

January 29, 2008

Mail Stop 4563

*By U.S. Mail and facsimile to (312) 930-4556*

Craig S. Donohue  
Chief Executive Officer  
Chicago Mercantile Exchange Holdings, Inc.  
20 South Wacker Drive  
Chicago, Illinois 60606

**Re: Chicago Mercantile Exchange Holdings, Inc.  
Definitive 14A  
Filed March 15, 2007  
File No. 00-33379**

Dear Mr. Donohue:

We have completed our review of your executive compensation and related disclosure, and we have no further comments at this time.

Please note that the company is responsible for the adequacy and accuracy of the disclosure in its filing. We are not approving any proposed disclosure you may have included in your response letter or any disclosure you include in your future filings in response to our comments.

If you have any further questions regarding our review of your filing, please call me at (202) 551-3419.

Sincerely,

Christian Windsor  
Special Counsel