



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON NUCLEAR WASTE
WASHINGTON, DC 20555 - 0001

April 6, 2006

AGENDA
169th ACNW MEETING
APRIL 18-20, 2006

**TUESDAY, APRIL 18, 2006, CONFERENCE ROOM T-2B3, TWO WHITE FLINT NORTH,
ROCKVILLE, MARYLAND**

- 1) 10:00 - 10:15 A.M. Opening Remarks by the ACNW Chairman (Open) (MTR/JTL)
The Chairman will make opening remarks regarding the conduct of the meeting.
- 2) 10:15 - 11:15 A.M. Overview of Accelerator Mass Spectrometry (Open)(WJH/NMC)
A member of the faculty of Purdue University (PRIME Lab) will brief the Committee on the methodology of accelerator mass spectrometry, including the statistical analysis of analytical results.
- 3) 11:15 - 12:00 Noon Update on U.S. Department of Energy (DOE) Chlorine-36 (Cl-36) Studies at Yucca Mountain (Open) (WJH/NMC)
DOE representatives will update the Committee on the status of Cl-36 validation studies at Yucca Mountain, Nevada.

12:00 - 2:00 P.M. *LUNCH*****

- 4) 2:00 - 4:30 P.M. Briefing from National Academy of Sciences (NAS) on Its 2006 Report on the Transportation of High-Level Nuclear Waste (Open) (RFW/RPS)
NAS representatives will brief the Committee on their recent report titled "Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States." A copy of this report is available on the NAS Web site at <http://www.nap.edu/catalog/11538.html>.

4:30 - 4:45 P.M. *BREAK*****

- 5) 4:45 - 5:15 P.M. Proposed Rulemaking on Naturally Occurring or Accelerator-Produced Radioactive Materials (Open) (MTR/DAW)
A representative from NRC's Office of Nuclear Material Safety and Safeguards (NMSS) will brief the Committee on the staff's proposed rulemaking to implement Section 651(e) of the Energy Policy Act of 2005 to include certain discrete sources of naturally occurring or accelerator-produced radioactive materials (NARM) in NRC's regulations for byproduct material.

- 6) 5:15 - 6:15 P.M. Discussion of Draft ACNW Letter Reports (Open) (All)
 Discussion of proposed ACNW reports on:
- 6.1) Risk-Informed Decisionmaking (JHC/JHF)
 - 6.2) NRC Research Director Annual Update (MTR/RPS)
 - 6.3) DOE Office of Science and Technology and International Waste Safety-Related Research (RFW/RPS)
 - 6.4) ACNW Working Group Meeting on Draft Final Guidance to Implement NRC's License Termination Rule (JHC/MPL)

6:15 P.M. Adjourn

WEDNESDAY, APRIL 19, 2006, CONFERENCE ROOM T-2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 7) 8:30 - 8:35 A.M. Opening Remarks by the ACNW Chairman (Open) (MTR/JTL)
 The Chairman will make opening remarks regarding the conduct of the meeting.
- 8) 8:35 - 9:30 A.M. Update on DOE Activities at the Yucca Mountain Site (Open) (WJH/DAW)
 DOE representatives will brief the Committee on recent activities related to the development of a proposed geologic repository at Yucca Mountain.
- 9) 9:30 - 11:30 A.M. Update on Nye County Independent Early Warning Drilling Program (Open) (WJH/NMC)
 Representatives from Nye County and DOE will provide the Committee with an update of technical developments related to this independent ground water monitoring program.

11:30 - 1:00 P.M. *LUNCH*****

- 10) 1:00 - 2:00 P.M. Modeling Igneous Activity: Dynamic Controls on Summit and Flank Eruptions of Basalt (Open) (WJH/NMC)
 A faculty member of Cambridge University (an NMSS contractor) will brief the Committee on research regarding a theoretical model for the eruption of basalt through multiple vents originating from a common source. The discussion will address partitioning of flow between summit and flank vents. This work potentially applies to the proposed Yucca Mountain repository.

