

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-93371; File No. SR-OCC-2021-011)

October 18, 2021

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Concerning the Interest Rates Used for Options Pricing in the STANS Methodology Description

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Exchange Act” or “Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on October 6, 2021, the Options Clearing Corporation (“OCC”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by OCC. OCC filed the proposed rule change pursuant to Section 19(b)(3)(A)<sup>3</sup> of the Act and Rule 19b-4(f)(1)<sup>4</sup> thereunder so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Clearing Agency’s Statement of the Terms of Substance of the Proposed Rule Change

OCC is filing a proposed rule change to make clarifying changes to OCC’s System for Theoretical Analysis and Numerical Simulation (“STANS”) Methodology Description concerning the interest rates used for options pricing. The proposed changes to OCC’s STANS Methodology Description are contained in confidential Exhibit 5 of filing SR-OCC-2021-011. Material proposed to be added to the STANS Methodology

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

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

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

<sup>4</sup> 17 CFR 240.19b-4(f)(1).

Description as currently in effect is underlined and material proposed to be deleted is marked in strikethrough text. All capitalized terms not defined herein have the same meaning as set forth in the OCC By-Laws and Rules.<sup>5</sup>

II. Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, OCC 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. OCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.

(A) Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

(1) Purpose

**Background**

STANS is OCC's proprietary risk management system for calculating Clearing Member margin requirements.<sup>6</sup> The STANS methodology utilizes large-scale Monte Carlo simulations to forecast price and volatility movements in determining a Clearing Member's margin requirement.<sup>7</sup> STANS margin requirements are calculated at the portfolio level of Clearing Member accounts with positions in marginable securities and

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<sup>5</sup> OCC's By-Laws and Rules can be found on OCC's public website: <https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>.

<sup>6</sup> See Exchange Act Release No. 91079 (Feb. 8, 2021), 86 FR 9410 (Feb. 12, 2021) (File No. SR-OCC-2020-016). OCC makes its STANS Methodology description available to Clearing Members. An overview of the STANS methodology is available at <https://www.theocc.com/Risk-Management/Margin-Methodology>.

<sup>7</sup> See OCC Rule 601.

consists of an estimate of two primary components: a base component and a concentration/dependence stress test add-on component. The base component is an estimate of a 99% expected shortfall<sup>8</sup> over a two-day time horizon. The concentration/dependence stress test add-on is obtained by considering increases in the expected margin shortfall for an account that would occur due to (i) market movements that are especially large and/or in which certain risk factors would exhibit perfect or zero correlations rather than correlations otherwise estimated using historical data or (ii) extreme and adverse idiosyncratic movements for individual risk factors to which the account is particularly exposed. OCC uses the STANS methodology to measure the exposure of portfolios of options and futures cleared by OCC and cash instruments in margin collateral.

In the STANS methodology, the interest rate discount curve is a critical input for OCC's pricing models. OCC's pricing models are developed using the Black-Scholes framework. OCC uses the interest rate curve, which is constructed from market instruments, along with dividends, implied borrow cost, and implied volatility to specify underlying price dynamics. OCC uses this data along with exchange listed option price data to calibrate the implied borrow cost and implied volatility parameters used in the option pricing models. STANS margins are computed using models to generate 10,000 scenarios on underlying price and implied volatility, and those price and implied volatility scenarios are used as inputs to the option pricing model (along with the interest

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<sup>8</sup> The expected shortfall component is established as the estimated average of potential losses higher than the 99% value at risk threshold. The term "value at risk" or "VaR" refers to a statistical technique that, generally speaking, is used in risk management to measure the potential risk of loss for a given set of assets over a particular time horizon.

rate curve) to re-price the options. The margin base component is then determined from the profit-and-loss distribution of the scenario prices.

OCC currently constructs the interest rate discount curve using instruments referencing the London Interbank Offered Rate (“LIBOR”). LIBOR is a key benchmark interest rate at which major global banks lend to one another in the international interbank market for short-term loans. LIBOR is also commonly used by financial market participants more broadly to gauge prevailing interest rates; however, financial market participants are expected to largely transition away from the use of LIBOR by the end of 2021.<sup>9</sup> Accordingly, OCC intends to transition to a new benchmark rate for constructing its interest rate curve to align with this industry transition.

The STANS Methodology Description currently provides a general description of OCC’s method for constructing the interest rate discount curve but does not specify any particular benchmark rate.<sup>10</sup> While the STANS Methodology Description is intended to provide flexibility in the benchmark rate used, the document contains certain details of the interest rate curve construction process that more closely reflect the use of LIBOR as the benchmark rate.

