

SECURITIES AND EXCHANGE COMMISSION  
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July 1, 2015

Self-Regulatory Organizations; Chicago Stock Exchange, Inc.; Notice of Filing of Proposed Rule Change to Implement CHX SNAP<sup>SM</sup>, an Intra-day and On-demand Auction Service

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 June 23, 2015, the Chicago Stock Exchange, Inc. (“CHX” or “Exchange”) 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 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

CHX proposes to adopt and amend rules to implement CHX SNAP<sup>SM</sup>, an intra-day and on-demand auction service. The text of this proposed rule change is available on the Exchange’s website at [http://www.chx.com/rules/proposed\\_rules.htm](http://www.chx.com/rules/proposed_rules.htm), at the principal office of the Exchange, 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 self-regulatory organization 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 those statements may be examined at the

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

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

places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B and C below, of the most significant parts of such statements.

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

1. Purpose

The Exchange proposes to adopt and amend rules to implement CHX SNAP<sup>SM</sup> (Sub-second Non-displayed Auction Process), an innovative intra-day and on-demand auction service that could occur numerous times throughout a regular trading session<sup>3</sup> at the request of Participants seeking to trade securities in bulk. SNAP Cycles are designed to transition seamlessly from, and back to, automated trading in the subject security, and to occur simultaneously with automated trading in the subject security elsewhere in the national market system. SNAP is designed to address a specific market need for bulk trading of securities on an exchange, which will operate efficiently within the national market system.

On June 5, 2014, Chair White noted, among other things, that a key question concerning trading venues is whether they have sufficient opportunity and flexibility to innovate successfully with initiatives that seek to deemphasize speed as a key to trading success in order to further serve the interests of investors.<sup>4</sup> Chair White specifically noted possible solutions to include frequent batch auctions designed to minimize speed advantages.<sup>5</sup>

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<sup>3</sup> CHX Article 20, Rule 1(b) provides that the “regular trading session – shall begin at 8:30 a.m. and shall end at 3:00 p.m. each day for all securities.” All times are in central time, unless noted otherwise.

<sup>4</sup> See Mary Jo White, Chair, Securities and Exchange Commission, Speech at Sandler O’Neil & Partners L.P. Global Exchange and Brokerage Conference (June 5, 2014).

<sup>5</sup> See id.

Consistent with Chair White’s statement, the Exchange proposes SNAP, an innovative solution that deemphasizes speed as a hallmark of its functionality, which will operate consistently with Regulation NMS<sup>6</sup> and Rule 201 of Regulation SHO or applicable exemptive relief.<sup>7</sup> As discussed in detail below, the SNAP Cycle has several characteristics specifically designed to minimize speed advantages, which include, among other things, the following:

- SNAP Cycles will never be scheduled and will always be driven by market demand for bulk trading in a security.
- The order acceptance period for SNAP Eligible Orders will always be randomized.
- Order cancellations during a SNAP Cycle will be prohibited.
- New order modifiers, such as SNAP Auction Only Order – Pegged, will permit market participants to take advantage of the most recent market data in competitively pricing their SNAP Eligible Orders, regardless of their respective speed capabilities.

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<sup>6</sup> 17 CFR 242.611.

<sup>7</sup> 17 CFR 242.201. As discussed in detail below, SNAP executions may be delayed up to 200 milliseconds from the market snapshot utilized for determining the single auction price (i.e., SNAP Price), if the SNAP Price would require, among other things, the routing of one or more orders to away markets for Rule 611 of Regulation NMS compliance purposes. See infra Section 5. The purpose of the routing delay is to give away markets sufficient time to respond to the routed orders, so that any unexecuted routed orders would be included in the SNAP execution within the Matching System. However, the SNAP execution delay may render the national best bid ascertained from the aforementioned market snapshot no longer “current,” as required during a short sale price test restriction in a covered security, pursuant to Rule 201(b)(1)(i) of Regulation SHO. Accordingly, the Exchange will be submitting separately a request for no-action relief or exemptive relief from certain requirements of Rule 201 of Regulation SHO to address this issue.

As such, the Exchange proposes to adopt Article 18, Rule 1 (SNAP) to outline the proposed SNAP Cycle; amend Article 1, Rule 2 (Order Types, Modifiers and Related Terms) to adopt several new order modifiers related to SNAP; and amend Article 20, Rule 8 (Operation of the Matching System) to support a new order ranking plan for SNAP executions. The Exchange also proposes to amend various other rules to harmonize with SNAP.

#### SECTION 1: SNAP Cycle – Generally

Proposed Article 18, Rule 1(a) provides a general overview of the scope of SNAP. Specifically, SNAP is a fully-hidden on-demand auction that may be initiated in a security (“subject security”) within the Matching System, pursuant to the provisions of proposed Article 18, Rule 1. Participants that submit valid limit orders marked Start SNAP will initiate a SNAP Cycle and, thus, SNAP Cycles are always on-demand and never scheduled or initiated by the Exchange.<sup>8</sup> Also, the entire SNAP Cycle is designed to be completed in less than one second. Except for specified time frames noted in the proposed rules, all other processes in the SNAP Cycle are virtually instantaneous.<sup>9</sup>

In addition, SNAP Cycles may only occur during the regular trading session, but may occur more than once during a regular trading session and may occur in different securities concurrently.<sup>10</sup> However, during a SNAP Cycle, automated trading in the subject security shall be suspended. It is important to note that the Exchange operates only one book and, thus, automated execution of orders in a subject security will never occur simultaneously with a SNAP

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<sup>8</sup> See infra Sections 3 and 5.

<sup>9</sup> See infra Section 5.

<sup>10</sup> See supra note 3.

Cycle in the same security. However, given the fundamental differences between automated execution of orders and auctions, as discussed in detail below, the Exchange proposes a distinction between the CHX book during the Open Trading State<sup>11</sup> and the CHX book during a SNAP Cycle (“SNAP CHX book”).

The Exchange also reserves the right to enable or disable SNAPs, per security, pursuant to notice to its Participants. On initial operation, the Exchange anticipates making the SNAP functionality available for all securities that are traded within the Matching System.<sup>12</sup>

In sum, the SNAP Cycle is comprised of the following five stages detailed under proposed Article 18, Rule 1(b), all of which are discussed comprehensively under Section 5 and illustrated through numerous examples under Section 6:

- Stage One: Initiating the SNAP Cycle.
- Stage Two: SNAP Order Acceptance Period.
- Stage Three: Pricing and Satisfaction Period.
- Stage Four: Order Matching Period.
- Stage Five: Transition to the Open Trading State.

## SECTION 2: Proposed Defined Terms

The Exchange proposes new defined terms related to SNAPs. Proposed Article 1, Rule 1(qq) defines “Open Trading State,” as the period of time during the regular trading session

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<sup>11</sup> See infra Section 2.

<sup>12</sup> Any changes to the list of SNAP eligible securities shall be announced via Information Memorandum and shall be effective no sooner than the trading day after the Information Memorandum has been issued.

when orders are eligible for automatic execution.<sup>13</sup> As discussed in detail below, the SNAP Cycle and the Open Trading State are mutually exclusive in a subject security as the automated trading of securities in a subject security is always suspended during the SNAP Cycle in the same security.

Proposed Article 1, Rule 1(rr) defines “SNAP Price” as a single price at which the greatest number of shares may be executed during a SNAP Cycle, as described under proposed Article 18, Rule 1(b), without trading-through any more aggressively priced orders on either side of the market, in compliance with all CHX Rules and relevant securities laws and regulations, including Regulation NMS<sup>14</sup> and Rule 201 of Regulation SHO, and any applicable exemptive relief therefrom;<sup>15</sup> provided the following:

(1) Where two or more price points are identified above, the SNAP Price shall be the price closest to the last reported sale in the security from the same trading day that was not permitted to trade-through the National Best Bid and Offer (“NBBO”) at the time the last sale was executed (“eligible same day last sale”). Where two or more price points are equally close to the eligible same day last sale price, the SNAP Price shall be the eligible same day last sale price.

(2) If an eligible same day last sale cannot be ascertained, pursuant to proposed paragraph (rr)(1) above, the SNAP Price shall be the price closest to the NBBO midpoint.

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<sup>13</sup> See supra note 3; see also supra note 7.

<sup>14</sup> 17 CFR 242.611.

<sup>15</sup> 17 CFR 242.201; see supra note 7.

Where two or more price points are equally close to the NBBO midpoint, the SNAP Price shall be the NBBO midpoint.

As discussed in detail below, the SNAP Price will only be determined after the SNAP CHX book has been established during the stage three Pricing and Satisfaction Period and the SNAP Price will always be based on a single market snapshot in the subject security at the time the SNAP Price is determined.<sup>16</sup> Example 6 below illustrates the process for determining the SNAP Price.<sup>17</sup>

Proposed Article 1, Rule 1(ss) defines “SNAP Eligible Order” as a limit order, as defined under Article 1, Rule 2(a)(1), not marked by, or handled as, any one of the following modifiers:

- (1) Cancel On SNAP, as defined under proposed Article 1, Rule 2(h)(4).
- (2) Fill Or Kill, as defined under Article 1, Rule 2(d)(2).
- (3) Immediate Or Cancel (“IOC”), as defined under Article 1, Rule 2(d)(4).
- (4) Start SNAP, as defined under proposed Article 1, Rule 2(h)(1), except where the limit order marked Start SNAP is eligible for SNAP AOO – One And Done handling, pursuant to proposed Article 1, Rule 2(h)(1)(B).<sup>18</sup>

In sum, aside from modifiers that require the immediate execution or cancellation of the order (i.e., Fill Or Kill and IOC) or explicitly prohibit the order from participating in SNAPs (i.e., Cancel On SNAP or Start SNAP), all other limit orders shall be considered SNAP Eligible

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<sup>16</sup> See infra Section 4.

<sup>17</sup> See infra Section 6.

<sup>18</sup> See infra Section 3.

Orders.<sup>19</sup> Moreover, to ensure that modifiers attached to SNAP Eligible Orders do not conflict with the SNAP Cycle, the Exchange proposes to deactivate certain modifiers for the subject security during the SNAP Cycle, pursuant to proposed Article 18, Rule 1(b)(2)(D).<sup>20</sup>

### SECTION 3: Proposed Orders Modifiers Related to SNAP

The Exchange proposes to adopt the following new limit order modifiers related to SNAP, which are listed and defined under proposed Article 1, Rule 2(h):

- Start SNAP, under proposed paragraph (h)(1);
- Cancel On SNAP, under proposed paragraph (h)(2);
- SNAP Auction Only Order (“SNAP AOO”) – Day, under paragraph (h)(3)(A);
- SNAP AOO – One And Done, under paragraph (h)(3)(B); and
- SNAP AOO - Pegged, under paragraph (h)(3)(C).

Proposed Article 1, Rule 2(h) provides that the valid use of a modifier is subject to the modifier being compatible with other applicable order modifiers or terms related to the order. The compatibility of the order modifier with other modifiers is either explicitly noted in the definition of the proposed modifier or implied by the definition itself.

Proposed paragraph (h)(1) defines “Start SNAP” as a limit order modifier that -1- initiates a SNAP Cycle in a specified security, as described under proposed Article 18, Rule 1(b), if the limit order marked Start SNAP meets the requirements of proposed subparagraph (A) or, -2- joins a SNAP Cycle in progress, if it does not meet the requirements of proposed

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<sup>19</sup> Cross and market orders are never SNAP Eligible Orders as cross orders are always handled IOC and market orders are required to be marked IOC. See CHX Article 1, Rule 2(a)(2) and (3).

<sup>20</sup> See infra Section 4.

subparagraph (A), but meets the requirements of proposed subparagraph (C). Also, a limit order marked Start SNAP is not executable during the Open Trading State, as defined under proposed Article 1, Rule 1(qq). Consequently, a limit order marked Start SNAP will never be permitted to post to the CHX book or be executed otherwise than during a SNAP Cycle. A limit order marked Start SNAP that does not meet the requirements of either proposed subparagraph (A) or (C) shall be cancelled.

Thereunder, proposed subparagraph (A) details the requirements for a limit order marked Start SNAP to initiate a SNAP Cycle. If the limit order marked Start SNAP does not meet all of the conditions under proposed subparagraph (A), the limit order marked Start SNAP will be cancelled, unless it meets the requirements for special handling pursuant to proposed subparagraph (C).

Proposed subparagraph (A)(i) provides that a limit order marked Start SNAP must meet the following minimum size requirement attributed to its limit price; provided, however, that certain issues specified below have special minimum size requirements:

<b>Limit Price</b>		<b>Minimum Size</b>
<b>From</b>	<b>To</b>	
0.0001	0.9999	100,000
1.00	4.99	50,000
5.00	24.99	25,000
25.00	49.99	20,000
50.00	99.99	10,000
100.00	499.99	5,000
500.00	----	2,500

<b>Special Issue</b>	<b>Minimum Size</b>
Berkshire Hathaway, Inc. (BRK-A) <sup>21</sup>	100

Proposed subparagraph (A)(ii) details the pricing requirement of the limit order marked Start SNAP. Specifically, the limit price of the buy (sell) order marked Start SNAP must be priced at or through the National Best Offer (National Best Bid) at the time the order was received by the Matching System. That is, the limit order marked Start SNAP must be priced at the market or more aggressively. The Exchange believes that this pricing requirement will maximize the size of the SNAP execution by encouraging aggressive pricing. In light of this

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<sup>21</sup> The Exchange believes it necessary and appropriate to establish a special minimum size requirement for BRK-A, due to its exceptionally high market value and special round lot size.

aggressive pricing requirement, a SNAP Cycle will not be initiated if the National Best Bid and Offer (“NBBO”) in the subject security is crossed or a two-sided NBBO does not exist at the time the limit order marked Start SNAP is received by the Matching System.

Proposed subparagraph (A)(iii) details the timing requirement of the limit order marked Start SNAP. Specifically, a limit order marked Start SNAP will only initiate a SNAP Cycle if it is received during the regular trading session; provided, however, that it will not initiate a SNAP if it is received (a) within five minutes of the first two-sided quote in the subject security having been received by the Exchange from the primary market disseminated after either the beginning of the regular trading session or after a halt or pause that required the Exchange to suspend trading in the subject security; (b) within five minutes of the end of the regular trading session; (c) during a SNAP Cycle; or (d) within one minute after the completion of the previous SNAP Cycle. With respect to proposed subparagraph (A)(iii)(a), the Exchange believes that requiring five minutes to have passed after the dissemination of the first two-sided quote from the primary market in the subject security before permitting a SNAP Cycle to be initiated is necessary to ensure that sufficient time has passed for the market in the subject security to have been established.

