

**QUARTERLY PROGRESS REPORT TO CONGRESS**  
**U.S. DEPARTMENT OF ENERGY**  
**OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

## **Introduction**

In testimony on July 19, 2006, the Director of the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM) committed to provide quarterly progress reports to the House Energy and Air Quality Subcommittee. This is the fifth quarterly report to Congress. The purpose of this report is to:

- Review major accomplishments of the last quarter
- Identify key ongoing activities
- Highlight significant challenges

In testimony before the House Budget Committee on October 4, 2007, the OCRWM Director addressed the critical need for Program funding reform which would make possible the use of the Nuclear Waste Fund and the nuclear waste fees. The OCRWM Director also testified on October 31 before the Senate Committee on Environment and Public Works, focusing on the regulatory framework for licensing the Yucca Mountain repository, and reiterated OCRWM's commitment to submit a high-quality and docketable license application no later than June 30, 2008, which is predicated on the Program receiving the funding requested by the President's FY 2008 Budget Request.

## **Major Accomplishments**

Licensing Support Network - On October 19, 2007, DOE certified its document collection for the NRC's electronic Licensing Support Network (LSN), further advancing the Yucca Mountain repository licensing process. DOE has made electronically available on the LSN over 3.5 million documents, estimated to exceed 30 million pages. The LSN is a web-based information system established by the NRC that allows the public to review documentary materials relating to DOE's license application.

National Environmental Policy Act Documents - On October 5, 2007, DOE issued two draft National Environmental Policy Act documents. The 90-day comment period began on October 12, 2007, and ends January 10, 2008. The first document, the Draft Repository Supplementary Environmental Impact Statement (SEIS), is a supplement to the Yucca Mountain Final Environmental Impact Statement (EIS) issued by DOE in 2002. The Draft Repository SEIS evaluates the potential environmental impacts of constructing and operating the Yucca Mountain repository under the repository design and operational plans that have been developed since the Yucca Mountain Final EIS was issued. The second document, the Draft Nevada Rail Corridor SEIS and Rail Alignment EIS, relates to the transportation of spent nuclear fuel and high-level radioactive waste in Nevada.

## **Key Ongoing Activities**

License Application - DOE remains on schedule to submit a high-quality license application to the NRC not later than June 30, 2008. This assumes that the Program receives the budget for FY 2008 as requested by the President.

Total System Life Cycle Cost Estimate - OCRWM is completing its update to the Total System Life Cycle Cost estimate (TSLCC) for the development, construction, operation, and final decommissioning of the Yucca Mountain repository system. The update is expected to be provided to Congress and to be made available to the public in the near future.

Fee Adequacy Assessment – An assessment of the adequacy of the 1 mil per kilowatt/hour fee paid by nuclear utilities into the Nuclear Waste Fund will follow the update to the TSLCC. An annual fee adequacy assessment is required by the Nuclear Waste Policy Act of 1982, as amended (NWPA). The fee adequacy assessment uses the most recent total system life cycle cost estimate in conjunction with a range of potential economic and civilian/defense cost share scenarios to assess whether the collection of the 1 mil per kilowatt/hour fee will provide sufficient revenues to offset the total life cycle costs of the Program.

Quality Assurance Program - OCRWM requirements specify that a Quality Assurance Management Assessment be conducted each year by an outside team of industry experts. This annual assessment has been completed. It focused on the Corrective Action Program, the license application, management issues affecting quality, and training and qualifications. The assessment found “evidence of significant improvements and tangible successes in correcting historical quality-related problems.” It also provided a number of recommendations that will assist OCRWM in focusing its efforts to continually improve its Quality Assurance Program.

In another action related to the Program, the Government Accountability Office issued a report following its review of the OCRWM QA Program. The report recognized OCRWM's increased management focus on quality assurance improvements, noting that "DOE has made progress in implementing the quality assurance recommendations in our March 2006 report, and resolving the challenges we identified . . .," and that "DOE has taken several important actions to change the organizational culture of the Yucca Mountain project since the issuance of our March 2006 report."

Project Decision Schedule - The NWPA requires DOE to prepare and update, in cooperation with all affected Federal agencies, a Project Decision Schedule (PDS) that identifies the optimum way to attain operation of the repository. The PDS identifies the specific actions that affected Federal agencies, including DOE, must take in order to achieve the schedule presented in the PDS. A draft PDS updated to the current program milestones has been developed in coordination with the affected Federal agencies and is undergoing review. We expect to issue the final PDS early next year.

Transportation Preparedness and Emergency Response Training – On July 23, 2007, OCRWM published a *Federal Register* notice presenting for public review and comment the Department's revised proposed policy for implementing Section 180(c) of the NWPA to provide support to States and tribes for transportation preparedness and emergency response training. Stakeholders were engaged in the development of this draft policy. The public comment period has recently

been extended from October 23, 2007, to January 22, 2008. A supplement to the notice addressing grant funding allocations for tribes is under development.

Nevada Rail Line - In response to a Request for Information issued by OCRWM, potential vendors provided comments and briefings to transportation personnel on approaches to designing, constructing, and operating a rail line in Nevada. This information from the private sector will be used in the acquisition and project planning for the rail line.

Transportation Benchmarking Project - OCRWM management visited spent fuel handling sites in France to observe operations and emergency response capabilities. This effort was part of OCRWM's benchmarking effort to understand how world-class nuclear organizations manage and conduct operations.

Second Repository Report - DOE is beginning its evaluation and report on the need for a second repository. The NWPA requires such a report to be provided to Congress no later than January of 2010. OCRWM currently expects to provide this report to Congress by the summer of 2008.

## **Significant Challenges**

Water Use for the Repository Program - A geotechnical studies program to support the license application was recently suspended. This two-phase program includes drilling boreholes and collecting core samples under the footprints of the surface facilities to support design of those facilities. This borehole drilling process requires water obtained from underground wells. In June, the Nevada State Engineer ordered DOE to cease and desist using water for its phase 2 geotechnical studies program. This dispute is part of ongoing litigation between DOE and the State Engineer, which is currently stayed, regarding access to water for the project. Water will continue to be needed to conduct activities at the site, and to construct both the repository and the Nevada rail line.

Funding Requirements and Access to the Nuclear Waste Fund - At the present time, due to technical scoring requirements, the Department cannot receive appropriations from the Nuclear Waste Fund equal to its annual receipts, interest, or corpus for their intended purpose without 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 legislation 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.

Current funding levels are insufficient to build the repository and the transportation system. If the Program is funded at its current levels without fixing the current funding mechanism, the shortfall in the funding needed would be between \$1.0 billion and \$1.5 billion per year. In short, DOE will not be able to execute its responsibilities under the NWPA.

The projected taxpayer liabilities are currently expected to be approximately \$7 billion under the best achievable schedule that assumes operations begin in 2017. Delaying the opening of the repository to 2020 could cost the taxpayers as much as an additional \$4 billion from the Judgment Fund to pay damages. If the requested fixes to the funding process are not enacted, DOE will not be able to set a credible opening date for the repository and Government liability will continue to grow.