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, 2003

OR

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

FOR THE FISCAL YEAR ENDED to

OF 1934

Commission file number 1-13179

A. Full title of the plan and address of the plan, if different from that of the issuer named below:

FLOWSERVE CORPORATION RETIREMENT SAVINGS PLAN

B. Name of the issuer of the securities held pursuant to the plan and the address of its principal executive office:

FLOWSERVE CORPORATION

5215 North O'Connor Blvd. Suite 2300 Irving, TX 75039

REQUIRED INFORMATION

The Flowserve Corporation Retirement Savings Plan (the "Plan") is subject to the Employee Retirement Income Security Act of 1974 ("ERISA").

Item 4. In lieu of the requirements of Items 1, 2 and 3 of Form 11-K, the following financial statements and schedules of the Plan (which have been prepared in accordance with the financial reporting requirements of ERISA), notes thereto, and Report of Independent Auditors thereon are being filed as Exhibit 99.1 to this Form 11-K:

- (a) Report of Independent Registered Public Accounting Firm.
- (b) Statements of Net Assets Available for Benefits for the December 31, 2003 and 2002.
- (c) Statement of Changes in Net Assets Available for Benefits for the Year Ended December 31, 2003.
- (d) Notes to Financial Statements.
- (e) Schedule H; Line 4i Schedule of Assets (Held at End of Year) as of December 31, 2003.
- (f) Schedule H; Line 4j Schedule of Reportable Transactions for the Year Ended December 31, 2003.

The Consent of Independent Registered Public Accounting Firm to the incorporation by reference of the foregoing financial statements and Report of Independent Registered Public Accounting Firm in the Registration Statements on Form S-8 pertaining to the Plan is being filed as Exhibit 23.1 to this Report.

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Pension and Investment Committee of Flowserve Corporation, which administers the Plan, has duly caused this annual report to be signed on behalf of the Plan by the undersigned hereunto duly authorized.

Flowserve Corporation Retirement Savings Plan

Ronald F. Shuff Ronald F. Shuff,

Name:

Authorized member of the Pension and

Investment Committee

Date: June 28, 2004

INDEX TO EXHIBITS

The following Exhibits are being filed with this Annual Report on Form 11-K:

Exhibit

- 23.1 Consent of PricewaterhouseCoopers LLP
- Annual Financial Statements of the Flowserve Corporation Retirement Savings Plan as of December 31, 2003 and 2002 and for the year ended December 31, 2003 with Report 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. 333-82081 and No. 33-72372) of Flowserve Corporation of our report dated June 25, 2004 relating to the financial statements of the Flowserve Corporation Retirement Savings Plan, which appears in this Form 11-K.

Dallas, TX June 25, 2004	

FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULES

AS OF DECEMBER 31, 2003 AND 2002 AND FOR THE YEAR ENDED DECEMBER 31, 2003

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Report of Independent Registered Public Accounting Firm

Financial Statements:

Statements of Net Assets Available for Benefits as of December 31, 2003 and 2002

Statement of Changes in Net Assets Available for Benefits for the year ended December 31, 2003

Notes to Financial Statements

Supplemental Schedules:

Schedule H; Line 4i – Schedule of Assets (Held at End of Year) as of December 31, 2003

 $\frac{Schedule\ H;\ Line\ 4j-Schedule\ of\ Reportable\ Transactions}{for\ the\ year\ ended\ December\ 31,2003}$

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of the Flowserve Corporation Retirement Savings Plan:

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of the Flowserve Corporation Retirement Savings Plan (the "Plan") at December 31, 2003 and 2002, 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. 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 of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and auditing standards generally accepted in the United States of America. 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of assets (held at end of year) and reportable transactions are presented for the purpose of additional analysis and are not a required part of the basic financial statements but are 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. These supplemental schedules are the responsibility of the Plan's management. The supplemental schedules have 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/PricewaterhouseCoopers LLP

Dallas, Texas June 25, 2004

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS DECEMBER 31, 2003 AND 2002

		December 31,		
	2003		2003 2002	
Investments:				
Registered investment companies	\$	268,888,165	\$	207,763,016
Common and collective trust		87,884,897		83,298,604
Flowserve Corp. common stock		25,122,216		26,091,736
Loans receivable from participants		8,236,479		8,364,798
		390,131,757		325,518,154
			<u> </u>	
Receivables:				
Employer contributions		249,432		223,183
Participant contributions		737,842		661,374
Total receivables		987,274	-	884,557
Total assets		391,119,031		326,402,711
Net assets available for benefits	\$	391,119,031	\$	326,402,711

