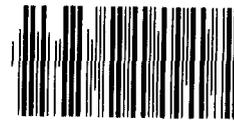


August 1986

NUCLEAR WASTE

Quarterly Report on DOE's Nuclear Waste Program as of June 30, 1986



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United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-202377

August 11, 1986

The Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate

The Honorable J. Bennett Johnston
Ranking Minority Member
Committee on Energy and Natural Resources
United States Senate

On March 26, 1984, you requested that we provide quarterly status reports on the Department of Energy's (DOE's) implementation of its nuclear waste program. (See appendix V for a list of previous quarterly reports.) The Nuclear Waste Policy Act of 1982 (Public Law 97-425) established a comprehensive national program to construct geologic repositories for the permanent disposal of high-level radioactive nuclear waste. The act also established within DOE the Office of Civilian Radioactive Waste Management (OCRWM) to carry out the act's provisions and established the Nuclear Waste Fund to finance the program.

This fact sheet provides the status of DOE's nuclear waste program activities for the quarter ending June 30, 1986. Activities during the quarter include the following:

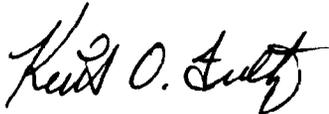
- In April 1986 the National Academy of Sciences completed its review of the methodology DOE used to evaluate and rank the first repository sites, and concluded that the methodology is satisfactory and complete. In May 1986 DOE issued final environmental assessments for first repository sites and recommended sites in Nevada, Texas, and Washington for site characterization. The President approved the recommendations, and DOE is continuing its preparations for future work at these three sites. States and tribes affected by these sites were highly critical of DOE's selection methodology and its overall management of the program.
- DOE postponed indefinitely any site-specific work on a second repository for several reasons, including DOE's progress in siting the first repository and the uncertainty of when and if a second repository might be needed. DOE officials stated that the areas previously identified for a potential second repository are no longer being actively considered. Some states and tribes potentially affected by a second repository are dissatisfied with a "postponement" rather than a

cancellation of the program. States and tribes potentially affected by the first repository are critical of the decision and are concerned that the first repository may be the only repository. One of these states has challenged the legality of the decision, arguing that the second repository program is legislatively mandated.

--The Nuclear Waste Fund collected over \$166 million in fees and investment income and obligated about \$40 million for program activities. The fund balance as of June 30, 1986, was about \$1.7 billion.

To determine the status of the program, we interviewed those DOE officials responsible for planning and managing the waste program, responding to litigation, and managing its financial activities. We obtained DOE program documents, publications, correspondence and studies, related legal documents, and financial data. We were unable to verify DOE's financial system data within the time frame of this report. We also attended congressional hearings on DOE's second repository program.

We discussed the facts presented with cognizant DOE officials and incorporated their views where appropriate. However, we did not ask DOE officials to review and comment officially on a draft of this fact sheet. We are sending copies to the Chairmen of the Senate Committee on Governmental Affairs, the House Committee on Government Operations, and the House Committee on Energy and Commerce; the Secretary of Energy; the Nuclear Regulatory Commission; and other interested parties. If you have further questions, please contact me at (202) 275-1441.



Keith O. Fultz
Associate Director

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ABBREVIATIONS

DOE	Department of Energy
EPA	Environmental Protection Agency
GAO	General Accounting Office
MRS	monitored retrievable storage
NAS	National Academy of Sciences
NRC	Nuclear Regulatory Commission
NWPA	Nuclear Waste Policy Act
OCRWM	Office of Civilian Radioactive Waste Management

SECTION I

STATUS OF OCRWM ACTIVITIES DIRECTED TOWARD LEGISLATED REQUIREMENTS DURING THE APRIL-JUNE 1986 QUARTER

BACKGROUND

The Nuclear Waste Policy Act of 1982 (NWPAA) required the Secretary of Energy to recommend to the President by January 1, 1985, three sites for further geologic testing as a first permanent repository for high-level nuclear waste. In February 1983 the Department of Energy (DOE) formally identified nine areas in six states as potentially acceptable sites. In May 1986 DOE nominated five sites, accompanied by the final environmental assessments required by NWPAA, and recommended three of the sites to the President. On May 28, 1986, the President approved the three sites.

