

**Statement of 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 19, 2006**

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 Project and my plans over the next two and one-half years.

It has been more than five years since I last appeared before this Committee as a vice president of Exelon Generation and testified about the Pebble Bed Modular Reactor (PBMR) project in South Africa. During 2002 I was in South Africa as the Chief Operating Officer of PBMR assisting the South Africans in determining the feasibility of commercializing that technology. I am pleased to report that the South African government has decided to proceed with demonstration and commercialization of the PBMR.

More recently, I was involved with forming a consortium to compete for the Next Generation Nuclear Plant project to demonstrate the cogeneration of electricity and hydrogen from the PBMR. While that technology and demonstration project holds much promise, I see a more urgent near-term need for this Nation's energy security; that is to move the issue of the disposition of spent nuclear fuel and high-level radioactive waste

forward with a sense of urgency. It is for that reason that I accepted President George W. Bush's appointment to serve as the Director of the Office of Civilian Radioactive Waste Management (OCRWM).

I have now been in my new position as Director for about five weeks. During this period I have been conducting a thorough assessment of the Yucca Mountain Project, and that assessment has not yet been completed. I continue to gather data on functional areas of the Project to determine the performance gaps between the current state and the levels of performance that will be necessary for the successful execution of this Project.

In order to expedite this assessment process, I have instructed my Office to issue Requests for Proposals for independent assessments of the draft License Application, the Quality Assurance programs and their implementation by DOE and its major contractor, and of the engineering processes and procedures being utilized by DOE and its major contractor. While I am not yet prepared to give you a full report of my assessment, I can tell you that there are a number of very good people working on this Project who can form the nucleus of a high-quality team needed to successfully design, license, build and operate the Yucca Mountain repository and the waste acceptance and transportation systems. I also can tell you that there are a number of process and organizational issues which must be addressed, all of which are correctable.

There are four strategic objectives that I intend to pursue and implement during my tenure as Director. Let me explain these objectives and why they are important.

My first objective is to submit a high-quality and docketable license application to the Nuclear Regulatory Commission (NRC) no later than Monday, June 30, 2008.

This objective is my first priority and will receive my full management attention. Success in meeting this objective is not measured only by the calendar, but also by the quality and completeness of the application. Before I will allow the application to be submitted, I must be satisfied that:

1. There is a repository design which meets the licensing requirements;
2. The application accurately reflects the design;
3. The data which are used to justify the design in the application are accurate and were generated in compliance with Quality Assurance requirements;
4. The application adequately addresses all of the guidance of the *Yucca Mountain Review Plan* (NUREG 1804); and
5. The writers of the application have attested to the accuracy and completeness of their sections.

I am certain there will be those who will question how these criteria can be met with such an aggressive schedule. I can tell you unequivocally that the concepts of safety, quality and schedule discipline are not mutually exclusive. This concept is demonstrated by world class nuclear organizations on a daily basis and I intend to hold my organization and its contractors to the same standards.

With a license application submittal on June 30, 2008, the best-achievable schedule for Yucca Mountain would lead to receipt of a license to begin to receive and possess spent nuclear fuel and high-level radioactive waste at Yucca Mountain in 2017. Attached is a more detailed set of schedule milestones for your information.

Let me define what I mean by “best-achievable schedule.” The schedule after the Department submits the License Application is predicated on 1) appropriations consistent with the Administration’s requests and passage of our proposed legislation entitled the “Nuclear Fuel Management Disposal Act”; and 2) an NRC construction authorization decision that is consistent with the timelines contained in the Nuclear Waste Policy Act. There are a number of uncertainties currently beyond the control of the Department that have the potential to significantly delay the opening date for the repository and cannot be accurately predicted. The most important is the ability of the Department to have access to the Nuclear Waste Fund to support the cash flows needed to implement the Project. I respectfully ask Congress to pass the Administration’s proposed legislation to address this issue; access to the Fund is key to moving the Project forward.

