$\square$ 

# FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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 Add <u>Piell Hilda</u>	lress of Reporting <u>Harris</u>	Person*	2. Issuer Name and Ticker or Trading Symbol <u>CME GROUP INC.</u> [ CME ]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner
(Last) (First) (Middle) 20 S. WACKER DRIVE		(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 09/14/2008	X Officer (give title Other (specify below) below) MD & Chief HR Officer
(Street)			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line)
CHICAGO	IL	60606		X Form filed by One Reporting Person
(City)	(State)	(Zip)	—	Form filed by More than One Reporting Person
		Table I - Non-D	Perivative Securities Acquired, Disposed of, or Ben	eficially Owned

### 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)	Transaction Code (Instr.		4. Securities Disposed Of			5. Amount of Securities Beneficially Owned Following Reported	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)		(
Common Stock Class A	09/14/2008		F		5 <sup>(1)</sup>	D	\$350.27	270	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)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		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. Ms. Piell surrendered shares to the Company in order to fulfill tax withholding obligations upon the vesting of restricted stock on September 14, 2008.

## By: Margaret C. Austin For: Hilda L Piell

09/15/2008

\*\* 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.