NWPAA also requires the Secretary of Energy to recommend to the President, by July 1, 1989, at least three potential sites for a second repository. The President is required to recommend to the Congress a final site for the second repository by March 31, 1990. No construction may be done without congressional authorization. DOE began a site screening process for the second repository in 1983 and had proposed, in a draft Area Recommendation Report issued in January 1986, 12 areas in 7 states as potentially acceptable sites. However, on May 28, 1986, DOE indefinitely postponed plans for any site-specific work on a second repository and stated that the 12 areas were no longer under active consideration.

DOE concluded last year that a monitored retrievable storage (MRS) facility should be an integral part of the waste management system and should be used to repackage and consolidate spent nuclear fuel before shipment to a repository. In April 1985 DOE identified three sites in Tennessee as potential locations for the MRS facility. However, because of litigation concerning the site selection process, DOE has not submitted a proposal for construction of an MRS to the Congress as required by NWPAA.

Program costs are paid from NWPAA's Nuclear Waste Fund, which receives fees from owners of spent nuclear fuel. In April 1986 DOE estimated the full cost of the program to be between \$23.6 billion and \$32.3 billion (in constant 1985 dollars).

FIRST REPOSITORY SITES APPROVED BY THE PRESIDENT FOR SITE CHARACTERIZATION

NWPAA required the Secretary of Energy to nominate five sites and recommend to the President by January 1, 1985, three sites for

detailed studies, called site characterization studies. Each site nomination, according to NWSA, must be accompanied by an environmental assessment that compares each site with the others and ranks them according to criteria defined in DOE's siting guidelines. In December 1984 DOE issued for public comment draft environmental assessments for the nine potentially acceptable sites as the first repository.

On May 28, 1986, the Secretary of Energy nominated five sites for site characterization: Richton Dome, Mississippi; Yucca Mountain, Nevada; Deaf Smith, Texas; Davis Canyon, Utah; and Hanford, Washington. Land for the potential sites in Mississippi and Texas is privately owned, whereas the land at the other three sites is federally owned. Each site nomination was accompanied by an environmental assessment. Of the five sites nominated, the Secretary recommended and the President approved for site characterization studies the three sites in Nevada, Texas, and Washington as candidates for the first repository.

The Secretary's recommendation of the three sites was based on associated evaluations and findings reported in the environmental assessments. DOE applied a formal methodology to aid in ranking sites suitable for nomination and presented its analysis of the nominated sites in a May 1986 report.¹ The Secretary considered factors such as technical and socioeconomic aspects before recommending the three sites for detailed site characterization. The sites that were nominated and recommended are the same sites identified by DOE in draft environmental assessments.

Before DOE issued the May 1986 report, the National Academy of Sciences (NAS) reviewed how DOE applied its revised site ranking methodology to one site and made cross comparisons among sites on key issues. In April 1986 NAS sent DOE a report on its review of the methodology and cross comparisons. The report concludes that the methodology and its application were satisfactory and generally commended DOE's efforts to objectively apply the state-of-the-art methodology. It also pointed out several limitations in the application of the methodology, including the fact that DOE did not use independent experts in the assessment process.

Site characterization studies and activities will form the basis for a decision on the preferred site for the nation's first repository. Site characterization will include constructing

¹A Multiattribute Utility Analysis of Sites Nominated for Characterization for the First Radioactive Waste Repository--A Decision-Aiding Methodology.

exploratory shafts to depths of a proposed repository--about 1,000 to 4,000 feet below ground--which will make possible scientific studies, evaluations, and comparisons in selecting a site for repository construction. Shaft construction is expected to begin in July 1987. Surface facilities and access roads also will be constructed at each candidate site.

The estimated costs for site characterization are about \$780 million for the tuff site (Nevada), \$850 million for the salt site (Texas), and \$970 million for the basalt site (Washington).² OCRWM expects to establish a project office near the salt site in Deaf Smith County, Texas, to oversee site characterization. Existing project offices in Washington and Nevada will oversee the basalt and tuff sites. Characterization activities are expected to employ 200 to 500 people at each site.

