DOE/RW-0029

OCRWM Bulletin

WASTE MANAGEMENT DOCKET CONTROL CENTER

'86 MAR -5 P12:10

United States Department of Energy
Office of Civilian Radioactive Waste Management
Washington, D.C. 20585

February 1986

IN THIS ISSUE...

WM Record File 109
WM Project 1
Docket No
PDR
LPDR
Distribution:
TEB MJB
JOB DRM
(Return to WM, 623-SS)
MRK JTC
Linehan
Bayle
Coplan
Kennedy
Hale

8603130302 860228
PDR WASTE
WM-1 PDR

Published by the Office of Policy and Outreach
For further information about the national program, write to: Office of Civilian Radioactive Waste Management, U.S. Department of Energy, Mail Stop RW-40, Washington, D.C., 20585; phone (202) 252-5722.

GEOLOGIC REPOSITORIES

DRAFT AREA RECOMMENDATION REPORT ISSUED FOR SECOND REPOSITORY PROGRAM

The Nuclear Waste Policy Act of 1982 (NWPA) specifies a process for developing a deep mined geologic repository for the permanent disposal of high-level radioactive waste and spent fuel. The NWPA also requires the Department of Energy (DOE) to identify a potential site for construction of a second nuclear waste repository, though Congressional authorization would be required for construction. The DOE is considering crystalline rock as a potential host for a second repository.

The process for selecting repository sites consists of four phases: (1) site screening to identify potentially acceptable sites, (2) nomination and recommendation of sites from among potentially acceptable sites for characterization (3) site characterization to acquire the necessary detailed geologic, environmental, socioeconomic and transportation information, and (4) site selection. Sites eligible for a second repository include those characterized but not selected for a first repository, those identified as potentially acceptable for a first repository but not nominated for characterization, and potentially acceptable crystalline rock sites.

The screening process for the crystalline repository consists of three phases: a national survey, regional studies, and area studies. For the past 2 1/2 years, publicly available data on 235 rock bodies in 17 States has been under review by DOE as part of its regional studies in the crystalline rock screening process. The results of these studies were published in August 1985 in the Regional Characterization Reports (DOE/CH-3 through 14). Using these Reports as a data base, DOE has now performed a region-to-area screening resulting in a proposed narrowing of the number of rock bodies under consideration from 235 areas to 12 proposed potentially acceptable sites in seven States. The results of that screening are reported in the draft Area Recommendation Report (ARR), released by DOE on January 16, 1986. The proposed potentially acceptable sites in the crystalline program are listed below:

Proposed Potentially Acceptable Sites for Second Repository

State	Size (sq.mi.)	Counties
Georgia	214	Lamar, Monroe, and Upson
Maine	92	Hancock and Penobscot
Maine	385	Androscoggin, Cumberland, and Oxford
Minnesota	300	Marshall, Pennington, Polk, and Red Lake
Minnesota	113	Norman, and Polk
Minnesota	397	Benton, Mille Lacs, Morrison, and Sherburne
New Hampshire	78	Cheshire, Hillsborough, Merrimac, and Sullivan
North Carolina	142	Franklin, Johnson, and Wake
North Carolina	105	Buncombe, Haywood, and Madison
Virginia	209	Bedford
Virginia	307	Halifax, and Pittsylvania
Wisconsin	1094	Langlade, Marathon, Menominee, Oconto, Portage, Shawano, and Waupaca

In addition, eight areas located in Georgia, Minnesota, Virginia, and Wisconsin, which meet the requirements for identification as potentially acceptable sites will retain their identification as candidate areas.

The process used in evaluating crystalline rock bodies and identifying the candidate areas is in accordance with 10 CFR 960, General Guidelines for the Recommendation of Sites for the Nuclear Waste Repositories, and is described in the Region-to-Area Screening Methodology for the Crystalline Repository Project issued in April 1985 (DOE/CH-1).

