REGISTRATION NO. 333-104804

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

POST EFFECTIVE AMENDMENT NO. 1

T0

FORM S-8

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

CHICAGO MERCANTILE EXCHANGE HOLDINGS INC.

(Exact name of registrant as specified in its charter)

DELAWARE

36-4459170

(State or other jurisdiction incorporation or organization) of incorporation or organization)

(I.R.S. Employer Identification No.)

30 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60606 (312) 930-1000 (Address of Principal Executive Offices)

AGREEMENT BETWEEN CHICAGO MERCANTILE EXCHANGE HOLDINGS INC. AND JAMES J. MCNULTY (Full Title of Plan)

KATHLEEN M. CRONIN, ESQ. MANAGING DIRECTOR, GENERAL COUNSEL AND CORPORATE SECRETARY CHICAGO MERCANTILE EXCHANGE HOLDINGS INC. 30 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60606 (312) 930-1000 (Name, Address and Telephone Number, including Area Code, of Agent for Service)

Copy to:

RODD M. SCHREIBER, ESQ. Skadden, Arps, Slate, Meagher & Flom (Illinois) 333 West Wacker Drive Chicago, Illinois 60606 (312) 407-0700

CALCULATION OF REGISTRATION FEE

PROPOSED MAXIMUM AMOUNT TO PROPOSED MAXIMUM AGGREGATE AMOUNT OF
TITLE OF SHARES BE REGISTERED OFFERING PRICE OFFERING PRICE REGISTRATION
TO BE REGISTERED (1) PER SHARE (2) (2) FEE TO BE REGISTERED Class A Common Stock, par value \$.01 per share 10,000 \$71.28 \$712,800 \$58 (including rights to acquire Series A Junior Participating Preferred Stock pursuant to our rights plan)

- Represents shares of our Class A common stock issuable upon exercise of a portion of the Class B portion of the option Mr. McNulty received under his employment agreement, together with an indeterminate number of shares of our Class A common stock that may become issuable under Mr. McNulty's employment agreement as a result of a stock split, stock dividend or similar adjustment of the outstanding shares of our Class A common stock. In accordance with Rule 416 under the Securities Act of 1933, as amended, such indeterminable number of additional shares as may be issuable as a result of such adjustments are also registered hereby.
- Estimated solely for the purpose of calculating the amount of the registration fee, pursuant to Rule 457(c) of the Securities Act of 1933, as amended, based upon the average of the high and low prices of our Class A (2) common stock on September 8, 2003, as reported on the New York Stock Exchange.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (the "Amendment") to the Registration Statement on Form S-8 (Registration No. 333-104804) (the "Original Registration Statement") of Chicago Mercantile Exchange Holdings Inc., a Delaware corporation (the "Company"), is being filed by the Company to register an additional 10,000 shares of the Company's Class A common stock, par value \$0.01 per share, issuable pursuant to the exercise of a portion of the Class B portion of the option granted to the Company's Chief Executive Officer under his employment agreement.

INCORPORATION OF PRIOR REGISTRATION STATEMENT BY REFERENCE

The Company hereby incorporates by reference into this Amendment the contents of the Original Registration Statement.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 8. EXHIBITS.

Exhibit

Number	Description
5.1	Opinion of Skadden, Arps, Slate, Meagher & Flom (Illinois).
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Skadden, Arps, Slate, Meagher & Flom (Illinois) (included in Exhibit 5.1).
24.1*	Power of Attorney.

* Previously filed.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post Effective Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Chicago, State of Illinois, on September 9, 2003.

CHICAGO MERCANTILE EXCHANGE HOLDINGS INC.

By /s/ Kathleen M. Cronin

Kathleen M. Cronin

Managing Director, General Counsel and
Corporate Secretary

Pursuant to the requirements of the Securities Act of 1933, this Post Effective Amendment No. 1 to Registration Statement has been signed by the following persons in the capacities indicated below on September 9, 2003.

