

**QUARTERLY PROGRESS REPORT TO CONGRESS**  
**U.S. DEPARTMENT OF ENERGY OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**  
**OCTOBER 1 – DECEMBER 31, 2006**

## **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 second quarterly report to Congress. The purpose of this report is to:

- Review progress and accomplishments of the last quarter
- Identify major upcoming activities
- Highlight significant challenges

These reports will document significant trends, major developments, and important new initiatives relating to our progress in building a national disposal system for spent nuclear fuel and high-level radioactive waste. While each report will focus on the previous and upcoming quarters, it will also elaborate on the long-term challenges facing this critical national project.

OCRWM has achieved several milestones and accomplished important work in 2006, including setting a new schedule for the submittal of the license application and initial repository operations. The following describes the key activities in the fourth calendar quarter of 2006.

## **Accomplishments**

License Application - The detailed schedules for the generation of the license application and the engineering and science deliverables were completed. The license application project organization has been established and consists of a project management team and specific technical, analytical, and programmatic groups all led by a Federal Project Director. Senior management is conducting monthly project reviews to identify and resolve issues. Writing teams have been formed and are preparing the license application.

Transportation, Aging, and Disposal (TAD) Performance Specification – In November 2006, OCRWM released the performance specification for the TAD canisters on the OCRWM website ([www.ocrwm.doe.gov](http://www.ocrwm.doe.gov)). This specification will be used by cask vendors to produce proof of concept and final designs for the TAD canisters. We are incorporating the canister-based approach into the license application to be submitted to the Nuclear Regulatory Commission (NRC).

Supplemental Environmental Impact Statement (EIS) Public Meetings – OCRWM held eight public scoping meetings attended by 334 people in Nevada and Washington, DC, for the Supplemental Yucca Mountain Repository EIS and the Supplemental Rail Corridor and Rail Alignment EIS. In order to ensure adequate opportunities for public participation, we extended the original comment period by 15 days to a total of 45 days and added a meeting in Reno, Nevada. OCRWM is now addressing the issues expressed and the questions asked at these meetings in its National Environmental Policy Act process.

Corrective Action Program (CAP) Improvements – Based on recommendations from the Government Accountability Office, the Department’s Office of Inspector General, and OCRWM’s own self-assessments, we are instituting improvements in the design and implementation of the CAP. We have issued a CAP Performance Improvement Plan which is sponsored by and involves senior management from all program major organizations. In addition, a team of experts has been commissioned to determine the root cause and contributing causes of the long history of problems with this process and to recommend enhancements to the Performance Improvement Plan. We have also instituted a temporary change to the process so that issues cannot be closed without independent verification of the completed corrective actions by OCRWM’s Office of Quality Assurance.

Performance Evaluation and Measurement Plan (PEMP) – OCRWM signed a new PEMP with Bechtel SAIC (BSC), our management and operating contractor, to establish new performance incentives that are focused on completing the preliminary design and the license application for Yucca Mountain. Implementation of this new PEMP is the result of DOE senior management involvement in refocusing the Program to meet the best achievable schedule provided to Congress in July.

Affected Units of Government (AUG) - The second quarterly meeting between DOE senior management and the AUG’s was held in November. This meeting covered a wide range of issues that the AUG’s requested be addressed. As a result, DOE is holding a workshop for the group on March 22 to address topics they requested. The next quarterly meeting with the AUG’s is scheduled for March 23. These meetings are part of DOE’s outreach efforts to improve its relationships with the counties and State government.

Nuclear Waste Fund - As of December 31, 2006, the balance of the Nuclear Waste Fund is \$19.5 billion (market value basis). DOE managed the fund portfolio of investments to earn a return of 5.4 percent for the year. The amount of revenues received by the U.S. Government in FY 2006 from the nuclear utilities under contract with DOE was \$751.5 million.

## **Ongoing and Upcoming Activities**

U.S. Geological Survey (USGS) Email Extent of Condition Report – The Department is finalizing its action plan to address its root cause analysis of the situation and culture at the USGS which resulted in emails that clearly showed a disregard for quality assurance requirements. These emails were written between 1998 and 2004 and were identified to OCRWM in March 2005. We have completed an extensive investigation to determine the extent of the quality-adverse culture connoted in the emails. Our investigation has shown that there was no widespread or pervasive pattern across the Program of instances suggesting a negative attitude toward quality assurance or willful noncompliance with quality assurance requirements. We are, however, taking corrective actions to ensure the quality of the technical work products that will be used as the bases for the license application to the NRC as well as taking the necessary actions to assure that quality-related expectations are clearly communicated and achieved across the Program. Our report will be issued in March. While we anticipated release at the end of 2006, we have delayed release due to our insistence that the corrective actions be implemented across the entire Program, and we are working with the senior management of our key Program participants to develop effective corrective actions in their respective organizations.

Independent Assessments – We are completing the procurement process in response to three Requests for Proposals to perform independent assessments of the draft license application, the

quality assurance program and its implementation by OCRWM and its major contractors, and the engineering processes and procedures being used by OCRWM and its management and operating contractor. These reviews are currently expected to be completed in the summer of 2007.

Budget Authority Analysis – We have completed an independent review of our Budget Authority requirements which reflects the new repository surface facilities design and the Program schedule. OCRWM is incorporating the results of this independent review and developing an updated Budget Authority analysis through planned initial operations in FY 2017, completion of repository surface facilities in FY 2022, and steady state operations in FY 2023. We expect the Budget Authority results to be available after completion of Office of Management and Budget review.

Integrated Baseline – The information from the independent review of our projected Budget Authority requirements, along with schedule and scope data from our major participants, will form the key inputs for an integrated project baseline through initiation of repository operations. This is expected to be completed by May 2007.

Skills Assessment - We are currently performing an assessment to determine the skill gaps that need to be addressed to allow the organization to perform its mission through repository licensing, construction, and operation. This is a major input to our Human Capital Plan.

Spent Fuel Contracts for New Nuclear Plants - We are currently evaluating various provisions to be included in contracts between DOE and the owners of any new nuclear plants that may be built. Contracts must be in place before the NRC will grant a license for a new plant. We expect to be ready for discussions with new nuclear plant developers on the contract in the near future.

## **Significant Challenges**

Annual Funding – Stable and adequate funding for the Program is necessary to meet the best achievable repository opening date of 2017. FY 2007 funding levels approved by Congress are causing redeployment of the limited resources to the critical path activities needed to submit the license application by June 30, 2008. Some reductions in total program staffing in science, laboratory, and transportation areas are being implemented.

Access to the Nuclear Waste Fund – An essential aspect of the Administration's previous legislative proposal and a fundamental pre-requisite to successfully building a national repository is access to the monies that the Government is collecting specifically for this purpose which currently amounts to approximately \$750 million per year. With long-lead procurements and parallel construction of the repository facilities, the Nevada rail line, and the national transportation system, our financial analyses have identified the need for access to the Nuclear Waste Fund at significantly increased levels over historical funding levels starting in FY 2009 to meet the best achievable schedule opening date of 2017. If annual appropriations remain constrained by current scoring methods and remain limited to current funding levels, the repository and the requisite transportation systems cannot be built within the current schedule.