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Quarterly Report on Program Cost and Schedule

Second Quarter FY 1992

U.S. Department of Energy
Office of Civilian Radioactive Waste Management
Washington, DC 20585

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PREFACE

This report is intended to provide a summary of the cost and schedule performance for the Civilian Radioactive Waste Management Program. Historical and current cost profiles (extracted from the DOE Financial Information System) are presented for each of the major program elements. Also included in this report are the program schedule baseline, the status of near-term program milestones and the status of the Nuclear Waste Fund revenues and disbursements. This report includes data through March 1992.

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SECTION 1. COST AND SCHEDULE HIGHLIGHTS

- The following are selected major milestones from the Operations Management Tracking System that were reported as complete for the second quarter of FY92.

Yucca Mountain Site Characterization Project

- Issue Final Early Site Suitability Evaluation (ESSE) Study (February 1992)
- State Issues Water Appropriations Permit (March 1992)

Program Management

- Receive Full NRC Acceptance of QA Programs Including MRS and Transportation (March 1992)
- Actual FY92 costs for the total Nuclear Waste Fund through the second quarter were \$142.5 million. Breakdown of cost by program element is as follows:
 - Total First Repository costs - \$81.8 million (\$77.2 million for the Yucca Mountain Site Characterization Project and the remainder for basalt and salt closeout, technical support and repository technology program activities).
 - Transportation - \$8.6 million
 - MRS - \$8.8 million
 - Systems Integration - \$5.8 million
 - Engineering Development - \$3.9 million
 - Program Management/Technical Support - \$33.6 million

SECTION 2. NUCLEAR WASTE FUND OVERVIEW

RECEIPTS, DISBURSEMENTS AND NET BALANCE PROJECTIONS

Projection of Receipts and Disbursements

- For FY 1983 through FY 1990, receipts were actual amounts collected from utilities while disbursements included actual disbursements and interest paid on the appropriated debt. The appropriated debt was repaid in FY 1985. Receipt and disbursement projections for FY 1992 through FY 1994 are based on information contained in the FY 1993 Congressional budget submission.

Projected Net Balance

- The current net balance projection (March 1992) assumes the revenues from the 1 mill per kWh fee contained in the Energy Information Administration projection dated September 1991. Revenues from the one time fee and earned interest are extracted from the FY 1993 Congressional budget submission. Disbursements for FY 1992 through FY 1994 assume the budget outlay estimates contained in the FY 1993 budget submittal.
- The January 1985 and February 1986 projections are provided to show the effect of the one-time payment for fuel generated before 1983. The January 1985 projection assumed that \$770 million would be received in June 1985 for the one-time payment while the February 1986 projection reflects the fact that \$1.4 billion was actually collected.
 - The February 1986 net balance projection assumed the cost estimates, revenues (both from the 1 mill per kWh fee and the one-time fee), and earned interest contained in the FY 1987 budget submittal.
 - The January 1985 net balance projection was based on revenue and cost projections (escalated to current dollars by an average annual growth rate of 5 percent per year) in the FY 1986 budget submitted to Congress. The projection of net balance assumed that a positive yearly balance earns interest at a rate of 7 percent per year.

PROJECTED NUCLEAR WASTE FUND

RECEIPTS & DISBURSEMENTS (AS OF 3/92)

PROJECTED NET BALANCE

OF WASTE FUND

COST PROFILE FOR TOTAL NUCLEAR WASTE FUND

- FY92 actual costs through the second quarter for the Nuclear Waste Fund were \$142.5 million.
- Through the second quarter of FY92, cumulative actual costs (from FY83) for the entire program totaled \$3,140.5 million.

COST PROFILE FOR TOTAL NUCLEAR WASTE FUND

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

SECTION 3. PROGRAM SCHEDULE BASELINE

- Figure 1 represents the current program schedule as contained in the Program Cost and Schedule Baseline (PCSB), Revision 2. This schedule was approved by the OCRWM Program Change Control Board on November 1, 1991.

