

November 12, 2007

VIA EDGAR TRANSMISSION AND FACSIMILE

Securities and Exchange Commission
Division of Corporation Finance
450 Fifth Street, N.W.
Washington, D.C. 20549
Mail Stop 4561
Attention: Christian N. Windsor

RE: *Chicago Mercantile Exchange Holdings Inc. Definitive 14A, Filed
March 15, 2007, File No. 00-33379 (the "2007 Proxy Statement")*

Dear Mr. Windsor:

CME Group Inc. (formerly known as Chicago Mercantile Exchange Holdings Inc.) (the "Company") has received the comments from the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") contained in your letter, dated September 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 bold and italics immediately prior to the Company's response.

Compensation Discussion and Analysis, page 22

1. Your disclosure suggests that individual performance was a significant factor considered by the Committee in awarding cash incentive compensation and determining annual equity grants. Please disclose and analyze how individual performance contributed to actual 2006 compensation for the named executive officers. For example, disclose the elements of individual performance, both quantitative and qualitative, and specific contributions the compensation committee considered in its evaluation, and if applicable, how the committee weighted and factored them into specific compensation decisions. See Item 402(b)(2)(vii) and Item 402(b)(1)(v) of Regulation S-K.

Annual Cash Bonuses

Annual cash bonuses are awarded under the Company's Annual Incentive Plan ("AIP"). The funding of the bonus pool was based upon the achievement of cash earnings in 2006 exceeding the established target as described beginning on page 23 of the 2007 Proxy Statement.

As discussed on page 24, the impact of the achievement of the cash earnings target and individual performance are weighted differently based upon the individual's level within the organization.

The performance measures and their approximate weighting for the Named Executive Officers is set forth in the table below:

| <u>Performance Measure</u> | <u>Approximate Weighting of Performance Measure</u> |
|---------------------------------------|---|
| Corporate Performance (Cash Earnings) | 70% |
| Individual Performance | 30% |

For the individual performance component, an individual's key job responsibilities and strategic initiatives for the year are agreed upon in the beginning of the year. These goals are then incorporated into the Company's Performance Management Process ("PMP"). The Company's PMP is designed to evaluate an individual's performance of their key job responsibilities and established annual initiatives. Each individual is awarded an overall performance rating ranging from 1 to 10 with 10 being the highest. The non-financial objectives for 2006 generally consisted of: generating additional revenue by growing our options and foreign exchange business, expanding into the energy and over-the-counter markets, growing globally in Asia; reducing costs; and enhancing our capabilities by planning for succession and enhancing our technology plan. Mr. Donohue and Mr. Gill collectively establish the performance ratings for the other members of the Management Team, including Messrs. Parisi and Davidson and Ms. Taylor. Messrs. Donohue and Gill present the performance reviews for the Named Executive Officers and their overall performance ratings to the Compensation Committee along with bonus recommendations. In 2006, the Compensation Committee approved their recommendations without any changes.

The table below shows the payout opportunities and actual bonus payments for 2006 for the Named Executive Officers:

| <u>Named Executive Officer</u> | <u>Annual Incentive Plan Target as % of Base Earnings</u> | <u>Annual Incentive Plan Target (\$)</u> | <u>Annual Incentive Plan Maximum as % of Base Earnings</u> | <u>Annual Incentive Plan Maximum</u> | <u>2006 Annual Cash Bonus as % of Base Earnings</u> | <u>2006 Annual Cash Bonus</u> |
|--------------------------------|---|--|--|--------------------------------------|---|-------------------------------|
| Craig S. Donohue | 100% | \$ 847,115 | 150% | \$ 1,270,673 | 138% | \$ 1,168,257 |
| James E. Parisi | 75% | \$ 206,250 | 150% | \$ 412,500 | 140% | \$ 386,375 |
| Phupinder S. Gill | 75% | \$ 450,000 | 150% | \$ 900,000 | 132% | \$ 791,160 |
| John P. Davidson III | 75% | \$ 381,490 | 150% | \$ 762,981 | 125% | \$ 635,817 |
| Kimberly S. Taylor | 75% | \$ 232,500 | 150% | \$ 465,000 | 135% | \$ 418,500 |

The role of the Chief Executive Officer's individual performance in setting his annual bonus is disclosed on page 28 of the 2007 Proxy Statement. The Compensation Committee did not assign particular weights to the factors considered in setting Mr. Donohue's bonus. The Chief Executive Officer reviews his evaluation of the performance of the President with the Board of Directors and the Compensation Committee considers such evaluation in setting the annual bonus for the President.

