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OCRWM Bulletin

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OCRWM Bulletin

THREE SITES SELECTED FOR SITE CHARACTERIZATION FOR FIRST GEOLOGIC REPOSITORY

Three sites, in Nevada, Texas, and Washington, have been selected for site characterization as candidates for the Nation's first geologic repository for permanent disposal of spent nuclear fuel and high-level radioactive waste.

As required by the Nuclear Waste Policy Act of 1982 (NWPA), John S. Herrington, Secretary of Energy (DOE), on May 28, 1986, announced his nomination of five sites and recommendation of three of them to the President for site characterization. The President approved the recommendation on May 28, 1986.

Characterizing the three sites requires constructing exploratory shafts to depths of an actual repository - about 1,000 to 4,000 feet below ground - so that scientific data collection and analysis can be performed to determine if those sites meet the criteria for a repository. The data gathered during this process will support DOE's submission of a license application to the Nuclear Regulatory Commission for construction of a repository. Characterization of the sites will take several years. The DOE will work closely with States, Indian Tribes, and local officials to assure that site characterization takes place in a safe and environmentally acceptable manner.

Upon completion of the site characterization phase, the Secretary of Energy will recommend a single site to the President for the development of a repository, and will submit to the President, and make available to the public, an Environmental Impact Statement that includes the DOE's analysis of the recommended site and the two alternative sites that were characterized.

The recommendation of sites for characterization is based on the development and public review of extensive geologic and environmental data gained from site studies which began before enactment of the NWPA. Sites nominated and recommended are the same sites identified in the draft Environmental Assessments issued by DOE for review and comment in December 1984.

The three candidate sites to undergo characterization are: Yucca Mountain, Nevada; Deaf Smith County, Texas; and Hanford, Washington. At the Hanford site three affected Indian Tribes have been identified -- the Yakima Indian Nation, the Confederated Tribes and Bands of the Umatilla Reservation, and the Nez Perce Tribe. Two sites nominated but not recommended for site characterization, are Richton Dome in Mississippi, and Davis Canyon in Utah.

SITE-SPECIFIC WORK FOR SECOND REPOSITORY POSTPONED INDEFINITELY

At the same time that Secretary of Energy, John S. Herrington, announced, on May 28, 1986, the recommendation of sites for site characterization, he also stated that site-specific work for a second repository has been postponed indefinitely. The DOE's decision to defer activities related to the identification of areas for study as potential candidates for a second repository resulted from a number of factors They include:

- The continuing progress in siting the first repository;

- The expectation of receiving Congressional authorization to proceed with the development of a Monitored Retrievable Storage (MRS) facility;

- Projections of spent fuel generation are uncertain and have been declining;

- While there exists in the law the limitation for emplacing more than 70,000 metric tons of spent fuel in the first repository before a second repository is in operation, emplacement of that amount is very far into the future and Congress need not reconsider specifically a second repository until at least the mid-1990's or much later;

- A decision that spending hundreds of millions of dollars now on siting would be premature and unsound fiscal management.

Earlier this year, DOE identified, from among 17 States, crystalline rock bodies in Georgia, Maine, Minnesota, New Hampshire, North Carolina, Virginia, and Wisconsin as potential candidates for a second repository. With the announced postponement, neither the 17 States nor any other sites are any longer under active consider tion.

Under the NWPA, DOE is authorized to construct the first repository and conduct siting activities for a second. The NWPA does not authorize construc tion of a second repository. DOE intends to continue studies for a second repository as required by the NWPA, but these studies will focus on technical issues.

DOE will concentrate its efforts on maintaining successful progress in the development of the disposal system, including the first geologic repository, the associated transportation system, and implementation of the MRS program. DOE believes a centralized MRS to receive, consolidate and package spent fuel for bulk transport to the repository will enhance the overall disposal system.

FROM-REACTOR CASK REQUEST FOR PROPOSAL

The Office of Storage and Transportation Systems is now finalizing the Request for Proposal (RFP) for the from-reactor cask fleet. This procurement action is designated as Phase I, Initiative I, in the Transportaton Business Plan.

The from-reactor cask fleet will be the "backbone" of the OCRWM transportation system as it will be designed to carry the majority of the spent fuel to a Monitored Retrievable Storage facility (if Congress approves such a facility), or directly to the repository. A public meeting held in Salt Lake City on March 17-18, 1986, discussed the statement of work, performance specifications, and interface guidelines, to be contained in the RFP. Eighty-eight participants attended that meeting and were encouraged to provide written comments.

A comment response document is being prepared that will discuss disposition of all the comments received from the 17 organizations that submitted written comments. Several substantive and helpful comments were directly responsible for changes that have been introduced into the RFP.

The availability of the comment response document will be announced in a later issue of the OCRWM Bulletin. The release of the RFP is scheduled for early Summer 1986.