Proposed subparagraph (A)(iv) provides a general condition that a SNAP Cycle shall not be initiated if the CHX Routing Services, the Exchange’s outbound routing service, is not operational.<sup>22</sup> Given the aggressive pricing requirement for limit orders marked Start SNAP, it is possible that one or more orders would have to be routed away to execute against contra-side Protected Quotations of external markets for purposes of Regulation NMS compliance. Thus, the

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<sup>22</sup> See CHX Article 19, Rule 1.

Exchange proposes to prohibit a SNAP Cycle from initiating when outbound routing is not available at time of receipt of a limit order marked Start SNAP.<sup>23</sup>

Proposed subparagraph (B) provides an optional minimum SNAP execution size condition that may be selected by the Participant that submitted the limit order marked Start SNAP. Specifically, an order sender may instruct that the SNAP Cycle be cancelled, without any executions, if the sum -1- of the minimum number of shares that may be executed within the Matching System at the SNAP Price, as defined under proposed Article 1, Rule 1(rr), and -2- the number of shares that would be routed away, pursuant to proposed Article 19, Rule 3(a)(4) and (5), is less than the minimum number of shares required for the Start SNAP order to have initiated the current SNAP Cycle, pursuant to proposed subparagraph (A)(i). The optional minimum size condition provides the Start SNAP order sender with a tool to minimize information leakage concerning orders that participated in the SNAP. That is, without a minimum size condition, the Participant that submitted the limit order marked Start SNAP may give up crucial information concerning its order, without receiving the benefit of a substantial execution. Thus, the minimum size condition is intended to minimize the probability and magnitude of such information leakage.

Proposed subparagraph (C) provides a default handling for a limit order marked Start SNAP that does not meet the requirements to initiate a SNAP Cycle. Specifically, by default, a limit order marked Start SNAP that does not meet the requirements of proposed subparagraph (A) and is received by the Matching System during a SNAP Order Acceptance Period, as

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<sup>23</sup> Moreover, a SNAP Cycle that was initiated may be aborted prior to order matching at the SNAP Price, if the CHX Routing Services are unavailable at the time the SNAP Price is to be determined. See infra Section 5.

described under proposed Article 18, Rule 1(b)(2), shall be handled as SNAP AOO – One And Done, as defined under proposed paragraph (h)(3)(B), and join the SNAP Cycle in progress. This default handling addresses the scenario, among others, where two or more limit orders marked Start SNAP are received by the Matching System at nearly the same time. Additionally, an order sender may instruct that the limit order marked Start SNAP not be subject to this special handling even if eligible.

Proposed paragraph (h)(2) defines “Cancel On SNAP,” which is a limit order modifier that requires the order to be cancelled upon initiation of a SNAP Cycle or cancelled upon receipt if received during a SNAP Cycle. Thus, resting orders marked Cancel On SNAP will be cancelled immediately after acceptance of a valid limit order marked Start SNAP and incoming orders marked Cancel On SNAP will be cancelled by the Matching System if received during a SNAP Cycle.<sup>24</sup> Thus, Cancel On SNAP is similar to the current Cancel On Halt modifier, defined under Article 1, Rule 2(b)(1)(B), which requires the order to be cancelled if a trading halt or suspension is declared in the security.

Proposed paragraph (h)(3) details the three proposed SNAP AOO modifiers. SNAP AOOs are limit orders marked by, or handled as, SNAP AOO – One And Done; SNAP AOO – Day; or SNAP AOO - Pegged.<sup>25</sup> As the name suggests, SNAP AOOs shall not be active during

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<sup>24</sup> An order marked Cancel On SNAP that is cancelled upon initiation of a SNAP Cycle or upon receipt during a SNAP Cycle is not a voluntary cancellation for the purposes of the Order Cancellation Fee and are excluded from the Order Cancellation Fee computation. See CHX Fee Schedule Section E.8.

<sup>25</sup> As currently proposed, the only orders that would be handled as a SNAP AOO, even if it not marked with an SNAP AOO modifier, would be limit orders marked Start SNAP, pursuant to Article 1, Rule 2(h)(1)(C), as described above. A limit order marked by any of the SNAP AOO modifiers will always be handled as a SNAP AOO.

the Open Trading State. Also, SNAP AOOs shall only be accepted from the beginning of the early session to five minutes prior to the end of the regular trading session.<sup>26</sup> Upon receipt by the Exchange, all valid SNAP AOOs are either queued or immediately ranked, as described under proposed Article 20, Rule 8(b)(2)(A), as discussed in detail below.<sup>27</sup>

Moreover, all SNAP AOOs must meet the below minimum size requirement at the time of original receipt associated with its corresponding SNAP AOO Reference Price, provided, however, that certain issues specified below have special minimum size requirements.<sup>28</sup> If there is no special minimum size requirement noted for a security, the SNAP AOO Reference Price shall be the last sale in the subject security that was not permitted to trade-through the NBBO at the time the last sale was executed.<sup>29</sup> If a SNAP AOO Reference Price cannot be determined (i.e., there is no last sale in the security), the SNAP AOO shall be cancelled. The following represents the SNAP AOO Reference Prices and the corresponding minimum size requirement:

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<sup>26</sup> CHX Article 20, Rule 1(b) provides that the “early session – shall begin at 6:00 a.m. and shall end at 8:30 a.m.” All times are in central time, unless noted otherwise. See supra note 3.

<sup>27</sup> Invalid SNAP AOOs (e.g., received after the end of the regular trading session) would be rejected. See infra Sections 4 and 5.

<sup>28</sup> SNAP AOOs that are queued upon receipt may also be re-queued, as discussed below. Thus, re-queued SNAP AOOs may be smaller than the minimum size, due to partial executions. See infra Sections 4 and 5.

<sup>29</sup> Compare proposed Article 1, Rule 1(rr), which has an additional requirement that the last sale be from the same trading day.

SNAP AOO Reference Price		Minimum Size
From	To	
0.0001	0.9999	10,000
1.00	4.99	5,000
5.00	24.99	2,500
25.00	49.99	2,000
50.00	99.99	1,000
100.00	499.99	500
500.00	----	250

Special Issues	Minimum Size
Berkshire Hathaway, Inc. (BRK-A) <sup>30</sup>	10

By pegging the SNAP AOO Reference Price to the last reported sale in the subject security, as opposed to the limit price of the SNAP AOO, order senders are discouraged from submitting hypermarketable SNAP AOOs in order to qualify for a lower minimum size tier. Moreover, the requirement that the last reported sale in the subject security not have been permitted to trade-through the NBBO at the time it was executed, such as Benchmark,<sup>31</sup> would better reflect the actual market price of the subject security.

<sup>30</sup> See supra note 21.

<sup>31</sup> See CHX Article 1, Rule 2(b)(2)(A).

Thereunder, proposed subparagraph (A) defines “SNAP AOO – Day” as a limit order modifier that requires the order to only participate in the next SNAP Cycle for which it is eligible and every SNAP Cycle thereafter for the remainder of the trading session until fully-executed or cancelled. Mechanically, the unexecuted balance of a limit order marked SNAP AOO – Day will be re-queued based on its original time of receipt and would be re-ranked in the SNAP CHX book during the next SNAP Cycle, pursuant to proposed Article 20, Rule 8(b)(2)(A).<sup>32</sup>

Proposed subparagraph (B) defines “SNAP AOO – One And Done” as a limit order modifier that requires the order to only participate in the next SNAP Cycle for which it is eligible with any unexecuted remainder to be cancelled; provided, however, that if the SNAP Cycle in which the limit order marked SNAP AOO – One And Done was participating was aborted prior to the stage three Pricing and Satisfaction Period, the order shall be re-queued pursuant to proposed Article 20, Rule 8(b)(2)(A), and not cancelled. Thus, unlike limit orders marked SNAP AOO – Day, which may be re-queued for any reason if an unexecuted balance exists, limit orders marked SNAP AOO – One And Done are only eligible to participate in one SNAP Cycle and may only be re-queued if the SNAP Cycle in which it was participating was aborted prior to the stage three Pricing and Satisfaction Period.

Proposed subparagraph (C) defines “SNAP AOO – Pegged” as a limit order modifier only available for orders marked SNAP AOO – Day or SNAP AOO – One And Done, that requires the order to be priced at the less aggressive of an optional limit price or mandatory offset price from the NBBO ascertained from the market snapshot taken pursuant to proposed

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<sup>32</sup> See infra Sections 4 and 5.

Article 18, Rule 1(b)(2)(E). An order sender that submits a limit order marked SNAP AOO - Pegged must specify one of the following proposed pricing options.

- (i) Midpoint. Priced at the midpoint of the NBBO or the locking price if the NBBO is locked. If the NBBO is crossed, the order shall not participate in the instant SNAP Cycle, even if there is an optional limit price indicated.
- (ii) Market. A buy (sell) order shall be priced at, or a specified offset below or above, the NBO (NBB).
- (iii) Primary. A buy (sell) order shall be priced at, or a specified offset below or above, the NBB (NBO).

Unlike non-auction pegged orders, which the Exchange does not currently offer, limit orders marked SNAP AOO – Pegged do not continuously track changes to the NBBO, but rather, are priced once per SNAP Cycle based on a single market snapshot taken immediately prior to the stage three Pricing and Satisfaction Period, as discussed in detail below.<sup>33</sup>

#### SECTION 4: Proposed SNAP CHX book and SNAP AOO Queue

The SNAP CHX book will be used to establish the SNAP Price and execution priority for participating SNAP Eligible Orders with Working Prices<sup>34</sup> at and more aggressive than the

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<sup>33</sup> See infra Section 5.

<sup>34</sup> Incidentally, the Exchange proposes to amend current Article 1, Rule 1(pp) to expand and clarify the definition of “Working Price.” Specifically, amended Article 1, Rule 1(pp) provides that Working Price means the most aggressive price at which a limit order, as opposed to the current “resting” limit orders, can execute within the Matching System, in compliance with CHX Rules and relevant securities laws and regulations, including Rule 611 of Regulation NMS and Rule 201 of Regulation SHO, and any applicable exemptive relief therefrom. See supra note 7.

SNAP Price.<sup>35</sup> Thus, the Exchange proposes to amend Article 20, Rule 8(b) (Ranking and display of orders) to adopt a distinction between the current ranking of orders on the CHX book, the proposed ranking of orders on the SNAP CHX book and the proposed queuing of certain SNAP AOO orders on the SNAP AOO Queue that would not be ranked on receipt.

Current Article 20, Rule 8(b) provides that all orders accepted by the Matching System that will post to the CHX book shall be ranked at each price point up or down to its limit price by display status then sequence number. Thereunder, current Rule 8(b)(1)-(3) outline the three display status pools according to priority on the CHX book as follows:

- Fully-displayable orders and displayed portions of Reserve Size orders, under paragraph (b)(1);<sup>36</sup>
- Undisplayed portion of Reserve Size orders, under paragraph (b)(2); and
- Orders marked Do Not Display, under paragraph (b)(3).<sup>37</sup>

The Exchange now proposes to amend Article 20, Rule 8(b) to expand the scope of the rules thereunder and to clarify the execution priority of resting orders on the CHX book. Specifically, amended Article 20, Rule 8(b) provides that orders shall be ranked and displayed as follows. Thereunder, proposed Rule 8(b)(1) provides that otherwise than during a SNAP Cycle, as described under proposed Article 18, Rule 1(b), orders that may post to the CHX book shall

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<sup>35</sup> As noted above, the Exchange only operates one book. The SNAP CHX book merely reflects the reprioritizing of orders for the purposes of the SNAP Cycle and is not an independent book of orders maintained in addition to the regular CHX book. See supra Section 1.

<sup>36</sup> See CHX Article 1, Rule 2(c)(3) defining “Reserve Size.”

<sup>37</sup> See CHX Article 1, Rule 2(c)(2) defining “Do Not Display.”

be executable in Working Price/display status/sequence number priority<sup>38</sup> and shall be ranked on the CHX book as described under proposed subparagraphs (A) – (C), which mirrors current Article 20, Rule 8(b)(1) – (3), respectively, but for amendments to certain cross-references affected by the proposed rule change.

Proposed Rule 8(b)(2) provides that the following orders shall not be ranked on the CHX book upon receipt, but shall be queued until ranked as follows. Thereunder, proposed subparagraph (A) describes the SNAP AOO Queue, which provides that valid SNAP AOOs, as defined under proposed Article 1, Rule 2(h)(3), shall be queued in the order in which they were originally received; provided, however, that SNAP AOOs not marked SNAP AOO - Pegged received during a SNAP Order Acceptance Period shall be immediately ranked on the SNAP CHX book upon receipt and not queued.<sup>39</sup> All SNAP AOOs shall be ranked on the SNAP CHX book, pursuant to proposed paragraph (b)(3)(E). Also, SNAP AOOs that are re-queued shall be re-queued based on time of original receipt.

Proposed Rule 8(b)(3) provides that during a SNAP Cycle, as described under proposed Article 18, Rule 1(b), orders shall receive execution priority as described under proposed Article 18, Rule 1(b)(4)(A)<sup>40</sup> and be ranked on the SNAP CHX book, as provided under proposed

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<sup>38</sup> Orders are currently executable in Working Price/display status/sequence number priority. See Exchange Act Release No. 73150 (September 19, 2014), 79 FR 57603 (September 25, 2014) (SR-CHX-2014-15) (“Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Adopt the CHX Routing Services”).

<sup>39</sup> As discussed below, SNAP AOOs marked SNAP AOO – Pegged can only be priced based on the market snapshot taken immediately after the end of the SNAP Order Acceptance Period, pursuant to proposed Article 18, Rule 1(b)(2)(E), and thus, cannot be ranked upon original receipt. See *infra* Section 5.

<sup>40</sup> See *infra* Section 5.

subparagraphs (A) – (E). In sum, all SNAP Eligible Orders ranked on the CHX book at the time a SNAP Cycle is initiated (“precedent orders”) shall maintain their priority in the SNAP CHX book, pursuant proposed subparagraphs (A) – (C). Following such precedent orders, the limit order marked Start SNAP that initiated the instant SNAP Cycle would be ranked, pursuant to proposed subparagraph (D). Finally, after the precedent orders and the limit order marked Start SNAP, SNAP AOOs and other SNAP Eligible Orders received during the SNAP Order Acceptance Period would be ranked by sequence number.

