

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-81768; File No. SR-C2-2017-025)

September 29, 2017

Self-Regulatory Organizations; C2 Options Exchange, Incorporated; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Rule 6.45 Relating to Disaster Recovery

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup>, and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on September 20, 2017, C2 Options Exchange, Incorporated (“Exchange” or “C2”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I, II, and III, below, which Items have been prepared by the Exchange. The Exchange filed the proposal as a “non-controversial” proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act<sup>3</sup> and Rule 19b-4(f)(6) thereunder.<sup>4</sup> 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 proposes to amend Rule 6.45 relating to disaster recovery. 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.

---

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> 15 U.S.C. 78s(b)(3)(A)(iii).

<sup>4</sup> 17 CFR 240.19b-4(f)(6).

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 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 the Statutory Basis for, the Proposed Rule Change

1. Purpose

Background

C2 adopted Rule 6.45 in 2012 for the limited purpose of providing alternative means of operation in the event C2’s trading system became inoperable or otherwise unavailable for use due to a disaster or other unusual circumstance. In particular, Rule 6.45, as originally adopted, was intended to allow C2 to operate a “Disaster Recovery Facility” (“DRF”) to continue to trade exclusively listed option classes until C2’s main trading system was again available.<sup>5</sup> C2 utilizes hardware located in the Chicago Board Options Exchange, Incorporated (“CBOE”) building in Chicago, IL, for the purposes of operating the DRF. C2’s main trading engine is located on the East coast.

In 2015, Rule 6.45 was amended to add greater detail to C2’s disaster recovery rules and harmonize the disaster recovery rules with newly implemented disaster recovery-related regulatory imperatives of Regulation Systems Compliance and Integrity (“Regulation SCI”),

---

<sup>5</sup> See Securities Exchange Act Release No. 67357 (July 5, 2012), 77 FR 40928 (July 11, 2012) (Order Granting Approval of Proposed Rule Change to Implement a Disaster Recovery Facility) (SR-C2-2012-011). C2 notes it no longer has any exclusively listed option products.

which superseded and replaced the SEC's voluntary Automation Review Policy.<sup>6</sup> In doing so, C2 made certain changes to Rule 6.45 to provide additional details regarding the Exchange's back-up trading systems, business continuity and disaster recovery plans, and testing and update its disaster recovery rules to ensure consistency with Regulation SCI.

C2 now proposes to make additional changes to its disaster recovery rules to provide C2 the authority to take additional steps necessary to preserve the C2's ability to conduct business in the event that C2's primary and/or back-up data center(s) become inoperable or otherwise unavailable for use due to a significant systems failure, disaster or other unusual circumstances and make clear in the Rules the intermediary steps that C2 may take to disable certain systems and users' connectivity while continuing to operate its primary data center. C2 believes this authority serves the interests of all investors and the general public, because it helps C2 ensure its continuous operation and ability to maintain fair and orderly markets in the event of a significant systems failure or other unusual circumstance.

#### Proposal

C2 proposes to amend Rule 6.45 relating to disaster recovery. Specifically, the Exchange proposes to make changes to Rule 6.45 to: (1) allow C2 to establish certain additional temporary requirements applicable to particular Designated BCP/DR Participants<sup>7</sup> during use of the back-

---

<sup>6</sup> See Securities Exchange Act Release No. 76300 (October 4, 2015), 80 FR 68343 (October 28, 2015) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Amending Rule 6.45 Relating to Disaster Recovery) (SR-C2-2015-030); see also Securities Exchange Act Release Nos. 73639 (November 19, 2014), 79 FR at 72252 (December 5, 2014) (Regulation Systems Compliance and Integrity) (File No. S7-01-13); 27445 (November 16, 1989), 54 FR 48703 (November 24, 1989) (Automated Systems of Self-Regulatory Organizations) (File No. S7-29-89); 29185 (May 9, 1991), 56 FR 22490 (May 15, 1991) (Automated Systems of Self-Regulatory Organizations) (File No. S7-12-91).