ROD CONSOLIDATION NEGOTIATIONS

On June 6, 1986, OCRWM announced that negotiations will proceed with five competitively selected contractors for the award of multiphase contracts to develop prototype equipment to consolidate spent nuclear fuel assemblies from commercial reactors. Spent fuel rod consolidation is a process where the spent fuel rods are removed from supporting structure and closely packed in a canister which is then placed in the waste package for emplacement in the repository.

Negotiations with Babcock and Wilcox, General Electric, NUS, Nutech Engineers Inc., and Westinghouse Electric will result in up to five Phase I awards to develop preliminary designs. Later phases include Final Design, Fabrication and Cold Checkout, and Hot Demonstration.

In each phase the number of contractors will be reduced until only one contractor will be selected for the final phase of process demonstration. In this phase, about 200 spent fuel assemblies will be consolidated at the Idaho National Laboratory in a qualification of the process. The three year project is valued at about $5.3 million for the contractor completing all four phases.

ANALYSIS OF THE TOTAL-SYSTEM LIFE-CYCLE COST FOR THE CIVILIAN RADIOACTIVE WASTE PROGRAM PUBLISHED

The fourth total-system life-cycle cost (TSLCC) analysis has been completed for the annual evaluation of the fee collected for the Nuclear Waste Fund. The TSLCC provides cost estimates that reflect as closely as possible current plans and information about the Civilian Radioactive Waste Management Program of the Department of Energy (DOE).

In addition to comparing the cost estimates of previous years, the TSLCC analysis reflects program changes as the civilian radioactive waste management program evolves.

The current DOE estimate of the total-system cost for the reference authorized system is 24 to 32 billion (1985) dollars. These costs are zero to three billion dollars (nine percent) higher than the estimate for the reference system in the previous TSLCC analysis.

As factors like repository location, quantity of waste generated, and repository startup dates may significantly affect total-system costs, a number of sensitivity cases were analyzed in this report. For the authorized system, the costs for the sensitivity cases studied range from 21 to 39 billion dollars. Delay in repository startup is the principal factor that affects costs.

The TSLCC analysis appears in two volumes. The first volume contains the analysis, while the second volume has detailed information on the cost estimates. To obtain copies, see New Publications and Documents, p. 14.

OTHER PROGRAM ITEMS

Robert H. Bauer Retires; Samuel Rousso Appointed as Associate Director of the Office of Resource Management

Robert H. Bauer, Associate Director of the Office of Resource Management retired on April 11, 1986, after 35 years of Federal service. During his Federal career, Mr. Bauer was Manager of the Chicago Operations Office of the Department of Energy and has held increasingly responsible positions including Assistant Controller for Budgets and Regional Representative of the Secretary of Energy.

Samuel Rousso has been appointed Associate Director, Office of Resource Management, to succeed Mr. Bauer. Mr. Rousso comes to OCRWM with 25 years of experience with both the Federal Government and private industry, in planning, financial management, and management analysis.

Most recently, he was a senior member of the Science Applications International Corporation and the Arthur D. Little Company. At these firms he provided management consulting expertise for large and complex technical programs. Previously, Mr. Rousso was chief planning and financial officer for Defense Programs in the Department of Energy and its predecessor agencies. He has also served as a Scientific Advisor for the Atomic Energy Commission in Europe. During the six years of this service his major activities centered on nuclear power, nuclear waste management, and other nuclear energy issues.

Mr. Rousso holds a Master's Degree in Business Administration from San Diego State University (1964) and a Bachelor's Degree (1958) in Mechanical Engineering from Rensselaer Polytechnic Institute.

Litigation Affecting the OCRWM Program

A number of lawsuits have been filed against the Department of Energy (DOE) since the decision of May 28, 1986, regarding the selection of sites in the states of Nevada, Texas, and Washington for site characterization as candidates for the Nation's first geologic repository; and the announcement that site-specific work for a second repository has been postponed indefinitely.

Following the announcement on May 28, the State of Nevada filed five lawsuits, in the U.S. Court of Appeals for the Ninth Circuit, challenging the Yucca Mountain Environmental Assessment (EA), the nomination and recommendation of that site, the preliminary determination of site suitability under Section 114 (f) of the Nuclear Waste Policy Act of 1982, (NWPA), and the compliance of DOE with the Federal Land Policy and Management Act at the Yucca Mountain site. The State is also contesting DOE's decision to deny use of NWPA grant money to support the State's expenses in suing the DOE.

The State of Texas and the Nuclear Waste Task Force, et al. (including property owners in Texas) each filed a lawsuit in the U.S. Court of Appeals for the District of Columbia Circuit on May 29. The two lawsuits present identical challenges to the EA for the Deaf Smith County site, the nomination and recommendation of the Deaf Smith County site, and the identification of two potentially acceptable sites in Texas. On May 30, DOE moved to transfer these cases to the U.S. Court of Appeals for the Ninth Circuit.