Examples 2-5 illustrate the process of creating the SNAP CHX book.<sup>41</sup> A discussion concerning SNAP Cycle order execution priority may be found below.<sup>42</sup>

#### SECTION 5: Proposed SNAP Cycle

##### Stage One: Initiating the SNAP Cycle

Upon the acceptance of a valid limit order marked Start SNAP, the Matching System shall begin the SNAP Cycle in the subject security, pursuant to proposed Article 18, Rule 1(b)(1), and take the following actions:

- Suspend automatic execution of orders in the subject security.
- Remove the Exchange’s Protected Quotation(s) in the subject security, if any.
- Notify the market that a SNAP Cycle in the subject security has begun.

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<sup>41</sup> See infra Section 6.

<sup>42</sup> See infra Section 5.

- Disseminate messages through the CHX Book Feed indicating that precedent orders on the CHX book in the subject security are no longer automatically executable.<sup>43</sup>
- Suspend dissemination of any other order information concerning the subject security through the CHX Book Feed.

Proposed Article 18, Rule 1(b)(1) describes how a SNAP Cycle is initiated. Specifically, a SNAP Cycle may be initiated upon acceptance by the Matching System of a valid limit order marked Start SNAP, as defined under proposed Article 1, Rule 2(h)(1), discussed in detail above. That is, a SNAP will only be initiated if all of the requirements of proposed Article 1, Rule 2(h)(1) are met. If a valid Start SNAP order is accepted by the Matching System, the Exchange shall only then immediately suspend automated matching of orders in the subject security and initiate the SNAP Cycle.

Thereunder, proposed subparagraph (A) provides that the Exchange will remove its Protected Quotation(s) in the subject security, if any, and will notify the market that a SNAP is taking place in the subject security.<sup>44</sup> Aside from the identity of the security subject to the SNAP, the Exchange will not disseminate any other information concerning the SNAP, including, but not limited to, the size, price or side of the Start SNAP order.

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<sup>43</sup> The CHX Book Feed is the Exchange's proprietary data feed, which allows subscribers to view all displayable orders in the Matching System, including the size and price associated with such orders and trade data for executions that occur within the Matching System. See CHX Article 4, Rule 1.

<sup>44</sup> As of the time of this filing, the Exchange anticipates that the SNAP Cycle notice will be achieved by a unique identifier that will be disseminated to the market through the relevant securities information processor at the time the Exchange removes its Protected Quotation(s) in the subject security and a message through the CHX Book Feed indicating that a SNAP Cycle is occurring in the subject security.

Incidentally, the Exchange proposes to amend Article 20, Rule 8(b)(6) to provide that the displayed CHX best bid and offer protocol shall be suspended during a SNAP Cycle, pursuant to proposed Article 18, Rule 1(b), and amend a citation to current “paragraph (b)(1)” to “paragraph (b)(1)(A),” as the citation has changed pursuant to this rule filing.<sup>45</sup>

Proposed subparagraph (B) provides that the Exchange shall submit messages through the CHX Book Feed to reflect that precedent orders previously disseminated through the CHX Book Feed are no longer automatically executable and that the Exchange will suspend dissemination of any other order information concerning the subject security. Any executions and cancellations that occur during the SNAP Cycle will continue to be reported immediately to the relevant Participant order sender(s). Similarly, any executions that occur during the SNAP Cycle will continue to be reported immediately to the relevant securities information processor and to clearing. However, information concerning displayable orders received, and cancellations and executions effected, during the SNAP Cycle shall not be disseminated through the CHX Book Feed for the remainder of the SNAP Cycle. Upon the restarting of the CHX Book Feed, pursuant to proposed Article 18, Rule 1(b)(5)(C), the Exchange shall only disseminate information concerning the displayable orders posted to the CHX book at the conclusion of the SNAP Cycle. Incidentally, the Exchange propose to amend current Article 4, Rule 1(a) to provide that the availability of the CHX Book Feed is subject to proposed Article 18, Rule 1(b).<sup>46</sup>

Example 2 below illustrates how the SNAP Cycle could be initiated.<sup>47</sup>

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<sup>45</sup> See supra Section 4.

<sup>46</sup> See supra note 43.

<sup>47</sup> See infra Section 6.

## Stage Two: SNAP Order Acceptance Period

Upon the initiation of the SNAP Cycle, the Matching System shall take the following actions, pursuant to proposed Article 18, Rule 1(b)(2):

- Begin the SNAP Order Acceptance Period.
- Begin establishing the SNAP CHX book.
- Begin the First In - First Out (“FIFO”) Queue for certain messages and orders received during the SNAP Cycle.

Proposed paragraph (b)(2) starts by providing that the SNAP Order Acceptance Period shall begin upon initiation of a SNAP Cycle and last approximately 475 to 525 milliseconds, the actual length of which will be randomized by the Matching System. By randomizing the exact length of the SNAP Order Acceptance Period, market participants would not be able to pinpoint exactly when the SNAP Order Acceptance Period would end, thereby minimizing speed advantages, which is one of the goals of the SNAP functionality.<sup>48</sup>

Proposed subparagraph (A) details how precedent resting orders would be handled upon the initiation of a SNAP Cycle. Specifically, subparagraph (A)(i) provides that SNAP Eligible Orders, as defined under proposed Article 1, Rule 1(ss), not marked SNAP AOO – Pegged, as defined under proposed Article 1, Rule 2(h)(3)(C), resting on the CHX book or SNAP AOO Queue, as described under proposed Article 20, Rule 8(b)(2)(A), prior to the initiation of the current SNAP Cycle, shall be ranked on the SNAP CHX book, pursuant to proposed Article 20, Rule 8(b)(3)(A) – (C) and (E), as applicable.<sup>49</sup> In turn, precedent SNAP AOOs marked SNAP

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<sup>48</sup> See infra Statutory Basis.

<sup>49</sup> See supra Section 4.

AOO - Pegged shall remain on the SNAP AOO Queue until ranked on the SNAP CHX book, pursuant to proposed paragraph (b)(3)(A).

SNAP AOO-Pegged orders are not ranked on the SNAP CHX book during the SNAP Order Acceptance Period because the limit price of SNAP AOO - Pegged orders can only be confirmed by the market snapshot immediately after the end of the SNAP Order Acceptance Period, pursuant to proposed Article 18, Rule 1(b)(2)(E).<sup>50</sup> In contrast, all other SNAP Eligible Orders, including SNAP AOOs not marked SNAP AOO - Pegged, have confirmed limit prices known at the time of original receipt, which enables such orders to be immediately ranked on the SNAP CHX book upon initiation of the SNAP Cycle or upon receipt if received during a SNAP Order Acceptance Period.

Proposed subparagraph (A)(ii) provides that the limit order marked Start SNAP that initiated the current SNAP Cycle shall be ranked on the SNAP CHX book, pursuant to proposed Article 20, Rule 8(b)(3)(D). Proposed subparagraph (A)(iii) provides that precedent non-SNAP Eligible Orders resting on the CHX book (i.e., limit orders marked Cancel On SNAP) shall be cancelled.

Proposed subparagraph (B) details how incoming orders received during the SNAP Cycle would be handled. Specifically, subparagraph (B)(i) provides that incoming SNAP Eligible Orders received during the SNAP Order Acceptance Period shall be immediately ranked on the SNAP CHX book, pursuant to proposed Article 20, Rule 8(b)(3)(E); provided, however, that SNAP AOOs marked SNAP AOO - Pegged shall be placed in the SNAP AOO Queue upon

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<sup>50</sup> See supra note 39.

receipt and shall only be ranked on the SNAP CHX book, pursuant to paragraph (b)(3)(A).<sup>51</sup> Incoming SNAP Eligible Orders received after the SNAP Order Acceptance Period has expired, but during a SNAP Cycle, shall not be eligible to participate in the current SNAP Cycle and shall be queued in the FIFO Queue, pursuant to proposed subparagraph (C). To the extent an order on the FIFO Queue is a SNAP AOO, upon processing of the SNAP AOO during the stage five Transition to the Open Trading State, the SNAP AOO will be placed in the SNAP AOO Queue, for activation in the next SNAP Cycle for which it is eligible to participate. Also, proposed subparagraph (B)(ii) provides that incoming non-SNAP Eligible Orders received during the SNAP Cycle shall be cancelled upon receipt, except for cross orders, which shall be placed in the FIFO Queue.

Currently, cross orders are always handled Immediate Or Cancel, pursuant to Article 1, Rule 2(a)(2). In light of SNAP, the Exchange now proposes to amend the definition of cross orders, under Article 1, Rule 2(a)(2), to provide that cross orders received during a SNAP Cycle shall be placed in the FIFO Queue for later processing and not immediately cancelled. This special handling of cross orders is necessary because, for example, the Exchange receives a significant number of cross orders marked Qualified Contingent Trade (“QCT”),<sup>52</sup> the execution of which is required, among other things, to be contingent upon the execution of all other components at or near the same time. Thus, the Exchange believes it preferable to momentarily delay processing of QCTs to give such orders the opportunity to clear the CHX book, whereas an immediate cancellation could result in the QCT being out-of-hedge with the other component

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<sup>51</sup> See id.

<sup>52</sup> See CHX Article 1, Rule 2(b)(2)(E).

trades. Moreover, in light of the manual nature of QCT order packaging process, the Exchange submits that the approximate one second delay in processing a QCT on the FIFO Queue is immaterial with respect to the execution “at or near the same time” requirement for QCTs.<sup>53</sup>

Proposed subparagraph (C) lists the following messages received during a SNAP Cycle that would be placed in the FIFO Queue for later processing, pursuant to proposed paragraph (b)(5)(B):

- (i) Cancel and cancel/replace messages for resting or queued orders.
- (ii) Cancel messages from away markets for routed orders received after the SNAP Order Acceptance Period.<sup>54</sup>
- (iii) SNAP Eligible Orders received after the SNAP Order Acceptance Period.
- (iv) Cross orders.

The FIFO Queue is necessary because the immediate processing of most messages are suspended during the SNAP Cycle. The Exchange submits that the momentary delay of processing such messages is reasonable because the delay will be no longer than the approximate one second that it would take for the SNAP Cycle to be completed. In addition, market liquidity in the subject security would be enhanced by preserving such orders and reducing unnecessary order cancellations.

Proposed subparagraph (D) provides that prior to being ranked on the SNAP CHX book, the following modifiers shall be deactivated for the subject security only:

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<sup>53</sup> See infra Statutory Basis.

<sup>54</sup> Cancel messages from away markets for routed orders received during the SNAP Order Acceptance Period would result in the corresponding order being immediately released as unexecuted. The released order will then either join the SNAP Cycle in progress or be cancelled, if marked Cancel On SNAP.

- (i) CHX Only, as defined under Article 1, Rule 2(b)(1)(C).
- (ii) Post Only, as defined under Article 1, Rule 2(b)(1)(D).
- (iii) Do Not Route, as defined under Article 1, Rule 2(b)(3)(A).
- (iv) Match Trade Prevention, as defined under Article 1, Rule 2(b)(3)(F).
- (v) Always Quote, as defined under Article 1, Rule 2(c)(1).
- (vi) Reserve Size, as defined under Article 1, Rule 2(c)(3).

Deactivating each of these modifiers is necessary so that SNAP Eligible Orders subject to a SNAP Cycle are handled in a manner which do not violate the terms of the specified order modifiers, as the SNAP Cycle requires all participating orders to be routable, undisplayed in whole and executable, without restriction.

Specifically, the CHX Only, Post Only and Do Not Route modifiers<sup>55</sup> must be deactivated because each of these modifiers, among other things, requires the order to be unroutable and, as discussed in detail below, the SNAP Price may require the routing of one or more orders to prevent improper trade-through(s) of Protected Quotations of external markets. In addition, the Always Quote and Reserve Size modifiers must be deactivated because each of these modifiers requires all or a portion of the order to be displayed, whereas all SNAP Eligible Orders must be fully-hidden during a SNAP Cycle.<sup>56</sup> Also, the Match Trade Prevention (“MTP”) modifier must be deactivated because the MTP modifier will prevent the execution of certain

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<sup>55</sup> CHX Only and Post Only orders are always handled “Do Not Route,” even if not marked Do Not Route. See CHX Article 1, Rule 2(b)(1)(C) and (D).

<sup>56</sup> While precedent Reserve Size orders will not have a displayed portion during the SNAP Cycle, as all orders participating in a SNAP Cycle are fully-hidden, the Matching System will maintain the distinction between the displayed and reserved portions of Reserve Size orders for the purposes of ranking on the SNAP CHX book. See supra Section 4.

orders that originate from the same MTP Trading Group or subgroup, whereas all participating SNAP Eligible Orders must be executable without condition.<sup>57</sup> Incidentally, the Exchange proposes to amend Article 1, Rule 2 to provide that order modifiers listed under proposed Article 18, Rule 1(b)(2)(D) shall not be active for a security that is subject to a SNAP Cycle, as described under proposed Article 18, Rule 1.

Proposed subparagraph (E) provides that upon conclusion of the SNAP Order Acceptance Period, the Matching System shall take a snapshot of the Protected Quotation(s) of external market(s) in the subject security and determine whether or not the CHX Routing Services are available. If the snapshot of the Protected Quotation(s) of external market(s) in the subject security shows that a two-sided NBBO exists and the CHX Routing Services are available, the SNAP Cycle shall continue to the stage three Pricing and Satisfaction Period. This proposed subparagraph (E) market snapshot will serve as the basis for the stage three Pricing and Satisfaction Period, as described below.

Alternatively, proposed subparagraph (F) provides that if the market snapshot taken pursuant to proposed subparagraph (E) above shows that a two-sided NBBO does not exist or the CHX Routing Services are unavailable, the SNAP Cycle shall be aborted without any executions and the Matching System shall take another market snapshot of the Protected Quotation(s) of external market(s) in the subject security and immediately begin the stage five Transition to the Open Trading State, as described below.

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<sup>57</sup> The Exchange notes that the deactivation of the MTP modifier during the SNAP Cycle does not extinguish Participants' obligations regarding self-trades, pursuant to CHX Rules and securities laws and regulations. See e.g., CHX Article 9, Rule 9 (Fictitious Transactions).

