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SECURITIES AND EXCHANGE COMMISSION  
[Release No. 34-81022; File No. SR-OC-2017-02]

Self-Regulatory Organizations; OneChicago, LLC; Notice of Filing of Proposed Rule Change to Implement Four Decimal Pricing for Outright Transactions in Single Stock Futures

June 26, 2017

Pursuant to Section 19(b)(7) of the Securities Exchange Act of 1934 (the “Act”)<sup>1</sup>, notice is hereby given that on June 16, 2017, OneChicago, LLC (“OneChicago” or the “Exchange”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons. OneChicago has also filed this rule change with the Commodity Futures Trading Commission (“CFTC”). OneChicago filed a written certification with the CFTC under Section 5c(c) of the Commodity Exchange Act (“CEA”) on June 16, 2017.

I. Self-Regulatory Organization’s Description of the Proposed Rule Change

OneChicago is proposing to amend OneChicago Rule 902 (Contract Specifications) to decrease the minimum price increment for outright Single Stock Futures (“SSFs”)<sup>2</sup> quotes and trades from \$0.01 to \$0.0001 per share, which results in a minimum price fluctuation of \$0.01 per contract. OneChicago is proposing this change to permit market participants to more precisely price the interest rate component of SSFs. Unlike their underlying securities, which are typically priced directly by the value of the security itself, SSF prices are derived by adding an interest rate component to the price of the underlying security. As described in more detail

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<sup>1</sup> 15 U.S.C. 78s(b)(7).

<sup>2</sup> An “outright” SSF trade is a non-block, non-EFP, non-spread trade.

below, interest rates are commonly quoted in basis points (“bps”), and the forward value of SSFs must accurately reflect these interest rates. As such, OneChicago believes that four decimal quoting and trading may assist market participants in pricing SSFs with the precision necessary to reflect the actual value of the interest rate component of the contract.

The minimum price fluctuation is set forth in OneChicago Rule 902, which provides general contract specifications for all OneChicago SSFs. Because the minimum price increment for blocks, EFPs, and spread transactions was already set at \$0.0001, upon amending OneChicago Rule 902(e), all SSF trade types, including outright trades, will quote and trade with minimum fluctuations of \$0.0001 (i.e., one basis point per dollar).

Further, as currently drafted, OneChicago Rule 902(e) provides that the Exchange may amend the minimum price fluctuation for SSFs without amending the text of the rule itself. Specifically, the clause “or as otherwise stated by the Exchange” effectively permits the Exchange to set a minimum price fluctuation by notice or other means. OneChicago is now proposing to amend OneChicago Rule 902(e) to delete this clause, thereby providing certainty to market participants that the minimum price fluctuation is stated solely in OneChicago Rule 902, and will not be amended other than through the rule change process.

The text of the proposed rule change is attached as Exhibit 4 to the filing submitted by the Exchange but is not attached to the published notice of the filing.

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

In its filing with the Commission, OneChicago included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared a summary of the most significant

aspects of such statements.

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

1. Purpose

OneChicago is proposing to amend OneChicago Rule 902 (Contract Specifications) to decrease the minimum fluctuation for outright SSF quotes and trades from \$0.01 to \$0.0001 per share effective July 10, 2017.<sup>3</sup> Previously, the minimum price fluctuation for each contract was located in the OneChicago Rule 905 supplement. In 2011, OneChicago amended the pricing of block and EFP transactions in OneChicago Rule 905 to permit four decimal point trade prices.<sup>4</sup> In 2015, OneChicago similarly amended OneChicago Rule 905 to permit quoting and trading of spread transactions in four decimal places as well.<sup>5</sup> This expansion allowed these trades to be more precisely priced because, as described in detail below, the interest rate component of SSFs is expressed in basis points, and four decimal pricing would permit market participants to quote or trade at prices that translate to their desired basis point level.

