

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

February 22, 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. Amendment No. 2 to Registration Statement on Form S-4 Filed February 20, 2007 File No. 333-139538

Dear Ms. Cronin:

We have reviewed your filings and have the following comments. 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.

Exhibits

1. We note your response to comment 12 of our letter dated February 15, 2007. Please note that counsel must opine on the tax consequences of the transaction, not the manner in which they are described in the prospectus. In this respect, we note the language on page 129 that it is a condition that you receive an opinion of counsel . . . substantially to the effect that the merger will be treated as a reorganization and that Skadden Arps has delivered an opinion to CME Holdings, and Mayer Brown has delivered an opinion to CBOT Holdings, to the effect that the merger will be treated as a reorganization. Please revise the prospectus disclosure U.S. Federal Income Tax Consequences of the Merger to delete this language and to state clearly what counsels' opinions are, i.e. that the transaction will be treated as a reorganization, or alternatively submit revised tax opinions directly opining on each material consequence of the merger to the parties and their shareholders.

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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
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Chicago, Illinois 60606