In sum, one or two market snapshots may be taken during the stage two Order Acceptance Period, depending on whether or not the SNAP Cycle was aborted during the stage two Order Acceptance Period. Specifically, if the market snapshot taken pursuant to proposed subparagraph (E) shows that a two-sided NBBO exists and the CHX Routing Services are available, the Matching System would not take any additional market snapshots during the stage two Order Acceptance Period, as the SNAP Cycle would immediately continue to the stage three Pricing and Satisfaction Period. In such a case, a third market snapshot would be taken during either the stage three Pricing and Satisfaction Period or the stage four Order Matching Period, as applicable, as discussed below. However, if the market snapshot taken pursuant to proposed subparagraph (E) shows that a two-sided NBBO does not exist or the CHX Routing Services are unavailable, the Matching System would immediately take a final market snapshot, pursuant to proposed subparagraph (F), abort the SNAP Cycle, skip stages three and four and enter the stage five Transition to the Open Trading State. Thus, there would always be a total of three market snapshots taken during the course of any given SNAP Cycle.<sup>58</sup>

Examples 3 – 4 below illustrate the various processes of the stage two SNAP Order Acceptance Period.<sup>59</sup>

#### Stage Three: Pricing and Satisfaction Period

Upon the conclusion of the stage two SNAP Order Acceptance Period, the Matching System shall take the following actions, pursuant to proposed Article 18, Rule 1(b)(3):

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<sup>58</sup> See infra note 79.

<sup>59</sup> See supra Section 6.

- Process the remaining orders on the SNAP AOO Queue and finalize the SNAP CHX book.
- Determine the SNAP Price.
- Route orders away to satisfy Protected Quotations of external markets, if necessary.

Proposed Article 18, Rule 1(b)(3) provides that, if permitted, pursuant to proposed paragraph (b)(2)(E), the Matching System will utilize the market snapshot taken pursuant to proposed paragraph (b)(2)(E) to initiate the Pricing and Satisfaction Period by taking the actions described under proposed subparagraphs (A) – (C).

Thereunder, proposed subparagraph (A) provides that the Matching System shall price all SNAP AOOs marked SNAP AOO - Pegged remaining on the SNAP AOO Queue, then rank such orders on the SNAP CHX book, pursuant to proposed Article 20, Rule 8(b)(3)(E). SNAP AOO – Pegged orders will be priced based on the market snapshot taken pursuant to proposed paragraph (b)(2)(E). Upon the completion of processing the remaining orders on the SNAP AOO Queue, the SNAP CHX book will be complete.

Proposed subparagraph (B) provides that once the process described under proposed subparagraph (A) has been completed, the Matching System shall determine the SNAP Price, as defined under Article 1, Rule 1(rr).<sup>60</sup> If the SNAP Price cannot be determined, the Matching System shall take a snapshot of the Protected Quotation(s) of external market(s) in the subject security and the SNAP Cycle shall continue to the stage five Transition to the Open Trading State, as described below. The most obvious reason that a SNAP Price could not be determined

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<sup>60</sup> See supra Section 2.

is that there are no orders that could be matched. Another reason why the SNAP Price could not be determined is if the limit order marked Start SNAP noted a SNAP minimum size condition, pursuant to proposed Article 1, Rule 2(h)(1)(B), and the minimum size condition was not met. In such a case, the SNAP Price would not be in compliance with “CHX Rules,” per the proposed definition. However, if the SNAP Price could be determined and one or more orders must be routed away, pursuant to proposed Article 19, Rule 3(a)(4) and/or (5), the SNAP Cycle would continue to the Satisfaction Period, pursuant to proposed subparagraph (C). If no order routing is necessary, the SNAP Cycle shall continue to the stage four Order Matching Period.

By definition, the SNAP Price will always be at a price that is in compliance with Rule 611 of Regulation NMS, LULD price bands and Rule 201 of Regulation SHO or applicable exemptive relief.<sup>61</sup> Specifically, the SNAP Price will be in compliance with Rule 611 of Regulation NMS through the routing of one or more Intermarket Sweep Orders (“ISOs”) to satisfy Protected Quotations of external markets, as necessary, pursuant to proposed subparagraph (C). Moreover, the SNAP Price will never be outside the LULD Price Bands.

The SNAP Price would also be in compliance with Rule 201 of Regulation SHO or applicable exemptive relief by ensuring that SNAP Eligible Orders marked Sell Short, as defined under Article 1, Rule 2(b)(3)(D), in a covered security subject to the short sale price test restriction, would never participate in a SNAP execution if the SNAP Price were determined to be at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article

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<sup>61</sup> See supra note 7.

18, Rule 1(b)(2)(E).<sup>62</sup> Specifically, such SNAP Eligible Orders marked Sell Short ranked on the SNAP CHX book will never have an executable price lower than one minimum price increment above the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E) because such SNAP Eligible Orders marked Sell Short with limit prices at or below that NBB would be repriced to one minimum price increment above that NBB, whereas such SNAP Eligible Orders marked Sell Short with limit prices at one minimum price increment above that NBB or higher would be ranked on the SNAP CHX book at their limit prices without being repriced.<sup>63</sup> Thus, if the SNAP Price were ultimately determined to be at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E), such participating SNAP Eligible Orders marked Sell Short would not be able to execute at the SNAP Price. However, if the SNAP Price were determined to be at one price increment above

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<sup>62</sup> Id. Rule 201(b)(1) of Regulation SHO provides as follows: “A trading center shall establish, maintain, and enforce written policies and procedures reasonably designed to: (i) Prevent the execution or display of a short sale order of a covered security at a price that is less than or equal to the current national best bid if the price of that covered security decreases by 10% or more from the covered security’s closing price as determined by the listing market for the covered security as of the end of regular trading hours on the prior day; and (ii) Impose the requirements of paragraph (b)(1)(i) of this section for the remainder of the day and the following day when a national best bid for the covered security is calculated and disseminated on a current and continuing basis by a plan processor pursuant to an effective national market system plan. (iii) Provided, however, that the policies and procedures must be reasonably designed to permit: (A) The execution of a displayed short sale order of a covered security by a trading center if, at the time of initial display of the short sale order, the order was at a price above the current national best bid; and (B) The execution or display of a short sale order of a covered security marked ‘short exempt’ without regard to whether the order is at a price that is less than or equal to the current national best bid.” See “Division of Trading and Markets: Responses to Frequency Asked Questions Concerning Rule 201 of Regulation SHO.” U.S. Securities and Exchange Commission, 20 Jan. 2011. Web. 16 June 2014. <<http://www.sec.gov/divisions/marketreg/rule201faq.htm>>; see also Securities Exchange Act Release No. 50103 (July 28, 2004), 69 FR 48008 (August 6, 2004) (“Short Sales”).

<sup>63</sup> See infra Section 6, Examples referring to “Sell Order E.”

the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E) or higher, such SNAP Eligible Orders marked Sell Short may execute at the SNAP Price, depending on their respective executable prices and rank on the SNAP CHX book.

In order to clarify how SNAP is designed to comply with Rule 201 of Regulation SHO or applicable exemptive relief, the Exchange proposes to amend Article 20, Rule 8(d)(4) (Rule 201 of Regulation SHO).<sup>64</sup> Initially, the Exchange proposes to reorganize current Rule 8(d)(4) by creating subparagraphs (A) and (B). Proposed subparagraph (A) would contain the current rules concerning Rule 201 of Regulation SHO compliance during the Open Trading State, as well as the stage five Transition to the Open Trading State, as described under proposed Article 18, Rule 1(b)(5), whereas proposed subparagraph (B) would apply to Rule 201 of Regulation SHO compliance (or compliance with applicable exemptive relief) during the stage four Order Matching Period, as described under proposed Article 18, Rule 1(b)(4).<sup>65</sup>

Specifically, proposed subparagraph (A) provides that during the Open Trading State, as defined under proposed Article 1, Rule 1(qq), and the stage five Transition to the Open Trading State, as described under proposed Article 18, Rule 1(b)(5), orders marked Sell Short in a covered security subject to the short sale price test restriction shall be handled as described thereunder. The contents of proposed subparagraphs (A)(i) – (iv) mirror current Article 20, Rule 8(d)(4).

Proposed subparagraph (B) provides that during the stage four Order Matching Period of a SNAP Cycle, as described under proposed Article 18, Rule 1(b)(4), in a covered security

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<sup>64</sup> See supra note 7.

<sup>65</sup> Id.

subject to the short sale price test restriction, participating SNAP Eligible Orders, as defined under Article 1, Rule 1(ss), marked Sell Short shall not be permitted to execute at prices at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E) and shall be handled as described thereunder.

Proposed subparagraph (B)(i) provides that a SNAP Eligible Order marked Sell Short in a covered security subject to the short sale price test restriction, with a limit price at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E), shall be repriced to one minimum price increment above that NBB for ranking purposes on the SNAP CHX book. A SNAP Eligible Order marked Sell Short in a covered security subject to the short sale price test restriction, with a limit price at one minimum price increment above the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E) or higher, shall be ranked on the SNAP CHX book at its limit price, without repricing. A SNAP Eligible Order marked Short Exempt, as defined under current Article 1, Rule 2(b)(3)(E), in a covered security subject to the short sale price test restriction, shall be handled like a SNAP Eligible Order not marked Sell Short, as described under proposed Article 18, Rule 1(b). Also, a SNAP Eligible Orders marked Sell Short in a covered security subject to the short sale price test restriction will never be permitted to execute at prices at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E).

Proposed subparagraph (B)(ii) provides that the Rule 201(b)(1)(iii)(A) of Regulation SHO exception shall not apply to a SNAP Eligible Order marked Sell Short that is being transitioned to the SNAP CHX book and such an order shall be repriced, if necessary, pursuant

to subparagraph (B)(i) above. This language clarifies that the Rule 201(b)(1)(iii)(A) of Regulation SHO exception would not apply to a resting Sell Short order that had been transitioned to the SNAP CHX book because the order would no longer be displayed.

Proposed subparagraph (B)(iii) provides that a limit order marked Start SNAP and Sell Short for a covered security subject to the short sale price test restriction shall not initiate a SNAP Cycle and shall be cancelled. This language mirrors the last sentence of proposed Article 1, Rule 2(h)(1)(A)(ii), which sets forth the pricing requirements for a limit order marked Start SNAP.<sup>66</sup>

Proposed Article 18, Rule 1(b)(3)(C) provides that if the SNAP Price requires the routing of one or more orders, pursuant to proposed Article 19, Rule 3(a)(4) and/or (5), the Exchange's routing systems shall route away the necessary SNAP Eligible Orders, or portions thereof, based on their execution priority, pursuant to proposed paragraph (b)(4)(A). The Matching System shall then delay proceeding to the stage four Order Matching Period for 200 milliseconds or until all the confirmations for routed orders have been received from away market(s), whichever occurs first. Moreover, the unexecuted remainders of orders routed away pursuant to proposed Article 19, Rule 3(a)(4) and/or (5) returned to the Matching System prior to the expiration of the Satisfaction Period during which the orders were routed away shall maintain their respective original execution priority within the SNAP CHX book,<sup>67</sup> whereas such unexecuted remainders returned to the Matching System after the expiration of the Satisfaction Period during which the

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<sup>66</sup> See supra Section 3.

<sup>67</sup> See infra Section 6, Examples 7 and 9 regarding "Buy Order F."

orders were routed away shall be handled pursuant to amended Article 20, Rule 8(b)(7), as discussed below.

The purpose of the Satisfaction Period, which includes the period of time during which orders are routed away pursuant to proposed Article 19, Rule 3(a)(4) and/or (5) (“SNAP routed orders”) and the subsequent delay of up to 200 milliseconds, is to give away markets sufficient time to respond to the SNAP routed orders, so that any unexecuted SNAP routed orders would be included in the SNAP execution within the Matching System. If the Exchange receives confirmations concerning all SNAP routed orders prior to the expiration of the 200-millisecond period, the SNAP Cycle will immediately move on to the stage four Order Matching Period. At the expiration of the 200-millisecond time period, the SNAP Cycle will continue to the stage four Order Matching Period, even if the Exchange had not received confirmations for all SNAP routed orders. To the extent that the Exchange does not receive confirmation(s) for routed order(s) prior to the expiration of the 200 millisecond time period, the corresponding SNAP Eligible Order(s) would not participate in the instant SNAP Cycle. In such a case, upon the eventual receipt of the away execution or cancellation confirmation by the Matching System, the corresponding order(s) would be handled pursuant to amended Article 20, Rule 8(b)(7).

While current Article 20, Rule 8(b)(7) addresses the priority of unexecuted remainders of routed orders returned to the Matching System, it does not address such priority in the context of the SNAP Cycle. Thus, the Exchange proposes to expand Article 20, Rule 8(b)(7) to provide that an unexecuted remainder of a routed order returned to the Matching System in one or more parts shall be added to the existing balance of the related Routable Order already posted to the CHX

book, the SNAP CHX book or the SNAP AOO Queue,<sup>68</sup> as applicable. Moreover, if no balance exists at the time a part of an unexecuted remainder of a routed order is returned to the Matching System, it shall be treated as a new incoming order, subject to proposed Article 18, Rule 1(b)(3)(C). As discussed above, proposed Article 18, Rule 1(b)(3)(C) provides, in pertinent part, that the unexecuted remainders of orders routed away pursuant to proposed Article 19, Rule 3(a)(4) and/or (5) returned to the Matching System prior to the expiration of the Satisfaction Period during which the orders were routed away would maintain their respective original execution priority within the SNAP CHX book and, thus, would not be treated as new incoming orders.

The Exchange also proposes to adopt two new Routing Events, as proposed Article 19, Rule 3(a)(4) and (5). In sum, proposed Article 19, Rule 3(a)(4) is designed to prevent improper trade-through(s) in compliance with Regulation NMS, whereas proposed Article 19, Rule 3(a)(5) is designed to increase the execution of participating SNAP Eligible Orders at the SNAP Price if they cannot be executed within the Matching System due to an order imbalance at the SNAP Price.<sup>69</sup>

Specifically, proposed paragraph (a)(4) provides that Routable Orders, or portions thereof, shall be routed away to permit SNAP Eligible Orders to be executed within the Matching System at the SNAP Price (“Routing Event #4”) in compliance with Regulation

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<sup>68</sup> For example, an unexecuted remainder of a partially routed SNAP AOO – Day returned to the Matching System after the conclusion of the SNAP Cycle during which the order was partially routed would be added to any existing unrouted and unexecuted balance of the same SNAP AOO – Day that was re-queued during the stage five transition the Open Trading State.