The ARR is being issued in draft form to allow States, Indian Tribes, and the public a 90-day opportunity to comment on the findings. To facilitate the comment process, DOE will conduct briefings for the States and Indian Tribes, the media, local officials, and the public in each of the 17 States involved in the crystalline repository program. At the briefings, presentations will be made on the overall crystalline repository project and its history, the purpose of the ARR and its results, and the implications of the ARR. (See p.4 for a listing of briefing locations and dates.)

In addition to the briefings, public hearings on the ARR will be held in each of the 17 States. The hearing schedule will be announced in the Federal Register, local newspapers, and public service announcements, and in DOE Press Releases on OCRWM's Electronic Bulletin Board (INFOLINK, 202/252-9359). In addition, public officials, Indian Tribe representatives, individuals, and organizations on DOE mailing lists will receive announcements. The hearings will be scheduled for one day, unless DOE is unable to accommodate all requests made in advance of the hearing to present testimony on that day.

In advance of the hearings, public officials, Indian Tribal representatives, organizations, and members of the public may request, in writing, to present comments. Such requests, as well as comments on the ARR, should be directed to the U.S. Department of Energy, Crystalline Repository Project Office, 9800 South Cass Avenue, Argonne, Illinois 60439. Depending on the number of requests, five to ten minutes will be provided to each person wishing to comment for the record. Each person wishing to comment is encouraged to submit detailed written comments, and to use the allotted time to summarize their comments.

As in the case of the Regional Characterization Reports and the Screening Methodology Document, the ARR has been distributed to designated States, Indian Tribes, and local officials, interested Federal agencies, and citizens and interest groups who have requested copies. Public libraries within the selected candidate areas will also receive copies of the ARR. To obtain a copy of the draft Area Recommendation Report, see New Publications and Documents, p. 16.

In the upcoming area phase, to begin when the final ARR is issued, DOE will do field studies at each of the potentially acceptable sites. Field work will include collection of geologic, environmental, socioeconomic and transportation data. Field work will commence after the issuance of an Area Characterization Plan expected to be completed in early 1987. In 1993, DOE plans to recommend to the President three sites, some or all of which will come from the crystalline rock program, for detailed site characterization studies.

LOCATIONS AND DATES FOR PUBLIC BRIEFINGS ON THE DRAFT AREA RECOMMENDATION REPORT

CONNECTICUT

March 11	Hartford

GEORGIA

February 19	Lawrenceville, Central Gwinnett High School
February 20	Forsyth, Tift College

MAINE

February 10	Bridgton, Lake Region High School, Route 302
February 12	Indian Island, Penobscot Indian Nation, 6 River Road
February 13	East Port, Shead High School, High Street
February 19	Lincoln, Mattanawoock Academy, 15 Read Drive

MARYLAND

March 11	Annapolis

MASSACHUSETTS

February 25	Boston, State House, Beacon and Boudin Streets

MINNESOTA

February 10	Foley, Foley Elementary School
February 11	Sauk Center, Sauk Center Junior High School, 9th and State Road
February 13	Winthrop, City Hall, 305 North Main Street
February 17	Warren, Warren High School, 224 East Bridge Street
February 18	East Ada, Ada High School, 105 4th Street
February 19	Morris, Morris High School, 201 Columbia Avenue
February 20	Mahnomen, Mahnomen High School, Madison Avenue

NEW HAMPSHIRE

February 11	Hillsboro, Hillsboro High School
February 12	Concord, Rundlett Junior High School, South Street

NEW JERSEY

February 27	Trenton

NEW YORK

February 25	Albany, Empire State Plaza Convention Center

NORTH CAROLINA

February 18	Raleigh, Athens High School, Athens Drive
February 20	Asheville, Thomas Wolfe Auditorium, Asheville Civic Center, 87 Haywood Street

SOUTH CAROLINA

February 27	Columbia

VERMONT

February 26	Montpelier

VIRGINIA

February 10	Tight Squeeze, Chatham High School, Route 703
February 11	Bedford, Bedford Educational Center, 600 Edmund Street
February 12	South Boston, Halifax County High School, Highway 129
February 18	Montpelier, South Anna Elementary School, South Route 673

