
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 11-K

- ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2004

OR

- TRANSITION REPORT PURSUANT TO SECTION 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 1-14287

USEC Savings Program

(Full title of the plan)

**USEC Inc.
2 Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817
(301) 564-3200**

(Name of issuer of the securities held pursuant to the plan and the address of its principal executive office)

USEC Savings Program

Financial Statements and Supplemental Schedule

As of December 31, 2004 and 2003

Together with Report of Independent Registered Public Accounting Firm

USEC Savings Program

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Schedules omitted because there were no such items:
For the year ended December 31, 2004:

- Reportable transactions
- Nonexempt transactions
- Leases in default or classified as uncollectible
- Loans or fixed-income obligations in default

Report of Independent Registered Public Accounting Firm

To the Benefit Plan Administrative Committee, the Benefit Plan Investment Committee and Participants of the USEC Savings Program:

We have audited the accompanying statements of net assets available for benefits of the USEC Savings Program (the "Plan") as of December 31, 2004 and 2003, and the related statements of changes in net assets available for benefits for the year ended December 31, 2004. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2004 and 2003, and the changes in net assets available for benefits for the year ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets (held at end of year) is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ Grant Thornton LLP

Baltimore, Maryland
June 3, 2005

USEC Savings Program
Statements of Net Assets Available for Benefits

In thousands

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
Assets:		
Investments at fair value	\$238,403	\$211,480
Participant loans receivable	4,773	4,385
Liabilities:		
Excess contributions due to participants	(47)	—
Net assets available for benefits	<u>\$243,129</u>	<u>\$215,865</u>

The accompanying notes are an integral part of these financial statements.

USEC Savings Program
Statements of Changes in Net Assets Available for Benefits

In thousands

	Years Ended December 31,	
	2004	2003
Changes in net assets:		
Interest and dividends	\$ 6,557	\$ 3,977
Net appreciation in fair value of investments	10,586	15,015
Contributions:		
Participants	14,452	8,443
USEC	5,506	3,256
Distributions to participants	(9,819)	(10,716)
Administrative expenses	(18)	(13)
Net transfers from other plans	—	68,613
Net increase	27,264	88,575
Net assets available for benefits, beginning of year	215,865	127,290
Net assets available for benefits, end of year	<u>\$ 243,129</u>	<u>\$ 215,865</u>

The accompanying notes are an integral part of these financial statements.

**USEC Savings Program
Notes to Financial Statements**

1. Plan description:

The following description of the USEC Savings Program (the Plan) provides only general information. Plan participants should refer to the Plan document for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). The Plan is administered by USEC Inc. through a plan administrator. USEC Inc. and its wholly owned subsidiary, United States Enrichment Corporation (together USEC), are participating employers. The USEC Benefit Plan Administrative and Investment Management Committees monitor and oversee administration of the Plan. Fidelity Management Trust Company (the Trustee or FMTC) acts as Trustee and recordkeeper.

In December 2003, the Plan was amended to include employees of United States Enrichment Corporation who participate in a collectively bargained group. Assets of the United States Enrichment Corporation Savings Program amounting to \$68.4 million were transferred to the Plan on December 31, 2003.

Eligibility

An eligible employee is an employee that is paid, employed and reported on the payroll and personnel records of USEC as an employee. An eligible employee may participate in the Plan after one hour of service.

Contributions

Participants may contribute between 1 percent and 50 percent of eligible compensation in .5 percent increments up to the maximum annual amount allowed under the Internal Revenue Code. Participants may elect either before-tax contributions, after-tax contributions or a combination of both. For each payroll period, USEC provides a 100 percent matching contribution for the first 3 percent of each participant's eligible earnings and a 50 percent matching contribution for the next 2 percent. The Plan accepts rollover contributions from other qualified plans.

Participant accounts and loans

Each participant's account is credited with the participant's and employer's matching contributions, and the respective investment earnings (losses) of the individual funds. Participants may borrow from the Plan in any amount greater than \$1,000 but less than 50 percent of the participant's vested account balance. In no event can a participant borrow more than \$50,000. Loan terms originated under the Plan are for a period not to exceed five years, except for loans taken for the purchase of a primary residence (home loans), which may have terms up to ten years, except for loans originated under the United States Enrichment Corporation Savings Program, which may have terms up to fifteen years. Loans are secured by the balance in the participant's account and bear a rate of interest at the prime lending rate plus one percentage point, subject to usury limits, at the date of loan origination with no refinancing option. Principal and interest on the loans are repaid in substantially level installments. As of December 31, 2004, loan interest rates on outstanding loans ranged from 5.0 percent to 10.5 percent.

