

August 31, 2006

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: Don Walker, Senior Assistant Chief Accountant
John Spitz, Staff Accountant

RE: Chicago Mercantile Exchange Holdings Inc.
Form 10-K for the year ended December 31, 2005
Filed March 6, 2006
File No. 000-33379

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 Don Walker, Senior Assistant Chief Accountant, dated August 3, 2006, regarding the Commission's limited 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 filed March 6, 2006

Exhibit 13.1

Liquidity and Cash Management, page 49

1. We note your disclosure that cash performance bonds and security deposits are included in your consolidated balance sheets and also that with the exception of the portion of securities deposited that are utilized in your securities lending program, clearing firm deposits other than those retained in the form of cash are not included in your consolidated balance sheets. Please tell us how you differentiate between including or excluding cash performance bonds, security deposits, and non-cash deposits (primarily short-term U.S. Treasury securities as disclosed in footnote 2 on page 61) in your balance sheet and provide the authoritative guidance to support your accounting.

Response: Securities deposited to satisfy performance bond and security deposit requirements are not included as assets in our consolidated balance sheets. According to FASB Concept Statement No. 6 par. 26, one of three essential characteristics of an asset is that "a particular entity can obtain the [probable future] benefit and control others' access to it [the benefit]." Interest and gains or losses on securities deposited accrue only to the clearing firm that has deposited the security with CME. The clearing firms obtain the probable future benefit - interest and gains or losses on disposal - from the securities they deposit. Cash deposited to satisfy performance bond and security deposit requirements is included as an asset in our consolidated balance sheets because we retain the interest collected.

Consolidated Statements of Income, page 57

2. We note that you do not present operating and non-operating income and expenses separately, nor do you present cost of revenues as addressed in Article 5-03(2) of Regulation S-X. Please tell us:
 - how your statement of income presentation complies with Article 5-03 of Regulation S-X; and
 - why you have netted securities lending interest expense against revenues instead of treating it as a cost of revenues.

Response:

Article 5-03(7) of Regulation S-X requires companies to state separately in the income statement or in a note thereto amounts earned from (a) dividends, (b) interest on securities, (c) profits on securities (net of losses), and (d) miscellaneous other income. Amounts earned from these sources accounted for 2%, 1% and 0% of total revenues in 2005, 2004 and 2003. Amounts earned from these sources accounted for 4%, 1% and (1)% of pre-tax income in 2005, 2004 and 2003. Under the current circumstances, we consider these amounts immaterial and do not believe that presenting these items separately on the income statement would increase an investor's understanding of our financial performance.

Article 5-03(2) of Regulation S-X requires companies to state separately the amount of cost of services. We believe that approximately 85% of our expenses are considered directly related to the creation of our revenues. These expenses consist primarily of non-variable direct expenses and, to a lesser extent, variable direct expenses including license fees paid for the trading of our equity index contracts and a component of our trading facility rent. We believe that the current income statement presentation is the most meaningful way to convey the results of our operations to investors since the vast majority of our expenses share a similar characterization related to revenue generation.

Securities lending interest income and expense vary significantly from period to period; however, this variability is not directly related to changes in our trading volume. Securities lending interest income as a percentage of total revenues was 6%, 3% and 2% in 2005, 2004 and 2003, respectively. Securities lending interest expense as a percentage of total expenses (including securities lending interest expense) was 12%, 5% and 3% in 2005, 2004 and 2003. However, securities lending interest income, net of related expense, was 0.4% of pre-tax income in all three years. Because securities lending interest expense varies directly with and in proportion to securities lending interest income, it is presented as a reduction of total revenues to arrive at net revenues.

3. *Please tell us how you determined individually that investment income and each element of other revenues:*

- *were the result of central or core operations and not peripheral as addressed in paragraphs 78-89 of FASB Concept Statement 6; and*
- *were not non-operating income or expense to be classified separately and addressed in Article 5-03(7)-(9) of Regulation S-X.*

Response: Article 5-03(7) of Regulation S-X requires companies to state separately in the income statement or in a note thereto amounts earned from (a) dividends, (b) interest on securities, (c) profits on securities (net of losses), and (d) miscellaneous other income. Amounts earned from these sources accounted for 2%, 1% and 0% of total revenues in 2005, 2004 and 2003. Amounts earned from these sources accounted for 4%, 1% and (1)% of pre-tax income in 2005, 2004 and 2003. Under the current circumstances, we consider these amounts immaterial and do not believe that presenting these items separately on the income statement would increase an investor's understanding of our financial performance.

4. *Please tell us how you determined that each element of "other expense," as well as other expense line items, should not be classified as selling, general, and administrative expenses as addressed in Article 5-03(4) of Regulation S-X.*

Response: Articles 5-03(a) and 5-03(4) of Regulation S-X indicate the various line items which, if applicable, and except as otherwise permitted by the Commission, should appear on the face of the income statement, including selling, general and administrative expenses. Currently, our income statement presents separately selling, general and administrative categories greater than 5% of net income. We consider remaining amounts immaterial and believe that the current income statement presentation is more meaningful than an aggregate presentation of selling, general and administrative expenses.

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 or requires additional information, please contact Nancy Goble, Managing Director and Chief Accounting Officer, at (312) 930-2385. Facsimile transmissions may be sent to the undersigned at (312) 930-4556.

Very truly yours,

CHICAGO MERCANTILE EXCHANGE HOLDINGS INC.

/s/ Kathleen M. Cronin

Kathleen M. Cronin
Managing Director, General Counsel and
Corporate Secretary