Summary

Edward F. Sproat, III, Director
Office of Civilian Radioactive Waste Management
U.S. Department of Energy
Before the
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
U.S. House of Representatives

July 15, 2008

- DOE has met all the milestones outlined before this Committee in July 2006, including submittal of the Yucca Mountain License Application (LA) to the Nuclear Regulatory Commission (NRC) on June 3, 2008, in spite of appropriations reductions totaling over $200 million less than the President's requests over the last two years.

- Following a 90-day acceptance review by the NRC, DOE believes the LA will be docketed, beginning the formal licensing phase that will last three to four years.

- Substantial progress has been made improving the management of this Program, ensuring a quality senior Federal management team to run this Program.

- DOE has nearly completed four reports that will be released in the near future: the Total System Life Cycle Cost estimate, the Fee Adequacy Assessment, the Second Repository, and the Interim Storage of Spent Nuclear Fuel.

- To allow the licensing of new nuclear plant, DOE has informed utilities interested in constructing new reactors that DOE is prepared to discuss an amendment to the Standard Contract to cover the new plants.

- DOE will not be able to execute its responsibilities under the Nuclear Waste Policy Act or set a firm date for meeting contractual obligations without funding reform that allows the Nuclear Waste Fund to be used as intended by Congress.

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Mr. Chairman and Members of the Committee, I appreciate the invitation to appear before the Committee to discuss the current status of the Yucca Mountain Program, including funding and liability issues associated with the development and operation of the repository.

In July 2006, I appeared before this Committee to discuss my plans to move the Yucca Mountain Program forward. I outlined four strategic objectives that I intended to pursue and implement during my tenure as Director:

1. Submit a high-quality and docketable License Application to the United States Nuclear Regulatory Commission (USNRC) no later than June 30, 2008;

2. Design, staff, and train the Office of Civilian Radioactive Waste Management (OCRWM) organization such that it has the skills and culture needed to design, license, and manage the construction and operation of the Yucca Mountain Project with safety, quality, and cost effectiveness;

3. Develop and begin implementation of a comprehensive national transportation plan that accommodates State, local and Tribal concerns and input to the greatest extent practicable; and

4. Minimize the Government's liability associated with the unmet contractual obligations to move spent nuclear fuel from nuclear plant sites.

In my testimony, I also outlined a number of intermediate milestones with dates that would need to be met in order to submit the License Application, including supplementing the repository environmental impact statement. I am pleased to report that we met or beat all but one of those milestones (we missed one by two weeks) and submitted the License Application to the USNRC on June 3 of this year in spite of FY 2007 and FY 2008 appropriations reductions totaling over $200 million less than the President's requests. We were able to accomplish this due to significant improvements the Program has made in management practices and processes. Following a 90-day acceptance review by the USNRC, the Department of Energy (the Department or DOE) believes the License Application will be docketed, thus beginning the formal licensing phase that is anticipated to last three to four years.

Concerning organizational development, the Program is transitioning from a science focus to a project execution focus and the organization must be ready to function successfully as a USNRC licensee to construct and operate the repository, as well as manage the transport and receipt of spent nuclear fuel and high-level radioactive waste.

Internal assessments have identified the need to establish and improve critical business processes, implement human capital management systems to provide a high quality workforce, and implement the organizational structure necessary to achieve optimal productivity and efficiencies during the licensing, construction, and operation phases of the project. The Department is currently developing and implementing the management processes and performance indicators needed to drive continuous improvement, improve individual employee and management job performance, and develop leadership capabilities.

Our focus on transportation has increased. The Department has issued a final rail alignment environmental impact statement for the Nevada Rail Line, submitted an application to the Surface Transportation Board at the U.S. Department of Transportation for a certificate of public convenience and necessity to construct and operate the proposed rail line, and issued a draft National Transportation Plan for comment. In May 2008, the Department also awarded contracts for the design, licensing and demonstration of the Transportation, Aging, and Disposal (TAD) canister system. The TAD canister is planned to be the primary means for packaging spent nuclear fuel for transportation to, and disposal in, the repository at Yucca Mountain. The TAD canister will minimize the need for repetitive handling of spent nuclear fuel by using the same canister from the time the fuel leaves a nuclear power plant; it is a significant step in the transportation planning process.

The DOE has also actively worked with the Department of Justice to achieve settlements

with more than 25 percent of the nuclear industry in connection with lawsuits relating to the Government's delay in beginning acceptance of spent nuclear fuel. The growing liability associated with the Department's inability to begin acceptance of spent nuclear fuel under the Standard Contracts with utilities provides further impetus for the Federal government to move forward with the repository program. To make this happen, it is essential that the Department have access to the Nuclear Waste Fund and its revenue streams as intended under the Nuclear Waste Policy Act of 1982.