<sup>69</sup> Currently, Routable Orders may be routed away from the Exchange if a Routing Event, listed under Article 19, Rule 3(a) is triggered.

NMS.<sup>70</sup> Orders routed away pursuant to this Routing Event #4 shall be priced at the SNAP Price, as opposed to the contra-side Protected Quotation price, so that the routed order would maximize the chance of executions at multiple price points. Moreover, where the SNAP Price is priced at a price increment smaller than the relevant minimum price increment (e.g., \$10.005), the routed order shall be priced at the minimum price increment less aggressive than the SNAP Price.

Proposed paragraph (a)(5) provides that Routable Orders, or portions thereof, shall be routed away so as to execute SNAP Eligible Orders at the SNAP Price against Protected Quotations of external markets priced at the SNAP Price that could not be matched within the Matching System during a SNAP Cycle (“Routing Events #5). Routing Event #5 addresses order imbalances on the SNAP CHX book at the SNAP Price by routing away orders, or portions thereof, that could not be executed within the Matching System, only if the contra-side Protected Quotation(s) of external market(s) are priced at the SNAP Price.

Mechanically, similar to how routed orders are currently handled during the Open Trading State, SNAP Eligible Orders or portions thereof that have been routed away are placed in a pending state by the Exchange’s routing systems. Away execution confirmations will result in the corresponding SNAP Eligible Order being released from the pending state as executed. Away cancellation confirmations, however, will be handled differently depending on when the confirmation was received. If the away cancellation confirmation is received during the Satisfaction Period, the corresponding SNAP Eligible Order would be released as cancelled and placed back in the SNAP CHX book at its original rank. If the away cancellation confirmation is

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<sup>70</sup> Incidentally, the Exchange proposes to amend Article 1, Rule 1(oo) defining “Routable Order” to add that during a SNAP Cycle, participating SNAP Eligible Orders are always Routable Orders.

received after the Satisfaction Period, but during the SNAP Cycle, or during a subsequent SNAP Cycle, the cancellation confirmation would be placed in the FIFO Queue for processing during the stage five Transition to the Open Trading State. If the away cancellation confirmation is received otherwise than during a SNAP Cycle, it shall be processed immediately upon receipt, as they are currently.

Examples 5 – 8 illustrate the various processes of the stage three Pricing and Satisfaction Period.<sup>71</sup>

#### Stage Four: Order Matching Period

Upon the conclusion of the stage three Pricing and Satisfaction Period, proposed paragraph (b)(4) provides that orders remaining on the SNAP CHX book, if any, shall be matched at the SNAP Price.

Proposed subparagraph (A) provides the execution priority of orders at the SNAP Price. Specifically, SNAP Eligible Orders with a Working Price at or more aggressive than the SNAP Price shall be executed in Working Price priority and if more than one such order shares the same Working Price, then as described under proposed Article 20, Rule 8(b)(3).<sup>72</sup> That is, orders will be executed according to their rank at the SNAP Price, except that orders with a more aggressive Working Price shall be executed first.

The Exchange utilizes the term “Working Price,” as opposed to “limit price” or “price,” in discussing execution priority, so as to be clear that orders with a limit price through the LULD Price Bands or marked Sell Short with a limit price at or below the NBB during a short sale price

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<sup>71</sup> See infra Section 6.

<sup>72</sup> Compare e.g., BATS Exchange Rule 11.23(b)(2)(C).

test restriction, shall only receive execution priority based on the most aggressive price at which such orders could execute (i.e., Working Price) and not based on a limit price that could not be executable. For example, a SNAP Eligible buy order priced through the Upper Price Band would receive priority based on its Working Price, which is at the Upper Price Band, and a SNAP Eligible Order marked Sell Short with a limit price at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E), during a short sale price test restriction of Rule 201 of Regulation SHO, would be repriced, pursuant to proposed Article 20, Rule 8(d)(4)(B)(i), and would receive priority based on its new price.<sup>73</sup>

It is important to note that during the Open Trading State, orders always execute at the Working Price of the resting order, pursuant to current Article 20, Rule 8(d)(1). However, as noted above, during a SNAP Cycle, participating SNAP Eligible Orders may execute at prices less aggressive than its Working Price. Thus, as an exception to current Article 20, Rule 8(d)(1), the Exchange proposes to amend Article 20, Rule 8(e)(2) to provide that during a SNAP Cycle, participating SNAP Eligible Orders shall be executed within the Matching System at the SNAP Price, pursuant to proposed Article 18, Rule 1(b)(4)(A). Incidentally, the Exchange proposes to amend the header to current Article 20, Rule 8(e) to provide that the amended rule addresses execution of certain orders, order types and auctions.

Proposed subparagraph (B) provides that upon conclusion of the matching of orders at the SNAP Price, the Matching System shall then take a snapshot of the Protected Quotation(s) of external market(s) in the subject security. Similar to the market snapshot taken pursuant to

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<sup>73</sup> See supra note 7.

proposed Article 18, Rule 1(b)(2)(E), this snapshot will be utilized for regulatory compliance purposes in transitioning to the Open Trading State.

Example 9 illustrates the execution priority of the stage four Order Matching Period.<sup>74</sup>

#### Stage Five: Transition to the Open Trading State

Upon conclusion of the stage two SNAP Order Acceptance Period or stage four Order Matching Period, as applicable, the Exchange shall take the following actions, pursuant to proposed Article 18, Rule 1(b)(5):

- Route away or cancel resting orders on the SNAP CHX book or transfer such resting orders to the CHX book or SNAP AOO Queue, as applicable, in preparation for the Open Trading State.
- Process the FIFO Queue.
- Notify the market that the SNAP has concluded and begin the normal dissemination of relevant market data in the subject security.

Proposed Article 18, Rule 1(b)(5) provides that upon conclusion of stages two, three or four of the SNAP Cycle, the Matching System shall utilize the relevant market snapshot taken pursuant to proposed paragraph (b)(2)(E) or (F), (b)(3)(B) or (b)(4)(B), as applicable, to transition trading in the subject security to the Open Trading State by taking the actions described under proposed subparagraphs (A) – (C).

Proposed subparagraph (A) provides that orders resting on the SNAP CHX book shall be transitioned to the CHX book and shall be ranked, pursuant to proposed Article 20, Rule 8(b)(1); routed away, pursuant to Article 19, Rule 3(a); placed in the proposed SNAP AOO Queue,

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<sup>74</sup> See infra Section 6.

pursuant to proposed Article 20, Rule 8(b)(2)(A), if the order is a SNAP AOO that may participate in a subsequent SNAP Cycle; or otherwise cancelled. All order modifiers attached to the SNAP Eligible Orders being transitioned to the CHX book that were deactivated shall be reactivated prior to transition to the CHX book.

Proposed subparagraph (B) provides that once the process under subparagraph (A) has been completed, all messages queued under the FIFO Queue, as described under proposed paragraph (b)(2)(C), shall be processed as incoming messages in the order in which they were received.<sup>75</sup> Thus, new orders that have been queued in the FIFO Queue may be ranked, cancelled, deactivated or routed, depending on the attached order modifiers and the relevant market snapshot.

Proposed subparagraph (C) provides that once the processes under proposed subparagraphs (A) and (B) have been completed, the Exchange will notify the market that the SNAP Cycle has concluded; publish CHX's Protected Quotation(s) in the subject security, if any; and begin the dissemination of relevant order information concerning orders resting on the CHX book, pursuant to current Article 4, Rule 1.<sup>76</sup>

Example 10 illustrates the various processes of the stage five Transition to the Open Trading State.<sup>77</sup>

#### Halt and Pause during a SNAP Cycle

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<sup>75</sup> Messages queued in the FIFO Queue are not considered to have been received by the Matching System.

<sup>76</sup> See supra note 43.

<sup>77</sup> See infra Section 6.

Proposed Article 18, Rule 1(c) outlines the interplay between the SNAP Cycle and trading halts or pauses that require the Exchange to suspend trading in the subject security (“material halt or pause”).<sup>78</sup> Currently, the Exchange suspends trading in a subject security upon receipt of a material halt or pause messages from the securities information processor (“SIP”). Since the SNAP Cycle is a sub-second process and the Matching System only draws upon the SIP data at three different points in the SNAP Cycle,<sup>79</sup> the Exchange proposes to require the SNAP Cycle to be aborted at those points if a material halt or pause is declared in the subject security and to unwind the SNAP Cycle in a manner consistent with current CHX Rules.<sup>80</sup>

Proposed paragraph (c) provides that if a material halt or pause is in effect for a subject security at the time a limit order marked Start SNAP is received, a SNAP Cycle shall not be

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<sup>78</sup> Certain trading halts initiated by away markets would be considered immaterial for the purposes of proposed CHX Article 18, Rule 1(c), because such a halt would not require the Exchange to cease trading in the subject security (e.g., technical problems at an away exchange which causes other exchanges to declare self-help).

<sup>79</sup> As discussed above, the Matching System will take three market snapshots during the SNAP Cycle based on SIP data of away markets. The first snapshot will be taken in validating the pricing requirement of a limit order marked Start SNAP, pursuant to proposed CHX Article 1, Rule 2(h)(1)(A)(ii). The second snapshot will be taken to establish the SNAP Price and route orders, pursuant to proposed CHX Article 18, Rule 1(b)(2)(E). The third snapshot will be taken to transition orders to the Open Trading State at one of three points during a SNAP Cycle, as applicable: -1- during the stage two Order Acceptance Period, pursuant to proposed CHX Article 18, Rule 1(b)(2)(F), if a two-sided NBBO does not exist or the CHX Routing Services are unavailable; -2- during the stage three Pricing and Satisfaction Period, pursuant to proposed CHX Article 18, Rule 1(b)(3)(B), if a SNAP Price could not be determined; or during the stage four Order Matching Period, pursuant to proposed CHX Article 18, Rule 1(b)(4)(B), after the matching of orders at the SNAP Price.

<sup>80</sup> The Exchange has two different processes for addressing material halts or pauses. LULD trading pauses are addressed pursuant to CHX Article 20, Rule 2A(c), whereas all other material halts or pauses are addressed pursuant to paragraph .02 of CHX Article 20, Rule 1. The Exchange also has the authority to cancel orders within the Matching System, pursuant to CHX Article 20, Rule 12(a).

initiated. In the event a material halt or pause has been declared for the subject security during a SNAP Cycle, the Exchange shall take the actions as described thereunder, as applicable.

Proposed paragraph (c)(1) provides that during either -1- a LULD Trading Pause or -2- a material halt or pause other than a LULD Trading Pause, the Exchange shall take the steps as described under subparagraphs (A) – (C), as applicable.

Subparagraph (A) (During stages one or two) provides that if the market snapshot taken pursuant to proposed paragraph (b)(2)(E) or (F) indicates that a material halt or pause is in effect, the SNAP Cycle shall be aborted and not proceed to stage three or stage five, as applicable. The Exchange shall then either:

- (i) cancel all orders resting on the SNAP CHX book, subject to proposed paragraph (c)(2) below, for a LULD Trading Pause; or
- (ii) cancel all resting orders received during the SNAP Order Acceptance Period that have been ranked on the SNAP CHX book, but otherwise maintain all other resting orders not marked Cancel On Halt, as defined under Article 1, Rule 2(b)(1)(B), subject to proposed paragraph (c)(2) below and Article 20, Rule 12(a),<sup>81</sup> for a material halt or pause other than an LULD Trading Pause.

Proposed subparagraph (A)(i) is consistent with the current LULD Trading Pause rules, which requires the Exchange to cancel all orders resting on the CHX book during a LULD Trading Pause.<sup>82</sup>

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<sup>81</sup> CHX Article 20, Rule 12(a) permits the Exchange to cancel orders as it deems to be necessary to maintain fair and orderly markets if, among other places, a technical or systems issue occurs at the Exchange.

<sup>82</sup> See CHX Article 20, Rule 2A(c)(3)(A).

Proposed subparagraph (A)(ii) is consistent with the current rules for a material halt or pause other than an LULD Trading Pause, which permits the Exchange to maintain all orders within the Matching System during a material halt or pause other than a LULD Trading Pause.<sup>83</sup> Since the SNAP CHX book could be locked and/or crossed after the conclusion of the stage two SNAP Order Acceptance Period, the Exchange proposes to unlock or uncross the SNAP CHX book by cancelling all orders received during the SNAP Order Acceptance Period, subject to proposed paragraph (c)(2) and Article 20, Rule 12(a). Thus, an uncrossed book would be achieved by essentially reverting to the state of the CHX book at the time the SNAP Cycle was initiated because the CHX book is never locked or crossed during the Open Trading State.

Subparagraph (B) (During stages three or four) provides that if the market snapshot taken pursuant to proposed paragraph (b)(3)(B) or paragraph (b)(4)(B) indicates that a material halt or pause is in effect for the subject security, the SNAP Cycle shall be aborted and will not proceed to stage five. The Exchange shall then either:

- (i) cancel the unexecuted remainders of all orders resting on the SNAP CHX book, subject to paragraph (c)(2) below, for a LULD Trading Pause; or
- (ii) maintain all unexecuted resting orders not marked Cancel On Halt, subject to paragraph (c)(2) below and Article 20, Rule 12(a),<sup>84</sup> for a material halt or pause other than an LULD Trading Pause; provided, however, that if the SNAP Price could not be determined, pursuant to proposed paragraph (b)(3)(B) above, resting orders will be handled pursuant to proposed subparagraph (A)(ii) above.

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<sup>83</sup> See paragraph .02 of CHX Article 20, Rule 1.

<sup>84</sup> See supra note 81.

Proposed subparagraph (B)(i) is consistent with the current LULD Trading Pause rules, which requires the Exchange to cancel all orders resting on the CHX book during a LULD Trading Pause.<sup>85</sup>

Proposed subparagraph (B)(ii) is consistent with the current rules for a material halt or pause other than an LULD Trading Pause, which permits the Exchange to maintain all orders within the Matching System during a material halt or pause other than a LULD Trading Pause.<sup>86</sup> While a SNAP Cycle that was completed through the stage four Order Matching Period would always result in an unlocked and uncrossed SNAP CHX book, a SNAP Cycle that was aborted due to an inability to determine a SNAP Price, pursuant to proposed paragraph (b)(3)(B), could result in a locked or crossed SNAP CHX book (e.g., the SNAP Price did not meet the SNAP minimum execution size condition). Thus, in such a case, the Exchange proposes to handle order cancellations pursuant to proposed subparagraph (A)(ii), as discussed above.

