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SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-81175; File No. SR-CBOE-2017-044)

July 20, 2017

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Order Granting Approval of Proposed Rule Change Relating to Disaster Recovery

I. Introduction

On May 24, 2017, the Chicago Board Options Exchange, Incorporated (“CBOE” or the “Exchange”) filed with the Securities and Exchange Commission (“Commission”), 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> a proposed rule change to amend CBOE Rule 6.18 relating to disaster recovery. The proposed rule change was published for comment in the Federal Register on June 9, 2017.<sup>3</sup> The Commission received no comments on the proposed rule change. This order grants approval of the proposed rule change.

II. Description of the Proposed Rule Change

CBOE Rule 6.18 contains the Exchange’s rules relating to disaster recovery, including provisions intended to comply with Regulation Systems Compliance and Integrity (“Regulation SCI”) concerning business continuity and disaster recovery plans.<sup>4</sup> The Exchange has proposed to amend Rule 6.18 to provide the Exchange authority to take additional steps that it deems necessary to preserve the Exchange’s ability to conduct business and maintain fair and orderly markets in the event of a significant systems failure, disaster, or other unusual circumstances. Specifically, the Exchange has proposed to amend Rule 6.18 to allow the Exchange to: (1)

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

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

<sup>3</sup> See Securities Exchange Act Release No. 80857 (June 5, 2017), 82 FR 26825 (“Notice”).

<sup>4</sup> See Notice, supra note 3, at 26826; see also 17 CFR 242.1000-07.

establish specified additional temporary requirements for Designated BCP/DR Participants<sup>5</sup> during use of the back-up data center; (2) temporarily allow trading in its exclusively-licensed and/or proprietary products, on a class-by-class basis, in an exclusively floor-based environment via open outcry if the Exchange's primary and back-up data centers both are inoperable or otherwise unavailable; (3) temporarily deactivate certain systems or systems functionalities that are not essential to conducting business on the Exchange if there is a systems disruption or malfunction, security intrusion, systems compliance issue, or other unusual circumstances; and (4) temporarily restrict a Trade Permit Holder's or associated person's access to the Exchange's electronic trading systems if the President of the Exchange determines that, because of a systems issue, such access threatens the Exchange's ability to operate systems essential to maintenance of a fair and orderly market.

First, the Exchange has proposed to adopt new Rule 6.18(b)(iv)(B), which would provide that, during the use of the back-up data center, if necessary for the maintenance of fair and orderly markets, the Exchange may: (1) establish heightened quoting obligations for Designated BCP/DR Participants in a class in which the Designated BCP/DR Participant is already an

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<sup>5</sup> "Designated BCP/DR Participants" are Trading Permit Holders that the Exchange has determined are, as a whole, necessary for the maintenance of fair and orderly markets in the event of the activation of the Exchange's business continuity and disaster recovery plans. See Rule 6.18(b)(iv)(A). "Trading Permit Holder" has the meaning set forth in Section 1.1(f) of CBOE's Bylaws. Designated BCP/DR Participants include, at a minimum, all Market-Makers in option classes exclusively listed on the Exchange that stream quotes in such classes and all Designated Primary Market-Makers ("DPMs") in multiply listed option classes. See Rule 6.18(b)(iv)(A)(2).

appointed Market-Maker<sup>6</sup> or Lead Market-Maker<sup>7</sup> up to the standards specified for Designated Primary Market-Makers<sup>8</sup> in Rule 8.85(a);<sup>9</sup> and/or (2) disallow BCP/DR Participants the ability to deselect an appointment intraday in a class in which the BCP/DR Participant is already an appointed Market-Maker. The Exchange would be required to notify market participants of any of these additional temporary requirements prior to implementing them.<sup>10</sup>

Next, the Exchange has proposed to adopt new Rule 6.18(c), which would provide that, if the Exchange's primary and back-up data centers become inoperable or otherwise unavailable for use due to a significant systems failure, disaster, or other unusual circumstances, in the interests of maintaining fair and orderly markets or for the protection of investors, the Exchange would be able to operate in an exclusively floor-based environment on a limited basis for certain classes. Specifically, the Exchange could determine, on a class-by-class basis, to temporarily

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<sup>6</sup> A Market-Maker is an individual Trading Permit Holder or TPH organization that is registered with the Exchange for the purpose of making transactions as a dealer-specialist on the Exchange in accordance with the provisions of Chapter VIII of the Rules. See Rule 8.1. A "TPH organization" is an organization that meets the requirements set forth in Rule 3.3.

