

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-70039; File No. SR-CBOE-2013-071)

July 25, 2013

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to the Technical Disconnect Functionality

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),¹ and Rule 19b-4 thereunder,² notice is hereby given that, on July 12, 2013, Chicago Board Options Exchange, Incorporated (the “Exchange” or “CBOE”) filed with the Securities and Exchange Commission (the “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is proposing to amend its rules to codify the Technical Disconnect Mechanism. The text of the proposed rule change is also available on the Exchange’s website (<http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx>), at the Exchange’s Office of the Secretary, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4. The Commission notes that the Exchange filed the proposed rule change pursuant to Section 19(b)(3)(A)(ii) of the Act (15 U.S.C. 78s(b)(3)(A)(ii)) and Rule 19b-4(f)(5) thereunder (17 CFR 240.19b-4(f)(5)), which renders the proposal effective upon filing with the Commission.

on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange is proposing to amend CBOE Rules to codify a Technical Disconnect functionality which is designed to assist CBOE Trading Permit Holders ("TPHs") in the event that they lose communication with a CBOE Application Server ("CAS") due to a loss of connectivity between their designated CBOE Client Application and a CAS.

By way of background, CBOE TPHs currently enter quotes and orders into a CAS via Client Applications. For purposes of this discussion, a "Client Application" is the system component, such as a CBOE-supported workstation or a TPH's custom trading application, through which a TPH communicates its quotes and/or orders to a CAS,³ which sits between the Client Application and the trading platform for the CBOE Hybrid Trading System. Messages are passed between a Client Application and a CAS. The quotes a Market-Maker enters on the Exchange may be sent by a Market-Maker from one or more Client Applications. Similarly, the orders a TPH enters on the Exchange may be sent by the TPH from one or more Client Applications.

When a CAS loses communication with a Client Application such that the CAS does not receive an appropriate response to a Heartbeat Request within "x" period of time ("Heartbeat Response Time"), the Technical Disconnect Mechanism will automatically logoff the TPH's affected Client Application and, if applicable, will automatically cancel

³ CBOE currently has numerous CASs serving TPHs.

any Market-Maker quotes posted through the affected Client Application. For purposes of this rule, a “Heartbeat Request” refers to a message from a CAS to a Client Application to check connectivity and which requires a response from the Client Application in order to avoid logoff. The Heartbeat Request acts as a virtual pulse between a CAS and a Client Application and allows a CAS to continually monitor its connection with a Client Application. Failure to receive a response to a Heartbeat Request within the Heartbeat Response Time is indicative of a technical or system issue. This function of automatically logging off a Client Application, and if applicable automatically cancelling Market-Maker quotes posted through the affected Client Application, when there is no response to a Heartbeat Request within the Heartbeat Response Time is intended to help to mitigate the potential risks associated with a loss of communication with a Client Application (e.g., erroneous or unintended executions due to stale quotes that remained in the CBOE Book). This serves to assist a TPH when such a technical or system issue occurs, and also assist the Exchange in maintaining a fair and orderly market generally.

A CAS will generate a Heartbeat Request to a Client Application after a specified interval (“Heartbeat Interval” or “‘n’ period of time”). Additionally as noted above, a CAS will disconnect a Client Application, and if applicable cancel any Market-Maker quotes posted through the affect Client Application, after a specified period of time if it does not receive a appropriate response to a Heartbeat Request (Heartbeat Response Time or “‘x’ period of time”). The Exchange notes that the Heartbeat Interval and the Heartbeat Response Time depend upon the Application Programming Interface (“API”) a TPH is

using.⁴ Currently, the Exchange offers two APIs: CBOE Market Interface (“CMi”) API and Financial Information eXchange (“FIX”) Protocol. CMi currently has two versions available: CMi and CMi 2. A TPH may determine which of the available APIs, and if applicable, which version, it would like to use.

First, a CAS on the CMi API will generate a Heartbeat Request to a Client Application after every “n” period of time. The Value of “n” is currently set by the Exchange at two (2) seconds. Depending upon the interface version of CMi a TPH is using, the value of “x” is either set at twenty (20) seconds by the Exchange or the TPH may determine the value of “x” at logon, so long as it is not less than three (3) seconds and does not exceed twenty (20) seconds.