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

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS FOR THE YEAR ENDED DECEMBER 31, 2003

	 2003
Additions:	
Investment income:	
Dividend income	\$ 4,339,423
Interest income from other than participant loans	3,621,652
Interest income from participant loans	546,027
Net appreciation in fair value of investments	60,015,794
•	 68,522,896
Contributions:	
Employer	6,154,809
Participant	20,505,703
	26,660,512
Total additions	95,183,408
Deductions:	
Benefits paid to participants	30,390,120
Other deductions	76,968
Total deductions	30,467,088
Increase in net assets available for benefits	64,716,320
Net assets available for benefits:	
Beginning of year	326,402,711
End of year	\$ 391,119,031

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

NOTES TO FINANCIAL STATEMENTS

1. DESCRIPTION OF THE PLAN

The following description of the Flowserve Corporation Retirement Savings Plan (the "Plan") provides only general information. Participants should refer to the Plan Agreement for a more complete description of the Plan's provisions.

Eligibility to participate

Full-time and part-time employees of Flowserve Corporation and its wholly-owned subsidiaries located in the United States (collectively the "Company") are eligible to participate in the Plan upon commencement of their employment.

Participant accounts

Each participant's account is credited with the participant's contribution, the employer's contribution and an allocation of investment income of each fund as defined in the Plan Agreement.

Contributions

Participants contribute a percentage of their compensation, as defined in the Plan. Unless participants elect otherwise, they automatically contribute 3% of compensation to the Plan. Additionally, the maximum contribution rate for participants is generally 50% of eligible compensation, of which up to \$12,000 may be made pre-tax. Contributions made by participants are invested based on each participant's election.

The Company matches 50% of participant contributions, which are allocated in accordance with each participant's investment directions, up to 6% of eligible compensation, except for union employees represented by the:

- United Steelworkers of America at the Vernon, California facility;
- United Steelworkers of America, AFL-CIO-CLC, District 30 Local Number 3320 at the Dayton, Ohio facility;
- IAM, District Lodge 1130 at the Cleveland, Ohio facility;
- · United Steelworkers of America AFL-CIO and its Local 9404 at the Phillipsburg, New Jersey facility; and
- IAM, District Lodge 16 at the Lynchburg, Virginia facility.

Each of these exception groups receive Company matching contributions of 25% of participant contributions up to 6% of eligible compensation, except the Lynchberg, Virginia facility which receives matching contributions of 50% of participant contributions up to 4% of eligible compensation.

Company matching contributions are made in cash and allocated among a participant's account in the same percentage to which the participant directs his or her contributions. The Company may also make a discretionary matching contribution based upon the Company meeting its performance targets, as determined by the Company in its sole discretion. All Company discretionary contributions are invested in the Company's common stock. Any discretionary

contributions are generally allocated based on the amount of Company matching contributions made during the Plan year, unless otherwise specified by a collective bargaining agreement.

The Plan allows all amounts allocated to participant accounts to be invested in accordance with participant investment directions except for the Company discretionary contribution which shall automatically be invested in the Company Stock Fund and cannot be transferred for a one year period.

Vesting

Participants are immediately vested in their contributions and related earnings thereon. Unless otherwise specified in a collective bargaining agreement, participants become 20% vested in the Company's contributions and related earnings after one year of service. Vesting increases by 20% for each additional year of service until a participant is fully vested after five years of service.

Forfeitures

Forfeitures are first made available to reinstate previously forfeited account balances of former participants, if any. Remaining forfeitures are used to reduce the Company's contributions. During 2003, participants forfeited \$358,096 of unvested account balances. In 2003, employer contributions were reduced by \$483,748 from previously forfeited account balances. Unutilized forfeitures at December 31, 2003 and 2002 total \$113,189 and \$241,266, respectively.

Payment of benefits

Terminated participants are paid their vested balance in a lump sum as soon as administratively possible after their date of termination.

Investments

Participants may direct their contributions and account balances among the following investment funds:

Company Stock Fund – Invested in common stock of the Company.

Morgan Stanley Small Cap Value Fund - Invested primarily in equity securities of companies in the Russell 2000 Small Stock Index.

Putnam International Growth Fund - Invested primarily in equity securities of companies based outside the United States.

T. Rowe Price Mid-Cap Growth Fund – Invested primarily in mid-cap common stocks of U.S. and foreign companies that, in the fund manager's opinion, possess above average growth potential.

<u>Vanguard 500 Index Fund</u> – Invested in large cap equity securities that are managed to achieve results similar to those of the overall stock market as measured by the Standard & Poor's 500 Index.

