Appendix B

Key Federal Laws and Regulations

The Office of Civilian Radioactive Waste Management must comply with the requirements set forth in the Nuclear Waste Policy Act of 1982, as amended, as well as those mandated in other applicable laws. The program must also comply with the regulations of other Federal agencies, including the Nuclear Regulatory Commission (NRC), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA).

The Nuclear Waste Policy Act of 1982

The Nuclear Waste Policy Act of 1982, as originally enacted, established basic policies.

Development of geologic repositories. The Act established a framework for siting, characterizing, constructing, and operating two permanent geologic repositories for disposal of spent nuclear fuel and high-level radioactive waste.

Storage. The Act provided for a limited amount of emergency interim storage and for developing a proposal to site and construct a monitored retrievable storage facility on a firm schedule. These provisions have expired.

Intergovernmental relations. The Act set requirements for interactions between the Federal Government and States, local governments, and Native American Tribes.

Other Federal responsibilities. The Act assigned responsibilities for nuclear waste management to specific Federal agencies.

Nuclear Waste Fund. The Act required the establishment of a fund to cover nuclear waste disposal costs. User fees on electricity generated and sold are paid into the fund.

Office of Civilian Radioactive Waste Management. The Act established the office within the Department of Energy.

The Nuclear Waste Policy Amendments Act of 1987

The Nuclear Waste Policy Amendments Act of 1987 retained the basic policies set forth in the 1982 Act regarding Federal responsibilities, the Nuclear Waste Fund, and the Office of Civilian Radioactive Waste Management. However it significantly modified the original Act.

Site characterization. The Amendments Act directed the Department to characterize only the Yucca Mountain site in Nevada, to determine whether it is suitable as a repository site, and to postpone consideration of the need for a second repository until the year 2007.

Monitored Retrievable Storage. It authorized the siting, construction, and operation of a monitored retrievable storage facility subject to certain conditions that link the construction and operation of the facility tightly to construction and licensing of a repository.

State and Tribal involvement. It provided financial incentives for States and Native American Tribes on whose land a repository or monitored retrievable storage facility is sited. It authorized on-site oversight representatives of host States, Native American Tribes, and localities. And it provided for increased local government participation.

Oversight. It increased external oversight of OCRWM's work by establishing the Nuclear Waste Technical Review Board.

Nuclear Waste Negotiator. It established the Office of the Nuclear Waste Negotiator to attempt to reach an agreement with a State or Native American Tribe willing to host a repository or monitored retrievable storage facility. These provisions have expired.

The Energy Policy Act

The Energy Policy Act of 1992 includes key elements of the National Energy Strategy proposed by the Administration in 1990. A number of provisions affect OCRWM.

Section 801 of the Act directed the Environmental Protection Agency to contract with the National Academy of Sciences to provide "findings and recommendations on reasonable standards for protection of the public health and safety" that would govern the long-term performance of a high-level radioactive waste repository at the Yucca Mountain site. Within 1 year of receiving the Academy's recommendations, the Environmental Protection Agency is required to promulgate public health and safety standards that "shall prescribe the maximum annual effective dose equivalent to the individual members of the public from releases to the accessible environment from radioactive materials stored or disposed of in the repository." The Nuclear Regulatory Commission is then required to modify its technical requirements and criteria consistent with the Environmental Protection Agency's standards.

Section 803 instructed the Department of Energy to evaluate whether its current programs and plans for management of nuclear waste are adequate to deal with additional volumes or categories that might be generated by nuclear power plants newly licensed after October 1992.

The Energy and Water Development Appropriations Act of 1996

The Energy and Water Development Appropriations Act of 1996 provided a total of $400 million for the program, $85 million of which was designated to be used only for the development of an interim storage facility and only upon enactment of new statutory authority. Pending such authority, the program was effectively reduced to a $315 million funding level, or one-half of the $630 million funding level anticipated for the continuation of the 1994 program approach.

Congress recognized that the significant reduction in funding would require a more restricted repository program. The Conference Report accompanying the appropriations language provided the following guidance:

> The conferees agree on the importance of continuing existing scientific work at Yucca Mountain to determine the ultimate feasibility and licensability of the permanent repository at that site. The conferees direct the Department to refocus the repository program on completing the core scientific activities at Yucca Mountain. The Department should complete excavation of the necessary portions of

the exploratory tunnel and the scientific tests needed to assess the performance of the repository. It should defer preparation and filing of a license application for the repository with the Nuclear Regulatory Commission until a later date. The Department's goal should be to collect the scientific information needed to determine the suitability of the Yucca Mountain site and to complete a conceptual design for the repository and waste package for later submission to the Nuclear Regulatory Commission.

