FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washin

| -t D O 00540     |              |
|------------------|--------------|
| gton, D.C. 20549 | OMB APPROVAL |
|                  |              |

|                                              | CIVID ALL I |
|----------------------------------------------|-------------|
| STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP | OMB Number: |

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

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

| OMB APPROVAL             |           |  |  |  |  |  |  |  |
|--------------------------|-----------|--|--|--|--|--|--|--|
| OMB Number:              | 3235-0287 |  |  |  |  |  |  |  |
| Estimated average burden |           |  |  |  |  |  |  |  |
| hours per response:      | 0.5       |  |  |  |  |  |  |  |

| 1. Name and Address of Reporting Person*  DONOHUE CRAIG S |                                                                                                                                              |                                            |                                                |        |                              | 2. Issuer Name and Ticker or Trading Symbol CHICAGO MERCANTILE EXCHANGE HOLDINGS INC [ CME ] |        |            |                                                          |                                                          |                                    |                  |                                                                                             |                                                                                                                                         | (Che         | elationship o<br>eck all applic<br>C Directo        | able)<br>r                                                                                                     | g Pers           | 10% Ov                                                                   | /ner                                                               |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|--------|------------------------------|----------------------------------------------------------------------------------------------|--------|------------|----------------------------------------------------------|----------------------------------------------------------|------------------------------------|------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|
| (Last)<br>20 S. WA                                        | (Fi<br>ACKER DR                                                                                                                              | •                                          | (Middle)                                       |        |                              | 3. Date of Earliest Transaction (Month/Day/Year) 01/01/2004                                  |        |            |                                                          |                                                          |                                    | _                | below)                                                                                      | (give title                                                                                                                             | utive        | Other (s<br>below)<br>Officer                       | :ресіту                                                                                                        |                  |                                                                          |                                                                    |
| (Street) CHICAC                                           |                                                                                                                                              |                                            | 60606<br>(Zip)                                 |        | 4. 1                         | 4. If Amendment, Date of Original Filed (Month/Day/Year)                                     |        |            |                                                          |                                                          |                                    |                  | Line                                                                                        | ndividual or Joint/Group Filing (Check Applicable t)  X Form filed by One Reporting Person Form filed by More than One Reporting Person |              |                                                     |                                                                                                                |                  |                                                                          |                                                                    |
|                                                           | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned                                                             |                                            |                                                |        |                              |                                                                                              |        |            |                                                          |                                                          |                                    |                  |                                                                                             |                                                                                                                                         |              |                                                     |                                                                                                                |                  |                                                                          |                                                                    |
| 1. Title of Security (Instr. 3)  2. Transa Date (Month/D  |                                                                                                                                              |                                            |                                                | action | 2A. Deemed Execution Date,   |                                                                                              |        | e, Tra     | 3. 4. Securit<br>Transaction Disposed<br>Code (Instr. 5) |                                                          |                                    | ties Acq         | uired (                                                                                     | (A) or                                                                                                                                  | 5. Amount of |                                                     | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)                                              |                  | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4)        |                                                                    |
|                                                           |                                                                                                                                              |                                            |                                                | Co     | ode V                        |                                                                                              | Amount | Amount (A) |                                                          | Price                                                    | Transaction(s)<br>(Instr. 3 and 4) |                  |                                                                                             |                                                                                                                                         | (1113411 4)  |                                                     |                                                                                                                |                  |                                                                          |                                                                    |
| Class A C                                                 | Common St                                                                                                                                    | ock                                        |                                                | 01/01  | 1/200                        | 2004                                                                                         |        | 1          | A                                                        |                                                          | 200 A                              |                  | A                                                                                           | \$0                                                                                                                                     | 5,4          | 5,490                                               |                                                                                                                | D                |                                                                          |                                                                    |
|                                                           | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (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) | 3A. Deeme<br>Execution<br>if any<br>(Month/Day | Date,  | 4.<br>Transa<br>Code (<br>8) |                                                                                              |        |            | Expira                                                   | 6. Date Exercisal<br>Expiration Date<br>(Month/Day/Year) |                                    |                  | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative Sec<br>(Instr. 3 and 4) |                                                                                                                                         |              | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Numbe<br>derivative<br>Securities<br>Beneficia<br>Owned<br>Following<br>Reported<br>Transacti<br>(Instr. 4) | e s<br>S<br>Illy | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|                                                           |                                                                                                                                              |                                            |                                                |        | Code                         | v                                                                                            | (A)    | (D)        | Date<br>Exerci                                           | sable                                                    |                                    | xpiration<br>ate | Title                                                                                       | OI<br>N<br>Of                                                                                                                           | umber        |                                                     |                                                                                                                |                  |                                                                          |                                                                    |
| Employee<br>Stock<br>Option<br>(right to<br>buy)          | \$72.36                                                                                                                                      | 01/01/2004                                 |                                                |        | A                            |                                                                                              | 1,300  |            | 01/01/2                                                  | 2005 <sup>(1)</sup>                                      | 01                                 | 1/01/2014        | Class<br>Comm<br>Stock                                                                      | on   1                                                                                                                                  | 1,300        | \$0                                                 | 1,300                                                                                                          | )                | D                                                                        |                                                                    |

## **Explanation of Responses:**

1. On January 1, 2004, the reporting person was granted an option to purchase 1,300 shares. The option will vest with respect to 20% (260 shares) of the shares subject thereto on January 1, 2005. On the anniversary of that date in each of the four subsequent years, the option will vest with respect to an additional 20% of the shares covered by the option, subject to acceleration or termination in certain circumstances.

> /s/ Kathleen M. Cronin, 01/02/2004 **Attorney** in Fact

\*\* Signature of Reporting Person Date

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

- \* 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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.