<sup>7</sup> Under Rule 6.45(b)(iv)(A), C2 shall designate those Permit Holders that C2 reasonably determines are, taken as a whole, the minimum necessary for the maintenance of fair and

up data center; (2) permit C2 to deactivate certain nonessential systems and systems functionalities in response to limited systems disruptions or malfunctions, security intrusions, systems compliance issues, or other unusual circumstances; and (3) permit C2 to restrict access of a Permit Holder or associated person to the System if such access poses a significant threat to C2's ability to operate systems essential to maintain a fair and orderly market.

C2 proposes to add new Rule 6.45(b)(iv)(B) (Alternative BCP/DR Participant Obligations), which would provide that during the use of the back-up data center, C2 may, if necessary for the maintenance of fair and orderly markets, establish heightened quoting obligations for Designated BCP/DR Participants in a class in which the Designated BCP/DR Participant is already an appointed Market-Maker up to the standards specified for Designated Primary Market-Makers ("DPMs") in Rule 8.17(a)<sup>8</sup> and/or disallow the ability to deselect an

---

orderly markets in the event of the activation of C2's business continuity and disaster recovery plans ("Designated BCP/DR Participants"). Designated BCP/DR Participants will include all C2 Market-Makers and all C2 Permit Holders connected to the C2 primary data center and transacting non-Participant customer business, unless a C2 Permit Holder, other than a C2 Market-Maker, can demonstrate ready access to the back-up data center through another C2 Permit Holder that is a designated participant. As further discussed below, temporary requirements may be imposed on C2 Market-Makers during use of the back-up data center.

<sup>8</sup> Currently, under Rule 8.17(a)(i), for example, DPMs must provide continuous quotes in at least the lesser of 99% of the non-adjusted option series (as defined in Rule 8.5(a)(1)) or 100% of the non-adjusted option series minus one call-put pair with the term "call-put pair" referring to one call and one put that cover the same underlying instrument and have the same expiration date and exercise price, and assure that its disseminated market quotations are accurate. This obligation does not apply to intra-day add-on series on the day during which such series are added for trading. For purposes of Rule 8.17(a)(1), "continuous" means 90% of the time. If a technical failure or limitation of the System prevents a DPM from maintaining, or from communicating to C2, timely and accurate quotes in a series, the duration of such failure shall not be considered in determining whether that DPM has satisfied the 90% quoting standard with respect to the series. C2 may consider other exceptions to this obligation based on demonstrated legal or regulatory requirements or other mitigating circumstances. Compliance with this quoting obligation applies to all of a DPM's allocated classes collectively. C2 will determine compliance by a DPM with this quoting obligation on a monthly basis. However,

appointment intraday in a class in which the Designated BCP/DR Participant is already an appointed Market-Maker.<sup>9</sup> Proposed Rule 6.45(b)(iv)(B) would also provide that C2 would notify market participants of any such additional temporary requirements prior to implementation in a reasonable manner as determined by C2.<sup>10</sup> C2 believes this extended authority would afford C2 with necessary flexibility to address unexpected contingencies that may arise if a disaster or other unusual circumstances occur, causing C2 to use the back-up data center and help ensure that C2 operates a fair and orderly market in the event of a market emergency. C2 also proposes non-substantive changes to the lettering in paragraph (b)(iv) to accommodate the addition of new Rule 6.45(b)(iv)(B). Accordingly, current Rule 6.45(b)(iv)(B)

---

determining compliance with this obligation on a monthly basis does not relieve a DPM from meeting this obligation on a daily basis, nor does it prohibit C2 from taking disciplinary action against DPM for failing to meet this obligation each trading day. See Rule 8.17(a)(1). Accordingly, under proposed Rule 6.45(b)(iv)(B), during use of the back-up data center, C2 could require that Market-Makers in AAPL provide continuous electronic quotes in up to 99% of the non-adjusted option series or 100% of the non-adjusted option series minus one call-put pair.

