



Department of Energy
Washington, DC 20585

Youngblood

JAN 06 1989

Mr. Owen Merrill
Nuclear Regulatory Commission
Advisory Committee on Nuclear Waste
Washington, D.C. 20555

Dear Mr. Merrill:

We thank the Advisory Committee on Nuclear Waste (ACNW) for the opportunity to brief them on OCRWM performance assessment program. In accordance with your invitation, we plan to make our presentation starting at 8:00 a.m. on January 24, 1989 in Room P-114 of the Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland.

Enclosed is a detailed agenda of topics that we plan to present at this briefing. This agenda has been discussed with ACNW staff, agreed to in those discussions and determined to be responsive to the agenda and the list of questions provided to us last year.

The detailed agenda lists and describes the topics that we plan to discuss in the briefing. The agenda also describes the staff currently planned to make the presentations. If you have any questions about these topics, please feel free to call Dr. Donald Alexander of my staff at (202) 586-4889.

Sincerely,

Ralph Stein

Ralph Stein
Associate Director for Systems
Integration and Regulations
Office of Civilian Radioactive
Waste Management

Enclosure

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bcc: J. Youngblood

Detailed Agenda for
OCRWM Presentation to the ACNW
on Performance Assessments
24 January, 1989

Location: Room P-114, Phillips Building
7920 Norfolk Avenue
Bethesda, Maryland

Time: 8:00 a.m. - 5:00 p.m.

1. Introduction and Overview of Performance Assessments
Dr. Donald Alexander, Chief
Regulatory Compliance Branch
OCRWM

General program of performance assessments to address the regulations. Overview of the management and organization of the performance assessment program. The interface between performance assessment and the testing program. Current projects (FY 1989 performance assessment activities).

2. Preclosure Safety Assessments
David Michlewicz, Manager
Safety Assessment Section
Weston, OCRWM Technical Support Team

Regulatory requirements applicable to safety assessments. OCRWM's technical approach to the assessments. Current information needs.

3. Development of the Complementary Cumulative Distribution Function (CCDF)
Dr. Larry D. Rickertson, Manager
Issues Resolution Section
Weston, OCRWM Technical Support Team

Why a CCDF is to be used. Definition and derivation of the CCDF. OCRWM approach to the construction of the CCDF. Treatment of human interference in constructing the CCDF.

4. Selection of Scenarios
Dr. Felton W. Bingham, Supervisor
Repository Performance Assessment Division
Sandias National Laboratories

Introduction to what a scenario is and why scenarios are useful. Discussion of scenario selection already accomplished. Approvals of future scenario selections.

5. Total System Performance Assessment Model
Dr. Scott Sinnock, Supervisor
NNWSI Program Interface
Sandia National Laboratories

General methodology for the system model and the treatment of submodels. Applications already conducted. Work that still needs to be done.

6. Validation of Models
Dr. Abraham Van Luik
Staff Scientist
Pacific Northwest Laboratory

Licensing needs for model validation. General DOE approach to model validation. Specific plans and schedules for testing of conceptual models.

7. Engineered Barrier System Model
Dr. Michael J. Apted, Deputy Manager
Performance Assessment Scientific Support (PASS) Program
Pacific Northwest Laboratory

Regulations applicable to engineered barrier system performance. General methodology for performance analysis. Description of an engineered barrier system numerical model. Typical results.

8. Engineered Barrier System Submodels
Dr. William J. O'Connell
Technical Area Leader for Waste Package Performance Assessment
Lawrence Livermore National Laboratory

Role of submodels in engineered barrier system performance assessment. Container degradation modelling. Spent fuel modelling. Waste form alteration modelling. Waste package environment modelling.

9. Example of Performance Allocation for the Waste Package Testing Program
Dr. U-Sun Park
Senior Staff Systems Engineer
Science Applications International Corporation

Applicable regulatory requirements. System description and preliminary analysis. Technical strategy for licensing. Performance goals to guide testing.

10. Difficulties in Performance Assessments for Licensing
Dr. Donald H. Alexander, Chief
Regulatory Compliance Branch
OCRWM

Problems in the area of total system performance assessment. Problems in the area of engineered barrier system performance assessment. Problems in the area of ground-water travel time assessment. Problems in the area of repository and seal system design assessment. Problems in the area of model validation.