<sup>7</sup> The Exchange may appoint one or more Market-Makers in a class to serve as Lead Market-Makers ("LMMs"). See Rule 8.15(a).

<sup>8</sup> A DPM is a TPH organization that is approved by the Exchange to function in allocated securities as a Market-Maker and is subject to the obligations under Rule 8.85. See Rule 8.80.

<sup>9</sup> With respect to their allocated series, DPMs must, among other things, provide continuous electronic quotes in the lesser of 99 percent of the non-adjusted option series or 100 percent of the non-adjusted option series minus one call-put pair, with the term "call-put pair" referring to one call and one put the cover the same underlying instrument and have the same expiration date and exercise price, and assure that its disseminated market quotations are accurate. See Rule 8.85(a)(i).

<sup>10</sup> See proposed Rule 6.18(b)(iv)(B). The proposal would also renumber existing subparagraphs (B) and (C) of Rule 6.18(b)(iv) as subparagraphs (C) and (D), respectively. See proposed Rule 6.18(b)(iv)(C) and (D).

allow trading in its exclusively-licensed and/or proprietary products<sup>11</sup> in an exclusively floor-based environment via open outcry to preserve the Exchange's ability to conduct business in those option classes.<sup>12</sup>

The Exchange has also proposed to adopt new Rule 6.18(e), which would provide that, if there is a systems disruption or malfunction, security intrusion, systems compliance issue, or other unusual circumstances, the Exchange could temporarily deactivate certain systems or systems functionalities that are not essential to conducting business on the Exchange in accordance with the Rules or, if necessary, to maintain fair and orderly markets or to protect investors.<sup>13</sup> The Exchange would notify market participants of any such deactivation and subsequent reactivation promptly and in a reasonable manner determined by the Exchange.<sup>14</sup>

Finally, the Exchange has proposed to adopt new Rule 6.18(f), which would allow the Exchange to temporarily restrict a Trading Permit Holder's or associated person's access to the Hybrid Trading System or other electronic trading systems if the President (or senior-level

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<sup>11</sup> According to the Exchange, its current proprietary and exclusively-licensed products include options on CBOE Volatility Index (VIX) futures, the S&P 500 (SPX and XSP) Index, S&P Dow Jones Indexes (OEX, XEO and DJX), Russell 2000 (RUT) Index, FTSE Emerging Index (FTEM/EMS), MSCI Emerging Markets Index (MXEF), and the MSCI EAFE Index (MXEA). The Exchange will maintain a current list of all proprietary and exclusively-licensed options products on its website. See Notice, supra note 3, at 26826 n. 8. The Exchange explained that options exclusively-listed on the Exchange may include options also listed on other CBOE Holdings Inc. affiliated exchanges, including C2 Options Exchange, Incorporated ("C2"), and that currently RUT is listed on CBOE and C2. See Notice, supra note 3, at 26826 n. 9.

<sup>12</sup> See proposed Rule 6.18(c). The proposal also would renumber existing subparagraph (c) of Rule 6.18 as subparagraph (d). See proposed Rule 6.18(d).

<sup>13</sup> See proposed Rule 6.18(e). The Exchange stated that such systems and systems functionalities that are non-essential to conducting business on the Exchange include, but are not limited to, Public Automated Routing ("PAR") workstations, the Automated Improvement Mechanism ("AIM"), and the Solicitation Auction Mechanism ("SAM"). See Notice, supra note 3, at 26827-28.

<sup>14</sup> See proposed Rule 6.18(e).

designee)<sup>15</sup> of the Exchange determines that, because of a systems issue, such access threatens the Exchange's ability to operate systems essential to the maintenance of fair and orderly markets.<sup>16</sup> The Exchange would continue to restrict such access until: (1) the end of the trading session; or (2) an earlier time if the President (or senior-level designee) of the Exchange, in consultation with the affected Trading Permit Holder, determines that lifting the restriction no longer poses a threat to the Exchange's ability to operate systems essential to conducting business or continuing to maintain a fair and orderly market on the Exchange or poses a threat to investors.<sup>17</sup> In the Notice, the Exchange also represented that it would make efforts to contact the affected Trading Permit Holder immediately before or contemporaneously with the restriction of access to the extent possible while protecting the Exchange's ability to operate systems essential to the maintenance of fair and orderly markets.<sup>18</sup>

### III. Discussion and Commission Findings

After careful review, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.<sup>19</sup> In particular, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,<sup>20</sup> which requires, among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and

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<sup>15</sup> According to the Exchange, a designee would make determinations under this subsection only in the President of the Exchange's absence and the designee would be a senior executive (*i.e.*, Vice President or above) of the Exchange. See Notice, supra note 3, at 26828 n. 23.