Site characterization is expected to take about 5 years and involve extensive interaction with federal agencies and states, Indian tribes, and the public. The current program focus is on the development of formal site characterization plans. The current schedule calls for the plans for the basalt and tuff sites to be completed in December 1986 and for the salt site in May 1987. These plans are to be developed with input from the Nuclear Regulatory Commission (NRC), the three states, and affected Indian tribes. According to OCRWM officials there was a cursory discussion of the plans during a June 1986 meeting of OCRWM's Institutional/Socioeconomic Coordinating Group, an internal management group that allows state and tribe representatives to participate in its meetings.

Affected states and tribes remain highly critical of the overall management of the program and question DOE's selection process. Fourteen new lawsuits, including several by states with potential first repository sites, were filed against DOE this quarter. (For more information on pending litigation, see section III.) Among the criticisms is the decision to include the Hanford, Washington, site which, according to the rankings in the environmental assessments, ranked number five (last place) overall. The OCRWM director explained that Hanford was chosen because, without the cost factor, it is one of the top three sites, and cost is not the driving factor in site selection. Several states and tribes also complained that they were given only a 20-minute advance notice of the exact date of the announcement, not 30 days as requested. DOE officials stated that they alerted states and tribes of the approximate date of the

²Tuff is a hard, compacted ash from volcanoes; basalt is a molten material from volcanoes or fissures; and salt is a sedimentary rock formed by evaporation of water from a saline solution.

announcement a month beforehand and informed them of the site selections as soon as DOE received the President's decision.

After DOE completes site characterization studies, NWPA requires the President to recommend to the Congress by March 31, 1987, one site for repository construction. However, DOE does not expect to complete site characterization studies until about 1990, and a Presidential recommendation is now projected for about 1991.

SITE-SPECIFIC SECOND REPOSITORY ACTIVITIES POSTPONED

Until May 1986 DOE was engaged in a site selection process that had tentatively identified 12 proposed, potentially acceptable areas in 7 states for a second repository. These areas, in the north central and eastern United States, were identified in the draft Area Recommendation Report issued in January 1986. By April 15, 1986, DOE had held 39 briefings and conducted 38 hearings in 15 states to discuss and obtain comments on the draft Area Recommendation Report. More than 18,000 people attended the briefings and more than 3,200 persons and organizations provided about 60,000 comments on the report. The comment period ended on April 16, 1986; however, DOE accepted comments up to the time site-specific work was postponed.

On May 28, 1986, the Secretary of Energy announced that DOE has postponed indefinitely any site-specific work related to a second geologic repository. According to the announcement, those 12 areas identified as possible second repository sites are no longer under active consideration, and subsequent program efforts will be limited to technology development rather than site-specific activities. OCRWM officials told us that siting activities could be resumed in the mid-1990's if the need for a second repository is demonstrated. They also told us that any resumption of these activities would begin at "square one" with a new national screening effort.

DOE cited the following reasons for the postponement decision: (1) the continuing progress in siting of the first repository, (2) projections of spent fuel generation are uncertain and have been declining, (3) a decision that spending hundreds of millions of dollars now on siting would be premature and unsound fiscal management, (4) emplacement of a large amount of waste in a second repository is very far into the future, and the Congress need not reconsider specifically a second repository until at least the mid-1990's or much later, and (5) DOE expects congressional authorization to proceed with the development of an MRS facility.

Prior to the announcement, the major activities during the quarter were the conduct of public briefings and development of a system for processing and controlling comments received on the draft Area Recommendation Report. Post-announcement activities have been geared to implementing the Secretary's postponement decision.

The Secretary's announcement provided that further work to finalize the Area Recommendation Report will be discontinued except for cataloging the comments DOE received on the draft. During the quarter, DOE established the comment response tracking system for handling about 60,000 comments received as of June 30, 1986 on the draft report. This computer-based system will be used to identify, code, track, and sort individual comments, an activity expected to be completed in early 1987. DOE does not plan to respond to the comments.