FIGURE 3. PROGRAM COST AND SCHEDULE BASELINE - REVISION 2
MILESTONES SUBJECT TO CHANGE CONTROL

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NEAR-TERM MILESTONE SUMMARY

- The following milestones were completed during the second quarter FY92 as reported in the Operations Management Tracking System.

Program Management

- Complete 1992 Multi-Year Program Plan (February 1992)
- Publish Program WBS Dictionary (March 1992)
- Receive Full NRC Acceptance of QA Programs Including MRS and Transportation (March 1992)

Yucca Mountain Site Characterization Project (YMP)

- Issue Final Early Site Suitability Evaluation (ESSE) Study (February 1992)
- ICE Kickoff Meeting Starts Phase II Review of YMP (February 1992)
- State Issues Water Appropriations Permit (March 1992)
- Receive Report on Preliminary Total System Performance Assessment for Yucca Mountain (March 1992)
- Start 50% Review of ESF Title II Design for First Access Site Preparation (March 1992)

Transportation

- Issue Draft Section 180(c) Strategy for Public Comment (January 1992)

Waste Acceptance

- Issue Annual Capacity Report (January 1992)
- Utilities Begin Submitting Delivery Commitment Schedules (March 1992)

SECTION 4. TOTAL FIRST REPOSITORY

COST PROFILE

- FY92 actual costs through the second quarter for the first repository were \$81.8 million. The distribution by project was \$77.2 million for the Yucca Mountain Site Characterization Project, \$4.4 million for technical support/repository technology program (RTP) activities, \$0.4 million for the basalt project (BWIP) closeout, and \$-.2 million for the salt project (SRP) closeout.
- Through the second quarter of FY92, cumulative actual cost (from FY83) for the first repository projects totaled \$2,280 million of which 49 percent (or \$1,132 million) was accounted for by YMP, 23 percent (or \$514.2 million) by SRP, 21 percent (or \$482.6 million) by BWIP, and 7 percent (or \$151.1 million) by technical support/RTP activities.

COST PROFILE FOR TOTAL FIRST REPOSITORY

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

COST PROFILES

BWIP

SRP

COST PROFILE FOR YMP

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

COST PROFILE FOR TECHNICAL SUPPORT/RTP

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

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SECTION 5. TRANSPORTATION

COST PROFILE

- FY92 actual costs through the second quarter were \$8.6 million.
- Through the second quarter of FY92 the cumulative costs since 1984 were \$111.9 million.

COST PROFILE FOR TRANSPORTATION

HISTORICAL
(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

SECTION 6. MONITORED RETRIEVABLE STORAGE

COST PROFILE

- FY92 actual costs for the MRS through second quarter were \$8.8 million.
- Through the second quarter of FY92, the cumulative costs since 1983 were \$56.1 million.

COST PROFILE FOR MRS

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

SECTION 7. SYSTEMS INTEGRATION

COST PROFILE

- FY92 actual costs for combined systems integration activities through the second quarter were \$5.8 million.
- Through the second quarter of FY92, the cumulative costs since 1985 were \$57.6 million.

COST PROFILE FOR SYSTEMS INTEGRATION

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

SECTION 8. ENGINEERING DEVELOPMENT

COST PROFILE

- Work on engineering development is administered through the Idaho Operations Office.
- FY92 actual costs through the second quarter for the engineering development activities were \$3.9 million.
- Through the second quarter of FY92, the cumulative costs since 1985 were \$50.4 million.

COST PROFILE FOR ENGINEERING DEVELOPMENT

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)

SECTION 9. PROGRAM MANAGEMENT/TECHNICAL SUPPORT

COST PROFILE

- Activities include program management (federal salaries, benefits, and travel); contractual services (administrative support costs); and technical support (i.e., NWF audit services and fee verification, technical support activities, program integration, external relations and policy); and debt service.
- FY92 actual costs through the second quarter for the program management/technical support activities were \$33.6 million.
- Through the second quarter of FY92, the cumulative costs since 1983 were \$503.1 million (includes NRC fees).

COST PROFILE FOR PROGRAM MANAGEMENT/TECHNICAL SUPPORT

HISTORICAL

(ENTRIES MAY NOT ADD TO TOTAL DUE TO INDEPENDENT ROUNDING)