This change will harmonize the pricing of all OneChicago trade types to four decimal places, and permit the same level of precision in central limit order book ("CLOB") outright trades as is currently available for block trades. This change may also remove a potential barrier to entry to OneChicago's competitive marketplace, and could encourage market participants to transition away from the block marketplace and to the CLOB.

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<sup>3</sup> OneChicago's outright SSFs are currently quoted and traded in two decimal places, and are therefore settled on a per-contract basis with a minimum price fluctuation of \$1.00 due to the 100 share per-contract multiplier. The Commission notes that the proposed rule change has become effective on June 16, 2017 and will be implemented on July 10, 2017.

<sup>4</sup> See Securities Exchange Act Release No. 65053 (August 8, 2011) (SR-OC-2011-01).

<sup>5</sup> See Securities Exchange Act Release No. 75464 (July 16, 2015) (SR-OC-2015-02).

OneChicago acknowledges that sub-penny pricing is currently prohibited in NMS securities.<sup>6</sup> Although SSFs are not NMS securities, OneChicago believes it is warranted to discuss why four decimal pricing is appropriate in the SSF market, as well as why certain concerns highlighted by the rule's sub-penny prohibition would not apply to the SSFs listed by OneChicago.<sup>7</sup>

#### Interest Rate Component of SSFs

Unlike securities—which are assets—SSFs are contingent liabilities that represent the forward value of the underlying security. The primary difference in pricing between securities and the SSFs that overlay them is the interest rate component of the forward contract. The interest rate of an SSF represents the cost for an individual to hold the underlying equity—or in other words, the cost of carry. Interest rates are described in basis points, which are hundredths of one percentage point. For example, an interest rate of 1.25% can also be expressed as 125 basis points. Interest rates are relative, not static, values. Consequently, 125 basis points can represent a different dollar value depending on the notional amount the interest rate is applied to. Four decimal pricing is a necessary step towards allowing SSFs to be priced in the dollar value that translates to the desired basis point equivalent.

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<sup>6</sup> 17 CFR 242.612.

<sup>7</sup> OneChicago notes that equity options, like SSFs, also have a multiplier of 100 underlying shares, but are currently only quoted and traded in two decimal places. OneChicago believes it is appropriate to distinguish SSFs from equity options with regard to decimal quoting and trading. In OneChicago's view, unlike equity options, which are primarily used for hedging or speculating, the primary uses of SSFs are to (1) refinance equity positions by replacing them with positions in SSFs at more favorable interest rates, (2) loan or borrow securities, or (3) loan or borrow cash with securities as collateral. In each case, the ability for the SSF trade price to precisely target the desired interest rate of the transaction is a necessary component. Accordingly, providing for four decimal quoting and trading supports the key uses of SSFs.

Since a trade in an SSF is not the purchase of an asset, but instead allows the individual to carry a position to a future time, the most accurate way to price the interest rate of the trade is in basis points. In order to trade in basis points, market participants need the ability to price trades to the fourth numerical decimal point.<sup>8</sup> The decimal pricing expressed in dollars and cents can simply be viewed as a translation tool to permit market participants to trade at their desired level of basis points.

OneChicago believes that two decimal pricing is not sufficient to translate a dollar value to an interest rate with precision. For example, an SSF bid-ask spread of \$4.01 by \$4.02 on a \$4.00 underlying stock with sixty-four days left until expiration would represent a 1.40% (140 bps) difference between the best bid and best ask. Specifically, the bid at \$4.01 translates to a 1.41% (141 bps) interest rate, whereas the offer at \$4.02 translates to a 2.81% (281 bps) interest rate.<sup>9</sup> A market participant desiring to enter into a long position in the SSF at any interest rate between 140 bps and 281 bps would be prohibited from doing so by two decimal pricing, even if the seller was also willing to enter into a short position at that level.

Although SSF trade prices are represented in dollar values, they also encompass interest rate and time until expiration. By using the trade price and time until expiration, market participants can determine the corresponding interest rate of the trade. Likewise, if a market

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<sup>8</sup> OneChicago notes that the greater number of numerical decimal places available in a trade price, the more precisely the basis point rate of a trade may be targeted. OneChicago believes that four decimal point pricing is currently sufficient to provide interest rate precision, while also avoiding increased complexity that may be associated with five or six (or greater) decimal point pricing. Due to the 100 share multiplier, per-share trade prices in four decimals would permit contract settlement in two decimal places.