To allow the licensing of new nuclear plants, we have informed utilities interested in constructing new reactors that DOE is prepared to discuss a revision to the Standard Contract to cover the new plants. The Department has developed an amendment to the Standard Contract which we believe adequately protects the interests of the taxpayer and the contract holder. The Nuclear Waste Policy Act of 1982 requires that utilities have such a disposal contract with DOE, or be engaged in good faith negotiations with DOE for such a contract, before USNRC may issue a license for a new commercial reactor. Numerous utilities have recently indicated their desire to enter into contracts with the Department for new nuclear power plants they intend to construct. Execution of disposal contracts with the utilities is an essential step in the development of new reactors that are needed to meet our Nation's growing demands for electricity.

My office has also completed four reports that are in DOE review and we expect that they will be released in the near future. The first report is the Total System Life Cycle Cost estimate for the development, construction, operation, and final decommissioning

of the Yucca Mountain repository system and the second report is the fee adequacy assessment of the 1 mil per kilowatt/hour fee paid by nuclear utilities into the Nuclear Waste Fund using the new total cost estimate. The third report addresses the need for a second repository and it is required by the Nuclear Waste Policy Act of 1982 to be submitted by the Secretary of Energy to the President and the Congress. The fourth report concerns the interim storage of spent nuclear fuel from decommissioned reactors, as requested in the House Report that accompanied the Consolidated Appropriations Act, 2008.

FUNDING REFORM

The significant reductions in appropriations funding for FY 2007 and FY 2008 have negated the Department's ability to meet the March 2017 opening date I outlined for this Committee in 2006. To have confidence in any milestones after 2008, it is imperative that the funding process for the OCRWM Program allow the Nuclear Waste Fund and the annual receipts from the nuclear waste generators to be used for their intended purpose. The Nuclear Waste Policy Act of 1982 established the requirement that the generators of spent nuclear fuel must pay for its disposal costs. As a result, the Nuclear Waste Fund was created and is funded by a 1 mil per kilowatt-hour fee on all nuclear generation in this country. As of today, the Fund has a balance of approximately $21 billion which is invested in U.S. Treasury instruments. The Government receives approximately $750 million per year in revenues from on-going nuclear generation and approximately $1 billion from interest earnings.

At the present time, due to technical scoring requirements, the Department cannot receive appropriations from the Nuclear Waste Fund equal to its annual fee receipts or interest or some combination of the two to use for their intended purpose without incurring a significant recorded negative impact on the Federal budget deficit. The monies collected are counted as mandatory receipts in the budgetary process, and spending from the Nuclear Waste Fund is scored against discretionary funding caps for the appropriations process. The Administration has proposed fixing this problem by reclassifying mandatory Nuclear Waste Fund fees as discretionary, in an amount equal to appropriations from the Fund for authorized waste disposal activities. Funding for the Program would still have to be requested by the President and appropriated by the Congress from the Nuclear Waste Fund.

The projected budget authority needed through repository construction is well above current and historic levels, and the current funding level is insufficient to build the repository and the transportation system. The current funding level will not allow the placement of the design and construction contracts for the repository or the transportation systems. In short, DOE will not be able to execute its responsibilities under the Nuclear Waste Policy Act of 1982 and will not be able to set a date for meeting its contractual obligations. Government liability will continue to grow with no apparent limit.

LIABILITY

The calculation of potential liability costs to taxpayers is a complex matter that depends on a number of variables that change year to year; however, on average the taxpayers' liability will increase $500 million annually for every year the Department is required to delay the opening of Yucca Mountain due to funding shortfalls. The DOE estimates that taxpayers' potential liability to contract holders who have paid into the Nuclear Waste Fund will increase from approximately $7 billion to approximately $11 billion because the opening of the repository is delayed from 2017 to 2020. Moreover, the liability costs to the taxpayers do not include the additional costs associated with keeping defense waste sites open longer than originally anticipated. The Department has not yet estimated those costs. It can be seen, however, that each year of delay in opening the repository has significant taxpayer cost implications. Therefore, the Administration believes it is in the Nation's best interest to expedite construction of the repository and the transportation infrastructure necessary to bring both defense and commercial spent nuclear fuel and high-level waste to Yucca Mountain.

CONCLUSION

Two years ago, when I first appeared before this Committee, I made a number of commitments intended to show that the Yucca Mountain Program was viable and could make progress. I am pleased to report that we have met those commitments, developed and submitted the long delayed License Application to the USNRC, and made substantial

progress in improving the management of this Program. I have every confidence in the senior Federal management team who will run this Program following my departure. They will need the help of Congress, however, to obtain the funding required to execute their mission. Assuming the USNRC grants the Department a Construction Authorization to build the repository in the next three to four years, the Department could be ready to begin accepting spent nuclear fuel by 2020, but only if adequate funding is provided. For the DOE to achieve its mission, it must be allowed to use the Nuclear Waste Fund and its revenue streams as intended by Congress when the Fund was established.

Thank you for this opportunity to discuss the status of the Program. I would be pleased to answer any questions the Committee may have at this time.