The Energy and Water Development Appropriations Act of 1997

The Energy and Water Development Appropriations Act of 1997 provided a total of $382 million for the program, with specific guidance as follows:

> That no later than September 30, 1998, the Secretary shall provide to the President and to Congress a viability assessment of the Yucca Mountain site. The viability assessment shall include:
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> > (1) the preliminary design concept for the critical elements for the repository and waste package; (2) a total system performance assessment, based upon the design concept and the scientific data and analysis available by September 30, 1998, describing the probable behavior of the repository in the Yucca Mountain geological setting relative to the overall system performance standards; (3) a plan and cost estimate for the remaining work required to complete a license application; and (4) an estimate of the costs to construct and operate the repository in accordance with the design concept.

In accordance with this direction, 85 percent of the funding provided to OCRWM in the Fiscal Year 1997 appropriations was allocated to the Yucca Mountain Project to ensure the successful completion of the viability assessment. The remainder of the Fiscal Year 1997 appropriation was used to support OCRWM's Office of Waste Acceptance, Storage, and Transportation, and for program management, systems integration, and quality assurance activities.

Key Regulations

These rules are published in the Code of Federal Regulations, which is divided into volumes organized by Title and Part. For example, "10 CFR 60" refers to "Part 60 of Title 10."

10 CFR 2 (NRC) Rules of Practice for Domestic Licensing Procedures and Issuance of Orders. Specifies the licensing process and requires an electronic record-keeping system to preserve data needed for licensing.

10 CFR 20 (NRC) Standards for Protection Against Radiation. Establishes standards for radiation safety at an NRC-licensed facility.

10 CFR 50, Appendix B (NRC) Quality Assurance Criteria for Nuclear Power Plant and Fuel Reprocessing Plants. Establishes quality assurance requirements.

10 CFR 60 (NRC) Disposal of High-Level Radioactive Wastes in Geologic Repositories. Sets forth technical requirements governing development of a permanent geologic repository for spent nuclear fuel and high-level radioactive waste. Specifies NRC oversight and licensing duties.

10 CFR 71 (NRC) Packaging and Transportation of Radioactive Material. Implements Department of Transportation requirements for packaging and transporting spent nuclear fuel and high-level radioactive waste.

10 CFR 72 (NRC) Licensing Requirements for the Independent Storage of Spent Fuel and High-Level Radioactive Waste. Sets forth technical requirements for licensing private storage facilities to receive, transport, and store spent nuclear fuel, and outlines procedures by which the Department of Energy is licensed to receive, transport, and store spent fuel at a temporary facility.

10 CFR 73 (NRC) Physical Protection of Plants and Materials. Prescribes requirements for physical protection systems to protect against radiological sabotage and theft or diversion of special nuclear materials.

10 CFR 74 (NRC) Material Control and Accounting of Special Nuclear Material. Establishes requirements for control and accounting of special nuclear material, including documentation of transfer of material.

10 CFR 75 (NRC) Safeguards on Nuclear Material—Implementation of US/IAEA Agreement. Establishes a system to implement the agreement between the U.S. and the International Atomic Energy Agency on the application of safeguards.

10 CFR 960 (DOE) General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories. Promulgated to establish guidelines to compare sites; used as the basis for the 1988 Site Characterization Plan for the Yucca Mountain Project.

10 CFR 961 (DOE) Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste. Outlines the Department's contract with utilities to receive, transport, and dispose of spent nuclear fuel and high-level waste.

40 CFR 191 (EPA) Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes. Originally issued in 1985 pursuant to the Nuclear Waste Policy Act, the regulations were remanded in 1987 in response to an objection filed by the Natural Resources Defense Council. However, in 1992, the Waste Isolation Pilot Plant Land Withdrawal Act reinstated the disposal standard, except for those sections that were subject to the remand order. In addition, the Waste Isolation Pilot Plant Land Withdrawal Act exempted "the characterization, licensing, construction, operation, or closure of any site required to be characterized under Section 113(a) of Public Law 97-425" (Nuclear Waste Policy Act of 1982) from regulation under 40 CFR 191. Pursuant to Section 801 of the Energy Policy Act of 1992, the Environmental Protection Agency is developing separate standards applicable to the Yucca Mountain site.

49 CFR 171-179 (DOT) Hazardous Materials Regulations. Specifies general Department of Transportation requirements for the transportation of radioactive materials.