The State of Washington has also filed challenges to the issuance of the EAs, the nomination and recommendation of sites, including the Hanford site, the approval of the recommended sites by the President, the preliminary determination of site suitability, and the postponement of the second repository program. The State filed in the U.S. Court of Appeals for the Ninth Circuit on June 4.

Excerpts from a Statement by Ben C. Rusche, Director, OCRWM, Before the Nevada Commission on Nuclear Projects Las Vegas, Nevada, May 15,1986

(After discussing the process of nomination and recommendation of sites for detailed site characterization for the first geologic repository, as described on page two of this issue, Mr. Rusche then presented further details on site characterization and other programmatic activities.)

Site characterization is an extensive investigative process involving mining operations and geologic and hydrological explorations to physically put people and equipment 1,000 to 4,000 feet below surface in the geologic formation where a geologic repository would be in order to evaluate the site to determine its potential capability for meeting the requirements for a repository. It will occur over a period of several years, and depending on the site, will cost from about $600 million to $1 billion per site.

The States will be involved in several ways. They will be involved in the development and review of the site characterization plan. They will be involved in the monitoring and conducting of activities after characterization begins, if those activities meet certain tests. In addition, the State, by its very presence will have the opportunity to conduct whatever oversight activities it wants to on its own, will be the recipient of all of the documents prepared by the DOE, will have the opportunity and hopefully will feel the obligation to participate in an extensive system of documentation to provide a complete record for the licensing process. This will include information which will be put into a licensing system database and which will be fully available to the States. Our current schedule is to complete characterization and make a selection, issue a final Environmental Impact Statement and recommend to the President a site for the first repository in 1991. We would submit a construction application to the Nuclear Regulatory Commission soon after and hope to receive from them a construction authorization in 1993 or 1994 and be ready to begin Phase I operation in 1998.

Interwoven throughout all these activities, and the other activities required under the Nuclear Waste Policy Act of 1982, (NWPA), is the need for an extensive system of interactions providing checks and balances to ensure Federal accountability to the States, affected Indian Tribes, and to the public.

To ensure the accountability of the Federal Government to the other parties and concerned citizens, we have on many occasions expanded the interactive process beyond that called for in the NWPA. For example, the issuance of draft Environmental Assessments was not required by the NWPA, but 23,000 comments are evidence of the importance to do so. In addition, we have been undertaking steps to ensure that the affected States and Indian Tribes can provide early input to our decisionmaking process.

We are currently revising our internal financial assistance guidelines to provide the greatest availability of funds and flexibility in managing these funds and have opened many internal planning meetings to participation by States and Indian Tribes.

We have invited States and Indian Tribes to participate in coordinating groups on topics such as institutional and socioeconomic issues; environmental issues; and quality assurance. Meetings between DOE and the Nuclear Regulatory Commission on both general issues and on site-specific issues are open to the public and are announced in Maryland on (800) 492-4610; and from other States on (800) 368-2235. In addition, these meetings and other information is available on an electronic bulletin board (INFOLINK), maintained by my office, that can be accessed through any standard computer communications package with a modem (202) 252-9359.

We, at the DOE, continue to be committed to carrying out a program which will result in the protection of the public health, safety, and the environment, and I am personally committed to being responsible to you, to your State and to the American public to implement the letter and spirit of the law.

CURRENTLY SCHEDULED OCRWM SHORT-TERM PROGRAM MILESTONES

6/86	Issue Request for Proposal (RFP) for Transportation Cask Development.
6/86	Issue Transportation Institutional Plan.
6/86	Issue Federal Register Notice on Defense Waste Fee.

FEDERAL REGISTER ACTION ITEMS RELATING TO OCRWM

(As a new feature of the OCRWM Bulletin, this section lists regulatory action items under review appearing in the Federal Register that relate to the OCRWM program.)

Subject	Citation	Comment Period Expiration and Instructions
Licensing requirements for a monitored retrievable storage (MRS) facility. - The Nuclear Regulatory Commission is proposing to add language to its regulations to provide for licensing an MRS in accordance with the requirements of the Nuclear Waste Policy Act of 1982.	51 FR 19106	The comment period will expire August 25, 1986. Mail written comments to the Secretary, U.S. Nuclear Regulatory Commission, Washington D.C. 20555. ATTN: Docketing and Service Branch.

