FORM 4

obligations may continue. See Instruction 1(b).

Check this box if no longer subject to Section 16. Form 4 or Form 5

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| | STATEMENT OF | CHANGES IN | BENEFICIAL | OWNERSHIP |
|--|--------------|------------|------------|-----------|
|--|--------------|------------|------------|-----------|

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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

| Name and Address of Reporting Person* SHEPARD WILLIAM R | | | | | 2. Issuer Name and Ticker or Trading Symbol CHICAGO MERCANTILE EXCHANGE HOLDINGS INC [CME] | | | | | | | | | | (Check all a | | cable) or | | Owner |
|--|-----------------|--|---|----------------------------|---|---|------------------|-----------------------------|--|--------------------------|---|-----------|---------|---|-----------------------------------|--|---|---|-------|
| (Last) 20 S. WA | (Fii CKER DR | est) (I | Middle) | | | 0 | | | | | | | | | Officer below) | (give title | Othe belov | r (specify v) | |
| (Street) CHICAG (City) | | | 50606 Zip) | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | 6. Lir | ie) | ridual or Joint/Group Filing (Check Applicable 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) | | | Date | Date (Month/Day/Year) i | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | Transaction Code (Instr. | | | | | | 4 and Secui Bene | | es ially Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | | | Code | v | Amount | (A (D |) or) | Price | Trans | | tion(s) and 4) | | (11341.4) | |
| Common Stock Class A | | | 07/27 | 7/2006 | | | | S | | 100 | | D | \$448.4 | | 37,427 | | D | | |
| Common Stock Class A 0 | | | 07/28 | 07/28/2006 | | | | S | | 700 | | D | \$450 | | 36,727 | | D | | |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | |
| Derivative Conversion Date | | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | | 4. Transaction Code (Instr. 8) | | n of | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | str. 3 | 8. Pric Deriva Securi (Instr. ! | ttive d ty S 5) E F F | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction((Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4 | Beneficial Ownership (Instr. 4) | |
| | | | Code | v | (A) | (D) | Date Exercisa | | Expiration Date | Amoun or Numbe of Shares | | nber | | | | | | | |

Explanation of Responses:

/s/Margaret C. Austin, **Attorney in Fact**

07/31/2006

** Signature of Reporting Person

Date

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

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.

 $^{^{\}star}$ 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).