<sup>9</sup> As an ancillary matter, OneChicago notes that the Exchange trading platform does not support market orders partly to protect market participants from inadvertently crossing these large interest rate spreads and executing at an unexpected or undesired interest rate. Limit orders are the only order type that allow participants to precisely target an interest rate with their order price.

participant is seeking a particular interest rate, that market participant can calculate the trade price by taking into account the desired interest rate and days until expiry. This is distinguished from trading in the underlying securities where the trade price directly represents the value of the asset itself. Accordingly, when market participants trade an SSF, they are calculating the futures trade price by considering not only the stock price, but also the days left to expiry and the prevailing interest rate.<sup>10</sup>

#### Concerns Raised by Reg NMS

OneChicago has considered whether permitting market participants to quote and trade SSFs in up to four decimals will impose any burdens on or otherwise negatively impact the SSF marketplace.<sup>11</sup> OneChicago does not believe that permitting quoting and trading SSFs in up to four decimals will cause market participants to step ahead of each other's limit orders for nominal amounts, and thereby cause resting limit orders to lose their execution priority in the CLOB. Since \$0.0001 in an SSF trade price may represent varying notional amounts depending on the trade price, quantity, and days left until expiry, OneChicago does not believe it is

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<sup>10</sup> Interest rates are typically expressed in five decimal places (or alternatively, in basis points out to three decimal places). See e.g., ICE Libor Historical Rates, available at <https://www.theice.com/marketdata/reports/170>.

<sup>11</sup> Rule 612 of Regulation NMS, 17 CFR 242.612, prohibits national securities exchanges from accepting or ranking orders in any NMS security priced greater than \$1.00 per share in an increment smaller than \$0.01. By prohibiting sub-penny pricing, Regulation NMS sought to prevent market participants from stepping ahead of each other for a nominal or infinitesimally small amount, thereby discouraging the use of limit orders, and also to prevent overburdening market participants' systems due to increased messaging traffic resulting from sub penny orders. Although SSFs are not NMS securities, OneChicago has considered the prohibition on sub-penny pricing in NMS securities, and has concluded that the concerns raised by sub-penny pricing are not applicable to SSFs and unnecessary to impose on the SSF market.

appropriate to prohibit four decimal pricing based on such a concern.<sup>12</sup> This is especially true in a low interest rate environment where market participants need to tailor their SSF trade prices with accuracy such that the resulting interest rate is in line with their expectations.

Additionally, unlike the equity markets in which hundreds of trades occur every second, OneChicago's markets are strictly governed to limit order frequency. The overwhelming majority of volume executed on the exchange occurs through the use of manual front-end systems, whereby the individual trader fills out each order ticket with the relevant order parameters. Further, even market participants trading programmatically (and who are not market-makers) are limited to a maximum of ten orders per second across all products, which minimizes the potential that any one market participant would repeatedly enter and modify orders in one particular product.

Accordingly, OneChicago believes that it is unlikely that limit orders will be frequently stepped ahead of due to the low messaging quantity threshold permitted by the Exchange. OneChicago notes on this topic that if a limit order loses execution priority to another limit order priced exactly \$0.0001 above (in the case of a buy order) or \$0.0001 below (in the case of a sell order) the resting order, this loss of priority typically would not have occurred for a nominal amount.<sup>13</sup> As described above, the fourth decimal place of an SSF trade can represent a different dollar value depending on the price of the underlying security and the days left until expiry of the

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<sup>12</sup> The average trade quantity on the CLOB is 5 contracts. Accordingly, the fourth decimal place would represent, on average, a \$0.05 difference in trade value, which may translate to a meaningful interest rate, depending on the trade price and time until expiration. On a typical CLOB trade, the fourth decimal place may represent 0.1 to 3 bps in interest. By way of example, a 5 contract trade at a futures trade price of \$13.9835 results in a notional value of \$6991.75. Without the third and fourth decimal places (a futures trade price of \$13.98), the notional value would be \$6990.00, a difference of \$1.75.