<sup>9</sup> In accordance with Rule 1001(a)(2)(v) of Regulation SCI, C2 maintains written policies and procedures reasonably designed to ensure that its trading systems (including with respect to both C2's primary and back-up data center trading systems), have levels of capacity, integrity, resiliency, availability, and security adequate to maintain C2's operational capability and promote the maintenance of fair and orderly markets, including, but not limited to business continuity and disaster recovery plans that are reasonably designed to achieve next two-hour resumption of its critical SCI systems, as defined in Rule 1000 of Regulation SCI. See Securities Exchange Act Release No. 73639 (November 19, 2014), 79 FR 72252 (December 5, 2014) (Regulation Systems Compliance and Integrity) (File No. S7-01-13). Notably, C2 employs business continuity and disaster recovery standards reasonably designed to achieve two-hour resumption of all trading systems that are essential to conducting business on C2 and which C2 believes are reasonably designed to support resumption in a significantly shorter amount of time, including, but not limited to with respect to those systems that are essential to the trading of proprietary products and products exclusively licensed for trading on the Exchange.

<sup>10</sup> C2 would make these notifications on the Systems Notification page on C2's website, via an Exchange-used messaging service, and/or other reasonable notification mechanisms.

would become Rule 6.45(b)(iv)(C), and current Rule 6.45(b)(iv)(C) would become Rule 6.45(b)(iv)(D).

C2 also proposes to add Rule 6.45(c) (Deactivation of Certain Systems), which would provide that in the event of a systems disruption or malfunction, security intrusion, systems compliance issue, or other unusual circumstances, C2 may, in accordance with the Rules or if necessary to maintain fair and orderly markets or to protect investors, temporarily deactivate certain systems or systems functionalities that are not essential to conducting business on C2. Many of the systems and systems functionalities described in the Rules are provided optionally by C2 to enhance participants' trading experience, but are not required to be active under the Rules and are not necessary for C2 to conduct business.<sup>11</sup> As is described in the Rules, many of the C2's systems functionalities may be made available (or unavailable) by C2 on a class-by-class basis. Such systems and systems functionalities that are non-essential to conducting business on C2 include, but are not limited to, the Automated Improvement Mechanism (AIM)<sup>12</sup> and the Solicitation Auction Mechanism (SAM).<sup>13</sup>

In addition, the activation of other functionalities may not be described by the Rule, but could be suspended temporarily (e.g., until the earlier of the end of a trading session or until systems disruptions could be remedied) if disruption or malfunction of that functionality were to interfere with the C2's ability to conduct business in a fair and orderly manner. For example, if a certain order type were to cause a wider system malfunction or a certain complex order product could not be created without triggering widespread systems issues,<sup>14</sup> C2 might announce, via its

---

<sup>11</sup> See, e.g., Rules 6.10, 6.11, 6.13, 6.14, 6.17, 6.18, 6.51, and 6.52.

<sup>12</sup> See generally Rule 6.51.

<sup>13</sup> See generally Rule 6.52.

<sup>14</sup> For example, if the creation of a certain complex order product (e.g., the

systems status page or otherwise, the suspension of the availability of that order type or complex product. If such an event impacts a non-essential system or system functionality, C2 may deem it necessary to maintain fair and orderly markets to deactivate that system or functionality until any issues are resolved to prevent any potential harm to investors. Proposed Rule 6.45(c) would also provide that C2 would notify market participants of any such deactivation, and subsequent reactivation, promptly and in a reasonable manner determined by the Exchange. C2 may make these notifications on the Systems Notification page on C2's website, via an Exchange-used messaging service such as SendWordNow,<sup>15</sup> Regulatory Circular, and/or other reasonable notification mechanisms.

Finally, C2 proposes Rule 6.45(d) (Connectivity Restriction), which would permit C2 to temporarily restrict a Permit Holder's or associated person's access to the trading system if it is determined by the President (or senior-level designee) of C2, that because of a systems issue, such access threatens C2's ability to operate systems essential to the maintenance of fair and orderly markets.<sup>16</sup> Such access would remain restricted until the end of the trading session or an earlier time if the President (or senior-level designee) of C2, in consultation with the affected Permit Holder(s), determines that lifting the restriction no longer poses a threat to C2's ability to operate systems essential to conducting business or continuing to maintain a fair and orderly

---

October/November calendar spread in class XYZ) were to cause significant trading disruptions in an entire class (e.g., trading in all of XYZ), C2 might determine to turn off calendar spreads or complex orders in general in the class in order to help ensure that regular trading (i.e., trading of simple orders) in the class remained available.