The redirection of program efforts resulting from the Secretary's postponement decision is being implemented by the Crystalline Repository Project Office, Argonne, Illinois. Prior to the decision, this office was responsible for activities related to finding potentially acceptable sites in crystalline rock under the second repository program. Planned activities have been curtailed or scaled back and DOE has begun to restructure the second repository program. The new program will concentrate on research and development of technical issues not related to a specific site. DOE plans to close out all grants to states and tribes potentially affected by a second repository by September 30, 1986, and in June 1986 issued letters to that effect.

In general, states and tribes potentially affected by the second repository stated that they are pleased that DOE has postponed the work; however, some stated that they are uncomfortable because they might be reconsidered as potential sites in the future. Some states and tribes potentially affected by the first repository, on the other hand, stated that they are considerably upset because the work on the second repository has been postponed and expressed concern that the first repository will be the only repository. As of the end of the quarter, Washington State and three private associations had filed suit against the postponement.

STATUS OF THE MRS PROPOSAL

NWPA required DOE to submit a proposal to the Congress by June 1, 1985, for the construction of one or more MRS facilities. In April 1985, after an analysis of various sites and facility designs, DOE concluded that the Oak Ridge, Tennessee, area was its preferred site for an MRS facility.

Although it completed the MRS proposal in February 1986, DOE has not submitted it to the Congress because the U.S. District Court in Nashville enjoined DOE from formally submitting it. The court found that DOE had failed to consult and cooperate with the state as required by the act. DOE has appealed this decision to a higher court. (See section III for more detail on this litigation.)

NWPA requires that MRS facilities be licensed by NRC if MRS is approved by the Congress. On May 27, 1986, NRC released for public comment in the Federal Register a proposed rule, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste." NRC is proposing to add language to its existing regulations (10 CFR 72) to provide for licensing the storage of spent fuel and high-level waste in an MRS. The revised regulations will establish requirements, procedures, and criteria for issuing a license to DOE to receive, transfer, package, and store in an MRS spent fuel, high-level waste, and associated radioactive materials from commercial reactors. The comment period for the proposed revisions will extend until August 25, 1986.

OTHER PROGRAM ACTIVITIES

The following program activities also occurred during the quarter.

- OCRWM completed draft guidelines for making payments to state and local governments during site characterization, repository development, and operation phases. The amounts are to be equal to what the eligible jurisdiction would receive were it authorized to tax site characterization activities and the development and operation of the repository, just as it taxes other real property and industrial or commercial activities. The draft has not been released for comment by OCRWM.
- OCRWM completed a draft Program Planning Manual for recipients of financial assistance to help them prepare for and participate in the award and administration of financial assistance under NWPA. The draft has not been released for comment by OCRWM.
- OCRWM finalized Public Information Guidelines setting forth the public information policy. In essence, the guidelines observe the act's mandate that all OCRWM program components make open and timely program information available to the states, affected Indian tribes, and other interested parties.

- OCRWM plans to issue in July 1986 a final Transportation Institutional Plan, which is intended to define a comprehensive process for effective interaction among those parties affected by development of a national waste disposal transportation system.
- OCRWM issued revised guidance to project offices on issues related to the Environmental Monitoring and Mitigation Plan and the Socioeconomic Monitoring and Mitigation Plan. These plans are intended to outline actions to be taken to mitigate potentially significant adverse environmental and sociological impacts.
- In April 1986 DOE published its annual Total System Life Cycle Cost Analysis report, which is the result of an ongoing analysis OCRWM uses to help determine whether the revenue-producing mechanism established by NWPA is sufficient to cover the cost of the program. The analysis estimates the total system cost for the program to be between \$23.6 billion and \$32.3 billion (in 1985 dollars).
- DOE sent letters to utilities detailing procedures they should follow in order to take a credit on subsequent quarterly payments to the Nuclear Waste Fund beginning with the July 1986 payment. This action responds to the U.S. Court of Appeals decision that utilities should have paid the 1-mill-per-kilowatt-hour fee since April 7, 1983, based on net electricity generated rather than gross. DOE expects to publish a Notice of Proposed Rulemaking for comment in the near future to amend utility contracts consistent with the court ruling.
- OCRWM placed the Site Evaluation Branch in its Office of Geologic Repositories' Division of Licensing and Regulatory and renamed it the Division of Siting, Licensing, and Quality Assurance. The Economic and Intergovernmental Analysis Branch was placed in the Repository Coordination Division. The Siting Division, which previously contained these two branches, was abolished.