The Company's discussion on the process for individual performance review and its impact on compensation is set forth on page 28. Based on the Staff's comments, the Company will supplement its disclosure in future filings to clarify the role of individual performance, including a discussion on its PMP, on setting actual annual bonuses similar to the discussion above.

Equity Awards

On page 25 of the 2007 Proxy Statement, the Company states that equity awards may be increased or decreased by 15% above or below the target opportunity based upon an individual's performance. In 2006, the Named Executive Officers received the following equity awards:

| <u>Named Executive Officer</u> | <u>Annual Equity Award Target as % of Base Pay</u> | <u>Annual Equity Award Target (\$)</u> | <u>Annual Equity Award Maximum as % of Base Pay</u> | <u>Annual Equity Award Maximum (\$)</u> | <u>2006 Annual Equity as % of Target</u> | <u>2006 Annual Equity Award (\$)</u> |
|--------------------------------|--|--|---|---|--|--------------------------------------|
| Craig S. Donohue | 300% | \$ 2,550,000 | 345% | \$ 2,932,500 | 100% | \$ 2,550,440 |
| James E. Parisi | 125% | \$ 343,750 | 144% | \$ 395,313 | 114% | \$ 390,800 |
| Phupinder S. Gill | 175% | \$ 1,050,000 | 201% | \$ 1,207,500 | 100% | \$ 1,049,410 |
| John P. Davidson III | 125% | \$ 718,750 | 144% | \$ 826,563 | 104% | \$ 747,472 |
| Kimberly S. Taylor | 125% | \$ 387,500 | 144% | \$ 445,625 | 100% | \$ 387,852 |

The Chief Executive Officer and the President recommended equity award values for Messrs. Parisi and Davidson and Ms. Taylor, within the guidelines of the program (15% above or below the target equity opportunity), taking into account the individual performance of each executive. The Compensation Committee approved their recommendations without any changes. The Compensation Committee also approved grants at 100% of target for the Chief Executive Officer and President. The Company will include additional disclosure regarding the use of any discretion to increase or decrease the equity awards for its Named Executive Officers in its future filings.

2. Please disclose all the terms of the necessary targets or performance objectives to be achieved in order for your executive officers to earn their incentive compensation for 2006 or 2007. For example, although you disclose the cash earnings target on page 26, you state that the Board utilizes other additional metrics for determining compensation under the Annual Incentive Plan. Please note that qualitative goals generally need to be presented to conform to the requirements of 402(b)(2)(v). To the extent you believe disclosure of certain performance metrics is not required because it would result in competitive harm such that you may omit the disclosure under Instruction 4 to Item 402(b) of Regulation S-K, please provide a detailed supplemental analysis supporting your conclusion and provide appropriate disclosure under Instruction 4. In discussing how difficult it will be for the executive how likely it will be for the registrant to achieve the target levels or other factors, revise your disclosure to provide as much detail as necessary without providing information that poses a reasonable risk of competitive harm. Please further refer to Item 402(b)(1)(v and vi) of Regulation S-K.

The Company will clarify in its future filings the specific performance metric used to establish annual bonuses for the Named Executive Officers. For example, in 2006, cash earnings was the only metric used to determine the funding of the bonus plan. As an additional check and balance, the Compensation Committee may review other performance metrics to ensure that the cash earnings achievement accurately reflects the Company's overall performance. In 2006, the Company reviewed 2006 actual earnings per share and return on equity. Based on this additional review, the Committee confirmed that the Company's 2006 cash earnings was an accurate indication of the Company's performance.

As discussed in response to Comment No. 1, the actual individual bonus amounts are set based upon individual performance within the established bonus guidelines. As stated in Response No. 1, we will include additional disclosure on the role of individual performance in setting the annual bonuses.

