



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

DIVISION OF
CORPORATION FINANCE

June 4, 2007

Mail Stop 7010

By U.S. Mail and facsimile to (312) 407-8522

Kathleen M. Cronin
Managing Director, General Counsel and Corporate Secretary
Chicago Mercantile Exchange Holdings Inc.
20 South Wacker Drive
Chicago, Illinois 60606

**Re: Chicago Mercantile Exchange Holdings Inc.
Registration Statement on Form S-4
Filed May 25, 2007
File No. 333-143282**

Dear Ms. Cronin:

We have limited our review of your filing to those issues we have addressed in our comments below. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. We note your disclosure that you intend to vote proxies submitted for the meeting that was originally scheduled for April 4, 2007. It appears that the revised merger agreement contains significantly amended terms that materially affect the amount and structure of the merger consideration. In addition, this registration statement contains significant information regarding the competing proposal for the

acquisition of CBOT Holdings, including the conclusion that the competing proposal offered a “higher implied short-term value of the ICE proposal based on recent market prices of ICE’s common stock and CME Holdings’ Class A common stock” Accordingly, it does not appear that shareholders for each party who submitted proxies for the meeting scheduled for April 4, 2007, had access to the material terms of the revised agreement. In this respect, the court’s decision in the case citation you provided to us appears to be distinguishable from the facts applicable here and in any respect does not implicate the federal securities laws. Please revise or advise.

2. We note news reports regarding an agreement between ICE and CBOE Holdings, Inc., regarding the CBOE exercise right possessed by members of the Chicago Board of Trade. Please update your disclosure to discuss this recent event and its consequences with respect to the parties to this transaction.

Comparative Stock Price and Dividends, page 20

3. Please tell us what consideration you gave to presenting the CBOT Holdings Equivalent Per Share data using the exchange ratio in the amended merger agreement, as it is unclear to us that equivalent data based on the exchange ratio in the original merger agreement would be meaningful to investors. In this regard, we note that you used the new exchange ratio in your presentation of equivalent pro forma per share data on page 25.

Summary of Unaudited Pro Forma Condensed Combined Financial Data, page 24

4. Please revise to disclose long-term debt in accordance with Instruction 2 to Item 301 of Regulation S-K.
5. We read that amounts are presented in millions, except per share data. However, based on comparison with your pro forma financial statements, these amounts actually appear to be in thousands. Please advise or revise.

Comparative Per Share Data, page 25

6. We read that outstanding shares are presented in millions. However, based on comparison with CME Holdings’ and CBOT Holdings’ periodic reports, these amounts actually appear to be in thousands. This is also apparent in your calculation of book value per share. Please advise or revise.

Background of the Merger, page 50

7. Please clearly disclose and quantify the differences in the consideration offered pursuant to the merger agreement and the ICE offer on an aggregate and per share basis here and at "Determination Regarding the ICE Proposal."

Recommendations of CBOT Holdings' Special Transaction Committee and Non-ER Members Committee, page 83

8. We note your statement on page 84 that the special transaction committee of CBOT was advised by CSC Consulting, Inc., as well as references on pages 70 and 88-89 to a report rendered by CSC. Please revise your document to include the information required by Item 1015(b) of Regulation M-A. Refer to Item 14(b)(6) of Schedule 14A. Please also provide the consent of CSC Consulting, as required by Rule 436 of Regulation C.

Certain Projections, page 89

9. We note the discussion on page 126 of Lazard's financial analyses of the ICE proposal prepared using financial projections of ICE prepared by CBOT Holdings following conversations with ICE management. To provide CBOT Holdings stockholders and Chicago Board of Trade members with a better understanding of the proposed transaction, please revise the discussion under this heading to disclose these projections. Please separately identify the information provided by ICE's management and that produced by CBOT.

Material U.S. Federal Income Tax Consequences of the Merger, page 156

10. The statement that the merger will be considered a reorganization regardless of whether any cash received in the tender offer is *properly* treated as merger consideration is unclear to us. Please revise to clarify the meaning of your use of "properly."

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for

an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Kathleen M. Cronin
Chicago Mercantile Exchange Holdings Inc.
June 4, 2007
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You may contact Bret Johnson, Staff Accountant, at (202) 551-3753 or Jennifer Thompson, Senior Staff Accountant, at (202) 551-3737 if you have questions regarding comments on the financial statements and related matters. Please contact Matt Franker, Staff Attorney, at (202) 551-3749 or me, at (202) 551-3767 with any other questions.

Sincerely,

Jennifer R. Hardy
Branch Chief

cc: Rodd M. Schreiber
Susan S. Hassan
Skadden, Arps, Slate, Meagher & Flom LLP
333 West Wacker Drive
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