Vesting

Participants are immediately vested in their contributions and associated earnings (losses). Plan vesting in the participating employer's matching contributions and associated earnings (losses) is based on years of credited service to USEC, as follows:

Years of credited service	Percentage
Less than 2	0 percent
2	50 percent
3	100 percent

Vesting requirements under the United States Enrichment Corporation Savings Program were 100% after three years of service and 0% for any term less than three years. Beginning January 1, 2004, employees of United States Enrichment Corporation who participate in a collectively bargained group are eligible to participate in the Plan. The vesting requirements of the United States Enrichment Corporation Savings Program remain in effect for matching contributions and associated earnings (losses) prior to January 1, 2004. Thereafter, vesting requirements for employer matching contributions and associated earnings (losses) are governed by the Plan.

Forfeitures

At December 31, 2004 and 2003, forfeited non-vested accounts totaled \$44,666 and \$13,479, respectively. Forfeitures are used to reduce current or future employer matching contributions. In 2004 and 2003, employer contributions were reduced by \$0 and \$86,000, respectively, from forfeitures of non-vested accounts.

Investment options

Participants direct FMTC to invest their contributions, the participating employer’s matching contributions and associated earnings (losses) among various investment options. At December 31, 2004, investment options consist of 19 mutual funds, the USEC Inc. Stock Fund and a managed fund of short-term bonds and other fixed income securities (the Stable Value Fund).

Participants may make changes and exchanges among the investment options at any time by contacting FMTC directly.

Distributions

Upon termination of service at a time when a participant is eligible for an immediate pension under a USEC defined benefit plan or for total and permanent disability benefits under a USEC long-term disability plan, a participant may elect to receive (a) a lump sum amount equal to the value of the participant’s vested interest in his or her account, (b) monthly installments over a fixed number of years of life expectancy or (c) in a series of partial payments. If a participant dies before the entire vested portion of the account is distributed, the remaining vested portion of the account is payable to a beneficiary. Upon termination of service (other than by death) before a participant is eligible for an immediate pension under a USEC defined benefit plan or for total and permanent disability benefits under a USEC long-term disability plan, upon request, the vested portion of a participant’s account may be paid as a lump sum. The amount of any payment from a participant’s account is reduced to satisfy income tax withholding requirements, unless the balance is rolled over to a qualifying plan or other tax-exempt option.

Participants may make hardship withdrawals from their contributions under certain circumstances allowed by the Plan.

Plan termination

Although USEC has not expressed any intent to do so, USEC has the right to discontinue its contributions at any time and to terminate the Plan, subject to applicable law. In the event of Plan termination, participants will become 100 percent vested in participating employer matching contributions and associated earnings.

2. Summary of significant accounting policies:

Basis of accounting

The financial statements of the Plan are prepared based on the accrual method of accounting. Distributions to participants are recorded on the cash basis.

Investment valuation and income recognition

The Plan's investments are stated at fair value, based on quoted closing market prices, except for the Stable Value Fund which seeks to maintain a stable \$1 unit price. Participant loans are valued at cost, which approximates fair value. As of December 31, 2004 and 2003, guaranteed investment contracts totaled \$0 and \$3.5 million (3 percent of the Stable Value Fund), respectively. Investments in guaranteed investment contracts are stated at contract value, which approximates fair value. The crediting interest rates for contracts as of December 31, 2003 ranged from 6.10 percent to 7.16 percent. All contracts matured in 2004. The average yield for the Stable Value Fund was 3.82 percent as of December 31, 2004 and 4.47 percent as of December 31, 2003.

Capital gains or losses, interest and dividend income are recognized according to the schedules maintained by the mutual funds. Gains or losses on the fixed income securities in the Stable Value Fund are recognized over time by adjusting the interest rate credited to the portfolio. The Statements of Changes in Net Assets Available for Benefits reports the net appreciation or depreciation in the fair value of investments, which consists of the realized gains or losses and the unrealized appreciation or depreciation on those investments.

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan's management to make estimates and assumptions that affect the reported amounts of assets and liabilities. Actual results could differ from those estimates.

3. Investments:

The following table presents investments at December 31, 2004 and 2003 that represent 5 percent or more of the Plan's net assets as of the beginning of the year.

In thousands

	<u>2004</u>	<u>2003</u>
Stable Value Fund — Fidelity Managed Income Portfolio II	\$ 107,058	\$ 100,733
American Funds — Investment Company of America, 358,707 and 314,511 shares, respectively	11,030	9,071
American Funds — New Perspective Fund, N/A and 342,423 shares, respectively	N/A	8,386
Weitz Partners Value Fund, 708,961 and 662,134 shares, respectively	16,944	14,212
Fidelity Dividend Growth Fund, 644,461 and 617,978 shares, respectively	18,361	16,871
American Funds — Growth Fund of America, 956,649 and 935,127 shares, respectively	26,183	22,948
Fidelity Spartan US Equity Index Fund, 271,846 and 278,255 shares, respectively	11,651	10,958
Total individual investments that represent 5 percent or more of the Plan's net assets	191,227	183,179
Other investments	47,176	28,301
Total investments	<u>\$ 238,403</u>	<u>\$ 211,480</u>

Components of the net appreciation in fair value of investments for the years ended December 31, 2004 and 2003 are as follows (in thousands):

	<u>2004</u>	<u>2003</u>
Registered investment companies	\$ 10,383	\$ 14,835
USEC Inc. common stock	203	180
Net appreciation	<u>\$ 10,586</u>	<u>\$ 15,015</u>

The Plan provides for investments in various forms of mutual funds, common stock and a managed fund of short-term bonds and other fixed income securities. In general, investments are exposed to various risks, such as interest rate, credit, and overall market volatility risks. Due to the level of risk associated with certain investment securities, it is reasonably possible that material changes in the values of investment securities will occur.