The achievement of cash earnings is the primary driver of the bonuses paid to our Named Executive Officers. We believe that the disclosure on page 23 of the 2007 Proxy Statement discussing the increases in the cash earnings target over time provides shareholders with an understanding of how difficult it would be to meet the future cash earnings target. We will include a similar discussion in future filings based upon the current cash earnings target.

Additionally, in connection with the closing of its merger in 2007 with CBOT Holdings, Inc. ("CBOT"), the Committee approved an additional performance metric for employees with the title of Managing Director and above. As discussed on page 23 of the 2007 Proxy Statement, this additional measure will not result in increased bonuses, but to the extent the pre-established synergy targets are not met, bonuses will be decreased. The Company will include a discussion of this additional performance metric in its future filings.

Equity, page 24

3. In your discussion of the distribution of equity value among eligible employees, please clarify how the target distribution of equity awards between officers and non-officers impacts awards, both target awards and any adjustments. Please refer to Item 402(b)(1)(v) of Regulation S-K.

The Company sets a target distribution of annual equity value of approximately 65% to officers and 35% to non-officers in connection with its goal of having a broad based equity program in which employees at all levels participate. The target distribution is utilized in the budgeting phase to allocate funds to the program. However, the target distribution does not impact target awards and no adjustments to individual awards are made due to this distribution. As disclosed on page 25 individual performance is the factor that would impact whether an officer receives an award at the target level. The Company will clarify in its future filings that the 65%/35% target distribution is not a factor in the value of individual equity awards.

Benchmarking, page 27

4. You state on page 20 that you set compensation at the 50th percentile of competitive market data. Please further clarify how the Committee uses the benchmark data from the three distinct peer groups used to set compensation levels. Include a discussion of where actual compensation fell in relationship to targeted parameters. To the extent actual compensation was outside the targeted range, please explain why. Please refer to Item 402(b)(1)(v) and Item 402(b)(2)(xiv) of Regulation S-K.

The Compensation Committee utilizes benchmark data to ensure that the Company's total compensation package is competitive in comparison to its peer groups. The Compensation Committee generally targets the 50th percentile of that benchmark data. However, the Committee does not mandate that our compensation package fall within a specific range of the

50th percentile, such as plus or minus 15%. The Compensation Committee within its discretion may make alterations to the entire compensation program or to a specific element of the program based on its evaluation of the benchmarking data to generally align it within the 50th percentile and/or to ensure its competitive nature. To the extent a change is made in the program, applicable disclosure would be included in the CD&A. For example, on page 27, the Company discussed modifications made to its retirement program in part due to their review of benchmarking information and disclosed on page 43 modifications to its director compensation in part due to benchmarking.

5. Please disclose and analyze how each compensation component and your decisions regarding these elements fit into your overall compensation objectives and their impact regarding other elements. See Item 402(b)(1)(vi) of Regulation S-K. It is not clear whether you review each element of compensation independently or whether you consider each element collectively with the other elements of your compensation program when establishing the various forms and levels of compensation. Please provide sufficient quantitative or qualitative disclosure as appropriate of the analyses underlying the Committee's decision to make specific compensation awards and how decisions regarding one type of award motivate the Committee to award or consider other forms of compensation. Explain and place in context how you considered each element of compensation and how or why determinations with respect to one element may or may not have influenced the Committee's decisions with respect to other allocated awards.

The Company will clarify the purpose for each of the Company's compensation components by including supplemental disclosure in future filings similar to the following:

| <u>Compensation Component</u> | <u>Purpose</u> |
|-------------------------------|---|
| Base Pay | Fixed component of pay intended to compensate the employee fairly based upon their job duties and level of responsibility. |
| Bonus | Variable component of pay intended to motivate and reward the employee's contribution to achieving the Company's short-term/annual goals. |
| Equity | Variable component of pay intended to motivate and reward the employee's contribution to achieving the Company's long-term objectives and to serve as a retention mechanism. |
| Benefits | Fixed component of pay intended to protect against catastrophic expenses (healthcare, disability and life insurance) and provide opportunity to save for retirement (pension and 401(k)). |

Compensation Component

Post-Termination Compensation (Severance and Change of Control)

Purpose

Fixed component of pay intended to provide a temporary income source following an employee's involuntary termination and in the case of a change of control to also provide for continuity of management during that event.

