

# Chapter Four

## Financial Management

We continued to carry out our primary financial management functions: accounting for the Program's assets, liabilities, and cash flows; quantifying the Program's long-range financial needs; and managing the investment of civilian revenues so that they are available to meet Program requirements.

### Program Funding

The Nuclear Waste Policy Act requires that the costs of disposing of spent nuclear fuel and high-level radioactive waste be borne by the parties responsible for the generation of these wastes. The Act left it up to the President to determine whether civilian and defense-related waste should be emplaced in the same repository. On April 30, 1985, President Reagan issued a decision that they should be, with each party paying its proportional share of the full cost. To implement that decision, public rulemaking was used to develop a methodology for allocating defense and civilian costs. The result was published in the *Federal Register* in August 1987. The Program's accounting system is consistent with this methodology.

### *Program revenues: civilian utility fees for civilian waste*

The Nuclear Waste Policy Act provides for two types of fee to be levied on the owners and generators of civilian spent nuclear fuel: an ongoing fee of 1.0 mil (one tenth of one cent) per kilowatt-hour on nuclear electricity generated and sold after April 7, 1983, and a one-time fee for all nuclear electricity generated and sold prior to that date. The fees are defined in the *Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste*, which was promulgated in 1983 and executed between the

Department and the owners and generators of the waste. Nuclear power producers make quarterly payments of the ongoing fee. For the one-time fee, the contract allowed owners to choose to pay immediately or defer payment and incur interest. Contract holders chose to pay approximately \$1,400 million and to defer approximately \$900 million.

Fees for spent nuclear fuel disposal are deposited in the Nuclear Waste Fund, a separate account in the U.S. Treasury that is managed and administered by the Department of Energy. Amounts not appropriated by the Congress for current Program expenses are invested in U.S. Treasury securities. OCRWM manages these investments strategically to ensure that the long-term costs of waste disposal can be met.

The Program earns civilian revenue when nuclear power plants generate and sell power, when the Program earns interest or realizes capital gains on U.S. Treasury investments, and when interest is charged on the utilities' unpaid fee balances. During Fiscal Year 1999, the Program earned \$1,419 million in civilian revenue. Fiscal Year 1999 civilian revenue consisted of \$673 million in ongoing 1 mil/kWh fees, \$108 million in interest on and adjustments to one-time fees, and \$638 million in investment earnings. The cumulative civilian revenue, as of September 30, 1999 (shown in Table 4-1), was \$16,730 million, of which \$14,081 million had been paid and \$2,649 million remained unpaid. Civilian revenue includes \$4,383 million in earnings on U.S. Treasury investments, of which \$4,302 million has been paid and \$81 million was due with the next semiannual interest payment. On September 30, 1999, the market value of Nuclear Waste Fund investments was approximately \$8,481 million, compared with \$8,611 million at the end of Fiscal Year 1998.

The market value of the Nuclear Waste Fund declined during the past year because, by law, it must be entirely invested in Treasury securities. The market value of the securities falls when interest rates rise, as they did last year. Standard accounting practices require that we report the market value of the Fund because we occasionally sell securities before maturity to adjust investments to Program spending plans. However, most of the securities will be held to maturity and should earn the return expected when they were purchased.

In Fiscal Year 1999, we continued to work to implement the terms of the memoranda of agreement that we had executed with the Office of Environmental Management and the Naval Nuclear Propulsion Program in Fiscal Year 1998. The memoranda establish a process for determining waste acceptance and fee payment schedules.

Table 4-1 also shows Program revenue from defense sources. Defense revenue is earned when the Program incurs costs related to defense waste

	CIVILIAN					DEFENSE			Grand Total
	1 Mil/kWh Fee	One-Time Fee	Interest on fees	Return on Investment	Civilian Total	Fees	Interest on fees	Defense Total	
FY 1999 <sup>1</sup>	673	0	108	638	1,419	320	182	502	1,921
Cumulative through FY 1999 <sup>2</sup>	8,458	2,337	1,552	4,383	16,730	1,772	833	2,605 <sup>3</sup>	19,335
Paid by Waste Owners <sup>4</sup>	8,293	1,457	29	4,302	14,081	1,119		1,119	15,200
Receivable <sup>5</sup>	165	880	1,523	81	2,649	1,486 <sup>3</sup>		1,486	4,135

1 From Note 14 to the Financial Statements (Appendix A).  
 2 Cumulative totals are calculated by adding the FY 1999 value to cumulative amounts in the FY 1998 Financial Statements.  
 3 From Note 2 to the Financial Statements. Defense payments include the \$12.5 million paid by the Department into the Nuclear Waste Fund, Defense Nuclear Waste Disposal appropriations, and credits to the government for use of the Nevada Test Site facilities. Because payments are credited against the balance due and not separated into interest and principal, only one number is shown on the Paid and Receivable lines.  
 4 Paid amounts are calculated by subtracting the Receivable amount from the cumulative total.  
 5 From the Balance Sheet in the Financial Statements.

**Table 4-1**  
**Cumulative Program revenue as of September 30, 1999**  
 (in millions of dollars)

**Program revenues: defense dollars for defense waste**

The Department of Energy’s Office of Environmental Management and the Office of Nuclear Energy, Science and Technology’s Naval Nuclear Propulsion Program are the custodians of the Department’s inventory of high-level radioactive waste and spent nuclear fuel.

disposal and when interest is charged on unpaid defense balances. During Fiscal Year 1999, the Program earned \$502 million in defense revenue, which included \$320 million in fee revenue and \$182 million in interest on deferred fees. Fiscal Year 1999 defense revenues reflect the re-estimation of prior-year costs in the 1999 update to the 1998 Total System Life Cycle Cost (TSLCC) estimate. The Program’s

cumulative accrued revenue as of September 30, 1999, consisted of \$1,772 million in fees and \$833 million in interest, for a total of \$2,605 million. Of the total, \$1,119 million had been paid and \$1,486 million (including interest) remained unpaid.