Other factors that have the potential to delay the Project include: 1) the length and outcome of any derivative litigation, 2) Congressional approval of the permanent withdrawal of the lands needed for the operational area of the repository, and 3) obtaining any necessary Federal or state authorizations or permits for the repository and the transportation system. The Administration’s proposed legislation addresses most of these



uncertainties and will go a long way in reducing schedule risk and the cost uncertainties of the Yucca Mountain Project while still fully protecting public and worker health and safety.

My second objective is to design, staff, and train the 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.

I am still in the process of assessing the current state of my organization and the skill gaps that may exist compared to what is needed to meet this objective. I do know that additional skills and competencies are required to enhance the current organization and that attracting and retaining individuals with these skills will be a major challenge. I have been encouraged, however, by the Department's Office of Human Capital Management and its help in meeting this challenge.

My third objective is to address the Federal Government's mounting liability associated with unmet contractual obligations to move spent fuel from nuclear plant sites.

What seems to have been lost in the Yucca Mountain debate over the last several years is that the U.S. Government has legally binding contracts with all owners of nuclear power plants to take possession of and remove their spent fuel. There are two major implications of the Government's inability to perform per the contract requirements: 1) the financial liability borne by America's taxpayers for non-performance of the contract

continues to grow every year, and 2) the ability of this country to depend on nuclear energy as a strategic energy option for the long term is in jeopardy because spent fuel continues to accumulate at existing plants. There is no one solution to these problems. It will require a portfolio of legal and financial solutions to address these problems; but it can be done, and I intend to work with the Congress and the contract holders to try to break this impasse.

My fourth objective is to develop and begin implementation of a comprehensive national spent fuel transportation plan that accommodates state, local and tribal concerns and input to the greatest extent practicable.

I believe that the planning of the transportation system for the country's spent nuclear fuel and high-level radioactive waste has been underfunded and not given the attention and resources that it demands. The recent National Research Council's report on spent fuel transportation concluded that, while there are no technical barriers to the safe transportation of spent nuclear fuel, there are a number of social and institutional challenges that must be addressed before large-scale shipments commence. I agree with this conclusion and I intend to put into place processes which maximize the ability of the public to understand the risks and mitigating safety precautions, and to influence as appropriate the selection of transportation routes in their areas. Some work has already been done in this area with local planning groups, but much more needs to be done at an accelerated pace.

In summary, these four strategic objectives will form the basis of planning and resource allocation during my tenure. I believe that these areas must be addressed today to move forward on the issue of final disposal of spent nuclear fuel and to prepare the Project for long-term success in meeting the mandated direction of the Nuclear Waste Policy Act. I will do my best to make this a reality.

### **Yucca Mountain Repository Schedule**

<b>Milestone</b>	<b>Date</b>
Design for License Application Complete	30 November 2007
Licensing Support Network Certification	21 December 2007
Supplemental Environmental Impact Statement (EIS) Issued	30 May 2008
Final License Application Verifications Complete	30 May 2008
Final Rail Alignment EIS Issued	30 June 2008
License Application Submittal	30 June 2008
License Application Docketed by NRC	30 September 2008

### **Best-Achievable Repository Construction Schedule**

Start Nevada Rail Construction	5 October 2009
Construction Authorization	30 September 2011
Receive and Possess License Application Submittal to NRC	29 March 2013
Rail Access In-Service	30 June 2014
Construction Complete for Initial Operations	30 March 2016
Start up and Pre-Op Testing Complete	31 December 2016
Begin Receipt	31 March 2017

The schedule above is based on factors within the control of DOE, appropriations consistent with optimum Project execution, issuance of an NRC Construction Authorization consistent with the three year period specified in the Nuclear Waste Policy Act, and the timely issuance by the NRC of a Receive and Possess license. This schedule also is dependent on the timely issuance of all necessary other authorizations and permits, the absence of litigation related delays and the enactment of pending legislation proposed by the Administration.