Generally, the Committee reviews the appropriateness of the current compensation programs — in aggregate or by a specific element — as needed. For instance, through the annual review of benchmark compensation data, the Committee reviews competitive base pay, bonus and equity data, as separate elements of compensation and in the aggregate — compared to the Company's actual compensation for management and the Company's current compensation structures. Additionally, the Committee may review individual elements of compensation as appropriate. As disclosed on page 23 of the 2007 Proxy Statement, the Committee did review the annual base salary for our Management Team and approved an increase for the Chief Financial Officer and for three other members of the Management Team. Additionally, as disclosed on page 27, in 2006 the Committee reviewed the retirement program as a separate element of compensation. When making specific awards under our bonus or equity programs, the Committee generally does not review the aggregate compensation, but reviews the specific element they are making decisions on, given the parameters of the particular program.

6. Please address the Committee's analysis of the information contained in the total compensation profiles and how the evaluation of this information resulted in specific awards for the fiscal year or modifications to the manner in which you implement your compensation program. Refer to disclosure on page 29.

To ensure that the Committee members are informed of the potential compensation levels of our management, the Committee reviews on an annual basis all components of their compensation package. This review includes annual base pay and earnings, annual cash bonus, value of annual equity award, in-the-money value of all historic equity grants including monetized gains, and the value of retirement contributions under the qualified and non-qualified plans. The review of these tally sheets serves as an additional check and balance. No changes to the Company's program were made as a result of this review in 2006. To the extent future reviews result in a change to the program, corresponding disclosure will be included.

Employment Contracts and Retention Agreements, page 29

7. Please discuss how the Committee determined that the employment contracts and retention agreements support the objectives of your compensation program. Please refer to Item 402(b)(1)(vi) of Regulation S-K.

The Company enters into employment contracts and retention agreements based on the particular facts and circumstances involved in the individual employment relationship such as whether the employment arrangement would be necessary to recruit and/or retain necessary talent with compensation terms that we believe are in accordance with our overall compensation program. The Company will clarify in its future filings that it enters into employment contracts as necessary to secure and retain desired talent based on the circumstances and that the contracts include protections for the Company in the form of non-competition and non-solicitation provisions and the requirement that executives sign a release before they may receive severance payments. The Company will also clarify that all contractual compensation terms within the employment agreements are reviewed and approved by the Compensation Committee and that the Company believes that such compensation terms are in line with its overall compensation program.

Use of Outside Consultants, page 30

8. With respect to the engagement of Towers Perrin, please provide the full disclosure required by Item 407(e)(3)(iii) of Regulation S-K. This includes a description of the nature and scope of the consultant's assignment or the material elements of the instructions or directions given to the consultant with respect to the performance of its duties under the engagement. Please provide similar information with relating to any other consultants who provided information used to determine compensation. Refer, for example, to your discussion of services provided by Hewitt Associates.

Towers Perrin has been retained by the Compensation Committee to provide periodic, project-specific advice and support. During 2006, Towers Perrin's primary areas of assistance were:

- Gathering market compensation data for outside directors. For this assignment, Towers Perrin was engaged by both management and the Compensation Committee.
- Providing information on the role of the Executive Chairman and competitive compensation data for this role. For this assignment, Towers Perrin was engaged by the Compensation Committee.
- Working with management to develop an annual incentive measure related to the integration of CBOT. For this assignment, Towers Perrin was engaged by both management and the Compensation Committee.

In accordance with its Charter, the Compensation Committee is responsible for making all decisions concerning executive pay and benefits.

In addition, Towers Perrin responds to periodic requests from the Committee and management for market data and on a variety of compensation-related topics. The Compensation Committee authorized its consultant, Towers Perrin, to interact with the Company's management, as needed, on behalf of the Committee, such as to obtain or confirm information.

The Company will include additional disclosure in its future filings regarding the role of its compensation consultants similar to the discussion above.