- 11) 2:00 - 3:00 P.M. Modeling Igneous Activity: Magma Interactions with a Geologic Repository (Open) (WJH/NMC)
An ACNW consultant from the Johns Hopkins University will present an analysis of the realistic effects of magma solidification during potential interactions with repository drifts and waste packages. This work potentially applies to the proposed Yucca Mountain repository.
- 3:00 - 3:15 P.M. ***BREAK*****
- 12) 3:15 - 4:15 P.M. DOE Performance Confirmation Program Plan: NRC Staff Perspective and Update (Open) (RFW/NMC)
NMSS representatives will brief the Committee on the staff's preliminary views regarding the most recent update of DOE's Performance Confirmation Program Plan.
- 13) 4:15 - 5:00 P.M. Physical Capacity of Yucca Mountain for the Emplacement of High-Level Waste (Open) (RFW/NMC)
A representative from the Electric Power Research Institute (EPRI) will present a preliminary analysis of the physical capacity of Yucca Mountain for the disposal of additional commercial spent nuclear fuel.
- 14) 5:00 - 6:00 P.M. Discussion of Draft ACNW Letter Reports (Open) (All)
Discussion of proposed ACNW reports on:
14.1) Risk-Informed Decisionmaking (JHC/JHF)
14.2) NRC Research Director Annual Update (MTR/RPS)
14.3) DOE Office of Science and Technology and International Waste Safety-Related Research (RFW/RPS)
14.4) ACNW Working Group Meeting on Draft Final Guidance to Implement NRC's License Termination Rule (JHC/MPL)
- 6:00 P.M. Adjourn**

THURSDAY, APRIL 20, 2006, CONFERENCE ROOM T-2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 15) 8:30 - 8:35 A.M. Opening Remarks by the ACNW Chairman (Open) (MTR/JTL)
The Chairman will make opening remarks regarding the conduct of today's sessions.
- 16) 8:35 - 10:30 A.M. NRC Radiation Research Program (Open) (MTR/RPS)
Representatives of the Office of Nuclear Regulatory Research will brief the Committee on recent NRC-sponsored activities in the area of health physics research.

10:30 - 10:45 A.M. *BREAK*****

- 17) 10:45 - 11:15 A.M. Discussion of Potential Draft Letters and Reports (Open) (All)
 Discussion of possible ACNW reports on:
- 17.1) Briefing from National Academy of Sciences on its 2006 Report on the Transportation of High-Level Nuclear Waste (RFW/RPS)
 - 17.2) Update on DOE Chlorine-36 Studies at Yucca Mountain (JHC/NMC)
 - 17.3) Proposed Rulemaking on NARM (MTR/DAW)
 - 17.4) Update on DOE Activities at the Yucca Mountain Site (WJH/DAW)
 - 17.5) Update on Nye County Independent Early Warning Drilling Program (WJH/NMC)
 - 17.6) NRC Radiation Research Program (MTR/NMC)
 - 17.7) DOE Performance Confirmation Program Plan: NRC Staff Perspective and Update (RFW/NMC)
 - 17.8) Recent Developments Related to Modeling the Igneous Activity in the Yucca Mountain Region (WJH/NMC)

- 18) 11:15 - 12:00 Noon Discussion of Draft ACNW Letter Reports (Open) (All)
 Continued discussion of proposed ACNW reports on:
- 18.1) Risk-Informed Decisionmaking (JHC/JHF)
 - 18.2) NRC Research Director Annual Update (MTR/RPS)
 - 18.3) DOE Office of Science and Technology and International Waste Safety-Related Research (RFW/RPS)
 - 18.4) ACNW Working Group Meeting on Draft Final Guidance to Implement NRC's License Termination Rule (JHC/MPL)

12:00 - 1:00 P.M. *LUNCH*****

- 19) 1:00 - 4:00 P.M. Discussion of Draft ACNW Letter Reports (Open) (All)
 Continued discussion of proposed ACNW reports listed under Item 18.

- 20) 4:00 - 4:30 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.

4:30 P.M. Adjourn

NOTES:

- Presentation time should not exceed 50 percent of the total time allocated item. The remaining 50 percent of the time is reserved for discussion.
- **Fifty (50) hard copies and one (1) electronic copy of the presentation materials should be provided to the ACNW in advance of the briefing.**
- 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 Mr. Michael R. Snodderly at 301-415-6927 between 8:00 a.m. and 5:00 p.m. prior to the meeting.