<u>Vanguard Retirement Savings Trust Fund</u> – Invested primarily in investment contracts or similar fixed-income instruments, that are managed to yield higher levels of current income without capital appreciation.

<u>Vanguard Total Bond Market Index Fund</u> – Invested primarily in fixed-income securities that are managed to yield performance mirroring the Lehman Brothers Aggregate Bond Index.

Vanguard U.S. Growth Fund – Invested primarily in large cap common stocks of U.S. corporations.

<u>Vanguard Wellington Fund</u> – Invested 65% in equity securities and 35% in high-quality bonds, which are managed in the aggregate to generate capital appreciation in the long-term while providing current income.

<u>Vanguard Windsor II Fund</u> – Invested primarily in equity and other instruments issued by large and medium-sized companies that, in the fund manager's opinion, are undervalued based on current price/earnings ratios or dividend yields.

Administration

The Plan is administered by the Pension and Investment Committee, which is appointed by the senior management of the Company pays the majority of the expenses related to the Plan's operations.

Participant loans

Subject to certain limitations set forth in the Plan, participants may borrow from their vested account balances using their account balance as collateral. Participants may borrow an aggregate maximum of the lesser of:

- \$50,000, subject to certain adjustments as set forth in the Plan, or
- one-half of the participant's vested account balance at the time the loan is made.

General purpose loans have a maximum term of five years, while primary residence loans have a maximum term of fifteen years. Loan repayments are generally made via bi-weekly payroll deductions. Loans bear interest at rates that become fixed at loan inception, based on prevailing interest rates at loan inception. Loans outstanding at December 31, 2003 have interest rates ranging from 5% to 10.5%.

Plan termination

Although it has not expressed any intent to do so, the Company may terminate the Plan at any time. In the event of termination of the Plan, distribution would be made to participants in the amounts of

their respective account balances. In the event of Plan termination, all components of participants' balances become 100% vested.

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting

The accompanying financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States.

Investment valuation and income recognition

The Plan's investments are stated at fair value based on quoted market prices. Participant loans are valued at cost, which approximates fair value.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is accrued when earned. Dividend income is recorded on the exdividend date.

The Plan's investments are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with investments in mutual funds and stocks, it is at least reasonably possible that changes in the values of such investments could occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

Determination of unrealized appreciation/depreciation and gain or loss on investments

The Plan presents in the Statement of Changes in Net Assets Available for Benefits the net appreciation (depreciation) in the fair value of its investments which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments.

The unrealized appreciation or depreciation in the fair value of investments held at year-end and the gain or loss on sale of investments during the year are determined using the fair value at the beginning of the year or purchase price if acquired during the year.

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect certain reported amounts of net assets available for benefits and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of changes in net assets available for benefits during the reporting period. Actual results could differ from those estimates.

3. INVESTMENTS

All Plan investments are held by Vanguard under a trust agreement dated May 27, 1999. The fair values of individual investments that represent 5% or more of the Plan's net assets available for benefits at December 31, 2003 and 2002 are as follows:

	 2003		2002	
T. Rowe Price Mid-Cap Growth Mutual Fund	\$ 37,789,474	\$	25,884,408	
Vanguard 500 Index Mutual Fund	91,892,066		71,791,120	
Vanguard Total Bond Market Index Mutual Fund	n/a(1)	17,013,242		
Vanguard Wellington Mutual Fund	67,347,013		51,274,137	
Vanguard Windsor II Mutual Fund	22,274,015		17,538,285	
Vanguard Retirement Savings Trust	87,884,897		83,298,604	
Flowserve Corp. common stock	25,122,216		26,091,736	
Individual investments less than 5% of net assets	57,822,076		32,626,622	
Total investments	\$ 390,131,757	\$	325,518,154	

⁽¹⁾ In 2002, Vanguard Total Bond Market Index Mutual Fund represented 5% or more of the Plan's net assets available for benefits, whereas in 2003 it did not.

