

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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                                 |           |
|--|-----------|
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|   |                |           |  |  |  |   |  |  |  |
|---|----------------|-----------|--|--|--|---|--|--|--|
| 1. Name and Address of Reporting Person*<br><u>KEEVE EILEEN</u> |                |           | 2. Issuer Name and Ticker or Trading Symbol<br><u>CHICAGO MERCANTILE EXCHANGE HOLDINGS INC [ CME ]</u> |  |  | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br>Director 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><u>MD Org. Development</u> |  |  |  |
| (Last)  | (First)        | (Middle)  | 3. Date of Earliest Transaction (Month/Day/Year)<br><u>01/03/2006</u>                                  |  |  | 6. Individual or Joint/Group Filing (Check Applicable Line)<br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br>Form filed by More than One Reporting Person                               |  |  |  |
| <u>20 S. WACKER DR.</u>   |                |           | 4. If Amendment, Date of Original Filed (Month/Day/Year)   |  |  |   |  |  |  |
| (Street)  | <u>CHICAGO</u> | <u>IL</u> | <u>60</u>  |  |  |   |  |  |  |
| (City)  | (State)        | (Zip)     |  |  |  |   |  |  |  |

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |          | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|----------|---|--|---|
|                                 |                                      |  | Code                           | V | Amount  | (A) or (D) | Price    |   |  |   |
| Common Stock Class A            | 01/03/2006                           |  | M                              |   | 500   | A          | \$22     | 2,730   | D  |   |
| Common Stock Class A            | 01/03/2006                           |  | M                              |   | 250   | A          | \$35     | 2,980   | D  |   |
| Common Stock Class A            | 01/03/2006                           |  | S                              |   | 750 <sup>(1)</sup>  | D          | \$368.75 | 2,230   | D  |   |

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |     | 6. Date Exercisable and Expiration Date (Month/Day/Year) |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |       |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|-------|
|  |  |                                      |  | Code                           | V | (A)  | (D) | Date Exercisable   | Expiration Date |   |  |  |   |  | Title |
| Stock Options (Right to buy)               | \$22   | 01/03/2006                           |  | M                              |   |  | 500 | 05/07/2005 <sup>(2)</sup>                                | 05/07/2011      | Common Stock Class A  | 500  | \$22   | 0   | D  |       |
| Stock Options (Right to buy)               | \$35   | 01/03/2006                           |  | M                              |   |  | 250 | 12/06/2005 <sup>(3)</sup>                                | 12/06/2012      | Common Stock Class A  | 250  | \$35   | 5,250   | D  |       |

**Explanation of Responses:**

- This sale was completed pursuant to the terms of a pre-arranged trading plan established in accordance with Rule 10b5-1.
- As of May 7, 2005 this option grant was 100% vested.
- On December 6, 2005, this option was vested with respect to 80% of the granted number of shares covered by the option. On the anniversary of that date in subsequent years, the option will vest with respect to the remaining 20% of the shares covered by the option, subject to acceleration or termination in certain circumstances.

Kathleen M. Cronin, Attorney 01/05/2006  
in Fact Date

\*\* 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.