Statement of Edward F. Sproat, III Director for the Office of Civilian Radioactive Waste Management U.S. Department of Energy Before the Committee on Energy and Natural Resources United States Senate

August 3, 2006

Mr. Chairman and Members of the Committee, thank you for the opportunity to appear before you today to discuss S. 2589 entitled the "Nuclear Fuel Management and Disposal Act." Enactment of this bill would significantly enhance the Nation's ability to manage and dispose of spent nuclear fuel and high-level radioactive waste. I thank the Chairman and Senator Inhofe for taking up the critical issue and introducing the legislation.

Over the last 50 years, our country has benefited greatly from nuclear energy and the power of the atom. We need to ensure a strong and diversified energy mix to fuel our Nation's economy, and nuclear power is an important component of that mix. Currently more than 50,000 metric tons of spent nuclear fuel is located at more than 100 above-ground sites in 39 states, and every year, reactors in the United States produce an additional approximately 2,000 metric tons of spent fuel. In order to ensure the future viability of our nuclear generating capacity, we need a safe, permanent, geologic repository for spent nuclear fuel at Yucca Mountain.

Recently the Department announced its plans to submit a License Application for the repository to the Nuclear Regulatory Commission (NRC) by June 30, 2008, and to initiate repository operations in 2017. This opening date of 2017 is a "best-achievable schedule" and is predicated upon enactment of the pending legislation. This proposed legislation addresses many of the uncertainties that are currently beyond the control of the Department that have the potential to significantly delay the opening date for the repository, and I would like to briefly summarize the bill's provisions for the Committee.

First, the most important factor in moving the Yucca Mountain Project forward is the ability of the Department to have access to the Nuclear Waste Fund to support the cash flows needed to implement the Project. By making a technical budgetary scoring change, the proposed legislation would correct a structural budget problem that currently prevents use of the Fund as it was intended. This change would allow the Fund to be used to provide consistent and sufficient funding for the construction and operations of the repository. Funding for the Program would still have to be requested by the President and Congressional appropriations from the Fund would still be required.

Second, to meet NRC licensing requirements it will also be necessary for Congress to approve the permanent withdrawal of the lands needed for the operational area of the repository. The bill would withdraw permanently from public use approximately 147,000 acres of land in Nye County, Nevada. The Department is confident that the permanent withdrawal of land would

meet the NRC licensing requirement for the Yucca Mountain repository and would help assure protection of public health and the environment.

Third, to promote efficient management and disposal of the current and projected future inventories of commercial spent nuclear fuel located at reactors throughout the United States, the proposed legislation would eliminate the current statutory 70,000 metric ton cap on disposal capacity at Yucca Mountain and allow for maximum use of the mountain's true technical capacity. By eliminating an artificial statutory limit and allowing NRC to evaluate the actual capacity at Yucca Mountain, this provision would help provide for safe isolation of the Nation's entire commercial spent nuclear fuel inventory from existing reactors, including life extensions, and may postpone the need for a second repository elsewhere until the next century.

In addition the proposed legislation includes a number of provisions that would promote prompt consideration of issues associated with the Yucca Mountain repository or would address other matters that have the potential to cause delays in moving forward with the Yucca Mountain Project.

First, the proposed legislation contains provisions that would provide for a more streamlined NRC licensing process by amending the licensing process in several respects. In particular, it would make clear that an application for construction authorization need not include information on surface facilities other than those facilities necessary for initial operations. The bill would also establish an expedited one-year schedule and a simplified, informal process for use by the NRC to consider the license amendment for the Department to be able to receive and possess nuclear materials as well as applications for other future license amendment actions. The bill would also direct that the NRC, consistent with other provisions under the Nuclear Waste Policy Act of 1982, need not consider in its environmental review any actions taken outside of the geologic repository operations area; this will help focus the licensing process.

Second, the proposed legislation would permit early initiation of infrastructure and preconstruction activities at the Yucca Mountain site for utility, communications, and safety upgrades, and the construction of a rail line to connect the Yucca Mountain site with the national rail network. Construction of repository surface and sub-surface nuclear facilities would still require a construction authorization from the NRC.

Third, the proposed legislation includes additional provisions that would simplify the regulatory framework for the repository. In particular, the legislation would designate the Environmental Protection Agency as the appropriate agency to issue, administer, and enforce any air quality permits required in connection with the Yucca Mountain repository. Material owned, transported and stored in NRC-licensed containers and NRC-licensed materials at Yucca Mountain would also be exempt from Federal, State, and local environmental requirements under the Resource Conservation and Recovery Act.

Fourth, the proposed legislation would address the use of water needed to carry out the authorized functions under the Nuclear Waste Policy Act of 1982. This legislation would allow the Department to be treated like a private business in requesting water access, resulting in a

non-discriminatory treatment of the Department. The State of Nevada would still review and administer water allocation to the Department under this provision.

Fifth, the proposed legislation would address transportation and ensure the expedited movement of shipments to Yucca Mountain. In this regard, the legislation would provide the flexibility for the DOE to regulate the transport of spent nuclear fuel and high-level radioactive waste to the repository in the same manner that we currently move nuclear weapons. The Department has been transporting such nuclear materials safely for many years. In addressing this issue, we are not proposing to change in any way our route planning activities with State, Tribal and local authorities or how we work with them on emergency planning, training and education. This provision would not affect our longstanding commitment to transporting nuclear material in a manner that meets or exceeds NRC and Department of Transportation requirements for transportation of comparable material. Likewise, it would not affect our longstanding practice of working with State, Tribal and local governments, transportation service providers, and other Federal agencies to utilize their resources and expertise to the maximum extent practicable.

Finally, the proposed legislation would promote the licensing of new nuclear facilities by addressing the need for a regulatory determination of waste confidence by the NRC in connection with proceedings for those new nuclear facilities. This provision directs the Commission to deem that sufficient capacity will be available to dispose of spent nuclear fuel in considering whether to permit the construction and operation of a nuclear reactor or a related facility.

Conclusion

Nuclear power has been demonstrated to be a safe, reliable, and efficient source of power. Enactment of the proposed legislation is necessary to allow the Yucca Mountain Project to move forward and to advance the Nation's energy independence, energy security, and national security objectives. Mr. Chairman, I look forward to working with you and the Members of this Committee on this legislation to facilitate the construction and operation of the repository and ensuring the continued development of safe, clean, and efficient nuclear power in this country. I would be pleased to answer any questions at this time.