A CAS on the CMi 2 API will generate a Heartbeat Request to a Client Application (i) after the CAS does not receive any messages from a particular Client Application for “n” period of time or (ii) after every “n” period of time. A TPH using CMi 2 will determine whether Heartbeat Requests are generated every “n” period of time or only if no messages are received for “n” period of time. A TPH using the CMi 2 API will also determine the value of “n” at logon. In no event shall “n” be less than three (3) seconds or exceed twenty (20) seconds. If a CAS generates a Heartbeat Request only after it does not receive any messages from a particular Client Application for “n” period of time, the value of “x” (Heartbeat Response Time) will be set at a half (.5) second. If a CAS generates a Heartbeat Request every “n” period of time, the value of “x” shall be equal to the value of “n.” For example, if a TPH using CMi 2 chooses to receive a

⁴ An API is a computer interface that allows market participants with authorized access to interface electronically with the Exchange. Multiple versions of each API may exist and other APIs may be supported from time-to-time.

Heartbeat Request every “n” period of time and sets the value of “n” to 6 seconds, then the TPH’s Client Application must respond to a Heartbeat Request within 6 seconds or the Client Application will be disconnected.

A CAS on the FIX API will generate a Heartbeat Message to a Client Application after the CAS does not receive any messages from a particular Client Application for “n” period of time. If the CAS does not receive a response to the “Heartbeat Message” from the Client Application for “n” period of time, the CAS shall generate a Heartbeat Request to the Client Application. For purposes of this rule, a “Heartbeat Message” refers to a message from a CAS to a Client Application to check connectivity. Failure to respond to a Heartbeat Message within “n” period of time will trigger the generation of a Heartbeat Request. A TPH using the FIX API will determine the value of “n” at logon. In no event shall “n” be less than five (5) seconds. The value of “x” (Heartbeat Response Time) will be set equal to the value of “n.” For example, if a TPH using FIX sets the value of “n” to 6 seconds, then the TPH’s Client Application must respond to a Heartbeat Request within 6 seconds or the Client Application will be disconnected.

The following example illustrates the manner in which the Technical Disconnect Mechanism functions on CMi. For purposes of this example only, the TPH will be a Market-Maker and “n” will be set at 2 seconds and “x” is set at 20 seconds:

- 1) 10:00:00 – Heartbeat Request sent to Client Application after logon
- 10:00:020 – CAS generates Heartbeat Request to Client Application
- 10:00:030 – CAS receives message from Client Application
- 10:00:040 – CAS generates Heartbeat Request
- 10:00:040-10:00:240 – No messages received from Client Application
- 10:00:240 – No messages received from Client Application within 20 seconds
 - Client Application automatically logged off and pending Market-Maker quotes previously entered from the Client Application automatically canceled

The following example illustrates the manner in which the Technical Disconnect Mechanism functions on CMi2 when a TPH chooses to have the CAS generate a Heartbeat Request every “n” period of time. For purposes of this example only, the TPH will be a non-Market-Maker and “n” will be set by the TPH at 5 seconds:

- 1) 10:00:00 – Heartbeat Request sent to Client Application after logon
10:00:020 – CAS receives a message from Client Application
10:00:050 – Heartbeat Request sent to Client Application
10:00:100 – No response to Heartbeat Request received by CAS within 5 seconds
– Client Application automatically logged off and pending orders previously entered from the Client Application remain in the Hybrid Trading System

The following examples illustrate the manner in which the Technical Disconnect Mechanism functions on CMi 2 when a TPH chooses to have the CAS generate a Heartbeat Request only when the CAS does not receive any messages from the Client Application for “n” period of time. For purposes of these examples only, the TPH will be a Market-Maker and “n” will be set by the TPH at 5 seconds:

- 1) 10:00:000 – Heartbeat Request sent to Client Application after logon
10:00:020 – CAS receives a message from Client Application
– Counter re-starts
10:00:070 – No messages received from Client Application within 5 seconds
– CAS generates Heartbeat Request
10:00:073 – CAS receives a message from Client Application
– Counter restarts
- 2) 10:00:000 – Heartbeat Request sent to Client Application within login
10:00:020 – CAS receives a message from Client Application
– Counter re-starts
10:00:070 – No messages received from Client Application within 5 seconds
– CAS generates Heartbeat Request
10:00:075 – No messages received from Client Application within .5 seconds

- Client Application automatically logged off and pending Market-Maker quotes previously entered from the Client Application automatically canceled

Lastly, the following example illustrates the manner in which the Technical Disconnect Mechanism functions on FIX. For purposes of this example only, the TPH will be a Market-Maker and “n” will be set by the TPH at 5 seconds:

- 1) 10:00:00 – Heartbeat Request sent to Client Application after logon
- 10:00:020 – CAS receives a message from Client Application
 - Counter restarts
- 10:00:070 – No messages received from Client Application within 5 seconds
 - CAS generates Heartbeat Message
- 10:00:120 – No messages received from Client Application within 5 seconds
 - CAS generates Heartbeat Request
- 10:00:170 – No messages received from Client Application within 5 seconds
 - Client Application automatically logged off and pending Market-Maker quotes previously entered from the Client Application automatically canceled

As demonstrated above, a Heartbeat Request may be generated (i) every “n” period of time or (ii) when the CAS does not receive any messages from a Client Application for a specified period of time (“n” period of time) depending upon the API being used. Regardless of the API being used however, if an appropriate response message to a Heartbeat Request is not received by the CAS from the Client Application within a specified period of time (“x” period of time or Heartbeat Response Time), the Technical Disconnect Mechanism is triggered and the Client Application is automatically logged off and, if applicable, a Market-Maker’s quotes through that Client Application are automatically canceled.

The Exchange notes that any non-connectivity is event- and Client Application-specific. Therefore, the cancellation of a Market-Maker’s quotes entered into a CAS via

a particular Client Application will neither impact nor determine the treatment of the quotes of the same or other Market-Makers entered into a CAS via a separate and distinct Client Application. The Technical Disconnect Mechanism will not impact or determine the treatment of orders previously entered into a CAS. As discussed above, the function of automatically cancelling a Market-Maker's quotes posted through an affected Client Application is intended to help to mitigate the potential risks associated with a loss of communication with a Client Application. For example, in today's market, Market-Makers' quotes are rapidly changing and can have a lifespan of only milliseconds. Additionally, under the Hybrid Trading System, trades are automatically effected against the Market-Maker's then current quote. Therefore, if a TPH's Client Application is disconnected for any period of time, it is very possible that any quotes posted through that Client Application would be stale by the time the TPH reestablished connectivity. Consequently, any resulting execution of such quotes is more likely to be erroneous or unintended. Conversely, the Exchange notes that orders tend to be static in nature and often rest in the book. Indeed, certain order types, such as Market-on-Close orders, are intended to rest in the book for a period of time. As such, there is a lower risk of erroneous or unintended executions resulting from orders that remained in the Hybrid Trading System during and after an affected Client Application was logged off.

The Exchange next notes that the CAS will send a logout message to an affected Client Application that confirms that the Client Application connection has been terminated. Once connectivity to the Client Application is reestablished, a Market-Maker affected by the mechanism is able to send messages to the CAS to reestablish the Market-Maker's quotes. Any Market-Maker affected by the Technical Disconnect Mechanism is

not relieved of its obligation to provide continuous electronic quotes under the Exchange rules.⁵ The Exchange finally notes that the Technical Disconnect Mechanism is enabled for all TPHs and may not be disabled by TPHs.