SECTION II

STATUS OF THE NUCLEAR WASTE FUND AS OF JUNE 30, 1986

NWPA established the Nuclear Waste Fund, a separate fund maintained by the Department of the Treasury, to finance the nuclear waste program. It receives fees paid by the owners and generators of high-level radioactive waste and disburses funds to finance OCRWM activities. (Previous quarterly reports explain how the fund receives fees and makes disbursements.) As of June 30, 1986, the fund had a balance of \$1.65 billion. (See table IV.1.)

NUCLEAR WASTE FUND RECEIPTS AND COSTS

DOE has contracted with 66 owners of spent fuel (one contract was added during the quarter) for a 1-mill-per-kilowatt-hour fee to be paid quarterly into the fund to finance the waste program. The fund began receiving quarterly fees late in fiscal year 1983 and as of June 30, 1986, had collected a total of about \$1.08 billion, of which about \$101.8 million was collected this quarter.

Owners of spent fuel generated prior to April 7, 1983, must pay a one-time fee into the Nuclear Waste Fund for the disposal of their spent fuel. This fee must be paid before delivery of spent fuel to the federal government. By June 30, 1986, over \$1.4 billion in one-time fees had been collected, of which about \$1.0 billion was collected during this quarter.

NWPA provides that when the amount of the Nuclear Waste Fund is in excess of current needs, DOE may request the Secretary of the Treasury to invest these excess funds in Treasury financial instruments in amounts as the Secretary of Energy determines appropriate. In the quarter ending June 30, 1986, daily overnight investments earned interest of about \$575,000 and long-term investments (90 days or more) earned about \$63.0 million.

OCRWM's appropriation for fiscal year 1986 totals \$499 million.³ OCRWM can obligate amounts from the Nuclear Waste Fund only as appropriated, even though more funds may be available in the Fund. OCRWM obligates by awarding contracts and grants, and

³The appropriation was reduced from \$521 million earlier in the fiscal year because of the Gramm-Rudman-Hollings deficit reduction legislation. As of June 30, 1986, DOE had about \$166 million in unobligated appropriations for the program. This \$166 million represents about 33 percent of the fiscal year appropriation.

also disburses funds for its civil service payroll and other program needs. Actual costs are recorded when invoices are received, and disbursements are recorded when payments are made. Obligations, costs, and disbursements are recorded in DOE's financial information system by the field finance offices that receive allocations from the fund. During the quarter, expenses totaled \$97.2 million for the five major cost activities. (See table IV.2.) About \$67.6 million, or about 70 percent of the funds were spent for the first repository program.

Most waste disposal activities have been and are being carried out by contractors. During the quarter DOE spent about \$86.5 million and obligated about \$23.2 million for contractor services, about 59 percent of the total amount obligated during the quarter. Since inception of the fund, OCRWM has obligated about \$1 billion for over 120 contracts.

SECTION III

STATUS OF LITIGATION RELATING TO THE NUCLEAR WASTE PROGRAM

During the quarter ending June 30, 1986, one court case was resolved and three cases, initiated earlier and including a case that consolidated the nine separate petitions challenging the siting guidelines, continued under review by the courts. Fourteen new petitions were filed this quarter, including 13 that were filed after the May 28, 1986, announcement naming the 3 first repository sites to be characterized. The new cases generally challenged DOE's first repository site selection process, but three of the cases also challenged aspects of DOE's grant program and its decision to postpone site-specific activities on the second repository program.

COMPLETED LITIGATION

State of Maine v. Herrington,
State of New Hampshire v. Herrington

On February 14, 1986, and February 19, 1986, the states of Maine and New Hampshire, respectively, petitioned the U.S. Court of Appeals for the First Circuit in Boston to review the Secretary of Energy's refusal to extend the 90-day comment period for the public and affected states on the draft Area Recommendation Report (which identified 12 areas as proposed potentially acceptable sites for a second repository). The states contended that 90 days was inadequate to review and comment on the report and that they will be irreparably harmed if deprived of adequate opportunity to comment on DOE's tentative selections. On May 1, 1986, the court granted DOE's motion to dismiss the petitions because it determined that the issues were not suitable for review at that time. On May 28, 1986, all site-specific work on the second repository program was indefinitely postponed.

