



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3628

October 20, 2010

Via Facsimile and U.S. Mail

Joanne Moffic-Silver
Executive Vice President
CBOE Holdings, Inc.
400 South LasSalle Street
Chicago, IL 60605

**Re: CBOE Holdings, Inc.
Schedule TO-I for Class A-1 Common Stock
Schedule TO-I for Class A-2 Common Stock
Filed October 13, 2010
File No. 005-85558**

Dear Ms. Moffic-Silver:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendments to your filing and the information you provide in response to these comments, we may have additional comments.

Offer to Purchase

Summary Term Sheet, page ii

When and how will I be paid for my shares, page iii

1. Please reconcile your statement that you will pay “promptly” with the disclosure that you expect that payment will be mailed five to seven business days after expiration.

Procedures for Tendering Shares, page 4

2. Please explain to us the purpose of the language that your interpretation of the conditions of the offer will be final and binding. Please disclose that only a court of competent jurisdiction can make a determination that will be final and binding upon the parties. In addition, please disclose that security holders may challenge your determinations.

Acceptance for Payment and Payment for Shares, page 5

Proration, page 5

3. Please disclose that you were granted no-action relief regarding Rule 13e-4(f)(3) and the modified proration procedure in your offer.

Conditions of the Offer, page 6

4. Please refer to the language relating to your failure to exercise any of the rights described in this section. This language implies that once a condition is triggered, you must decide whether or not to assert it. Please note that when a condition is triggered and you decide to proceed with the offer anyway, the staff believes that this constitutes a waiver of the triggered condition. Depending on the materiality of the waived condition and the number of days remaining in the offer, you may be required to extend the offer and recirculate new disclosure to security holders. You may not, as this language suggests, simply fail to assert a triggered condition and effectively waive it without officially doing so. Please confirm your understanding supplementally, or revise your disclosure.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to the disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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

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- 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.

Please direct any questions to me at (202) 551-3411. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

Peggy Kim
Special Counsel
Office of Mergers & Acquisitions

cc: David McCarthy, Esq.
Richard Miller, Esq.
Schiff Hardin LLP