**Program expenditures**

Congress makes two separate appropriations for the Program, one from the Nuclear Waste Fund, the other through a Defense Nuclear Waste Disposal appropriation. These appropriations are recorded in separate internal accounts; however, they are consolidated in the OCRWM financial statements.

Appropriations for the Program are subject to the Federal budget process. They are considered part of the discretionary portion of the budget and thus compete for resources with other discretionary

spending programs. As a consequence, although the Nuclear Waste Fund is composed of dedicated utility money, appropriations from it are included in the total spending limits imposed on general Federal programs. Historically, this has resulted in constraints on Program funding.

As shown in Table 4-2, cumulative Program expenditures were \$6,381 million, of which \$4,609 million was allocated to civilian and \$1,772 million to defense waste disposal activities. Through Fiscal Year 1999, Congress had appropriated a total of \$6,265 million for the Program and related activities under the Nuclear Waste Policy Act, as amended.

The OCRWM Financial Statements for Fiscal Year 1999 and the report of OCRWM’s independent auditor are at *Appendix A*.

	CIVILIAN	DEFENSE	TOTAL
FY 1999 <sup>1</sup>	261	109	370
Cumulative through FY 1999 <sup>2</sup>	4,609	1,772	6,381
Paid by Program <sup>3</sup>	4,581	1,760	6,341
Payable	28	12	40
Appropriations <sup>4</sup>	5,172	1,093	6,265
1	Total Program expenditures are from Note 14 to the Financial Statements, which says that kWh and defense fees are recognized as revenue to the extent of expenses incurred and recognizes earned revenue of \$370 million. The total is divided into civilian and defense portions based on the TSLCC defense share of 29%.		
2	Cumulative total expenditures are calculated by adding this year's total to last year's total. Cumulative defense expenditures also include an adjustment of \$211 million for prior costs due to the increase in the percent of total costs attributed to defense. Cumulative civilian expenditures are the difference between total expenditures and defense expenditures.		
3	The Paid amount is the difference between total expenditures and payables. (Payables are shown in the Balance Sheet of the financial Statements and are amounts owed by the Program that have not yet been paid.)		
4	Appropriation totals are based on historic appropriation legislation and are not discussed in the Financial Statements. Total appropriations are not equal to total expenditures because: 1) civilian expenditures include \$135 million in interest on utility overpayment, most of which was funded through fee credits, i.e., not through appropriations; 2) capital expenditures are amortized in the Financial Statement; and 3) some appropriated funds were carried over into FY 2000 from FY 1999. Civilian appropriations include \$254 million appropriated from the Nuclear Waste Fund to the Nuclear Regulatory Commission the Nuclear Waste Technical Review Board, and the now defunct Office of the Nuclear Waste Negotiator. Defense appropriations do not include \$85 million appropriated in FY 1996, which is reserved pending statutory authority to develop an interim storage facility, and \$12.5 million paid into the Nuclear Waste Fund in FY 1991 and FY 1992.		

**Table 4-2**  
**Cumulative Program Expenditures as of September 30, 1999**  
 (in millions of dollars)

## Managing Investments

The objectives of OCRWM's investment strategy are to: (1) ensure that investment income is available when needed, (2) support the adequacy of the fee paid into the Nuclear Waste Fund by waste owners and generators, and (3) hedge against uncertainty and unplanned funding requirements. To achieve these objectives, the Nuclear Waste Fund is managed as two portfolios: a contingency portfolio and a match portfolio.

The purpose of the contingency portfolio is to hedge against reasonable contingencies, such as unexpected near-term expenditures. The purpose of the match portfolio is to provide reliable funding for expected program expenditures. It serves to bring into balance the Program's assets and liabilities and to maintain that balance. The contingency portfolio is highly liquid and consists of Treasury securities whose average maturity does not exceed 3 years. The match portfolio consists of a mix of Treasury bills, notes, bonds, and zero-coupon bonds. The durations and present values of these investments are matched or will be matched, year-for-year, to the durations and present values of the Program's projected liabilities. Matching investments to planned spending reduces the sensitivity of the fee adequacy balance to changing interest rates.

Each month, near-term cash flow expectations and current asset and liability values are reassessed and used as the basis for investment selection. The portfolio is rebalanced, as required, upon completion of each new total system life cycle cost analysis or when changes in Program assumptions warrant. During Fiscal Year 1999, the average of the contingency portfolio's month-end balances was \$1.7 billion and the

average of its month-end maturities was 2.9 years. Match portfolio investments matched the Program's cumulative spending profile to within 12.5% in all but one year through 2020. An additional \$320 million had been invested in later years.

Over the last year, the Nuclear Waste Fund investments earned a market value return of -6.34 percent and a book value return of 8.14 percent. Market value moves in the opposite direction to interest rates. Because interest rates rose, the market value fell. Market value returns can change significantly from year to year - we earned 17.1 percent in Fiscal Year 1998. Book value returns reflect the actual income received from investments and realized capital gains. They are much more stable than market returns. Over many years, average book and market value returns will be approximately equal. Since the first investments were made in 1985, the average market value return has been 7.88 percent and the average book value returns has been 8.18 percent.

## Civilian Radioactive Waste Research and Development Account

We also administer the Civilian Radioactive Waste Research and Development account, which, like the Defense Nuclear Waste Disposal appropriation, is supported by general taxpayer revenues. It pays for generic research, development, and demonstration activities authorized by Title II of the Nuclear Waste Policy Act. There was no appropriation to this account for Fiscal Year 1999; only funds carried over from prior years were spent.