The Exchange believes that while information relating to connectivity and the Technical Disconnect Mechanism are already available to TPHs via technical specifications, codifying this information within the rule text will provide additional transparency and further reduce potential confusion.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the “Act”) and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.⁶ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)⁷ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles

⁵ With respect to a Market-Maker who is obligated to provide continuous electronic quotes on the Hybrid Trading System (“Hybrid Market-Maker”), CBOE Rule 1.1(ccc) Continuous Electronic Quotes provides that the Exchange may consider other exceptions to the Hybrid Market-Maker’s continuous electronic quote obligation based on demonstrated legal or regulatory requirements or other mitigating circumstances. As provided in SR-CBOE-2005-93, Amendment 1 (See Securities Exchange Act Release No. 54250 (July 31, 2006), 71 FR 44729 (August 7, 2006)), mitigating circumstances that may be considered by the Exchange may include, but is not limited to, instances where a technical failure or limitation in a Hybrid Market-Maker’s system prevents the Hybrid Market-Maker from maintaining, or communicating to the Exchange, timely and accurate electronic quotes. However, a pattern or practice of technical failures or limitations, or the excessive frequency of technical failures or limitations, may also be considered by the Exchange in determining whether to except the period of time from the continuous electronic quoting requirements.

⁶ 15 U.S.C. 78f(b).

⁷ 15 U.S.C. 78f(b)(5).

of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

In particular, the Exchange believes that codifying in the rules how the Technical Disconnect Mechanism works provides additional transparency in the rules and provides an additional avenue to easily understand CBOE's system and processes. The Exchange believes this will also reduce any potential confusion, thereby removing a potential impediment to and perfecting the mechanism for a free and open market and a national market system, and, in general, protecting investors and the public interest.

Additionally, the Technical Disconnect Mechanism is a valuable tool that is designed to help maintain a fair and orderly market. The Exchange believe that the Technical Disconnect Mechanism assists with the maintenance of fair and orderly markets by helping to mitigate the potential risks associated with a loss in communication with a Client Application, especially risk associated with a loss in communication with a Client Application of a Market-Maker that is providing quotes across a multitude of series and classes.

The Exchange also believes that the proposed rule change is designed to not permit unfair discrimination among market participants. The Exchange notes that the Technical Disconnect Mechanism automatic logoff function is applicable to all TPHs and may not be disabled by any TPH. The Exchange believes that the Technical Disconnect Mechanism benefits the marketplace because it designed to help alert a TPH to a

potential technical or system issue and automatically logoff a TPH's Client Application within certain prescribed parameters. With respect to the Technical Disconnect Mechanism's automatic cancellation of Market-Maker quotes, the Exchange also believes it is not unfair to cancel only Market-Maker quotes and not orders. Particularly, the automatic cancellation of Market-Maker quotes benefits the marketplace because it is designed to help reduce the risk of stale quotes remaining on the CBOE Book in the event that a CAS loses connectivity with a Client Application (e.g., potentially resulting in erroneous or unintended executions). Furthermore, the functionality provides for the protection of Market-Makers, who must bear the burden of market risk for stale quotes, as well as for the protection of investors and the efficiency and fairness of the markets as a whole. Conversely, because orders tend to be static in nature and often rest in the book, the Exchange believes there is a lower risk of erroneous or unintended executions resulting from orders that remain in the Hybrid Trading System during and after an affected Client Application is logged off. The Exchange believes this functionality enhances the overall market quality for options traded on CBOE.

B. Self-Regulatory Organization's Statement on Burden on Competition

CBOE does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Specifically, the Exchange does not believe the proposed rule change will cause any burden on intramarket competition because it applies to all TPHs. Even though the functionality treats Market-Makers' quotes differently than orders, the Exchange notes again that it believes that the Technical Disconnect Mechanism benefits all market participants because it reduces the risk of stale quotes on the CBOE Book, which can

result in erroneous or unintended trades. Further, the Exchange does not believe that such change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange notes that, should the proposed changes make CBOE more attractive for trading, market participants trading on other exchanges are welcome to become TPHs and trade at CBOE if they determine that this proposed rule change has made CBOE more attractive or favorable.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act⁸ and paragraph (f) of Rule 19b-4⁹ thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

⁸ 15 U.S.C. 78s(b)(3)(A).

⁹ 17 CFR 240.19b-4(f).

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-CBOE-2013-071 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-CBOE-2013-071. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the

principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CBOE-2013-071 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁰

Kevin M. O'Neill
Deputy Secretary

¹⁰ 17 CFR 200.30-3(a)(12).