SIGNATURE	TITLE
James J. McNulty	President and Chief Executive Officer and Director
*	Chairman of the Board and Director
Terrence A. Duffy	
* David G. Gomach	Managing Director and Chief Financial Officer
* Nancy W. Goble	Managing Director and Chief Accounting Officer
Timothy R. Brennan	Director

Director

Martin J. Gepsman	
Daniel R. Glickman	Director
Scott Gordon	Director
* Bruce F. Johnson	Director
Gary M. Katler	Director
* Patrick B. Lynch	Director
* Leo Melamed	Director
* William P. Miller II	Director
John D. Newhouse	Director
* James E. Oliff	Director
*	Director
William G. Salatich, Jr. *	Director
John F. Sandner *	Director
Terry L. Savage *	Director
Myron S. Scholes *	Director
William R. Shepard *	Director
Howard J. Siegel *	Director
David J. Wescott	

* By: /s/ Kathleen M. Cronin
Kathleen M. Cronin, as attorney-in-fact

INDEX TO EXHIBITS

Exhibit

Number	Description
5.1	Opinion of Skadden, Arps, Slate, Meagher & Flom (Illinois).
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Skadden, Arps, Slate, Meagher & Flom (Illinois) (included in Exhibit 5.1).
24.1*	Power of Attorney.

^{- -----}

^{*} Previously filed.

Skadden, Arps, Slate, Meagher & Flom (Illinois) 333 West Wacker Drive Chicago, Illinois 60606

September 9, 2003

Chicago Mercantile Exchange Holdings Inc. 30 South Wacker Drive Chicago, Illinois 60606

Re:

Chicago Mercantile Exchange Holdings Inc. Post Effective Amendment No. 1 to Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as special counsel to Chicago Mercantile Exchange Holdings Inc., a Delaware corporation (the "Company"), in connection with the registration of 10,000 shares (the "Shares") of the Company's Class A common stock, par value \$.01 per share (the "Common Stock"), which are issuable upon exercise of stock options granted under the Agreement, dated February 7, 2000, between the Company and James J. McNulty, as amended (the "Agreement").

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act of 1933, as amended (the "Act").

In rendering the opinions set forth herein, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Company's Registration Statement on Form S-8 (Registration No. 333-104804) as filed with the Securities and Exchange Commission (the "Commission") on April 29, 2003 under the Act; (ii) a draft of Post Effective Amendment No. 1 to the Registration Statement, to be filed with the Commission on the date hereof under the Act (such Registration Statement, as so amended, being hereinafter referred to as the "Registration Statement"); (iii) a specimen certificate representing the Common Stock; (iv) the Amended and Restated Certificate of Incorporation of the Company, as amended to date and currently in effect; (v) the Amended and Restated By-Laws of the Company, as amended to date and currently in effect; and (vi) the Agreement. We also have examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such agreements, certificates of public officials, certificates of officers or other representatives of the Company and others, and such other documents, certificates and records as we have deemed necessary or appropriate as a basis for the opinions set forth herein.

In our examination, we have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents. In making our examination of executed documents, we have assumed that the parties thereto, other than the Company, had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. As to any facts material to the opinions expressed herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and others and of public officials.

Members of our firm are admitted to the bar in the State of Illinois, and we do not express any opinion as to the laws of any jurisdiction other than the General Corporation Law of the State of Delaware, and we do not express any opinion as to the effect of any other laws on the opinions stated herein.

Based upon and subject to the foregoing, we are of the opinion that when (i) the Registration Statement becomes effective under the Act; and (ii) certificates representing the Shares to be issued under the Agreement in the form of the specimen certificate examined by us have been manually signed by an authorized officer of the transfer agent and registrar for the Common Stock and registered by such transfer agent and registrar, and have been delivered and paid for in accordance with the terms and conditions of the Agreement, the issuance and sale of such Shares will have been duly authorized, and such Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Very truly yours,
/s/ Skadden, Arps, Slate, Meagher & Flom (Illinois)
Skadden, Arps, Slate, Meagher & Flom (Illinois)

Consent of Independent Auditors

We consent to the incorporation by reference in the Post Effective Amendment No. 1 to Registration Statement (Form S-8 No. 333-104804) of our report dated January 28, 2003, with respect to the consolidated financial statements and schedules of Chicago Mercantile Exchange Holdings Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2002, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

ERNST & YOUNG LLP

Chicago, Illinois September 9, 2003