

October 3, 2006

Mail Stop 4561

Mr. Craig S. Donohue
Chief Executive Officer and Director
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, 2005
Filed March 6, 2006
File Number: 000-33379**

Dear Mr. Donohue:

We have reviewed your response to our comment letter dated August 3, 2006 and have the following comment. Where indicated, we think you should revise your document in response to this comment. 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 our comment, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 comment or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Mr. Craig S. Donohue
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Form 10-K, filed March 6, 2006

Consolidated Statements of Income, page 57

1. We note your response to comment 2 from our letter dated August 3, 2006. Please tell us how you considered the guidance in EITF 99-19 to support your presentation of securities lending expense as a reduction of total revenues to arrive at net revenues. We continue to believe that securities lending expense should be presented within your expenses in your income statement rather than as a reduction of revenues in accordance with Article 5 of Regulation S-X.

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As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your response to our comment and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response to our comment.

You may contact John Spitz, Staff Accountant at (202) 551-3484, or me at (202) 551-3490, if you have questions regarding these comments.

Sincerely,

Don Walker
Senior Assistant Chief Accountant