<sup>16</sup> See proposed Rule 6.18(f).

<sup>17</sup> See id.

<sup>18</sup> See Notice, supra note 3, at 26828 n. 22.

<sup>19</sup> In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>20</sup> 15 U.S.C. 78f(b)(5).

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. The Commission also finds that the proposed rule change is consistent with Section 6(b)(7) of the Act,<sup>21</sup> which requires, among other things, that the rules of a national securities exchange provide a fair procedure for the prohibition or limitation by the exchange of any person with respect to access to services offered by the exchange or a member thereof.

The Commission believes that the proposed rule change will provide the Exchange with additional tools to help ensure continuous operation of the Exchange and its core systems in the event of a significant systems failure or other unusual circumstances that threaten the Exchange's ability to operate its systems, maintain fair and orderly markets, and protect investors. The Commission notes that the authority provided by the proposed provisions is limited to circumstances where the Exchange is experiencing a disruption to its primary, or primary and back-up, electronic systems, or where the Exchange believes it is in imminent danger of experiencing such disruption. Further, the Commission notes that, according to the Exchange, in accordance with Rule 1001(a)(2)(v) of Regulation SCI, the Exchange maintains written policies and procedures reasonably designed to ensure that its trading systems, including its primary and back-up data centers, have levels of capacity, integrity, resiliency, availability, and security adequate to maintain the Exchange's operational capability and promote the maintenance of fair and orderly markets, including, but not limited to, business continuity and disaster recovery plans

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<sup>21</sup> 15 U.S.C. 78f(b)(7).

that are reasonably designed to achieve next two-hour resumption of its critical SCI systems, as defined in Rule 1000 of Regulation SCI.<sup>22</sup> Further, the Exchange represents that its business continuity and disaster recovery standards are reasonably designed to achieve two-hour resumption of all trading systems that are essential to conducting business on the Exchange, and that the Exchange believes that its standards are reasonably designed to support resumption in a significantly shorter amount of time.<sup>23</sup> As such, the Commission expects that the Exchange would invoke the disaster recovery provisions in this proposed rule change only in rare and unusual circumstances and only for very limited periods of time.

The Commission believes that the Exchange's ability, during use of the back-up system, to invoke pre-determined heightened quoting obligations for Designated BCP/DR Participants that are Market-Makers (or Lead Market-Makers) in their appointed classes, or prevent them from dropping their appointments intraday, may help to ensure that such Designated BCP/DR Participants contribute to, and continue to help ensure, the maintenance of fair and orderly markets in the event of a disaster or other serious circumstances causing the Exchange to operate out of its back-up data center. Moreover, the Commission notes that such additional requirements will be imposed only on Designated BCP/DR Participants, which are market participants that the Exchange has determined that, taken as a whole, are necessary for the maintenance of fair and orderly markets in the event of the activation of the Exchange's business continuity and disaster recovery plans pursuant to Regulation SCI.<sup>24</sup> The Commission believes that, through the adoption of this rule, Designated BCP/DR Participants will be on notice that they might be called upon to meet heightened quoting obligations up to the levels currently

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<sup>22</sup> See Notice, supra note 3, at 26827 n. 12.

<sup>23</sup> See id.

<sup>24</sup> See Notice, supra note 3, at 26826 n. 7.

required for Designated Primary Market-Makers in CBOE Rule 8.85(a)<sup>25</sup> during unusual circumstances when the back-up data center is in use and notes that the Exchange would provide specific notice prior to invoking this new authority. The Commission further notes that, as described above, Regulation SCI requires the Exchange to have business continuity and disaster recovery plans reasonably designed to achieve two-hour resumption of critical SCI systems and next business day resumption of trading,<sup>26</sup> and the Exchange represented that its procedures are reasonably designed to achieve two-hour resumption of all trading systems that are essential to conducting business on the exchange and that they are designed to support resumption in a significantly shorter amount of time.<sup>27</sup> As such, the additional requirements imposed by this provision should be in effect for relatively short periods of time if they are ever invoked. In addition, to the extent the Exchange invokes this authority when necessary to support fair and orderly markets when its systems are in back-up mode, then the additional requirements may help support quote activity during a disruption and thereby may help protect investors and the public interest.

