



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3233

September 28, 2017

Via E-mail

Mr. Alan J. Dean
Chief Financial Officer
CBOE Holdings, Inc.
400 South LaSalle Street
Chicago, IL 60605

**Re: CBOE Holdings, Inc.
Form 10-Q for the quarterly period ended June 30, 2017
Filed August 4, 2017
File No. 1-34774**

Dear Mr. Dean:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

/s/ Shannon Sobotka

Shannon Sobotka
Staff Accountant
Office of Real Estate and
Commodities