PENDING LITIGATION

Environmental Policy Institute,
et al. v. Herrington, and Other
Siting Cases

In December 1984 and March 1985, a number of environmental groups and the state of Washington, respectively, petitioned the U.S. Court of Appeals for the Ninth Circuit to review the siting guidelines issued by DOE in December 1984 to determine whether they are in accordance with NWPA. In May 1985 DOE filed a motion to dismiss both cases--Environmental Policy Institute, et al. v. Herrington, and Washington v. DOE--arguing that the claims of the petitioners are premature because the issuance of the guidelines

is a preliminary step to the issuance of environmental assessments. By June 30, 1985, seven other cases challenging the siting guidelines had been filed. These new cases were later transferred to the Ninth Circuit, where the Environmental Policy Institute and Washington cases had been filed.

On August 16, 1985, the court ordered that action on the seven new guidelines cases be deferred until the motion to dismiss the Environmental Policy Institute and Washington cases is resolved. However, in May 1986 the court consolidated all of the siting guidelines cases and planned a July 1986 scheduling conference.

Tennessee v. Herrington

On August 20, 1985, the state of Tennessee filed suit in the U.S. District Court located in Nashville, alleging that any DOE proposal to request authority from the Congress to construct an MRS facility in Tennessee would violate NWPA because DOE did not consult with the state before conducting a study to determine the suitability of three Tennessee locations for the facility. Tennessee requested that the Secretary of Energy be enjoined from presenting any proposal to the Congress for an MRS facility in Tennessee until the requirements of the act have been fulfilled.

On October 21, 1985, DOE asked the court to dismiss the case, contending that the District Court lacked jurisdiction. The District Court determined on November 12, 1985, however, that it does have jurisdiction, and on February 5, 1986, concluded that DOE violated the act by failing to consult and cooperate with the state's governor and legislature in the MRS siting process. On February 7, 1986, the District Court permanently enjoined DOE from making any proposal to the Congress that relies on siting studies developed prior to consultation and cooperation with Tennessee.

On February 13, 1986, DOE asked the U.S. Court of Appeals for the Sixth Circuit to (1) reverse the district court's decision, (2) dissolve the injunction, or (3) stay the injunction pending the outcome of the appeal. On March 6, 1986, the Circuit Court denied DOE's request to dissolve or stay the injunction. As of June 30, 1986, all briefs had been filed by the parties involved and oral arguments were scheduled for late July 1986.

Natural Resources Defense Council, Inc., et al. v. EPA and the U.S.A.

The states of Maine, Minnesota, Texas, and Vermont and various environmental groups, including the Natural Resources Defense Council, Inc. and the Environmental Policy Institute, have filed suits challenging the Environmental Protection Agency's (EPA) High-Level Waste Standards, which were published in

September 1985. The suits were consolidated, and in March 1986 briefs were filed in the First Circuit Court of Appeals in Boston. These states and environmental groups allege that the EPA standards are arbitrary and capricious and that the groundwater and individual protection provisions of the standards violate provisions of the Safe Drinking Water Act. They also allege that EPA violated the Administrative Procedures Act by not providing adequate notice to permit a genuine opportunity to comment on the proposed standards.

As of the end of the quarter, the parties involved were in the midst of filing briefs supporting their claims. Oral arguments had not yet been scheduled.

NEW LITIGATION THIS QUARTER

Lakes Environmental Association v. DOE

On April 25, 1986, the Lakes Environmental Association, a group of local property owners in Maine that is concerned about the identification in the draft Area Recommendation Report of the Sebago Lake area as a proposed potentially acceptable site, petitioned the U.S. Court of Appeals for the First Circuit to review and set aside certain aspects of the general siting guidelines and the screening methodology for the second repository.