Proposed subparagraph (C) provides that any subsequent material halt or pause shall be handled pursuant to the relevant CHX Rules.<sup>87</sup>

Proposed paragraph (c)(2) (SNAP AOOs) provides an exception for SNAP AOOs from the order cancellation requirements of proposed paragraph (c)(1). It provides that upon initiation of a material halt or pause, all SNAP AOOs not marked Cancel On Halt or otherwise cancelled by the order sender that are -1- on the SNAP AOO Queue or -2- resting on the SNAP CHX book

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<sup>85</sup> See supra note 80.

<sup>86</sup> See paragraph .02 of CHX Article 20, Rule 1.

<sup>87</sup> See supra note 80.

and may be re-queued on the SNAP AOO Queue,<sup>88</sup> shall remain or be re-queued on the SNAP AOO Queue, as applicable, and not cancelled.

Proposed paragraph (c)(3) (FIFO Queue) provides that upon the initiation of a material halt or pause, the FIFO Queue shall be processed until exhausted. The FIFO Queue must be processed because messages on the FIFO Queue are not considered to have been received by the Matching System until they are sent to the Matching System. Thus, the FIFO Queue messages will be handled as incoming messages and processed pursuant to proposed paragraphs (c)(4) and (c)(5).

Proposed paragraph (c)(4) (Incoming orders) provides that upon initiation of a material halt or pause and for the remainder of the material halt or pause, all incoming orders shall be rejected; provided, however, that incoming SNAP AOOs shall be placed on the SNAP AOO Queue, if the material halt or pause is not the result of a systems issue at the Exchange. That is, if the material halt or pause is the result of a systems issue at the Exchange, all incoming orders shall be rejected, without exception.

Proposed paragraph (c)(5) (Incoming cancel messages) provides that incoming cancel messages and the cancel component of cancel/replace messages shall be immediately processed during a material halt or pause. The replace component of a cancel/replace message, which is a new incoming order, would be ignored, pursuant to proposed paragraph (c)(4).

In light of the proposed paragraph (c), the Exchange proposes to amend paragraph .02 of Article 20, Rule 1 and Article 20, Rule 2A(c)(3) to provide that the actions described thereunder are subject to proposed Article 18, Rule 1(c), as the current rules do not contemplate special

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<sup>88</sup> See proposed CHX Article 1, Rule 2(h)(3)(A) and (B).

treatment for SNAP AOOs or the SNAP AOO Queue. The Exchange also proposes to clarify that the provisions of paragraph .02 of Article 20, Rule 1 only apply to halts or pauses, “which requires the Exchange to suspend trading in the issue, other than a LULD Trading Pause.”<sup>89</sup>

Example 5 illustrates how a trading halt or pause may abort a SNAP Cycle in progress.

#### SECTION SIX: Examples

The following Examples are illustrative of the SNAP Cycle, but do not exhaustively depict every possible scenario during a SNAP Cycle. Moreover, the charts used herein are illustrative and do not necessarily depict the actual technical processes involved in sorting orders.

Example 1: Precedent Orders. Assume that the NBBO for security XYZ is \$10.00 x \$10.01 and the short sale price test restriction is in effect. Assume that the CHX book is empty. Assume also that the Protected Quotations of external markets in security XYZ is as follows:

- Protected Bid A at Exchange 1 displaying 500 shares at \$10.00.
- Protected Offer A at Exchange 2 displaying 500 shares at \$10.01.
- Protected Offer B at Exchange 3 displaying 500 shares at \$10.02.

Assume then that the Exchange receives orders in security XYZ at 10:59 a.m. during the Open Trading State in the following sequence:

- Buy Order A for 5000 shares priced at \$10.00/share marked Reserve Size, with 1000 displayed and 4000 reserved.

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<sup>89</sup> See supra note 78.

- Buy Order B for 100 shares priced at \$10.04/share marked CHX Only,<sup>90</sup> price slid to a Working Price of \$10.01 and displayed at \$10.00.
- Buy Order C for 100 shares priced at \$9.99/share marked Cancel On SNAP.
- Sell Order A for 200 shares priced at \$10.03/share.
- Sell Order B for 3,000 shares priced at \$10.00/share marked SNAP AOO – Day and SNAP AOO - Pegged - Midpoint.

Under this Example 1, Buy Orders A through C and Sell Order A would be immediately posted to the CHX book and ranked in the CHX book pursuant to proposed Article 20, Rule 8(b)(1)(A) – (C) (i.e., current Article 20, Rule 8(b)(1)-(3)). However, Sell Order B would be placed in the SNAP AOO Queue, pursuant to proposed Article 20, Rule 8(b)(2)(A), and not immediately ranked, as SNAP AOOs are never active during the Open Trading State.

Example 2: Initiating the SNAP Cycle. Assume the same as Example 1. Assume that at 11:00 a.m., the Matching System receives the following order:

- Buy Order D for 25,000 shares of security XYZ priced at \$10.02/share marked Start SNAP with a minimum SNAP execution size condition noted.

Assume also that the CHX Routing Services are available and operational.

Under this Example 2, Buy Order D would initiate a SNAP Cycle in security XYZ because Buy Order D meets the size, price, time and routing availability requirements of proposed Article 1, Rule 2(h)(1)(A). Thus, the Matching System would validate Buy

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<sup>90</sup> See CHX Article 1, Rule 2(b)(3)(C).

Order D. The Exchange would then take the actions as described under proposed Article 18, Rule 1(b)(1).

The Matching System would then begin the stage two SNAP Order Acceptance Period, pursuant to Article 18, Rule 1(b)(2), as follows:

- All order modifiers listed under proposed subparagraph (D) would be deactivated.
- Buy Order A would be ranked on the SNAP CHX book. The 1000 displayed shares would be ranked at each price point up to its limit price of \$10.00, pursuant to proposed Article 20, Rule 8(b)(3)(A), while the remaining undisplayed 4000 reserved shares would be ranked at each price point up to its limit price of \$10.00, pursuant to proposed Article 20, Rule 8(b)(3)(B).
- Buy Order B would be ranked on the SNAP CHX book at each price point up to its limit price of \$10.04, pursuant to proposed Article 20, Rule 8(b)(3)(A). In doing so, Buy Order B would be unslid from its previous Working Price of \$10.00 because the CHX Only modifier would be deactivated prior to the order being ranked on the SNAP CHX book.
- Buy Order C would be cancelled because it is ineligible for SNAP.
- Sell Order A would be ranked on the SNAP CHX book at each price point down to its limit price of \$10.03, pursuant to proposed Article 20, Rule 8(b)(3)(A).
- Sell Order B would remain on the SNAP AOO Queue, as SNAP AOOs marked SNAP AOO - Pegged are only ranked on the SNAP CHX book during the stage three Pricing and Satisfaction Period, pursuant to proposed Article 18, Rule 1(b)(3)(A).

- Buy Order D would be ranked on the SNAP CHX book at each price point up to its limit price of \$10.02, pursuant to proposed Article 20, Rule 8(b)(3)(D).

Thus, the SNAP CHX book for security XYZ is now as follows:

SNAP CHX BOOK and AWAY PROTECTED QUOTES – Example 2								
Buy Orders				Price Point	Sell Orders			
Total <u>away</u> buy size <u>at</u> price point	Total <u>CHX</u> buy size <u>at</u> price point	Total buy size <u>better</u> than price point	Total buy size <u>at</u> and <u>better</u> than price point		Total sell size <u>at</u> and <u>better</u> than price point	Total sell size <u>better</u> than price point	Total <u>CHX</u> sell size <u>at</u> price point	Total <u>away</u> sell size <u>at</u> price point
0	0	0	0	<b>10.05</b>	1,200	1,200	0	0
0	100	0	100	<b>10.04</b>	1,200	1,200	0	0
0	0	100	100	<b>10.03</b>	1,200	1,000	200	0
0	25,000	100	25,100	<b>10.02</b>	1,000	500	0	500
0	0	25,100	25,100	<b>10.01</b>	500	0	0	500
500	5,000	25,100	30,600	<b>10.00</b>	0	0	0	0
0	0	30,600	30,600	<b>9.99</b>	0	0	0	0

Example 3: SNAP Order Acceptance Period. Assume the same as Example 2 and the eligible same day last sale in security XYZ was priced at \$10.01. Assume then that during the SNAP Order Acceptance Period, the Exchange receives the following orders in security XYZ:

- Buy Order E for 5,000 shares of security XYZ priced at \$10.03/share marked SNAP AOO – Day.
- Sell Order C for 25,000 shares of security XYZ at \$10.00/share marked Start SNAP.
- Sell Order D for 100 shares of security XYZ at market.

- Sell Order E for 100 shares of security XYZ priced at \$10.00/share marked Sell Short and Do Not Display.
- Buy Order F for 2,500 shares of security XYZ marked SNAP AOO – One And Done and SNAP AOO - Pegged – Market (+ three minimum price increments more aggressive).

The Exchange would handle the orders as follows:

- Buy Order E would be ranked on the SNAP CHX book at each price point up to its limit price of \$10.03, pursuant to Article 20, Rule 8(b)(3)(E).
- Sell Order C would not trigger a SNAP Cycle because it was received during an ongoing SNAP Cycle, pursuant to proposed Article 1, Rule 2(h)(1)(A)(iii). However, Sell Order C would nevertheless join the SNAP Cycle in progress, pursuant to proposed Article 1, Rule 2(h)(1)(C), because it meets the minimum size requirement for SNAP AOOs, pursuant to proposed Article 1, Rule 2(h)(3). Thus, Sell Order C would be handled as SNAP AOO – One And Done and would be ranked on the SNAP CHX book at each price point down to its limit price of \$10.00.
- Sell Order D would be immediately cancelled by the Matching System because it is a market order and, thus, not a SNAP Eligible Order.
- Sell Order E would be ranked on the SNAP CHX book, pursuant to Article 20, Rule 8(b)(3)(E), at each price point down to its Working Price of \$10.01 and not its limit price of \$10.00, pursuant to proposed Article 20, Rule 8(d)(4)(B)(i), because it is a Sell Short order priced at the NBB during a short sale price test

restriction in a covered security. This would be achieved by repricing Sell Order E from \$10.00 to \$10.01.

- Buy Order F would be placed on the SNAP AOO Queue, pursuant to proposed Article 20, Rule 8(b)(2)(A), as SNAP AOOs marked SNAP AOO – Pegged are only ranked on the SNAP CHX book during the stage three Pricing and Satisfaction Period, pursuant to proposed Article 18, Rule 1(b)(3)(A).

Thus, the SNAP AOO Queue for security XYZ is as follows:

SNAP AOO QUEUE – Example 3	
1	Sell Order B
2	Buy Order F

Example 4: FIFO Queue. Assume the same as Example 3. Assume then that during the SNAP Order Acceptance Period, the Exchange receives the following messages in order:

- Cancel Buy Order B.
- Cross Order A for 100,000 shares of security XYZ priced at \$10.01/share.

Under this Example 4, the Exchange will place Cancel Buy Order B and Cross Order A in the FIFO Queue, pursuant to proposed Article 18, Rule 1(b)(2)(C), in the order in which they were received.

Thus, the FIFO Queue for security XYZ is as follows:

FIFO QUEUE – Example 4	
1	Cancel Buy Order B
2	Cross Order A

Example 5: SNAP AOO Queue Processing. Assume the same as Example 4 and that the SNAP Order Acceptance Period ends without any additional orders received. Assume also that the market snapshot taken of security XYZ, pursuant to proposed Article 18, Rule 1(b)(2)(E), remains unchanged from Example 1.

Assuming that the market snapshot does not indicate that a material halt or pause has been issued in the security and that the CHX Routing Services are available, the SNAP Cycle would continue to the stage three Pricing and Satisfaction Period.

Thus, pursuant to proposed Article 18, Rule 1(b)(3)(A), the Matching System would utilize that single market snapshot and process the SNAP AOO Queue and rank such orders on the SNAP CHX book as follows:

- Sell Order B would be processed first and since Sell Order B is marked SNAP AOO – Midpoint, the Matching System will utilize the latest market snapshot to determine the NBBO midpoint price of \$10.005. Since \$10.005 is less aggressive than the stated limit price of Sell Order B of \$10.00, pursuant to proposed Article 1, Rule 2(h)(3)(C), the Matching System will rank all 3,000 shares of Sell Order B at each price point down to \$10.005.

- Buy Order F would then be processed and since Buy Order F is marked SNAP AOO – Market (+ three minimum price increments more aggressive) and does not have an optional limit price noted, the Matching System will rank all 2,500 shares of Buy Order F at each price point up to three minimum price increments more aggressive than the NBO, which is \$10.04.

Thus, the SNAP CHX book for security XYZ is now as follows:

SNAP CHX BOOK and AWAY PROTECTED QUOTES – Example 5								
Buy Orders				Price Point	Sell Orders			
Total <u>away</u> buy size <u>at</u> price point	Total <u>CHX</u> buy size <u>at</u> price point	Total buy size <u>better</u> than price point	Total buy size <u>at</u> <u>and</u> <u>better</u> than price point		Total sell size <u>at</u> <u>and</u> <u>better</u> than price point	Total sell size <u>better</u> than price point	Total <u>CHX</u> sell size <u>at</u> price point	Total <u>away</u> sell size <u>at</u> price point
0	0	0	0	<b>10.05</b>	29,300	29,300	0	0
0	2,600	0	2,600	<b>10.04</b>	29,300	29,300	0	0
0	5,000	2,600	7,600	<b>10.03</b>	29,300	29,100	200	0
0	25,000	7,600	32,600	<b>10.02</b>	29,100	28,600	0	500
0	0	32,600	32,600	<b>10.01</b>	28,600	28,000	100	500
0	0	32,600	32,600	<b>10.005</b>	28,000	25,000	3,000	0
500	5,000	32,600	38,100	<b>10.00</b>	25,000	0	25,000	0
0	0	38,100	38,100	<b>9.99</b>	0	0	0	0

If, however, the market snapshot indicated that a relevant trading halt or pause was issued in the subject security, the SNAP Cycle would not continue to the stage three Pricing and Satisfaction Period and the SNAP would be unwound pursuant to proposed Article 18, Rule 1(c). Similarly, if the CHX Routing Services were not available at the conclusion of the stage two SNAP Order Acceptance Period, the SNAP Cycle would immediately proceed to the stage five Transition to the Open Trading State.