4. Tax status:

The Plan has received a determination letter, dated February 15, 2002, from the Internal Revenue Service that the Plan is qualified to be exempt from federal income taxes under certain provisions of the Internal Revenue Code. Pursuant to such provisions, participants are not subject to federal income taxes on their contributions to the Plan, on participating employer contributions to the Plan, or on income accruing to their accounts, until such time as they receive distributions from the Plan. Although the Plan has been amended since receiving the determination letter, the Plan administrator believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the Internal Revenue Code.

5. Related-party transactions:

Certain Plan investments are shares of mutual funds managed by FMTC. FMTC is the Trustee as defined by the Plan, and these transactions qualify as party-in-interest transactions.

Expenses of the Plan, except participant loan costs and fund investment management expenses that are paid by the participant, are paid by USEC and amounted to \$24,631 and \$31,930 in 2004 and 2003, respectively.

USEC as a participating employer is a related party. Related party values as of and for the years ended December 31, 2004 and 2003 are as follows (in thousands):

	<u>2004</u>	<u>2003</u>
Shares of USEC Inc. common stock held by the Plan	75	50
Fair value of USEC Inc. common stock held by the Plan	\$ 699	\$ 449
Purchases of USEC Inc. common stock by the Plan	\$ 2,263	\$ 1,372
Sales of USEC Inc. common stock by the Plan	\$ 2,100	\$ 1,467

**USEC Savings Program, Plan Number 001
Schedule of Assets (Held at End of Year)**

**As of December 31, 2004
(In Thousands)**

ERISA Form 5500 Schedule H, line 4(i)

Issuer	Description of asset	Current value
Stable Value Fund -Fidelity Managed Income Portfolio II*	Commingled Pool of the Fidelity Group Trust for Employee Benefit Plans	\$ 107,058
Morgan Stanley Midcap Growth Fund -Institutional Shares	Growth-Oriented Stock Mutual Fund	2,299
Weitz Partners Value Fund	Growth Mutual Fund	16,944
American Funds -Growth Fund of America	Growth Mutual Fund	26,183
American Funds -Investment Company of America	Domestic Equity Mutual Fund	11,030
American Funds - New Perspective Fund	Growth Mutual Fund that Invests Globally	10,314
Royce Pennsylvania Mutual Fund	Growth Mutual Fund	3,860
USEC Stock Fund*	Company stock fund for USEC Inc.	699
Fidelity Contrafund*	Growth Mutual Fund	6,187
Fidelity Growth Company Fund*	Growth Mutual Fund	3,955
Fidelity Diversified International Fund*	Growth Mutual Fund that Invests Internationally	4,303
Fidelity Dividend Growth Fund*	Growth Mutual Fund	18,361
Fidelity Freedom Income Fund*	Asset Allocation Mutual Fund	185
Fidelity Freedom 2000 Fund*	Asset Allocation Mutual Fund	650
Fidelity Freedom 2010 Fund*	Asset Allocation Mutual Fund	3,938
Fidelity Freedom 2020 Fund*	Asset Allocation Mutual Fund	2,741
Fidelity Freedom 2030 Fund*	Asset Allocation Mutual Fund	655

**USEC Savings Program, Plan Number 001
Schedule of Assets (Held at End of Year)**

**As of December 31, 2004
(Thousands)**

ERISA Form 5500 Schedule H, line 4(i)

Issuer	Description of asset	Current value
Fidelity Freedom 2040 Fund*	Asset Allocation Mutual Fund	234
Fidelity Spartan Extended Market Index Fund*	Index Mutual Fund	710
Fidelity Spartan US Equity Index Fund*	Index Mutual Fund	11,651
Fidelity US Bond Market Index Fund*	Income Mutual Fund	6,446
Participant Loans*	Participant notes at interest rates ranging from 5.0% to 10.5% maturing between 1/2005 and 9/2019	4,773
	Total Current Value	<u>\$ 243,176</u>

* Party-in-interest

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

USEC Savings Program

June 3, 2005

By

/s/ W. Lance Wright

W. Lance Wright

USEC Inc.

Chairman

Benefit Plan Administrative Committee

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
23	CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 52-2107911) of USEC Inc. of our report dated June 3, 2005, relating to the financial statements of the USEC Savings Program, which appears in this Form 11-K for the fiscal year ended December 31, 2004.

/s/ Grant Thornton LLP

Baltimore, Maryland
June 3, 2005