\square

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

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

| | | Table I - Non-D | Perivative Securities Acquired, Disposed of, or Bene | ficially | Owned | | |
|--|---------|-----------------|--|------------------------------------|--|---|--|
| (City) | (State) | (Zip) | | | Form filed by More th Person | an One Reporting | |
| (Last) (First) 20 S. WACKER DRIVE (Street) CHICAGO IL | 60606 | | X | Form filed by One Reporting Person | | | |
| (Street) | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indiv Line) | ividual or Joint/Group Filing (Check Applicable | | |
| | | (middle) | 3. Date of Earliest Transaction (Month/Day/Year) 05/25/2007 | | | 20.0 M) | |
| 1. Name and Address of Reporting Person* SHEPARD WILLIAM R (Last) (First) (Middle) | | | 2. Issuer Name and Ticker or Trading Symbol <u>CHICAGO MERCANTILE EXCHANGE</u> <u>HOLDINGS INC</u> [CME] | | tionship of Reporting Pe all applicable) Director Officer (give title below) | son(s) to Issuer 10% Owner Other (specify below) | |

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) | | | | | Securities | 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 | Transaction(s) (Instr. 3 and 4) | | (1130.4) |
| Common Stock Class A | 05/25/2007 | | A ⁽¹⁾ | | 195 | A | \$ <mark>0</mark> | 29,087 | 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. Transa Code (8) | | of | | 6. Date Exerc Expiration Da (Month/Day/Y | 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 | Amount or Number of Shares | | | | |

Explanation of Responses:

1. Granted pursuant to the Chicago Mercantile Exchange Holdings Inc. 2005 Director Stock Plan.

By: Margaret C. Austin For: William R. Shepard

05/30/2007

** 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.