Example 6: SNAP Price and Minimum Size Condition. Assume the same as Example 5.

The Matching System will now attempt to establish the SNAP Price, pursuant to proposed Article 18, Rule 1(b)(3)(B). Pursuant to proposed Article 1, Rule 1(rr), the SNAP Price is a single price at which the greatest number of shares may be executed during a SNAP Cycle, which would not trade-through any more aggressively priced orders on either side of the market. The size requirement is inclusive of all executions that may result during the SNAP Cycle, which would include executions within and without the Matching System.

Under this Example 6, the SNAP Price is determined by ascertaining the price point with the greatest number of shares that may be executed. Pursuant to the Example 5 chart, that price point would be \$10.02, with 29,100 executable shares (i.e., 1,000 executable shares away and 28,100 executable shares within the Matching System).

The next step would be to ensure that no orders priced more aggressively than \$10.02 on the SNAP CHX book would be traded-through by verifying that -1- the total buy size at and better than \$10.02, minus away size, is equal to or greater than the total sell size better than \$10.02 (i.e.,  $32,600 \geq 28,600$ ) and -2- the total sell size at and better than \$10.02, minus away size, is equal to or greater than the total buy size better than \$10.02 (i.e.,  $28,100 \geq 7,600$ ). Thus, the total executable size within the Matching System on one side of the market will cover all orders that must be executed within the Matching System on the other side of the market to avoid an impermissible trade-through of the CHX book and Protected Quotations of external markets. This requirement is satisfied at \$10.02.

Since Buy Order D noted a minimum SNAP execution size condition, the SNAP Price will only be \$10.02, if the size requirement, as described under proposed Article 1, Rule 2(h)(1)(B), is met.

Under this Example 6, the sum of the minimum number of shares that could be executed within the Matching System (i.e., 28,100), plus all shares that are to be routed away (i.e., 1,000 shares), equals 29,100 shares, which is greater than the minimum size requirement that was necessary to trigger the instant SNAP Cycle (i.e., 25,000 shares). Thus, the minimum size condition is met and the SNAP Price will be \$10.02.

Example 7: Satisfaction Period. Assume the same as Example 6. Since execution at the SNAP Price of \$10.02 would result in one or more orders, or portions thereof, to be routed away (i.e., to satisfy Protected Offers A and B), the SNAP Cycle will enter the Satisfaction Period prior to matching orders within the Matching System at the SNAP Price.

Pursuant to proposed Article 18, Rule 1(b)(3)(C), orders to be routed away would be selected based on their execution priority, in a manner consistent with proposed Article 19, Rule 3(a)(4). After routing orders away, the Matching System will delay executing the 28,100 shares within the Matching System for 200 milliseconds or until all confirmations are received from away markets, whichever is sooner.

Under this Example 7, execution priority on the buy side is as follows:

- Buy Order B for 100 shares, with a Working Price of \$10.04.
- Buy Order F for 2,500 shares, with a Working Price of \$10.04.
- Buy Order E for 5,000 shares with a Working Price of \$10.03.

- Buy Order D for 25,000 shares, with a Working Price of \$10.02.

Whereas, execution priority on the sell side is as follows:

- Sell Order C for 25,000 shares, with a Working Price of \$10.00.
- Sell Order B for 3,000 shares, with a Working Price of \$10.005.
- Sell Order E for 100 shares, with a Working Price of \$10.01.

Pursuant to proposed Article 19, Rule 3(a)(4), the Exchange's routing systems would route away one corresponding routing buy order for 500 shares of security XYZ priced at \$10.02/share to execute against the 500 displayed shares of Protected Offer A at \$10.01, representing 100 shares of Buy Order B and 400 shares of Buy Order F ("Routed Order A"). In addition, pursuant to proposed Article 19, Rule 3(a)(5), the Exchange's routing systems would route away one corresponding routing buy order for 500 shares of security XYZ priced at \$10.02/share to execute against the 500 displayed shares of Protected Offer B at \$10.02, representing the next 500 shares of Buy Order F ("Routed Order B"). During the Satisfaction Period, the routed portions of Buy Orders B and F will enter a pending state on the Exchange's routing systems. The routed portions of Buy Orders B and F will be released as either executed or cancelled, depending on the confirmation returned from the away market.

Assume then that within the Satisfaction Period, the Matching System receives an order execution confirmation for Routed Order A and a cancellation confirmation for Routed Order B. In this case, -1- all 100 shares of Buy Order B and -2- 400 shares of Buy Order F represented by Routed Order A would be released as executed. However, the 500 shares of Buy Order F represented by Routed Order B would be released as unexecuted

and would join the existing balance of Buy Order F at its original rank on the SNAP CHX book.

Example 8: SNAP Eligible Order received after SNAP Order Acceptance Period. Assume the same as Example 7 and that during the Satisfaction Period, the Exchange receives the following orders:

- Buy Order G for 100 shares of security XYZ priced at \$10.03/share.
- Sell Order F for 100 shares of security XYZ priced at \$10.02/share marked Post Only.
- Buy Order H for 5,000 shares of security XYZ priced at \$10.02/share marked SNAP AOO – One And Done.
- Buy Order I for 100 shares of security XYZ priced at \$10.03/share.
- Buy Order J for 100 shares of security XYZ priced at \$10.02/share marked IOC.

Pursuant to proposed Article 18, Rule 1(b)(2)(B)(i), incoming SNAP Eligible Orders that are received after the SNAP Order Acceptance Period, but during a SNAP Cycle, will be placed in the FIFO Queue, pursuant to proposed subparagraph (C). Pursuant to proposed Article 18, Rule 1(b)(2)(B)(ii), incoming non-SNAP Eligible Orders will be immediately cancelled.

Since Buy Orders G – I and Sell Order F are SNAP Eligible Orders, they will all be placed in the FIFO Queue, which is now as follows:

<b>FIFO QUEUE – Example 8</b>	
1	Cancel Buy Order B
2	Cross Order A
3	Buy Order G
4	Sell Order F
5	Buy Order H
6	Buy Order I

Buy Order J will be immediately cancelled because it is non-SNAP Eligible Order by virtue of its IOC designation.

Example 9: Order Matching. Assume the same as Example 8.

Upon conclusion of the Satisfaction Period, the SNAP Cycle would continue to the stage four Order Matching Period and execute 28,100 shares within the Matching System at the SNAP Price of \$10.02, in the following priority, pursuant to proposed Article 18, Rule 1(b)(4)(A):

Under this Example 9, execution priority on the buy side is as follows:

- Buy Order F for the remaining 2,100 shares.
- Buy Order E for all 5,000 shares.

- Buy Order D for 21,000 shares, with 4,000 shares remaining unexecuted.<sup>91</sup>

Whereas, execution priority on the sell side is as follows:

- Sell Order C for 25,000 shares.
- Sell Order B for 3,000 shares.
- Sell Order E for 100 shares.

These orders are matched by the Matching System and each trade is reported first to the appropriate SIP and then to the parties of each side of the trade as follows:

Buy Order	Sell Order	Number of Shares	Trade Price
F	C	2,100	10.02
E	C	5,000	10.02
D	C	17,900	10.02
D	E	100	10.02
D	B	3,000	10.02

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<sup>91</sup> Note that while the minimum execution size condition of 25,000 shares was met, Buy Order D received an execution size less than the minimum. This may result if there are orders on the SNAP CHX book, on the same side of the market as a Start SNAP order, that have more aggressive Working Prices.

Thus, the SNAP CHX book after execution at the SNAP Price would be as follows:

SNAP CHX BOOK and AWAY PROTECTED QUOTES – Example 9								
Buy Orders				Price Point	Sell Orders			
Total away buy size at price point	Total CHX buy size at price point	Total buy size better than price point	Total buy size at and better than price point		Total sell size at and better than price point	Total sell size better than price point	Total CHX sell size at price point	Total away sell size at price point
0	0	0	0	<b>10.05</b>	200	200	0	0
0	0	0	0	<b>10.04</b>	200	200	0	0
0	0	0	0	<b>10.03</b>	200	0	200 (A)	0
0	4,000 (D)	0	4,000	<b>10.02</b>	0	0	0	0
0	0	4,000	4,000	<b>10.01</b>	0	0	0	0
0	0	4,000	4,000	<b>10.005</b>	0	0	0	0
0	5,000 (A)	4,000	9,000	<b>10.00</b>	0	0	0	0
0	0	9,000	9,000	<b>9.99</b>	0	0	0	0

The only remaining orders are the unexecuted balance of Buy Order D, Buy Order A and Sell Order A.

Example 10: Transition to Open Trading State. Assume the same as Example 9. Assume also that after executing the orders within the Matching System at the SNAP Price, the Matching System takes another market snapshot of security XYZ, pursuant to proposed Article 18, Rule 1(b)(4)(B), which shows that the NBBO for security XYZ is now \$10.02 x. \$10.03. Assume also that the Protected Quotations of away markets in security XYZ is as follows:

- Protected Bid B on Exchange 4 displaying 100 shares at \$10.02.
- Protected Offer C on Exchange 5 displaying 100 shares at \$10.03.

Under this Example 10, the Matching System will utilize the above market snapshot in security XYZ to transition the remaining unexecuted resting orders on the SNAP CHX book to the CHX book, pursuant to proposed Article 18, Rule 1(b)(5)(A), as follows:

- Buy Order A would post to the CHX book at \$10.00, with the 1,000 displayed shares ranked, pursuant to proposed Article 20, Rule 8(b)(1)(A), and the 4,000 undisplayed reserved shares ranked, pursuant to proposed Article 20, Rule 8(b)(1)(B).
- Sell Order A would post to the CHX book at \$10.03 and ranked, pursuant to proposed Article 20, Rule 8(b)(1)(A).
- Buy Order D would be cancelled as limit orders marked Start SNAP are never eligible for the Open Trading State.

The Matching System will then process the FIFO Queue, pursuant to proposed Article 18, Rule 1(b)(5)(B), as follows:

- Cancel Buy Order B message would have no effect because Buy Order B was fully executed during the stage three Satisfaction Period.<sup>92</sup>
- Cross Order A would be cancelled because execution at the crossing price of \$10.01 would result in an impermissible trade-through of Protected Bid B at \$10.02, in violation of Rule 611 of Regulation NMS.
- Buy Order G would execute against 100 shares of Sell Order A at \$10.03, leaving Sell Order A with 100 shares at \$10.03.

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<sup>92</sup> See supra Example 7.

- Sell Order F would be cancelled pursuant to its Post Only designation because it would impermissible lock the NBO at \$10.02 and it is not routable.
- Buy Order H would be placed in the SNAP AOO Queue, since it was received after the SNAP Order Acceptance Period and is, thus, eligible for the next SNAP Cycle that is initiated.
- Buy Order I would execute against the remaining 100 shares of Sell Order A at \$10.03.

Thus, the only remaining order on the CHX book is Buy Order A for 5,000 shares (i.e., 1,000 displayed and 4,000 undisplayed) at \$10.00.

Immediately after the FIFO Queue has been processed, pursuant to proposed Article 18, Rule 1(b)(5)(C), the Exchange will notify the market that the SNAP has concluded; publish its Protected Bid at \$10.00 for 1,000 shares; and begin dissemination of information through the CHX Book Feed, including information regarding the displayable portions of all orders posted to the CHX book (i.e., 1,000 displayed shares of Buy Order A).

#### SECTION SEVEN: Market Maker Requirements

The Exchange does not propose to include any market making requirements with regards to SNAP. Pursuant to current Article 16, Rule 8, Participant Market Makers in a security are required to maintain two-sided quotes in the security and to meet certain pricing obligations concerning such quotes, during the regular trading session. As such, the current requirements would only be applicable during the Open Trading State, which is the only time during the regular trading session when quotes would be displayed and automatically executable. Thus, the

current requirements are inapplicable to SNAP Cycles because quotes are never displayed and never automatically executable during a SNAP Cycle. Moreover, in light of the substantial size and aggressive pricing requirements to initiate a SNAP Cycle, the Exchange does not believe it appropriate, at this time, to propose additional requirements for Participant Market Makers with regards to SNAP.

Thus, the Exchange proposes to amend Article 16, Rule 8(a) to provide that the current two-sided quote and pricing obligations for Participant Market Makers only apply during the Open Trading State. Incidentally, the Exchange proposes to amend an obsolete reference to “member” with the more accurate “Participant,” under paragraph (a)(1).

#### SECTION EIGHT: Operative Date

In the event the proposed rule change is approved by the SEC, the Exchange proposes to make the proposed rule change operative pursuant to two weeks’ notice by the Exchange to its Participants via Regulatory Notice. Prior to the operative date, the Exchange will ensure that policies and procedures are in place to allow Exchange operations personnel to effectively monitor the use of the SNAP functionality. The Exchange will also ensure that any special notices required pursuant to the proposed rule change will be made to Participants, including notices regarding securities that will not be eligible for SNAP.

#### 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act in general,<sup>93</sup> and furthers the objectives of Section 6(b)(5) in particular,<sup>94</sup> in that it is

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<sup>93</sup> 15 U.S.C. 78f(b).

<sup>94</sup> 15 U.S.C. 78f(b)(5).

designed to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments and perfect the mechanisms of a free and open market, and, in general, to protect investors and the public interest.

The Exchange believes that SNAP will further the objectives of Section 6(b)(5) of the Act precisely because it will address a market need, as noted by Chair White, for a trading service that deemphasizes speed as a key to trading success in order to further serve the interests of investors,<sup>95</sup> which will operate in compliance with Regulation NMS and Rule 201 of Regulation SHO or applicable exemptive relief.<sup>96</sup>

In recent years, market participants seeking to trade securities in bulk have largely avoided exchanges due to a lack of trading services that sufficiently minimize the downside of exposing large orders to the market, which may include unfavorable market activity in response to the posting of a large displayed order and insufficient displayed liquidity, both of which result in inadequate price discovery for bulk orders. It is a vicious cycle: market participants seeking to execute bulk orders in whole at marketable or even hypermarketable prices are frequently unable to find sufficient liquidity on exchanges, whereas market participants wishing to provide bulk liquidity to the market are unwilling to display such orders on an exchange due to the inevitable and unfavorable market activity to follow.