SELECTED EVENTS CALENDAR

July 9	Consultation and Cooperation Agreement Meeting with the Confederated Tribes of the Umatilla Indian Reservation, Pendleton, OR. Contact Max Powell (509) 376-5267.
July 23-24	Quality Assurance Coordinating Group Meeting, Denver, CO. Contact Carl Newton (202) 252-9300.
August 4-8	Annual Meeting of National Conference of State Legislatures, New Orleans, LA. Contact Cheryl Runyon (303) 623-7880.
September 14-17	American Nuclear Society International Conference on Low-Level, Intermediate, and High-Level Waste Management, Niagara Falls, NY. Contact John Knabensch (716) 942-4295.
September 24	Western Legislative Conference, High-Level Waste Subcommittee Meeting, Colorado Springs, CO. Contact Patty Spangler (415) 986-3760.
October 5-8	Atomic Industrial Forum Workshop on Radiation Issues, Boston, MA. Contact Patrice Boulanger (301) 654-9260.
October 19-22	Atomic Industrial Forum Meeting on High-Level Waste Business-Transportation, Storage and Disposal, Charleston, SC. Contact Patrice Boulanger (301) 654-9260.

For details on Department of Energy/Nuclear Regulatory Commission meetings call (800) 368-2235 for a recorded message. In Maryland, call (800) 492-4610.

A telephone recording service has been established for the announcement of upcoming meetings related to the waste management program of the Nuclear Regulatory Commission. The number is (1/800) 368-5642, Ext. 79002, or Washington D.C. residents should call 427-9002.

For information on meetings and events occurring 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 or call Neal Duncan, (202) 252-5722.

NEW PUBLICATIONS AND DOCUMENTS

First Repository Environmental Assessment Reports for: May 1986

Deaf Smith County Site
- Volumes I - III (DOE/RW-0069)
- Overview (only) (DOE/RW-0075)

Hanford Site
- Volumes I - III (DOE/RW-0070)
- Overview (only) (DOE/RW-0076)

Davis Canyon Site
- Volumes I - III (DOE/RW-0071)
- Overview (only) (DOE/RW-0077)

Richton Dome Site
- Volumes I - III (DOE/RW-0072)
- Overview (only) (DOE/RW-0078)

Yucca Mountain Site
- Volumes I - III (DOE/RW-0073)
- Overview (only) (DOE/RW-0079)

The NWPA requires that site nominations be accompanied by Environmental Assessments (EAs). Volume I of each EA contains an Executive Summary, a discussion of the site selection process, the site, the expected effects of site characterization activities, and the regional and local effects of locating a repository at the site. Volume II evaluates the suitability of the site for site characterization and for development as a repository. In addition, it contains a comparative evaluation of all the nominated sites. The issues raised during the period provided for public review and comment were considered in preparing the EAs and are addressed in the comment and response document, Volume III.

Because the EAs contain more information than may be required for many members of the public, an Overview has been prepared for each of the nominated sites and can be obtained separately.

A Multiattribute Utility Analysis of Sites Nominated for Characterization for the First Radioactive-Waste Repository -- A Decision-Aiding Methodology (DOE/RW-0074) — May 1986

This report presents a formal analysis of the five sites nominated as suitable for characterization for the repository. It is intended to aid in the site recommendation decision by providing insights into the comparative advantages and disadvantages of each site. Because no formal analysis can account for all the factors important the decision, this study does not form the sole basis for the recommendation. An independent review of the revised methodology, and the application of it has been conducted by the Board of Radioactive Waste Management of the National Academy of Sciences. The comments of the Board are included as an appendix to this report.

Recommendation by the Secretary of Energy of Candidate Sites for Site Characterization for the First Radioactive-Waste Repository (DOE/S-0048) — May 1986

As required by the Nuclear Waste Policy Act of 1982 (NWPA), Secretary of Energy John S. Herrington nominated five sites and recommended three of them to the President for site characterization. This report contains a discussion of the methodology and approach of the decision, diversity provisions of the NWPA, the order of preference and recommendation, and a preliminary determination of suitability.

Copies of the documents described above can be obtained while supplies last by writing to:

U.S. Department of Energy
Attention: EA
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Analysis of the Total-System Life-Cycle Cost for the Civilian Radioactive Waste Management Program (DOE/RW-0047, Volumes I and II) — April 1986

This report presents an updated analysis of the total-system life-cycle costs of the waste management program to help determine if revenues are sufficient to cover the cost of the program. The report describes the sources of information and discusses the estimation methods and results in substantial detail. For copies, contact Department of Energy, OCRWM, Office of Resource Management, RW-12, 1000 Independence Avenue, S.W., Washington D.C. 20585.

Office of Geologic Repositories Guidelines for Intergovernmental and Public Participation Activities — May 1986

These Guidelines establish the repository program's policy for participation activities to assist Headquarters and Project Offices in planning and implementing activities that inform and involve States, Indian Tribes, local governments, and the general public. For copies contact Department of Energy, OCRWM, Office of Geologic Repositories, RW-25, 1000 Independence Avenue S.W., Washington D.C. 20585.

*U.S. GOVERNMENT PRINTING OFFICE: 1986-491-162:20093