and disposal facility. Members will also meet with representatives of the Japan Atomic Energy Research Institute, the Japan Nuclear Cycle Development Institute, the Nuclear and Industrial Safety Agency, Japan Nuclear Fuel Limited, and the Nuclear Waste Management Organization of Japan.
- Break
 LUNCH
- ~~10:10 - 10:15~~
~~11:00 - 1:00 P.M.~~
- 14) ~~1:00 - 1:30 P.M.~~ 10:15 - 11:30
ACNW White Paper on Low-Level Radioactive Waste Management Issues (Open) (MTR/SAS)
 The Committee will discuss the format and content of a potential ACNW White Paper addressing technical issues in the management of civilian low-level radioactive waste.
- 15) ~~1:30 - 3:00 P.M.~~
Miscellaneous (Open)
 The Committee will discuss matters related to the conduct of ACNW activities and specific issues that were not completed during previous meetings, as time and availability of information permit. Discussions may include future Committee Meetings.
- 11:50
3:00 P.M. Adjourn

8:34 - 9:48
 8:34 - 9:05
 9:05 - 9:10
 9:10 - 9:48

Prep. of ACNW Rpts
 - Estimation of Groundwater Recharge Techniques (JHC/NMC)
 - U.S.E.C. License Application
 - TBD

NOTES:

- Presentation time should not exceed 50 percent of the total time allocated for a specific item. The remaining 50 percent of the time is reserved for discussion.
- **Thirty-Five (35) hard copies and one (1) electronic copy of the presentation materials should be provided to the ACNW.**
- ACNW meeting schedules are subject to change. Presentations may be canceled or rescheduled to another day. If such a change would result in significant inconvenience or hardship, be sure to verify the schedule with Ms. Sharon Steele at 301-415-6805 between 8:00 a.m. and 4:00 p.m. prior to the meeting.

3/17/05

9:48-10:10

CNWRA Visit

APPENDIX C: MEETING ATTENDEES

158TH ACNW MEETING

ACNW MEMBERS

Michael Ryan, Chairman
Allen Croff, Vice Chairman
James Clarke
William Hinze
Ruth Weiner

ACNW STAFF

John Larkins
Neil Coleman
John Flack
Michele Kelton
Latif Hamdan
Michael Lee
Richard Major
Richard Savio
Sharon Steele

ATTENDEES FROM THE NUCLEAR REGULATORY COMMISSION

MARCH 15, 2005

A. Fetter	NMSS
D. Rom	NMSS
K. Stablein	NMSS
D. Cool	NMSS
J. Rubenstone	NMSS

MARCH 16, 2005

R. Cady	RES
T. Nicholson	RES
A. Schwartzman	RES
A. Fetter	NMSS
W.	RES
T. Mo	RES
J. Bradbury	NMSS
W. Reamer	NMSS
D. Cool	NMSS
J. Strosnider	NMSS
P. Michalak	NMSS
P. Reed	RES
E. O'Donnell	RES
M. Blevins	NMSS
J. Rubenstone	NMSS
Y. Faraz	NMSS
J. Klein	NMSS
B. Smith	NMSS
M. Langschwager	NMSS
J. Davis	NMSS

**APPENDIX C
158TH ACNW MEETING
MARCH 15-17, 2005**

ATTENDEES FROM THE NUCLEAR REGULATORY COMMISSION (CONT'D)

MARCH 16, 2005 (Cont'd)

S. Magruder	NMSS
J. Flemming	NSIR
D. Gillen	NMSS
R. Johnson	NMSS
B. Eid	NMSS
P. Harris	NMSS

MARCH 17, 2005

R. Cady	RES
T. Nicholson	NMSS
A. Fetter	NMSS

ATTENDEES FROM OTHER AGENCIES AND GENERAL PUBLIC

MARCH 15, 2005

E. von Tiesenhausen	CCCP
N. Henderson	Bechtel SAIC Co. (BSC)
C. Hanlon	U.S. Department of Energy (DOE)
N. Roth	Nuclear Waste News
J. Russell	Center for Nuclear Waste Regulatory Analyses (CNWRA)

MARCH 16, 2005

W. Szymanski	DOE
J. Russell	Center for Nuclear Waste Regulatory Analyses (CNWRA)
E. von Tiesenhausen	CCCP
C. Daughtry	U.S. Department of Agriculture (USDA)/ARS
A. Chinkuyu	USDA/ARS
C. Hanlon	DOE
A. Guber	USDA/ARS
J. Shaffner	PARALLEX
M. Robles	USEC
T. Gish	Via telecon
Y. Pachepsky	