<sup>15</sup> See C2 Regulatory Circular RG15-036 RG (Send Word Now Smart Notification Services); see also C2 Regulatory Circular RG15-037.

<sup>16</sup> In such cases, C2 would make efforts to contact the affected Permit Holder immediately before or contemporaneously with the restriction of access to the system to the extent possible while protecting C2's ability to operate systems essential to the maintenance of fair and orderly markets.

market on C2 or to investors.<sup>17</sup> In the current electronic trading environment, if a Permit Holder's systems malfunctions or is compromised, it could disrupt C2's systems or market or harm other investors. For example, software malfunctions may pose a risk to C2's systems, investors, and the general public without proper risk controls. Proposed Rule 6.45(d) would simply give C2 the authority to activate additional risk controls to stem the access of a Permit Holder that has experienced a systems disruption or malfunction, which poses undue risk to C2.

## 2. Statutory Basis

C2 believes the proposed rule change is consistent with the Act and the rules and regulations thereunder applicable to C2 and, in particular, the requirements of Section 6(b) of the Act.<sup>18</sup> Specifically, C2 believes the proposed rule change is consistent with the Section 6(b)(5)<sup>19</sup> requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles 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. Additionally, C2 believes the proposed rule change is

---

<sup>17</sup> In determining whether a Permit Holder's access threatens C2's ability to operate systems essential to the maintenance of fair and orderly markets and/or determining that lifting the restriction no longer poses a threat to C2's ability to operate systems essential to conducting business or continuing to maintain a fair and orderly market on the Exchange or to investors, a designee of the President of C2 would only be charged with making such determinations in the President of C2's absence. In such cases, the designee would be a senior executive (i.e. Vice President or above) of C2.

<sup>18</sup> 15 U.S.C. 78f(b).

<sup>19</sup> 15 U.S.C. 78f(b)(5).

consistent with the Section 6(b)(5)<sup>20</sup> requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The proposed rule change is designed to promote C2's ability to ensure the continued operation of a fair and orderly market in the event of a systems failure, disaster, or other unusual circumstances that might threaten the ability to conduct business on C2. C2 recognizes that switching operations to the back-up data center may occur in times of uncertainty or great volatility in the markets. It is at these times that the investors may have the greatest need for viable, trustworthy marketplaces. The proposed rule change seeks to ensure that such a marketplace will exist when most needed, and thus, C2 believes that the proposed rule protects investors in the most fundamental sense.

In particular, C2 believes that proposed Rule 6.45(b)(iv)(B) allowing C2, during the use of the back-up data center to (1) establish heightened quoting obligations for Designated BCP/DR Participants in a class in which the Designated BCP/DR Participant is already an appointed Market-Maker up to the standards specified for DPMs specified in Rule 8.17(a) and/or (2) disallow the ability to deselect an appointment intraday in a class in which the Designated BCP/DR Participant is already an appointed Market-Maker would help ensure the maintenance of a fair and orderly market in the event of a disaster, which is in the interests of all market participants, investors, and the general public. C2 believes that adopting rules that help ensure that markets are open and available during times of turmoil and emergency is an important goal consistent with the Act. C2 also believes that deactivation of certain systems in proposed Rule 6.45(c), whether by rule or otherwise, in order to ensure that C2 is able to provide a fair and

---

<sup>20</sup>

Id.

orderly market in the face of systems disruptions and malfunction is in the best interests of market participants, investors, and the general public.