Nevada, et al. v. Herrington

On May 28, 1986, the day the Secretary of Energy announced the first repository sites, Nevada and its state officials filed five separate petitions with the U.S. Court of Appeals for the Ninth Circuit. Two petitions ask the court to declare null and void the Secretary's recommendation of Yucca Mountain, Nevada, for site characterization. In one petition, the state argues that the failure of the Secretary to prepare a final environmental assessment for the Yucca Mountain site violates the NWPA; the second petition, however, argues that the environmental assessment for the Yucca Mountain site does not adequately address all factors required of environmental assessments by the NWPA.

A third petition asks the court to declare null and void the Secretary's preliminary determination that three sites, including Yucca Mountain, are suitable for development as repositories. The state argues that such determination may be made only after site characterization has been completed. The fourth and fifth petitions, however, ask the court to prohibit site characterization until (1) DOE awards the state its grant request for funds to enable the state to seek judicial review of the Secretary's and the President's actions, and (2) the Secretary satisfies the requirements of the Federal Land Policy and

Management Act to secure jurisdiction over the Yucca Mountain site.

Texas v. Herrington;
Nuclear Waste Task Force,
Inc., et al. v. Herrington;
Texas v. Reagan

On May 29, 1986, the state of Texas and a coalition of local representatives and landowners filed identical petitions in the U.S. Court of Appeals for the District of Columbia Circuit requesting a review of the environmental assessment and the nomination and recommendation process for the Deaf Smith County site in Texas. On June 5, 1986, the state of Texas also filed a separate petition requesting the court to review the President's site selection decision. In June 1986 these petitions were consolidated and the case was transferred to the U.S. Court of Appeals for the Ninth Circuit.

Washington v. Herrington

On June 4, 1986, the state of Washington filed three petitions with the U.S. Court of Appeals for the Ninth Circuit requesting that the court review

- the nomination and recommendation process for the first repository program, including the final environmental assessments for the Hanford site, and declare them erroneous and invalid;
- the Secretary of Energy's actions resulting in the postponed site-specific work for a second repository, and declare the decision a violation of NWPA; and
- the Secretary of Energy's decision to preliminarily determine the suitability of the Hanford site prior to site characterization, and declare it in error and invalid.

National Parks and Conservation
Association, et al. v. Herrington

On June 12, 1986, the National Parks and Conservation Association and two other private associations petitioned the U.S. Court of Appeals for the District of Columbia Circuit to review DOE decisions (1) determining the suitability for site characterization of two Utah sites in close proximity to Canyonlands National Park, (2) nominating one of these sites for site characterization, and (3) postponing the identification of sites for the second repository. The petitions request that the

court set aside DOE's decisions as unlawful and contrary to NWPA. Later in June this case was transferred to the Ninth Circuit.

Sierra Club v. Herrington

On June 9, 1986, the Sierra Club, a California nonprofit corporation, petitioned the U.S. Court of Appeals for the Ninth Circuit to review (1) the nomination of the Hanford and Davis Canyon sites, (2) the recommendation of the Hanford site, (3) the approval and issuance of the environmental assessments for the five nominated sites, and (4) decisions made and actions performed as a result of or based on the environmental assessments, including the determination of site suitability. The Sierra Club requested that the court set aside (1) the nomination of the Hanford and Davis Canyon sites, (2) the selection of the Hanford site, and (3) the issuance of the assessments for the five nominated sites as unlawful and in violation of NWPA. It also asked the court to find the environmental assessments for the Hanford and Davis Canyon sites insufficient and inadequate.

SECTION IV

TABLES DETAILING THE STATUS OF THE NUCLEAR WASTE FUND

Table IV.1: Status of the Nuclear Waste Fund as of June 30, 1986

Beginning fund balance (April 1, 1986)	\$1,588,693,073
Fees from waste owners (April-June 1986)	102,863,404
Investment income collected (April-June 1986)	<u>63,556,123</u>
Total funds available	<u>1,755,112,600</u>
Disbursements ^a	(100,820,769)
Fund balance as of June 30, 1986	<u><u>\$1,654,291,831</u></u>
Cash balance as of June 30, 1986	\$ 549,517
Funds invested	\$1,653,727,356
Unpaid obligations as of June 30, 1986 ^b	\$ 199,018,572

^aThis figure includes amounts disbursed in April-June 1986 that were obligated in current and prior years.