WISCONSIN

February 15	Keshena, Menominee Indian Senior High School, Highway 47
February 24	Ashland, Ashland Middle School, 203 11th Street East
February 26	Antigo, Antigo High School, 815 7th Street
February 27	Waupaca, Waupaca High School, 1149 Shoemaker Road

DESCRIPTION OF DECISION-AIDING METHODOLOGY ISSUED

The Department of Energy (DOE) is using a formal decision-aiding methodology to help recommend three sites as suitable for characterization for the first geologic repository for the disposal of high-level radioactive waste. This methodology, known as the multi-attribute utility estimation analysis (MUA), has been refined and given greater technical specificity as a result of comments received on the draft Environmental Assessments (EAs). The application of this methodology will be reviewed by the Board on Radioactive Waste Management of the National Academy of Sciences and fully documented in the final EAs.

Although the MUA will not form the sole basis for DOE's siting decisions, it is important to the selection process because it will help determine which sites will be chosen for site characterization. While the methodology is straightforward, some of the terminology and procedures may be unfamiliar to the public. For this reason, DOE has prepared an overview for those wishing a summary description. To obtain a copy of the Overview of Decision-Aiding Methodology, see New Publications and Documents, p. 16.

In general, the application of the MUA technique to the selection of sites for a geologic repository consists of six basic steps:

- Identify objectives (from General Guidelines for the Recommendation of Sites for the Nuclear Waste Repositories, 10 CFR Part 960) for selecting among candidate repository sites.
- Develop measures to show how well each site meets siting objectives.
- Assess numerically the performance of each site with respect to each measure, and list these numbers on a common desirability or utility scale.
- Assess weights for each siting objective.
- Aggregate utilities and weights into a composite score for each site using an aggregation rule.
- Perform sensitivity analyses.

The MUA is carried out by DOE staff and consultants consisting of experts in decision analysis, the disciplines corresponding to the technical siting guidelines, and repository performance. The technical information for the MUA was obtained from the EAs or from references cited in the EAs.

One of the major assets of the MUA is that it disaggregates the task of selecting sites for characterization into its component parts that can be analyzed more readily. The methodology, however, does not reduce the subjectivity or professional judgment required in selecting sites for characterization. By following the sequence of steps outlined above, DOE intends to make the subjectivity inherent in the scientific and policy judgments explicit to the reviewer.

MONITORED RETRIEVABLE STORAGE

MONITORED RETRIEVABLE STORAGE PROPOSAL SUBMISSION TO CONGRESS

A proposal to construct and operate a Monitored Retrievable Storage (MRS) facility for high-level radioactive waste and spent fuel at a site near the Clinch River in the portion of the City of Oak Ridge in Roane County, Tennessee, has been prepared by DOE for submission to Congress. The OCRWM document, Monitored Retrievable Storage Submission to Congress, consists of three volumes: Proposal (Vol. 1); Environmental Assessment (Vol. 2); and Program Plan (Vol. 3). The proposal, however, is being held in abeyance pending resolution of the legal issue (see page 13).

As mandated by the Nuclear Waste Policy Act of 1982 (NWPA), DOE developed designs for two alternative storage concepts at three alternative sites. The preferred storage concept is surface storage in sealed concrete casks; the alternative concept is storage in field drywells. The three alternative sites are all located in Tennessee on land owned by the Federal Government. The preferred site is at the former location of the Clinch River Breeder Reactor project in Oak Ridge; the alternative sites are on the DOE Oak Ridge Reservation and at a site previously proposed for a nuclear power plant in Hartsville.

The MRS facility would receive and prepare spent fuel for shipment to and emplacement in geologic repositories. The principal waste preparation functions would be spent fuel consolidation and loading into canisters. Being uniform in size and free of surface contamination by radioactive material, these canisters would facilitate handling, shipping, and further processing at a permanent repository. The canisters of spent fuel would be shipped to the repository in dedicated trains.