The Exchange believes that the key to bulk trading success on an exchange is a functionality that momentarily consolidates trading interest in a security in one place, while

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<sup>95</sup> See supra note 4.

<sup>96</sup> See supra note 7.

automated trading in the security continues elsewhere in the national market system, and to permit such orders to interact on a fully-hidden book based on a set of carefully-designed rules that minimize the downside of exposing large orders to the market. The Exchange submits that SNAP is precisely such a functionality because it would enhance market liquidity and the price discovery process, while minimizing information leakage and speed advantages.

The Exchange believes that incentivizing market participants to initiate and respond to SNAPs would remove impediments and perfect the mechanisms of a free and open market because it would enhance market liquidity. In order to incentivize market participants to initiate SNAP Cycles, upon initiation of a SNAP Cycle, the Exchange will notify the market that a SNAP Cycle has been initiated, which gives the Start SNAP order sender the benefit of notifying the market of its bulk trading interest, without giving away crucial details, such as exact price, size or side of the Start SNAP order, that could disadvantage the Start SNAP order sender.<sup>97</sup> In turn, market participants will be incentivized to respond to SNAP Cycles knowing that a SNAP Cycle will only be initiated by a valid marketable or hypermarketable Start SNAP order that meets a substantial minimum size requirement.<sup>98</sup> Also, market participants will also know that SNAP AOs that could participate in a SNAP Cycle will also be ranked on the SNAP CHX book, all of which must meet a substantial minimum size requirement, thereby potentially increasing the size of interest on the SNAP CHX book.<sup>99</sup> Moreover, SNAP will further incentivize market participants to participate in SNAP Cycles by prohibiting order cancellations

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<sup>97</sup> See proposed CHX Article 18, Rule 1(b)(1)(A).

<sup>98</sup> See proposed CHX Article 1, Rule 2(h)(1)(A).

<sup>99</sup> See proposed CHX Article 1, Rule 2(h)(3).

during a SNAP Cycle, which will assure potential order senders that the Start SNAP order that initiated the SNAP Cycle, as well as any other orders participating in the instant SNAP Cycle, will not be cancelled, and has the additional effect of encouraging order senders to submit bona fide SNAP Eligible Orders.<sup>100</sup> In light of all of these characteristics, the market will be on notice that aggressively priced interest of a substantial size is guaranteed to exist at CHX.

Similarly, the Exchange believes that incentivizing market participants to initiate and respond to SNAPs would remove impediments and perfect the mechanisms of a free and open market because it would enhance the price discovery process. That is, SNAP would enhance the price discovery process through enhanced market liquidity. Specifically, the concentration of liquidity at CHX combined with the aggressive pricing requirement of the Start SNAP order will maximize the probability of overlap of orders at one or more price points. If overlap exists, a SNAP Price will be determined pursuant to a ruled-based algorithm that balances maximum execution size with an execution price that accurately reflects market demand.<sup>101</sup> As such, SNAP Eligible Order senders can submit aggressively priced orders knowing that the SNAP Price will be equitable, which enhances the price discovery process.

The Exchange further believes that certain aspects of SNAP designed to minimize information leakage concerning orders participating in a SNAP Cycle would promote just and equitable principles of trade and remove impediments and perfect the mechanisms of a free and open market because such measures would minimize the probability of unfavorable market activity in response to a SNAP that could disadvantage orders participating in a SNAP Cycle

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<sup>100</sup> See proposed CHX Article 18, Rule 1(b)(2)(C)(i).

<sup>101</sup> See proposed CHX Article 1, Rule 1(rr); see also supra Section 6, Example 6.

and, in particular, the Start SNAP order. Specifically, this would be achieved by requiring the SNAP CHX book to be fully-hidden and market data dissemination to be suspended during the SNAP Cycle (except for SNAP execution reports to the relevant SIP and order senders).<sup>102</sup> Also, since orders are only executed within the Matching System during the stage four Order Matching Period, market participants will be prevented from “pinging” the SNAP CHX book in an attempt to glean the contents of the book.<sup>103</sup> Moreover, a Start SNAP order sender has the option to place a minimum SNAP execution size condition equal to the minimum size requirement to initiate a SNAP Cycle, which prevents the market from being able to deduce crucial information concerning the Start SNAP order without maximizing the probability of substantial executions.<sup>104</sup>

The Exchange also believes that the fact that SNAP would never be scheduled and that the length of the SNAP Order Acceptance Period would be randomized would promote just and equitable principles of trade and remove impediments and perfect the mechanisms of a free and open market because such aspects deemphasize speed as a key for trading success. For example, by randomizing key aspects of the SNAP Cycle, market participants will not be able to utilize speed advantages to ascertain precisely when a SNAP Cycle will be initiated and when certain events during a SNAP Cycle will begin or end. That is, since SNAP Cycles are never scheduled, market participants, other than the Start SNAP order sender, will never know precisely when a

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<sup>102</sup> See proposed CHX Article 18, Rule 1(a) and (b)(1).

<sup>103</sup> See proposed CHX Article 18, Rule 1(b)(4).

<sup>104</sup> See proposed CHX Article 1, Rule 2(h)(1)(B).

SNAP Cycle will be initiated.<sup>105</sup> Similarly, since the stage two SNAP Order Acceptance Period is randomized, within a time frame of 475 to 525 milliseconds, market participants will never be able to know exactly when the SNAP Order Acceptance Period will end.<sup>106</sup> At the same time, the Exchange believes that 475 to 525 milliseconds is sufficient time for virtually all order senders to submit SNAP Eligible Orders in response to a SNAP Cycle notification.

The Exchange further believes that the special order ranking plan and new order modifiers for SNAP promote just and equitable principles of trade and remove impediments and perfect the mechanisms of a free and open market because such aspects also deemphasize speed as a key for trading success. Specifically, SNAP Eligible Orders received in response to a SNAP Cycle notification will be subordinated in rank on the SNAP CHX book to all precedent SNAP Eligible Orders.<sup>107</sup> Thus, market participants submitting orders in response to a notice of a SNAP Cycle will never be able to utilize speed advantages to achieve priority over precedent resting SNAP Eligible Orders. Moreover, SNAP AOOs further minimize speed advantages by permitting order senders to submit SNAP AOOs from as early as the beginning of the early session,<sup>108</sup> well before a SNAP Cycle could be initiated.<sup>109</sup> Thus, an order sender could submit a SNAP AOO before a SNAP Cycle is initiated knowing that that order will never lose priority to orders received during a subsequent SNAP Order Acceptance Period. Similarly, SNAP AOO – Pegged further minimize speed advantages by obviating the need to directly consume and

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<sup>105</sup> See proposed CHX Article 18, Rule 1(a).

<sup>106</sup> See proposed CHX Article 18, Rule 1(b)(2).

<sup>107</sup> See proposed CHX Article 20, Rule 8(b)(3).

<sup>108</sup> See supra note 26.

<sup>109</sup> See proposed CHX Article 1, Rule 2(h)(3).

process market data at the crucial moment when the order is submitted because such orders will be priced at the last possible moment, after the end of the SNAP Order Acceptance Period, by the Exchange's systems, which will utilize the most recent market data.<sup>110</sup>

In adopting Regulation NMS, the SEC highlighted the importance of maintaining an appropriate balance between competition among markets and competition among orders.<sup>111</sup> Specifically, the SEC stated, "vigorous competition among markets promotes more efficient and innovative trading services, while integrated competition among orders promotes more efficient pricing of individual stocks for all types of orders, large and small."<sup>112</sup> The SEC noted, however, the difficulty in striking that balance in that "competition among multiple markets trading the same stock can detract from the most vigorous competition among orders in an individual stock, thereby impeding efficient price discovery for orders of all sizes."<sup>113</sup> The Exchange believes that SNAP is consistent with these concepts because it is an innovative functionality that promotes competition among markets by enhancing the price discovery process for orders of all sizes, thereby also promoting competition among orders. As such, the Exchange believes that SNAP would further the objectives of Section 6(b)(5) the Act precisely because it would operate consistently with Regulation NMS<sup>114</sup> and Rule 201 of Regulation SHO or applicable exemptive

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<sup>110</sup> See proposed CHX Article 1, Rule 2(h)(3)(C).

<sup>111</sup> See Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005) ("NMS Release").

<sup>112</sup> Id.

<sup>113</sup> Id.

<sup>114</sup> 17 CFR 242.611.

relief.<sup>115</sup>

Specifically, SNAP will be compliant with the Order Protection Rule of Rule 611 of Regulation NMS.<sup>116</sup> SNAP executions during the stage four Order Matching Period will only occur after the routing of one or more ISOs to execute against the Protected Quotations of external markets priced better than the SNAP Price.<sup>117</sup> In addition, where there are additional orders resting on the SNAP CHX book at the SNAP Price that could not be executed within the Matching System during the stage four Order Matching Period, but could be executed against Protected Quotations of external markets at the SNAP Price, the Exchange will route those orders to execute against such Protected Quotations, even though such routing is not required by Rule 611 of Regulation NMS.<sup>118</sup> Thus, SNAP routing is compliant with Rule 611 of Regulation NMS because executions at the SNAP Price will never impermissibly trade-through better priced Protected Quotations of external markets.

With respect to the proposed queuing of cross orders on the FIFO Queue received during a SNAP Cycle for later processing during the stage five Transition to the Open Trading State,<sup>119</sup> the Exchange believes that the queuing of cross orders marked Qualified Contingent Transaction (“QCT”) during a SNAP Cycle will have no material impact on its ability to meet all of the

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<sup>115</sup> See supra note 7; 17 CFR 242.201.

<sup>116</sup> Since the Exchange will remove its Protected Quotations in the subject security, if any, upon the initiation of a SNAP Cycle and will not disseminate Protected Quotations in the subject security until the end of the SNAP Cycle, SNAP does not implicate any Rule 610 of Regulation NMS issues.

<sup>117</sup> See proposed CHX Article 19, Rule 3(a)(4).

<sup>118</sup> See proposed CHX Article 19, Rule 3(a)(5).

<sup>119</sup> See proposed CHX Article 18, Rule 1(b)(2)(C)(iv).

requirements for the QCT exemption.<sup>120</sup>

The SEC defines “QCT” as a transaction consisting of two or more component orders, executed as agent or principal, where:

- (1) at least one component order is in an NMS stock;
- (2) all components are effected with a product or price contingency that either has been agreed to by the respective counterparties or arranged for by a broker-dealer as principal or agent;
- (3) the execution of one component is contingent upon the execution of all other components at or near the same time;
- (4) the specific relationship between the component orders (e.g., the spread between the prices of the component orders) is determined at the time the contingent order is placed;
- (5) the component orders bear a derivative relationship to one another, represent different classes of shares of the same issuer, or involve the securities of participants in mergers or with intentions to merge that have been announced or since cancelled; and
- (6) the Exempted NMS Stock Transaction is fully hedged (without regard to any prior

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<sup>120</sup> See Securities Exchange Act Release No. 54389 (August 31, 2006), 71 FR 52829 (September 7, 2006) (“Order Granting an Exemption for Qualified Contingent Trades From Rule 611(a) of Regulation NMS Under the Securities Exchange Act of 1934”); see also Securities Exchange Act Release No. 57620 (April 4, 2008), 73 FR 19271 (April 4, 2008) [sic] (“Order Modifying the Exemption for Qualified Contingent Trades From Rule 611(a) of Regulation NMS Under the Securities Exchange Act of 1934”); see also Article 1, Rule 2(b)(2)(E).

existing position) as a result of the other components of the contingent trade.<sup>121</sup>

The proposed queuing of QCTs on the FIFO Queue only implicates the QCT timing requirement because the proposed queuing would only impact the timing of the QCT execution. However, the Exchange believes that the momentary delay resulting from the proposed queuing would be immaterial because of the fact that the execution of the different components that comprise QCTs usually take many seconds, if not minutes, to accomplish. This is because the packaging of QCTs is inherently a manual process that frequently involves numerous broker-dealers representing several counter-parties with two or more component orders to be executed on two or more venues. In fact, this reality is recognized by the QCT exemption itself through the timing requirement of “at or near the same time,” which does not note a specific time requirement.<sup>122</sup>

SNAP is also consistent with Rule 201 of Regulation SHO or applicable exemptive relief.<sup>123</sup> Specifically, SNAP Eligible Orders marked Sell Short in a covered security subject to the short sale price test restriction will never be permitted to execute at prices at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E). For SNAP Eligible Orders marked Sell Short with a limit price at one minimum price increment above the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E) or higher, such orders would simply be ranked on the SNAP CHX book at its limit price. However, for SNAP Eligible Orders marked Sell Short with a limit price

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<sup>121</sup> See id.

<sup>122</sup> See id. (emphasis added).

<sup>123</sup> See supra note 7.

at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E), the Matching System would reprice such orders to one minimum price increment above that NBB and rank such orders on the SNAP CHX book at the new higher price.<sup>124</sup> Thus, if the SNAP Price is ultimately determined to be at or below the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E), during a short sale price test restriction, this ranking methodology would ensure that SNAP Eligible Orders marked Sell Short would not participate in the SNAP execution, as such orders would never have an executable price lower than one minimum price increment above the NBB ascertained from the market snapshot taken pursuant to proposed Article 18, Rule 1(b)(2)(E).<sup>125</sup>

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

The Exchange 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. To the contrary, the Exchange believes that any burden on competition is necessary and appropriate in furtherance of the purposes of Section 6(b)(5) of the Act because SNAP is an initiative that seeks to deemphasize speed as a key to trading success in order to further serve the interests of investors, as recently noted by Chair White, and thereby removes impediments and perfects the mechanisms of a free and open market.<sup>126</sup>

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

No written comments were solicited or received with respect to the proposed rule change.

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<sup>124</sup> See proposed CHX Article 20, Rule 8(d)(4)(B)(i).

<sup>125</sup> See proposed CHX Article 18, Rule 1(b)(4)(A).

<sup>126</sup> See supra note 4; see also supra Statutory Basis.

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

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- A. by order approve or disapprove the proposed rule change, or
- B. Institute proceedings to determine whether the proposed rule change should be 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:

#### 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-CHX-2015-03 on the subject line.

#### Paper comments:

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

All submissions should refer to File Number SR-CHX-2015-03. 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 such filing also will be available for inspection and copying at the principal offices 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-CHX-2015-03, 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>127</sup>

Robert W. Errett  
Deputy Secretary

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<sup>127</sup> 17 CFR 200.30-3(a)(12).