**APPENDIX C
158TH ACNW MEETING
MARCH 15-17, 2005**

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

MARCH 17, 2003

E. von Tiesenhausen

CCCP

APPENDIX D: FUTURE AGENDA

The Committee approved the following topics for discussion during its 159th meeting, scheduled for April 18–19, 2005:

- NMSS Division Directors' Quarterly Program Update
- ACNW White Paper on Low-Level Radioactive Waste Management
- Discussion of April 14–15, 2005, Visit to the Center for Nuclear Waste Regulatory Analyses
- National Source Tracking System
- Department of Energy Repository Design
- Transportation Aspects of the Yucca Mountain Environmental Impact Statement Update
- Electric Power Research Institute Topical Report on Future System States
- Visit to Japan
- Preparation of ACNW Reports

**APPENDIX E
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

<u>AGENDA ITEM NO.</u>	<u>DOCUMENTS</u>
8	<u>Estimation of Groundwater Recharge at the Watershed Scale: Implications for Model Abstractions and Validations</u> <ol style="list-style-type: none">1. Research on: Estimating Ground-Water Recharge & Evaluating Model Abstraction Techniques, presented by Thomas Nicholson, RES, NRC [Viewgraphs]2. Identifying and Quantifying Field-Scale Subsurface Flow Pathways, presented by Timothy Gish, USDA, via telecon [Viewgraphs]3. Model Abstraction in Flow and Transport Simulations, presented by Yakov Pachespky, USDA [Viewgraphs]
9	<u>NMSS Office Director Semiannual Briefing</u> <ol style="list-style-type: none">4. NMSS Director's Semiannual Briefing to the Advisory Committee on Nuclear Waste, presented by Jack Strosnider, Director, NMSS [Viewgraphs]
10	<u>Status of NRC's Review of USEC Inc.'s License Application for a Gas Centrifuge Uranium Enrichment Facility</u> <ol style="list-style-type: none">5. ACNW Information Briefing, Licensing Status of NRC's Review of USEC Inc.'s Application, presented by Yawar Faraz, NMSS [Viewgraphs]

**APPENDIX E
158TH ACNW MEETING
MARCH 15-17, 2005**

MEETING NOTEBOOK CONTENTS

**TAB
NUMBER**

DOCUMENTS

Agenda, 158th ACNW Meeting, March 15-17, 2005, dated March 2, 2005

Color Code, dated March 9, 2005

Introductory Statement by ACNW Chairman, Tuesday, March 15, 2005, undated

Introductory Statement by ACNW Chairman, Wednesday, March 16, 2005,
undated

Items of Interest 158th ACNW Meeting, undated

Introductory Statement by ACNW Chairman, Thursday, March 17, 2005, undated

4

**Preparation for Visit to the Center for Nuclear Waste Regulatory Analyses
(CNWRA)**

1. Status Report
2. Excerpt from CNWRA 2002-05, Revision 2, "System-Level Performance Assessment of the Proposed Repository at Yucca Mountain Using the TPA Version 4.1 Code," prepared for NRC, Contract NRC-02-02-012
3. CNWRA Programs Accomplishing and Planned Activities, presented by Budhi Sagar, CNWRA, viewgraphs presented at February 24, 2005, ACNW Meeting
4. Paper, "Resolving Issues in Isothermal Hydrology at Yucca Mountain, Nevada - A Regulatory Perspective," presented by Neil Coleman, NMSS, at WM'00 Conference, February 27-March 2, 2000, Tucson, Arizona,
5. Paper, "Testing claims about volcanic disruption of a potential geologic repository at Yucca Mountain, Nevada," by N. M. Coleman, and L. R. Abramson, NRC, *Geophysical Research Letters*, Vol. 31, L24601

**APPENDIX E
158TH ACNW MEETING
MARCH 15-17, 2005**

- 8 Estimation of Groundwater Recharge at the Watershed Scale: Implications for Model Abstractions and Validations**
6. Manuscript, "Comparing Ground-Water Recharge Estimates Using Advanced Monitoring Techniques and Models," prepared for NRC, date published September 2003
- 10 Status of NRC's Review of USEC Inc.'s License Application for a Gas Centrifuge Uranium Enrichment Facility**
7. Status Report
8. ACNW Information Briefing, License Status of NRC's Review of USEC Inc.'s Application, March 16, 2005, viewgraphs
- 13 Preparation for ACNW May 2005 Visit to Japan**
9. Draft Outline for WIR Briefing During Japan Visit
10. ACNW Visit to Japan, May 2005, based on presentation materials provided by Shin-ichi Murata