### FORM 4

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

# STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person*  |   |  |       |  |                                 | 2. Issuer Name and Ticker or Trading Symbol FLOWSERVE CORP [FLS] |                 |          |  |             |   |                 |   | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)  |   |   |  |  |  |
|---|---|--|-------|--|---------------------------------|--|-----------------|----------|--|-------------|---|-----------------|---|---|---|---|--|--|--|
| Guiltinan Richard J JR<br>(Last) (First) (Middle)   |   |  |       |  | - 3. Da                         | 3. Date of Earliest Transaction (Month/Day/Year)<br>04/20/2005   |                 |          |  |             |   |                 |   | Director<br>X Officer (give title<br>below)<br>VP Controller  |   |   | 10% Ov<br>Other (s<br>below)                                       |  |  |
| 5215 N. O'CONNOR BLVD.<br>SUITE 2300  |   |  |       |  | 4. lf A                         | 4. If Amendment, Date of Original Filed (Month/Day/Year)         |                 |          |  |             |   |                 |   |   | VP Controller and CAO           6. Individual or Joint/Group Filing (Check Applicable |   |  |  |  |
| (Street)<br>IR VING TX 75039<br>(City) (State) (Zip)  |   |  |       |  | -                               |  |                 |          |  |             |   |                 |   | Line)<br>X Form filed by One Reporting Person<br>Form filed by More than One Reporting<br>Person                          |   |   |  |  |  |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned  |   |  |       |  |                                 |  |                 |          |  |             |   |                 |   |   |   |   |  |  |  |
| 1. Title of Security (Instr. 3)<br>2. Transact<br>Date<br>(Month/Day  |   |  |       |  | Exe<br>if a                     | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year       |                 | Code (In | ion Dispose  |             | ities Acquired (A<br>d Of (D) (Instr. 3,  |                 | or 5. Amo<br>Securit<br>Benefic<br>Owned                    | ies   | Form<br>(D) o   | r Direct  | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4)  |  |  |
|   |   |  |       |  |                                 |  |                 | Code     | v  | Amount      | (A) c<br>(D)  | Price           | Following<br>Reported<br>Transaction(s)<br>(Instr. 3 and 4) |   | (Instr. 4)  |   |  |  |  |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned<br>(e.g., puts, calls, warrants, options, convertible securities) |   |  |       |  |                                 |  |                 |          |  |             |   |                 |   |   |   |   |  |  |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)   | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | ifany |  | 4.<br>Transac<br>Code (Ir<br>8) | tion   | 5.<br>on Number |          | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |             | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Instr. 3<br>and 4) |                 | 8. Price<br>of<br>Derivative<br>Security<br>(Instr. 5)      | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s<br>(Instr. 4) |   | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr.<br>4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |  |
|   |   |  |       |  | Code                            | v  | V (A)           |          | Date<br>Exercisable  | Exp<br>Date | iration<br>e  | Title           | Amount<br>or<br>Number<br>of<br>Shares                      |   |   |   |  |  |  |
| Stock<br>option<br>(right-to-<br>buy)   | \$22.9  |  |       |  |                                 |  |                 |          | (1)  | 07          | /15/2014  | Common<br>Stock | 4,300   |   | 4,300   |   | D  |  |  |
| Restricted<br>Common<br>Stock<br>(\$1.25 par<br>value per<br>share)   | \$0 <sup>(2)</sup>  |  |       |  |                                 |  |                 |          | (3)  |             | (4)   | Common<br>Stock | 2,600   |   | 2,600   |   | D  |  |  |
| Restricted<br>Common<br>Stock<br>(\$1.25 par<br>value per<br>share)   | \$0 <sup>(2)</sup>  | 02/16/2005                                 |       |  | А                               |  | 3,500           |          | (5)  |             | (4)   | Common<br>Stock | 3,500   | \$0 <sup>(2)</sup>  | 3,500   |   | D  |  |  |
| Stock<br>Option<br>(right-to-<br>buy)   | \$24.9  | 02/16/2005                                 |       |  | A                               |  | 4,500           |          | (6)  | 02          | /16/2015  | Common<br>Stock | 4,500   | \$24.9  | 4,500   |   | D  |  |  |
| Restricted<br>Common<br>Stock<br>(\$1.25 par<br>value per<br>share)   | \$0 <sup>(2)</sup>  | 04/20/2005                                 |       |  | А                               |  | 5,000           |          | (7)  | 04/2        | 0/2015 <sup>(4)</sup>   | Common<br>Stock | 5,000   | \$0 <sup>(2)</sup>  | 5,000   |   | D  |  |  |
| Stock<br>Option<br>(right-to-<br>buy)   | \$27.97   | 04/20/2005                                 |       |  | A                               |  | 5,000           |          | (8)  | 04          | /20/2015  | Common<br>Stock | 5,000   | \$27.97   | 5,000   |   | D  |  |  |

Explanation of Responses:

- 1. The option shares vest in three (3) equal annual installments commencing on July 15, 2005, with the remaining thirds vesting on July 15, 2006 and July 15, 2007, respectively.
- 2. The shares of Restricted Common Stock shall be valued at the fair market value upon each vesting date. A conversion or exercise price is not applicable.
- 3. One-third of the shares of Restricted Common Stock vests on July 15, 2005, with the remaining thirds vesting on July 15, 2006 and July 15, 2007, respectively.
- 4. The lapse of the restrictions on the shares of Restricted Common Stock is contingent upon continued employment with the Issuer. An expiration date is not applicable.
- 5. One-third of the shares of Restricted Common Stock vests on February 16, 2006, with the remaining thirds vesting on February 16, 2007 and February 16, 2008, respectively.
- 6. The option shares vest and become exercisable in three (3) equal annual installments commencing on February 16, 2006, February 16, 2007 and February 16, 2008, respectively.
- 7. One-third of the shares of Restricted Common Stock vests on April 20, 2006, with remaining thirds vesting on April 20, 2007 and April 20, 2008, respectively.
- 8. The option shares vest and become exercisable in three (3) equal annual installments commencing on April 20, 2006, April 20, 2007 and April 20, 2008, respectively.

# /s/ Ronald F. Shuff, by power 04/22/2005

#### of attorney

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 $^{\ast}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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