The Commission believes that the Exchange's ability to temporarily operate in an exclusively floor-based environment via open outcry in certain proprietary and exclusively-licensed products if the Exchange's primary and back-up data centers become inoperable or otherwise unavailable could help ensure that the market for these securities would continue to be available and functioning, which should protect investors by providing the ability to continue to

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<sup>25</sup> These heightened quoting obligations could include providing continuous electronic quotes in up to the lesser of 99 percent of the non-adjusted option series or 100 percent of the non-adjusted option series minus one call-put pair in classes in which the Designated BCP/DR Participant is already an appointed LMM or Market-Maker. See supra note 9.

<sup>26</sup> 17 CFR 242.1001(a)(v).

<sup>27</sup> See supra notes 22-23 and accompanying text.

trade these products until such time as the Exchange can resume normal trading. The Commission notes that this provision would be invoked only if the Exchange's primary and back-up data centers were both inoperable or otherwise unavailable due to a significant systems failure, disaster, or other unusual circumstances, and will only apply to the Exchange's exclusively-licensed and proprietary products, which only trade on CBOE and, in some instances, its affiliated exchanges. The Commission notes that the period of operation for this exclusively floor-based environment should be minimal based on Regulation SCI's requirements and the Exchange's two-hour resumption standard for its trading systems.<sup>28</sup>

The Commission believes that the Exchange's ability to temporarily deactivate certain non-core systems or systems functionalities in the event of a systems disruption or malfunction, security intrusion, systems compliance issue, or other unusual circumstances could help prevent systems issues from spreading and potentially causing harm to investors or impeding the Exchange's ability to maintain fair and orderly markets. The Commission notes that this authority will only extend to those systems not essential to conducting business on the Exchange. The Commission further notes that the new rule provides that the Exchange will notify market participants of any such deactivation and any subsequent reactivation promptly.

The Commission believes that the Exchange's ability to temporarily restrict a Trading Permit Holder's or associated person's access to the Hybrid Trading System or other electronic trading system as provided in the rule is designed to allow the Exchange to prevent a Trading Permit Holder's systems issues from spreading across the Exchange's systems and potentially causing a more widespread problem implicating the Exchange's ability to maintain fair and orderly markets and thus potentially impacting other market participants. The Commission

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<sup>28</sup> See supra notes 26 and 27 and accompanying text.

believes that this connectivity restriction is consistent with Section 6(b)(7) of the Act,<sup>29</sup> as the proposed limitation on access is exceptionally limited in duration and the rule provides a fair procedure for imposing such restrictions. Specifically, the Commission notes that the Exchange's authority under this provision is limited to when, due to a systems issue, a Trading Permit Holder's activity poses a present threat to the Exchange's ability to operate systems essential to maintaining a fair and orderly market. The Commission also notes that the decision to restrict access would be made by the highest levels of Exchange management, namely the President (or his or her senior-level designee), and this restriction would be temporary, lasting only until the end of the trading session or such earlier time that it is determined by the President, in consultation with the affected Trading Permit Holder, that the access no longer poses a threat. Consistent with the Exchange's representations, the Commission expects that the Exchange would make reasonable efforts to contact the affected Trading Permit Holder immediately before, or, if that is not possible, contemporaneously with, any restriction of access.<sup>30</sup>

Accordingly, for the reasons discussed above, the Commission believes that the Exchange's proposal is consistent with the Act.

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<sup>29</sup> 15 U.S.C. 78f(b)(7).

<sup>30</sup> See supra note 16 and accompanying text.

IV. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,<sup>31</sup> that the proposed rule change (SR-CBOE-2017-044) be, and hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>32</sup>

Eduardo A. Aleman  
Assistant Secretary

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<sup>31</sup> 15 U.S.C. 78s(b)(2).

<sup>32</sup> 17 CFR 200.30-3(a)(12).

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