

O'Connell Gerald T  
Form 3  
June 14, 2010

# FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

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## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting  
Person \*

Â O'Connell Gerald T

(Last) (First) (Middle)

C/O CBOE HOLDINGS,  
INC.,Â 400 SOUTH LASALLE  
STREET

(Street)

CHICAGO,Â ILÂ 60605

(City) (State) (Zip)

2. Date of Event Requiring  
Statement

(Month/Day/Year)

06/14/2010

3. Issuer Name **and** Ticker or Trading Symbol  
CBOE Holdings, Inc. [CBOE]

4. Relationship of Reporting  
Person(s) to Issuer

5. If Amendment, Date Original  
Filed(Month/Day/Year)

(Check all applicable)

\_\_\_\_ Director \_\_\_\_ 10% Owner  
\_\_X\_\_ Officer \_\_\_\_ Other  
(give title below) (specify below)  
Executive VP & CIO

6. Individual or Joint/Group  
Filing(Check Applicable Line)  
\_\_X\_\_ Form filed by One Reporting  
Person  
\_\_\_\_ Form filed by More than One  
Reporting Person

### Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security  
(Instr. 4)

2. Amount of Securities  
Beneficially Owned  
(Instr. 4)

3. Ownership  
Form:  
Direct (D)  
or Indirect  
(I)  
(Instr. 5)

4. Nature of Indirect Beneficial  
Ownership  
(Instr. 5)

Reminder: Report on a separate line for each class of securities beneficially  
owned directly or indirectly.

SEC 1473 (7-02)

**Persons who respond to the collection of  
information contained in this form are not  
required to respond unless the form displays a  
currently valid OMB control number.**

### Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security  
(Instr. 4)

2. Date Exercisable and  
Expiration Date  
(Month/Day/Year)

3. Title and Amount of  
Securities Underlying  
Derivative Security  
(Instr. 4)

Date Expiration Title Amount or  
Exercisable Date Date Number of

4. Conversion  
or Exercise  
Price of  
Derivative  
Security

5. Ownership  
Form of  
Derivative  
Security:  
Direct (D)

6. Nature of Indirect  
Beneficial Ownership  
(Instr. 5)

Shares

or Indirect  
(I)  
(Instr. 5)

## Reporting Owners

| Reporting Owner Name / Address   | Relationships |           |                    |       |
|--|---------------|-----------|--------------------|-------|
|  | Director      | 10% Owner | Officer            | Other |
| O'Connell Gerald T<br>C/O CBOE HOLDINGS, INC.<br>400 SOUTH LASALLE STREET<br>CHICAGO, IL 60605 |               |           | Executive VP & CIO |       |

## Signatures

/s/ Patrick Sexton,  
attorney-in-fact

06/14/2010

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

### No securities are beneficially owned

- \* If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

^

### Remarks:

Exhibit List: ^ ^ Exhibit 24 - Power of Attorney

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure.  
Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.