<sup>13</sup> As described in footnote 12, \$0.05 may represent a spectrum of interest rates, depending on the futures trade price and days remaining until expiry.

futures contract. Accordingly, the Exchange believes that in most instances, the new limit order would have provided actual interest rate improvement over the resting order. In fact, the Exchange predicts that this rule change will encourage the entry of more competitive orders due to increased participation by both retail investors and market makers.<sup>14</sup>

Furthermore, OneChicago does not anticipate any capacity burden generated as a result of permitting four decimal quoting and trading, as OneChicago does not expect its messaging traffic to increase as a result of this change. Therefore, the Exchange does not believe quote submission or market data receipt will be impacted in any way. Moreover, four decimal pricing is currently commonplace in the futures industry outside of SSFs.<sup>15</sup>

#### Impact on Retail Investors

OneChicago believes that the primary beneficiaries of this rule change will be retail investors. OneChicago's SSFs offer retail investors an alternative to financing their equity securities positions via margin loan from their brokers, and offer these investors the ability to acquire synthetic exposure to equity securities at competitive financing rates. OneChicago believes the lack of four decimal pricing for outright trades has hampered the ability of the Exchange's market makers to make competitive markets which would allow retail investors to transact at competitive financing rates. With four decimal pricing in the CLOB for outright trades, OneChicago anticipates that new market makers will enter the marketplace and make more competitive markets, increasing trading activity on the CLOB.

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<sup>14</sup> OneChicago notes that its spread marketplace has been trading on a centralized order book in four decimal places since July 20, 2015. Since that time, OneChicago has not observed any instance in which a limit order for a spread transaction was stepped ahead of.

<sup>15</sup> Many futures products tied to interest rates trade in greater than two decimals. Although the per-contract notional value in these products are usually larger than the typical outright SSF notional value, OneChicago believes the need for interest rate precision is consistent across all of these products.

Further, as stated above, this rule change will encourage market participants to transact in OneChicago's CLOB, rather than in the block marketplace, thereby increasing competition in trading and quoting these products. Currently, block trades, which are privately negotiated transactions available only to eligible contract participants, as that term is defined in section 1a(18) of the CEA,<sup>16</sup> are already priced in four decimals. This change will place retail investors, who may not access the block marketplace, on equal footing with these more sophisticated participants by permitting them to price their SSF trades in up to four decimals. As a result of this bifurcated structure in which sophisticated parties can transact blocks in four decimals, but retail investors may not, retail investors are at a disadvantage as they receive less competitive interest rates on their CLOB trades.<sup>17</sup> In addition to permitting retail investors to trade in four decimals, OneChicago anticipates this rule change will cause sophisticated participants who can already transact in four decimal places in the block marketplace to begin to transition their activity to the CLOB. By aggregating and concentrating more SSF activity in the CLOB, OneChicago expects that all market participants will transact at more competitive levels than those present today.

#### Monitoring of Four Decimal Trading

As stated above, OneChicago does not anticipate that the transition of outright SSF trading to four decimals will harm or disadvantage any market participant. Nonetheless, in order to address any concerns related to stepping ahead, the Exchange plans to monitor its trading

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<sup>16</sup> 7 U.S.C. 1a(18).

