FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| illington, D.C. 20549 | OMB APPROVAL |
|-----------------------|--------------|
| | |

| | OMB Number: | 3235-0287 |
|---|-------------------------|-----------|
| l | Estimated average burde | en |
| | hours per response: | 0.5 |
| | | |

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| 1. Name and Address of Reporting Person* KRAUSE JAMES R | | | | | CI | 2. Issuer Name and Ticker or Trading Symbol CHICAGO MERCANTILE EXCHANGE HOLDINGS INC [CME] | | | | | | | | | Check | all app Dired | p of Reporting blicable) ctor er (give title | 10 | % Ow | vner |
|--|---|--|---|---|--------------|---|---|-----------|----------|-------------|------------------|--|---|--------------------------|------------------------|---|---|---|-----------------------------------|--|
| (Last) 20 S. WA | (Fir | , | | 3. Date of Earliest Transaction (Month/Day/Year) 09/01/2005 | | | | | | | | | X Officer (give title Other (specify below) MD & CIO | | | | | peony | | |
| (Street) CHICAGO IL 60606 (City) (State) (Zip) | | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | i. Indivine) | | | | | |
| | | Tabl | e I - No | n-Deriv | /ative | Sec | uritie | s Ac | quired, | Dis | posed o | f, or | Ben | efici | ally | Owne | ed | | | |
| 1. Title of Security (Instr. 3) 2. Transa Date (Month/D | | | | | Execution Da | | Date, | Code (Ins | | | | | and 5) Secu Bene Own | | icially d Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership | | |
| | | | | | | Code | v | Amount | (A (C | () or () | Price | | Reported Transaction(s) (Instr. 3 and 4) | | | | (Instr. 4) | | | |
| Common Stock Class A 09, | | | | | /2005 | | | | S | | 300(1) | D \$280 | | 0.1 | 3,300 | | D | | | |
| Common | Common Stock Class A 09/01/2 | | | | | 2005 | | | S | | 100(1) | | D | \$28 | \$280.5 | | 3,200 | D | | |
| Common | ommon Stock Class A 09/01/2 | | | | | 2005 | | | S | | 50(1) | | D | \$281.61 | | 3,150 | | D | | |
| Common | Stock Class | s A | | 09/01 | /2005 | | | | S | | 200(1) | | D | \$282 | 282.01 2,950 D | | | | | |
| Common | non Stock Class A 09/01/2005 s 450 ⁽¹⁾ D \$282.5 2,500 D | | | | | | | | D | | | | | | | | | | | |
| | | Та | | | | | | • | | | sed of, onvertib | | | | • | wned | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deem Execution if any (Month/D | | | | on of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | | | е | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) Amount or Numbe of Shares | | nstr. 3 nount mber | | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownersi Form: Direct (E or Indire (I) (Instr. | iip C E C Ct (| 11. Nature of Indirect Beneficial Ownership (Instr. 4) |

Explanation of Responses:

1. This sale was completed pursuant to the terms of a pre-arranged trading plan established in accordance with Rule 10b5-1.

Kathleen M. Cronin, Attorney in Fact

09/02/2005

** 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.