The DOE is proposing that the total storage capacity be limited to 15,000 metric tons of uranium. This will provide significant operational benefits to the Federal portion of the waste management system. The MRS will also provide an improved basis for the utilities to plan for their storage needs.

MRS Benefits and Costs

The most significant advantages of an integral MRS facility can be summarized as follows:

Improve system development

The MRS facility would allow DOE to proceed immediately with detailed planning for and development of the front end of the waste system. This would advance the development and specification of the transportation system, enhance confidence in the schedule for the operation of the total system, and provide a focal point for early system integration.

Accelerate waste acceptance from the utilities

By starting in 1996 and reaching full operation by 1998, the MRS facility would allow the system to receive spent fuel at full-scale rates 5 years sooner than does a system without an MRS facility.

Improve the reliability and flexibility of the waste management system

By separating the acceptance of reactor spent fuel from emplacement in a repository and adding significant operational storage capacity to the system, substantial improvements in the manageability and flexibility of the system would be achieved.

Improve the operations of the repository

By performing certain waste packaging functions, the MRS facility would simplify and enhance the efficiency of repository operations because the repository would receive fewer shipments and have fewer packaging operations to perform.

Improve the performance of the transportation system

Since consolidated fuel would be shipped in dedicated trains, the MRS facility would significantly reduce the number of shipments to the repository and minimize the distances of spent fuel shipments in less efficient truck-mounted casks.

Institutional benefits

The development of the MRS facility would provide institutional benefits through the experience gained from interactions with the State of Tennessee. Institutional benefits would also result from the opportunity to demonstrate earlier that facilities developed under the NWPA are safe and that in developing and operating these facilities the DOE is a responsible corporate citizen and neighbor.

The expenditures for the MRS project from the time of Congressional approval to the start of operations are estimated at $970 million in constant 1985 dollars, of which $700 million would be used for construction. The annual operating expenses for the facility, that would employ about 600 workers, would be about $70 million, not including financial assistance and tax equivalency payments. All costs would be borne by the waste generators through the Nuclear Waste Fund. The costs of constructing and operating an MRS facility would be partially offset by savings in the cost of constructing and operating the simplified repository surface facilities; by the savings realized by utility ratepayers in reducing the need for additional at-reactor storage; and by various institutional benefits.

No significant incremental adverse environmental impacts are expected from an integral MRS facility, and the social and economic impacts that might result would be prevented or mitigated by measures proposed in the submission to Congress in accordance with the NWPA.

To establish an MRS facility as a responsible corporate citizen and neighbor, DOE is proposing measures that include: (1) the provision of opportunities for State and local governments to participate in the project, (2) assurances about safety and environmental quality, and (3) financial assistance.

Actions Conditioned upon Congressional Approval

If this proposal is approved by Congress, DOE will seek to enter into a written consultation-and-cooperation agreement with Tennessee. This agreement would serve as an "umbrella" contract between DOE and Tennessee, and would formalize arrangements for further State and local involvement. To allow the State and local communities to plan and prepare for the MRS facility, DOE proposes to provide the State and local governments annual financial assistance payments during the pre-operational period. For the operational phase, financial assistance would be provided to the State and local units of government in the form of impact mitigation funds and annual payments equal to the taxes that would have been collected had the MRS facility been subject to taxation. This financial assistance would be in addition to reimbursements to the State and local governments for work performed for the MRS project.

To allay concerns that an MRS facility would diminish DOE resolve to develop a permanent geologic repository, and to reinforce the unwavering commitment to the geologic repository program, in addition to limited capacity mentioned earlier, DOE proposes that Congress link the startup of the MRS facility to the schedule of the repository. No waste would be accepted at the MRS facility until a construction authorization for the permanent repository is received from the Nuclear Regulatory Commission.

STORAGE AND TRANSPORTATION SYSTEMS

CURRENT INITIATIVES ON TRANSPORTATION ISSUES

Participants at the OCRWM Transportation Institutional Workshop held in Atlanta last November (see OCRWM Bulletin for 12/85) were asked to prioritize transportation issues. The eight issues identified by meeting attendees as being of top priority are listed below with a brief discussion of near-term OCRWM initiatives and activities for each. These and 11 additional issues will be discussed in some detail in the Transportation Institutional Plan to be released this spring.

