

April 5, 2007

**VIA EDGAR TRANSMISSION AND FACSIMILE**

Securities and Exchange Commission  
Division of Corporate Finance  
450 Fifth Street, N.W.  
Washington, D.C. 20549  
Mail Stop 4561  
Attention: John Cash  
Bret Johnson  
Jennifer Thompson

RE: Chicago Mercantile Exchange Holdings Inc.  
Form 10-K for the year ended December 31, 2006  
Filed March 1, 2007  
File No. 000-33379

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Ladies and Gentlemen:

Chicago Mercantile Exchange Holdings Inc. (the "Company") has received and reviewed the comments from the staff of the Division of Corporate Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") contained in a letter from John Cash, Accounting Branch Chief, dated March 26, 2007, regarding the Commission's review of the above-referenced Company filing (the "Comment Letter"). The Company hereby submits its responses to the Staff's comments contained in the Comment Letter, as set forth below. For the convenience of the Staff, each of the Staff's comments has been reproduced below and is set forth in italics immediately prior to the Company's response.

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.*

**Response:** We note the Staff's comment and the disclosure in Item 4 of future Forms 10-Q and Item 9A of future Forms 10-K will reflect the Staff's comments, reading as follows (assuming the controls are determined to be effective):

"(a) Disclosure Controls and Procedures. The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report. Based on such evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures are effective."

Exhibits 13.1 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."*

**Response:** We note the Staff's comment and Section 302 certifications for future Forms 10-Q and Forms 10-K will conform exactly as set forth in Item 601(31) of Regulation S-K, including the deletion of the officers' title and using "report" rather than "annual report" or "quarterly report."

Acknowledgement

In connection with the Company's response to the Staff's comments, the Company hereby acknowledges that:

- The Company is responsible for the adequacy and accuracy of the disclosure in its filings;
- 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.

If the Staff has any questions, concerns or additional comments regarding the foregoing, please contact me at (312) 930-3488 (phone) or (312) 930-4556 (fax).

Very truly yours,

CHICAGO MERCANTILE EXCHANGE HOLDINGS INC.

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Name: Kathleen M. Cronin

Title: Managing Director, General Counsel and Corporate Secretary