<sup>17</sup> Although block trades typically have greater trade quantities than outright trades, block trades may trade in minimum quantities as low as five contracts for OneChicago's NoDivRisk products. Currently, participants in the block marketplace receive more favorable interest rates than those in the outright CLOB marketplace due to (1) the ability to pre-hedge block trades, and (2) four decimal pricing, which is currently available in blocks but not for outright trades.

activity to determine whether permitting outright SSFs to trade in up to four decimal places has caused any harm to investors or deterioration in market quality. OneChicago plans to monitor this in two ways. First, the Exchange plans to monitor its trading directly for any incidence of stepping ahead. To do so, the Exchange will implement surveillance procedures that identify instances in which a market participant uses the third or fourth decimal place to step ahead of limit orders on the CLOB. OneChicago will review such activity and determine whether there is a pattern or practice of conduct not in line with just and equitable principles of trade. Second, OneChicago will, on a periodic basis, assess its market quality by looking to various factors such as spreads, market depth, and number and diversity of market participants. Using this two-pronged approach, the Exchange can determine whether permitting quoting and trading of SSFs in up to four decimals has promoted market quality, while ensuring market integrity. If OneChicago makes the determination that four decimal pricing has harmed either market quality or integrity, the Exchange will amend OneChicago Rule 902 to return to two decimal pricing. In order to provide its market participants with sufficient notice regarding this this [sic] change, OneChicago plans to distribute a Notice to Members before implementing the change to permit its market participants to make any necessary technology or operational changes, which OneChicago anticipates will be minimal.

## 2. Statutory Basis

OneChicago believes that the proposed rule change is consistent with Section 6(b) of the Act,<sup>18</sup> in general, and furthers the objectives of Section 6(b)(5)<sup>19</sup> in particular. The proposed rule change furthers the objectives of Section 6(b)(5) because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster

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

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

cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes that the proposed rule change is equitable and not unfairly discriminatory because it would apply equally to all market participants. The ability to trade outright transactions in up to four decimal places will not be limited to any class of market participant, and all market participants are eligible to trade on OneChicago's CLOB. The requirements to trade on the CLOB are no more restrictive than the requirements to trade block, EFP, or spread transactions. Permitting outright transactions to trade in up to four decimal allows all OneChicago participants to trade in the same way, thereby promoting just and equitable principles of trade.

OneChicago has considered whether permitting SSFs to quote and trade in up to four decimal places could permit manipulation or other violative activity in either the underlying equity or SSF, and has determined that no such concern exists. Four decimal pricing for SSFs would not present any new methods for market participants to engage in behavior that may be violative of Exchange Rules or any applicable law.

Further, as currently drafted, OneChicago Rule 902(e) provides that the Exchange may amend the minimum price fluctuation for SSFs without amending the text of the rule itself. Specifically, the clause "or as otherwise stated by the Exchange" effectively permits the Exchange to set a minimum price fluctuation by notice or other means. OneChicago is now proposing to amend OneChicago Rule 902(e) to delete this clause, thereby providing certainty to

market participants that the minimum price fluctuation is stated solely in OneChicago Rule 902, and will not be amended other than through the rule change process. OneChicago believes that its existing surveillance systems and capacity is sufficient to monitor and review trading activity for any violative trading in the SSF market.

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

OneChicago does not believe that the rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act, in that the rule change simply allows an additional type of transaction to be priced in up to four decimal places. This change will allow all market participants to more precisely price the interest rate component of their outright transactions. By pricing futures trades more precisely, market participants will be able to submit more competitive bids and offers on the Exchange. Further, as described above, OneChicago believes this rule change will increase competition in that it will allow all market participants to transact at four decimal places, and not just sophisticated parties who qualify as eligible contract participants.

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.

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

The proposed rule change has become effective on June 16, 2017 and will be implemented on July 10, 2017.

At any time within 60 days of the date of effectiveness of the proposed rule change, the Commission, after consultation with the CFTC, may summarily abrogate the proposed rule change and require that the proposed rule change be refiled in accordance with the provisions of

Section 19(b)(1) of the Act.<sup>20</sup>

#### 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-OC-2017-02 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-OC-2017-02. 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.

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<sup>20</sup> 15 U.S.C. 78s(b)(1).

and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make publicly available. All submissions should refer to File Number SR-OC-2017-02 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>21</sup>

Robert W. Errett  
Deputy Secretary

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<sup>21</sup> 17 CFR 200.30-3(a)(12).

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