### **Proposed Changes**

OCC proposes to revise its STANS Methodology Description to clean up certain details regarding the interest rate curve construction process. Section 3.2 of the STANS Methodology Description describes OCC’s method for constructing the interest rate discount curve used to accurately price the options cleared by OCC. While the STANS

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<sup>9</sup> See <https://www.sec.gov/news/public-statement/libor-transition>.

<sup>10</sup> See supra note 6.

Methodology Description does not specify the interest rate used in this process, the document contains certain details that more closely reflect the use of LIBOR as the benchmark rate. As noted above, the industry plans to transition away from using LIBOR as the benchmark for short-term interest rates by the end of 2021. OCC therefore proposes additional clarifying and clean up changes to the STANS Methodology Description so that the methodology more accurately reflects the potential use of different industry standard benchmark rates to construct the interest rate discount curve in STANS.

(2) Statutory Basis

OCC believes the proposed rule change is consistent with Section 17A of the Act<sup>11</sup> and the rules thereunder applicable to OCC. Section 17A(b)(3)(F) of the Act<sup>12</sup> requires, in part, that the rules of a clearing agency be designed to promote the prompt and accurate clearance and settlement of derivative agreements, contracts, and transactions and to assure the safeguarding of securities and funds which are in its custody or control or for which it is responsible. The proposed rule change would make minor changes to the STANS Methodology Description to clarify the use of different industry benchmark interest rates used for discounting options pricing. The proposed rule change would ensure that OCC's STANS methodology documentation remains accurate and is aligned with standard industry practice after the industry transitions away from LIBOR. OCC uses the margin it collects from a defaulting Clearing Member to protect other Clearing Members from losses that may result from the default and ensure that OCC is able to continue the prompt and accurate clearance and settlement of its

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<sup>11</sup> 15 U.S.C. 78q-1.

<sup>12</sup> 15 U.S.C. 78q-1(b)(3)(F).

cleared products. Moreover, OCC believes that accurate calculation of margin requirements is necessary to help OCC manage the risk of a Clearing Member default without recourse to the assets of non-defaulting Clearing Members, which supports the safeguarding of securities and funds in OCC's custody or control. OCC believes that the proposed rule change would result in more accurate documentation for its margin methodology and is therefore consistent with the requirements of Section 17A(b)(3)(F) of the Act.<sup>13</sup>

Exchange Act Rules 17Ad-22(e)(6)(i) and (iii)<sup>14</sup> further require that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, among other things: (1) considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market and (2) calculates margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. The proposed rule change would result in more accurate documentation for OCC's STANS margin methodology, particularly once the industry and OCC transition away from LIBOR later this year. OCC therefore believes the proposed rule change would result in more accurate policies and procedures that are reasonably designed to produce margin levels commensurate with the risks and particular attributes of its cleared options and calculate margin sufficient to cover its potential future exposure to participants in the interval between the last margin

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<sup>13</sup> Id.

<sup>14</sup> 17 CFR 240.17Ad-22(e)(6)(i) and (iii).

collection and the close out of positions following a participant default. In this way, OCC believes the proposed rule change is consistent with the requirements of Rules 17Ad-22(e)(6)(i) and (iii).<sup>15</sup>

(B) Clearing Agency's Statement on Burden on Competition

Section 17A(b)(3)(I) of the Act<sup>16</sup> requires that the rules of a clearing agency not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. OCC does not believe that the proposed rule change would have any impact or impose a burden on competition. The proposed rule change would make clarifying and clean up changes to OCC's margin methodology concerning the industry benchmark interest rates used for discounting options pricing. OCC does not believe that the proposed rule change would unfairly inhibit access to OCC's services or disadvantage or favor any particular user in relationship to another user. OCC therefore does not believe that the proposed rule change would have any impact or impose a burden on competition.

(C) Clearing Agency's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments on the proposed rule change were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

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<sup>15</sup> 17 CFR 240.17Ad-22(e)(6)(i) and (iii).

<sup>16</sup> 15 U.S.C. 78q-1(b)(3)(I).

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

Pursuant to Section 19(b)(3)(A) of the Act,<sup>17</sup> and Rule 19b-4(f)(1) thereunder,<sup>18</sup> the proposed rule change is filed for immediate effectiveness because it constitutes a stated policy, practice, or interpretation with respect to the meaning, administration, or enforcement of an existing rule.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.<sup>19</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-OCC-2021-011 on the subject line.

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<sup>17</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>18</sup> 17 CFR 240.19b-4(f)(1).

<sup>19</sup> Notwithstanding its immediate effectiveness, implementation of this rule change will be delayed until this change is deemed certified under CFTC Rule 40.6.

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-OCC-2021-011. 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 office of OCC and on OCC's website at <https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>.

All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-OCC-2021-011 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>20</sup>

J. Matthew DeLesDernier  
Assistant Secretary

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<sup>20</sup> 17 CFR 200.30-3(a)(12).