

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

Mail Stop 7010

April 6, 2007

James E. Parisi Chief Financial Officer Chicago Mercantile Exchange Holdings, Inc. 20 South Wacker Drive Chicago, Illinois 60606

Re: Chicago Mercantile Exchange Holdings, Inc.

Form 10-K for Fiscal Year Ended December 31, 2006

Filed March 1, 2007 File No. 0-33379

Dear Mr. Parisi:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

If you have any further questions regarding our review of your filings, please direct them to Bret Johnson, Staff Accountant, at (202) 551-3753 or, in his absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash Accounting Branch Chief