



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 7010

March 26, 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 reviewed your filing and have the following comments. 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.

FORM 10-K FOR FISCAL YEAR ENDED DECEMBER 31, 2006

Controls and Procedures, page 98

1. We note that your Chief Executive Officer and Chief Financial Officer concluded the Company's disclosure controls and procedures "...are effective in recording, processing, summarizing, and reporting, on a timely basis, information required to be disclosed by us in the reports that we file or submit under the Exchange Act." In future filings, please revise your disclosure to clarify, if true, that your officers also concluded that your disclosure controls and procedures are effective to

ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to your management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Alternatively, your officers may conclude that the Company's disclosure controls and procedures are "effective" without defining disclosure controls and procedures.

Exhibits 31.1 and 31.2

2. In future filings, please ensure the wording of your Section 302 certifications is exactly as set forth in Item 601(31) of Regulation S-K, including the following:
  - Delete the officers' title in the first line as they are signing the certification in a personal capacity.
  - Replace "annual report" with "report."

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your 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 Exchange Act of 1934 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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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 our review of your filing or in response to our comments on your filing.

You may contact Bret Johnson at (202) 551-3753, Jennifer Thompson at (202) 551-3737, or me at (202) 551-3768 if you have questions regarding our comments.

Sincerely,

John Cash  
Accounting Branch Chief