Potential Payments Upon Termination or Change in Control, page 37

9. Please describe and explain how the Committee determined the appropriate payment and benefit levels under the various circumstances that trigger payments or provision of benefits under the employment agreements or change of control arrangements. Also, in the Compensation Discussion and Analysis, discuss how these arrangements fit into your overall compensation objectives and affect the decisions you made regarding other compensation elements and the rationale for decisions made in connection with these arrangements. To the extent the terms resulted from negotiations or were derived from an evaluation of similar benefits provided by peer companies; clarify how these factors impacted the resulting benefits, Refer to Item 402(j) and item 402(b)(1)(v) of Regulation S-K. See paragraphs (b)(1)(v) and (j)(3) of Item 402 of Regulation S-K.

The Company's severance program provides its employees with the opportunity to be protected from involuntary terminations under circumstances that are not related to an individual's poor performance, including terminations in connection with a change of control. We believe our program is competitive and reasonable and allows us to attract and retain a high caliber of employees. We recognize that such protections are commonly provided at other companies that we compete with for talent, and are necessary to ensure the impartiality and objectivity of our employees in event of a change-in-control situation. We believe our severance programs are designed to be reasonable from a shareholders perspective. For example, our severance payments, including those payable to our executive officers with employment agreements, do not exceed two years of base salary.

The Committee periodically reviews our severance programs based on the Company's current circumstances. As described beginning on page 38 of the 2007 Proxy Statement, in light of our merger with CBOT, the Committee adopted an enhanced severance program. Additionally, in 2007 the Committee approved the adoption of a written severance policy under ERISA for employees of Chicago Mercantile Exchange Inc., a subsidiary of the Company, which embodied the Company's current unwritten policy and adopted the written policies for employees of the Board of Trade of the City of Chicago, Inc. in connection with the merger.

The Company will include discussions of its rationale for its severance program as well as additional analysis of the Committee or use of discretion relating to the Company's severance program as applicable in its future filings, including those discussed above.

10. It appears that the severance arrangements made for executive officers who are terminated as a result of the merger with CBOT do not apply to all employees. Please provide a quantitative analysis of the payments under this severance policy. Please refer to Item 402(j) of Regulation S-K.

Chicago Mercantile Exchange Holdings adopted an enhanced severance program for employees who were terminated as a result of the merger as generally described on page 38 of the 2007 Proxy Statement. Employees who were not officers of the Company participated in the enhanced severance package with a smaller severance package. The merger closed in July 2007. To the extent the enhanced severance program applies to a Named Executive Officer, the Company will include the requested quantitative analysis in its future filings.

Director Compensation, page 42

11. Disclose all assumptions made in the valuation of awards in the option awards column of the table by reference to a discussion of those assumptions in your financial statements, footnotes to the financial statements, or discussion in management's discussion and analysis. See Instruction to Regulation S-K Item 402(k), which refers to Instruction 1 to Item 402(c)(2)(v) and (vi).

The Company will include the requested footnote disclosure by including a footnote to the option award column of the Director Compensation table referring to the Company's financial statements in its future filings similar to the footnote disclosure included in the Company's 2007 Proxy Statement – footnote 1 to the Summary Compensation Table.

12. For each director, disclose by footnote to the stock and option awards columns of the director compensation table the grant date fair value of each equity award computed in accordance with FAS 123R. See Instruction to Regulation S-K Item 402(k)(2)(iii) and (iv).

The Company will include the requested footnote disclosure by including a footnote to the option award column of the Director Compensation table referring to the Company's financial statements in its future filings similar to the footnote disclosure included in the Company's 2007 Proxy Statement – footnote 1 to the Summary Compensation Table.

13. Disclose the aggregate number of stock awards and the aggregate number of option awards outstanding at fiscal year end held by each of those directors, as required in the Instruction to Item 402(k)(2)(iii) and (iv).

Non-executive directors are awarded annual equity stipends that are not subject to any vesting restrictions and, therefore, the Company did not consider them to be outstanding awards for purposes of Item 402(k)(2)(iii) or (iv). The Company will clarify this fact in its future filings. Messrs. Donohue and Duffy as executive officers do have outstanding equity awards. Mr. Donohue's outstanding equity awards are disclosed in the Outstanding Equity Awards at Fiscal Year End on page 34. Mr. Duffy's outstanding equity awards are disclosed in footnote 2 to the Director Summary Compensation Table on page 43.

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).

Sincerely,



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