During 2003, the Plan's investments had net appreciation in fair value as follows:

Mutual funds	\$	50,430,647
Common stock	<u></u>	9,585,147
Total net appreciation	\$	60,015,794

4. NON-PARTICIPANT DIRECTED INVESTMENTS

Company discretionary contributions are automatically invested in the Company's common stock. Employees also have the option of investing their contributions, or a portion thereof, in the Company's common stock. Since the activity of the non-participant directed and participant directed investments in the Company's common stock are combined, the entire investment is considered non-participant directed for purposes of this disclosure. Information regarding the net assets available for benefits and the changes in net assets available for benefits for that fund, the Company Stock Fund, is shown below:

	December 31,			
	 2003		2002	
Investments:				
Flowserve Corp. Common Stock	\$ 25,122,216	\$	26,091,736	
Net assets available for benefits	\$ 25,122,216	\$	26,091,736	
	Year Ended December 31, 2003			
Changes in net assets available for benefits:				
Additions:				
Contributions	\$ 1,239,135			
Net appreciation in fair value of investments	9,585,147			
Interfund transfers	(9,821,158)			
Total additions	 1,003,124			
Deductions:				
Benefits paid to participants	 1,972,644			
Decrease in net assets available for benefits	 (969,520)			
Net assets available for benefits at beginning of year	 26,091,736			
Net assets available for benefits at end of year	\$ 25,122,216			
9				

5. PARTY-IN-INTEREST TRANSACTIONS

Certain investments are shares of mutual funds managed by an affiliate of Vanguard Fiduciary Trust Company, which is the trustee as defined by the Plan and, therefore, these transactions with such mutual funds qualify as party-in-interest transactions and are so indicated in the supplemental schedules.

Additionally, the Plan holds investments in the Company's common stock and loans receivable from participants, both of which constitute party-in-interest transactions and are so indicated in the supplemental schedules.

6. INCOME TAX STATUS

The Plan has received a determination letter from the Internal Revenue Service dated March 19, 2003, stating that the Plan as then designed and operated qualified under Section 401(a) of the Internal Revenue Code (the "Code") and, therefore, the related trust is exempt from taxation. The Plan Administrator believes the Plan operated in compliance with the applicable requirements of the Code throughout 2003 and, therefore, the Plan and the related trust are exempt from taxation.

The Plan was amended subsequent to March 19, 2003 to incorporate certain provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 ("EGTRRA"). The most significant impact from the amendments was an increase in the level of eligible compensation maximum to \$200,000 from \$150,000, as provided in EGTRRA. The Plan Administrator believes that the Plan, as amended, continues to be exempt from federal income taxes.

SUPPLEMENTAL SCHEDULES

SCHEDULE H; LINE 4i – SCHEDULE OF ASSETS (HELD AT END OF YEAR)

<u>(a)</u>	(b) Identity of Issue, Borrower, Lessor or Similar Party	(c) Description of Investment Including Maturity Date, Rate of Interest, Collateral, Par, or Maturity Value		(d) Cost	 (e) Current Value
	MSIFT Small Cap Value Portfolio Mutual Fund	Registered investment company			\$ 10,929,808
	Putnam International Growth A Mutual Fund	Registered investment company			6,772,517
	T. Rowe Price Mid-Cap Growth Mutual Fund	Registered investment company			37,789,474
*	Vanguard 500 Index Mutual Fund	Registered investment company			91,892,066
*	Vanguard Total Bond Market Index Mutual Fund	Registered investment company			15,655,280
*	Vanguard U.S. Growth Mutual Fund	Registered investment company			16,227,992
*	Vanguard Wellington Mutual Fund	Registered investment company			67,347,013
*	Vanguard Windsor II Mutual Fund	Registered investment company			22,274,015
*	Vanguard Retirement Savings Trust	Common and collective trust			87,884,897
*	Flowserve Corp. Common Stock	Common stock	\$	21,830,550	25,122,216
*	Loans Receivable from Participants	5.0% - 10.5%			8,236,479
Tota	Total assets held for investment purposes				\$ 390,131,757

 $[\]ast$ Denotes an investment issued by an entity known to be a party-in-interest to the Plan.

SCHEDULE H, LINE 4j - SCHEDULE OF REPORTABLE TRANSACTIONS* FOR THE YEAR ENDED DECEMBER 31,2003

(a) Identity of Party Involved	(b) Description of Asset (include interest rate and maturity in the case of a loan)	(c) Purchase Price	(d) Selling Price	(g) Cost of Asset	(h) Current Value of Asset on Transaction Date	(i) Gain or (Loss)
The Vanguard Group	Flowserve Corp. Common Stock	6,902,905.15			6,902,905.15	
The Vanguard Group	Flowserve Corp. Common Stock		17,457,917.46	14,390,702.75	17,457,917.46	3,067,214.71

^{*} Transactions or a series of transactions in non-participant directed funds which exceed 5% of the current value of the Plan's assets as of the beginning of the plan year, as defined in Section 2520.103-6 of the Department of Labor Rules and Regulations for Reporting and Disclosure under ERISA.