Cask Safety and Testing

OCRWM is participating in regional meetings to provide interested State, Tribal, and local decisionmakers with information regarding the basics of cask design and testing, and the characteristics of spent fuel. The Western Interstate Energy Board (WIEB) held such a meeting in Salt Lake City on February 6-7. The Southern States Energy Board (SSEB) will hold a similar meeting for the southern States in Atlanta at a date to be determined. The OCRWM will try to arrange for other regional groups to offer similar seminars.

Routing

The OCRWM is planning a number of initiatives to support State and Tribal analysis of transportation routes. Under DOE contract, both WIEB and SSEB are identifying potential shipping routes in their respective regions, beginning with the interstate system (as outlined in Department of Transportation Regulation HM-164) and identifying unique regional characteristics that would require the designation of alternate routes. It is intended that an atlas of potential routes considered worthy of route-specific analysis will be developed. The DOE will seek to establish contracts with other representative State, Tribal, and local organizations for similar types of analysis.

The OCRWM is in the early stages of identifying route evaluation criteria to be used in the Environmental Impact Statement for the first repository. Since substantial State, Tribal, and local input will be essential for OCRWM planning, the possibility of several regional meetings to support identification of criteria is being investigated. Probable timing of these workshops is mid to late summer of 1986.

Procedures for Interaction and Financial Assistance

The OCRWM has received numerous comments that procedures for interaction with interested parties need to be more clearly defined. In response to these comments, OCRWM will include in the Transportation Institutional Plan further details on the anticipated levels of participation and interaction in current Nuclear Waste Policy Act of 1982 (NWPA) transportation activities. Procedures for interaction and participation, which will change and be refined as the overall waste management program progresses, will be reflected in ongoing OCRWM transportation planning.

Greater detail also will be included in the Transportation Institutional Plan on the provision of financial assistance to facilitate participation and interaction by interested parties. A DOE working group is currently evaluating such assistance, and will make recommendations for OCRWM consideration. The DOE working group will consider the suggestions contained in the group reports from the Atlanta Transportation Workshop, and written comments on the Draft Transportation Institutional Plan. The DOE working group will also evaluate the potential for contracting with regional organizations and professional groups having transportation expertise to study issues for cooperative issue resolution.

Enforcement and Inspection

One of the initial contracts with a professional organization having transportation expertise will be for the purpose of addressing the issue of enforcement and inspection. The contracting process is underway, and prospective arrangements and activities could be available for announcement in the next issue of the OCRWM Bulletin.

Emergency Response

The OCRWM is a participant in the Subcommittee on Transportation Accidents of the Federal Radiological Preparedness Coordinating Committee. This Subcommittee is currently revising the Federal Emergency Management Agency's Guidance for Developing State and Local Radiological Emergency Response Plans and Preparedness for Transportation Accidents (FEMA-REP-5). This guidance provides a basis for State and local governments to develop emergency plans and improve emergency preparedness for transportation accidents involving radioactive materials.

Also under consideration by OCRWM are potential tools for the efficient dissemination of emergency response information to State and local law enforcement agencies and emergency responders. A study group will focus on this issue in the near future.

Liability

Determination of liability provisions will depend on Congressional action on the Price-Anderson Act which expires in August 1987. The DOE has submitted a report on the Act to Congress.

Defense Waste

The procedures under which defense waste will be shipped to NWPA facilities is an overall Departmental decision that is under consideration. At present, primary attention is directed to the fee that the Office of Defense Programs will pay into the Nuclear Waste Fund for disposal of waste related to defense activities.