Similarly, C2 believes that the proposed connectivity restriction in proposed Rule 6.45(d) would help ensure that C2 remains open and available to all market participants. C2 notes that other connectivity restrictions are already in place on the Exchange.<sup>21</sup> Furthermore, C2 believes that proposed Rule 6.45(d) is consistent with Section 6(b)(7)<sup>22</sup> of the Act, which requires C2 to adopt rules that provide a fair procedure for the disciplining of members and persons associated with members, the denial of membership to any person seeking membership therein, the barring of any person from becoming associated with a member thereof, and the prohibition or limitation by the exchange of any person with respect to access to services offered by the exchange or a member thereof. C2 notes that proposed Rule 6.45(d) is not aimed at denying access to a particular Permit Holder, but rather making sure that C2 remains accessible to all other Permit Holders that do not threaten C2's ability to conduct normal business operations. C2 notes that as soon as the President of C2 (or designee), working with the Permit Holder organization that

---

<sup>21</sup> See, e.g., Rules 6.34 (Participant Electronic Connectivity) and 6.48 (Technical Disconnect). Under Rule 6.34(b), C2 may limit the number of messages sent by Participants accessing C2 electronically in order to protect the integrity of the System. In addition, C2 may impose restrictions on the use of a computer connected through an application programming interface ("API") if it believes such restrictions are necessary to ensure the proper performance of the system. Any such restrictions shall be objectively determined and submitted to the Commission for approval pursuant to a rule change filing under Section 19(b) of the Exchange Act. Under Rule 6.48(a), when a CBOE Application Server ("CAS") loses communication with a Client Application such that a CAS does not receive an appropriate response to a Heartbeat Request within "x" period of time, the Technical Disconnect Mechanism will automatically logoff the Permit Holder's affected Client Application and automatically cancel all the Permit Holder's Market-Maker quotes, if applicable, and open orders with a time-in-force of "day" resting in the Book ("day orders"), if the Permit Holder enables that optional service, posted through the affected Client Application.

<sup>22</sup> 15 U.S.C. 78f(b)(7).

poses a threat to C2, were able to confirm that the Permit Holder organization no longer posed such a threat, access to C2 would be restored to that Permit Holder. C2 believes that this is a fair result and is in the best interests of all market participants, investors, and the general public.

C2 also believes that the proposed rule change promotes just and equitable principles of trade by adding detail and clarity to the Rules. The proposed rule change seeks to provide additional clarity to C2's disaster recovery rules, putting all market participants on notice as to how C2 will function in case of significant systems disruption or other disaster situation. C2 is continuously updating the Rules to provide additional detail, clarity, and transparency regarding its operations and trading systems and regulatory authority. C2 believes that the adoption of detailed, clear, and transparent rules reduces burdens on competition and promotes just and equitable principles of trade. C2 also believes that adding greater detail to the Rules regarding C2's ability to ensure the continuous operation of the market and preserve the ability to conduct business on C2 will increase confidence in the markets and encourage wider participation in the markets and greater investment.

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

C2 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. Rather, the proposed rule change will help ensure that competitive markets remain operative in the event of a systems failure or other disaster event. C2 notes that the proposed rule change is designed to provide C2 with authority to require market participants to participate in, and provide necessary liquidity to, the market to ensure that C2 functions in a fair and orderly manner in the event of a significant systems failure, disaster, or other unusual circumstances. Accordingly, C2 believes that

the proposed rule change is designed to ensure fair and competitive markets at time when they may be most needed.

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

C2 neither solicited nor received written comments on the proposed rule change.

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

Because the foregoing proposed rule change does not:

- A. significantly affect the protection of investors or the public interest;
- B. impose any significant burden on competition; and
- C. become operative for 30 days from the date on which it was filed, or such shorter

time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act<sup>23</sup> and Rule 19b-4(f)(6)<sup>24</sup> 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

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:

---

<sup>23</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>24</sup> 17 CFR 240.19b-4(f)(6).

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](mailto:rule-comments@sec.gov). Please include File Number SR-C2-2017-025 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-C2-2017-025. 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-C2-2017-025, 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.<sup>25</sup>

Eduardo A. Aleman  
Assistant Secretary

---

<sup>25</sup> 17 CFR 200.30-3(a)(12).