^bThis figure includes amounts of undisbursed obligations remaining from current and prior years.

Source: DOE's financial information system.

Table IV.2: Status of Nuclear Waste Fund Costs as of June 30, 1986

<u>Funding category</u>	<u>First quarter FY86 costs</u>	<u>Second quarter FY86 costs</u>	<u>Third quarter FY86 costs</u>	<u>Cumulative FY86 costs</u>
<u>First repository</u>				
Development, construction, operations	\$ 47,462,811	\$ 67,384,221	\$66,829,848	\$181,676,880
Capital equipment	1,407,700	4,103,813	811,413	6,322,926
Plant acquisition and construction	-	-	-	-
Total first repository	48,870,511	71,488,034	67,641,261	187,999,806
<u>Second repository</u>				
Development, construction, operations	5,384,680	6,593,538	8,260,612	20,238,830
Capital equipment	43,000	47,000	14,674	104,674
Plant acquisition and construction	-	-	-	-
Total second repository	5,427,680	6,640,538	8,275,286	20,343,504
<u>Monitored retrievable storage</u>				
Development, construction, operations	1,560,873	1,495,070	1,394,723	4,450,666
Capital equipment	24,133	-	-	-
Plant acquisition and construction	-	-	-	-
Total monitored retrievable storage	1,585,006	1,495,070	1,394,723	4,474,799
<u>Program management and technical support</u>				
Management and support	8,945,856	16,944,349	15,010,786	40,900,991
Capital equipment	63,012	76,849	341,941	481,802
Plant acquisition and construction	-	-	-	-
Total program management and technical support	9,008,868	17,021,198	15,352,727	41,382,793
<u>Transportation and system integration</u>				
Design, development, and testing	1,187,700	2,649,745	4,198,209	8,035,654
Capital equipment	-	350,052	360,560	710,612
Total transportation and system integration	1,187,700	2,999,797	4,558,769	8,746,266
Total	\$ 66,079,765	\$ 99,644,637	\$97,222,766	\$262,947,168

Source: DOE's financial information system.

SECTION V

GAO REPORTS ON THE NUCLEAR WASTE PROGRAM

Annual Reports to the Congress

Department of Energy's Initial Efforts to Implement the Nuclear Waste Policy Act of 1982 (GAO/RCED-85-27, Jan. 10, 1985).

Nuclear Waste Policy Act: 1984 Implementation Status, Progress, and Problems (GAO/RCED-85-100, Sept. 30, 1985).

Quarterly Reports to the Senate Committee on Energy and Natural Resources

Status of the Department of Energy's Implementation of the Nuclear Waste Policy Act of 1982 as of September 30, 1984 (GAO/RCED-85-42, Oct. 19, 1984).

Status of the Department of Energy's Implementation of the Nuclear Waste Policy Act of 1982 as of December 31, 1984 (GAO/RCED-85-65, Jan. 31, 1985).

Status of the Department of Energy's Implementation of the Nuclear Waste Policy Act of 1982 as of March 31, 1985 (GAO/RCED-85-116, Apr. 30, 1985).

Status of the Department of Energy's Implementation of the Nuclear Waste Policy Act of 1982 as of June 30, 1985 (GAO/RCED-85-156, Jul. 31, 1985).

Quarterly Report on DOE's Nuclear Waste Program as of September 30, 1985 (GAO/RCED-86-42, Oct. 30, 1985).

Quarterly Report on DOE's Nuclear Waste Program as of December 31, 1985 (GAO/RCED-86-86, Jan. 31, 1986).

Quarterly Report on DOE's Nuclear Waste Program as of March 31, 1986 (GAO/RCED-86-154FS, Apr. 30, 1986).

Other Congressional Reports

Nuclear Waste: Monitored Retrievable Storage of Spent Nuclear Fuel (GAO/RCED-86-104FS, May 8, 1986).

Reports to Agency Officials

Department of Energy's Program for Financial Assistance
(GAO/RCED-86-4, Apr. 1, 1986).

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