PROGRAM ITEMS

ENVIRONMENTAL POLICY STATEMENT OF THE DEPARTMENT OF ENERGY

On January 8, 1986, the Secretary of Energy, John S. Herrington, issued the following environmental policy statement:

> It is the policy of the Department of Energy (DOE) to conduct its operations in an environmentally safe and sound manner. Protection of the environment and the public are responsibilities of paramount concern and importance to this Department. All activities of DOE should recognize and reflect this concern and public trust. To that end, DOE is firmly committed to assuring incorporation of national environmental protection goals in the formulation and implementation of DOE programs. It has an equal commitment to advance the goals of restoring and enhancing environmental quality, and assuring public health. Accordingly, it is the policy of DOE to conduct the Department's operations in compliance with the letter and spirit of applicable environmental statutes, regulations, and standards. In addition, DOE is committed to good environmental management in all its programs and at all of its facilities in order to correct environmental problems, to minimize risks to the environment or public health, and to anticipate and address potential environmental problems before they pose a threat to the quality of the environment or the public welfare. Finally, it is DOE's policy that efforts to meet environmental obligations be carried out consistently across all operations and among all field organizations and programs.
>
> While responsibility for good environmental management is a Departmental one, environmental protection practices will, of necessity, be carried out at the levels and locations where many of DOE's activities are performed by its management and operating contractors. Thus, although the Department will continue to indemnify its management and operating contractors for fines, penalties, and other liabilities that are incurred pursuant to their contracts and not the result of willful misconduct or lack of good faith, it is DOE policy that contractors will share the DOE's commitment to good environmental management. DOE expects its contractors to conduct their operations in an environmentally sound manner that limits the risks to the environment and protects the public health. DOE will actively oversee contractors' activities to assure compliance with this policy.
>
> To further assure that these goals and objectives are met, the Department's environmental compliance activities will be coordinated at the Headquarters level. Effective immediately, the responsibility for this coordination is assigned to the Office of the Assistant Secretary for Environment, Safety, and Health.

NEW COURT DECISIONS AFFECTING OCRWM PROGRAM

Texas Site Identification Litigation

On December 2, 1985, the U.S. Supreme Court denied the State of Texas' petition for writ of certiorari in the case of State of Texas v. DOE, et al. Texas had been seeking review of the decision of the U.S. Court of Appeals for the Fifth Circuit that dismissed its challenge to DOE's identification of potential repository sites in Texas.

Nuclear Waste Fund Litigation

On December 6, 1985, the U.S. Court of Appeals for the District of Columbia issued a decision in Wisconsin Electric Power Company, et al. v. Herrington. The court ruled in favor of Wisconsin Electric, holding that the ongoing fee to be paid by utilities into the Nuclear Waste Fund applies only to net, rather than the gross, electricity generated by civilian nuclear power reactors.

Repository Grant Litigation

On December 2, 1985, the U.S. Court of Appeals for the Ninth Circuit issued its decision in State of Nevada v. Herrington. The court established definitive criteria that must be met before certain pre-site characterization activities, such as independent scientific data collection, can be funded by a Nuclear Waste Policy Act grant, and found that certain provisions in DOE's site characterization grant guidelines are unduly restrictive. On January 28, 1986, the State of Nevada filed a motion to clarify and enforce the mandate of the court. On February 6, 1986, DOE filed its response.

Monitored Retrievable Storage Facility Litigation

On February 5, 1986, the U.S. District Court for the Middle District of Tennessee ruled in favor of the State of Tennessee and issued a declaratory judgment which held that the siting study for the Monitored Retrievable Storage facility was not conducted in compliance with the State consultation requirements of the Nuclear Waste Policy Act of 1982. On February 7, the court enjoined DOE from making any proposal to Congress or filing any documents with Congress which rely on the siting study. On February 12, DOE filed a notice of appeal with the District Court and on February 13 an emergency motion was filed with the U.S. Circuit Court for the Sixth Circuit for summary reversal, or in the alternative, for a stay of the injunction pending appeal and for expedited disposition.

CURRENTLY SCHEDULED OCRWM SHORT-TERM PROGRAM MILESTONES

2/86	Issue OCRWM's Annual Report to Congress.
2/86	Issue Transportation Business Plan.
2/86	Submit Fee Adequacy Report to Congress.
2/86	Submit Monitored Retrievable Storage Proposal to Congress (the Proposal is ready for submission, but is in abeyance pending resolution of the legal issue).
3/86	Issue Project Decision Schedule.
4/86	Issue Environmental Assessments for First Repository.
4/86	Issue Nomination and Recommendation for First Repository Candidates for Site Characterization.
.4/86	Issue Transportation Institutional Plan.

SELECTED EVENTS CALENDAR

3/2-6/86	Waste Management '86, Tucson, AZ. Contact Roy Post, (606) 621-3054.
3/3-7/86	International Symposium on Repository Site Selection and Technical Design, Hannover, Federal Republic of Germany. Contact Conference Service Station, IAEA, P.O. Box 100, A-1400, Vienna, Austria.
3/17-18/86	DOE, First Repository State and Tribes Quarterly Meeting, Albuquerque, NM. Contact John W. Green, Mississippi Department of Energy and Transportation, Jackson, MS, (601) 961-4733 or Barry Gale (DOE) (202) 252-1116.
4/25-28/86	National Conference of State Legislatures, Legislative Working Group on High-Level Waste, Richland, WA. Contact Judy Tokarz (509) 376-6288.

*For details on DOE/NRC meetings call (800) 368-2235 for a recorded message. In Maryland call (800) 492-4610.

For information on meetings and events occuring between issues of the OCRWM Bulletin use OCRWM INFOLINK, an Electronic Bulletin Board, that can be accessed through a standard computer communications capability on (202) 252-9359.

****

Milestones and the Selected Events Calendar are prepared by the Office of Policy and Outreach, Neal Duncan, (202) 252-2838.

NEW PUBLICATIONS AND DOCUMENTS

Systems Engineering Management Plan — October 1985

The purpose of the Systems Engineering Management Plan is to prescribe systems engineering procedures and requirements to ensure Program integration and uniformity of approach.

Crystalline Repository Project Overview — December 1985

This brochure provides background on the requirements of the Nuclear Waste Policy Act of 1982 for siting and development activities relating to a second repository. It explains why crystalline rocks are being studied and the status of the crystalline rock investigations. Also, it contains information on institutional activities and public participation.

Crystalline Repository Project State Interactions — December 1985

State and Indian Tribe interactions are an important part of the Crystalline Repository Project as well as the Civilian Radioactive Waste Management Program as a whole. In the 17 States being considered for the second repository, workshop briefings, and consultation meetings have been frequent and important. This brochure lists such interactions from February 10, 1983, through December 4, 1985.

An Evaluation of Commercial Repository Capacity for the Disposal of Defense High-Level Waste, Responses to Comments — DOE/DP-0027 December 1985

This document contains responses to over 400 comments that were received on the draft report An Evaluation of Commercial Repository Capacity for the Disposal of Defense High-Level Waste, DOE/DP-0020. All comments were considered and changes made in the final report as appropriate.

Radioactive Waste Minithesaurus — DOE/TIC-7032 January 1986

This Minithesaurus displays the terminology used to index information on radioactive waste as contained in the U.S. DOE Energy Data Base. This listing is a subset of the Energy Data Base: Subject Thesaurus (DOE/TIC-7000-R6). The publication is available as DE86000860 from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161 for $10.00.

Site Descriptions — DOE/RW-0040, December 1985

As part of its series Managing the Nation's Nuclear Waste, this document contains two-page summaries of nine potentially acceptable sites for the first geologic repository. These summaries are drawn from the draft Environmental Assessments issued for each of these sites.

Draft Area Recommendation Report — DOE/CH-15, January 1986

The draft Area Recommendation Report, issued for public comment, identifies twelve crystalline rock areas in seven States that are proposed potentally acceptable sites for a second high-level radioactive waste repository. In addition to the 12 areas identified, an additional eight areas have been designated as potential candidate areas in the event that any of the proposed potentially acceptable sites proves unsuitable.

Implementation Plan for Deployment of Federal Interim Storage Facilities for Commercial Spent Nuclear Fuel — DOE/RW-0045, January 1986

This document is the third annual report on plans for providing Federal Interim Storage facilities (FIS), if required, and provides a generic description of the the approach that DOE will follow if FIS facilities are deployed.

Description of Decision-Aiding Methodology — February 1986

A summary overview of the multi-attribute utility estimation analysis methodology used in the site selection process for a first repository.

Transportation Business Plan — DOE/RW-46, February 1986

This document reviews DOE's expected business methods, strategies, and actions to develop and operate the required transportation system for support of the repository program.

For copies, except where otherwise indicated, contact Department of Energy, OCRWM, Office of Policy and Outreach, RW-43, 1000 Independence Avenue, S.W., Washington D.C. 20585, (202) 252-5722.

DOE/RW-0034

OCRWM Backgrounder

United States Department of Energy
Office of Civilian Radioactive Waste Management
Washington, D.C. 20585

THE STATUS OF THE NUCLEAR WASTE FUND

The Nuclear Waste Fund was established to finance activities under the Nuclear Waste Policy Act of 1982 (the Act), Public Law 97-425. Under the Act, such activities include the siting, design, construction and operation of deep, geologic repositories for the disposal of spent nuclear fuel and high-level radioactive waste; preparation of a proposal to Congress on the need for and feasibility of one or more monitored retrievable storage facilities; development of a transportation system; and other related activities. The Act requires DOE to begin accepting waste for disposal by January 31, 1998.

The Act's key financial concept is that the cost to the Federal Government of providing disposal and/or storage services shall be fully recovered from the generators and owners of spent nuclear fuel and high-level radioactive waste.

The Nuclear Waste Fund is the financing mechanism for DOE's Office of Civilian Radioactive Waste Management (OCRWM), the office charged with managing the Nation's nuclear waste program in accordance with the mandates of the Act.

Under the Act, nuclear utilities, through contracts with DOE, pay a one-mil (one-tenth of a cent) per kilowatt hour

(MORE)

Published by the Office of Policy and Outreach
To provide current background information on program facts, issues, and initiatives. For further information write to Information Services Division, Office of Civilian Radioactive Waste Management, U.S. Department of Energy, Mail Stop RW-40, Washington, D.C. 20585, Telephone (202) 252-5722.

disposal fee for commercial spent nuclear fuel generated beginning April 7, 1983. As of December 31, 1985, $880 million in ongoing fees have been collected, and DOE will collect approximately $350 million per year for the life of the program.

For commercial spent fuel or high-level waste generated prior to April 7, 1983, three payment options are available to the utilities: (1) pay in 40 quarterly installments with accrued interest; (2) pay in a lump sum with accrued interest prior to the first scheduled delivery of spent fuel to DOE for disposal; or (3) pay in a lump sum prior to June 30, 1985, with no interest.

Most owners and generators of commercial spent fuel and high-level waste -- primarily utilities -- chose to pay the one-time fee by June 30, 1985. These receipts amount to $1.426 billion.

With receipt of the $1.4 billion one-time fee payments, DOE has paid off an appropriated debt of $264 million inherited from disposal-related activities conducted prior to establishment of the Nuclear Waste Fund. Remaining funds are invested in a mix of Treasury bills and notes intended to maximize interest earnings. Investment strategy is developed in conjunction with the cash flow plan such that investments are termed to mature at the time required to meet program outlays. With the President's determination that a separate defense waste only repository is not required, defense waste will also be disposed of in the repositories. In accordance with the Act, the generator of defense high-level waste -- the Department of Energy (DOE) -- will pay into the Nuclear Waste Fund its full share of the costs for disposal of defense waste.

The Act requires an annual evaluation of the adequacy of the one-mil per kilowatt hour fee to ensure full cost recovery and provide for adjustment of that fee, as needed, with the approval of Congress. A proposal to Congress for a fee adjustment is required only if DOE determines that an adjustment to the ongoing fee is required. To date, such an adjustment has not been necessary.

-DOE-