



July 10, 2020

**VIA ELECTRONIC MAIL**

Christopher J. Kirkpatrick  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21<sup>st</sup> Street, N.W.  
Washington, DC 20581

**Re: Rule Filing SR-OCC-2020-007 Rule Certification**

Dear Secretary Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended (“Act”), and Commodity Futures Trading Commission (“CFTC”) Regulation 40.6, enclosed is a copy of the above-referenced rule filing submitted by The Options Clearing Corporation (“OCC”). The date of implementation of the rule is at least 10 business days following receipt of the rule filing by the CFTC or the date the proposed rule is approved by the Securities and Exchange Commission (“SEC”) or otherwise becomes effective under the Securities Exchange Act of 1934 (the “Exchange Act”). This rule filing has been submitted to the SEC under the Exchange Act.

OCC has requested confidential treatment for Exhibits 3 and 5 to SR-OCC-2020-007 (contained in pages 24-63 of SR-OCC-2020-007).

In conformity with the requirements of Regulation 40.6(a)(7), OCC states the following:

Explanation and Analysis

The proposed rule change by OCC would clarify the intended scope of use of an existing OCC margin model. The proposed changes to OCC’s Margins Methodology are contained in confidential Exhibit 5. Material proposed to be added to the Margins Methodology 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>1</sup>

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<sup>1</sup> OCC’s By-Laws and Rules can be found on OCC’s public website:  
<http://optionsclearing.com/about/publications/bylaws.jsp>.

## Background

In May 2019, OCC implemented an enhanced margin model for Volatility Index Futures.<sup>2</sup> The model enhancements included: (1) the daily re-estimation of prices and correlations using “synthetic” futures;<sup>3</sup> (2) an enhanced statistical distribution for modeling price returns for synthetic futures (i.e., an asymmetric Normal Reciprocal Inverse Gaussian (or “NRIG”) distribution); and (3) a new anti-procyclical floor for variance estimates. The main feature of the enhanced model was the replacement of the use of the underlying index itself as a risk factor<sup>4</sup> (e.g., the VIX) with risk factors that are based on observed futures prices (i.e., the “synthetic” futures contracts). These risk factors are then used in the generation of Monte Carlo scenarios for the futures by using volatility and correlations obtained from the existing simulation models in OCC’s propriety margin system, the System for Theoretical Analysis and Numerical Simulations (“STANS”).<sup>5</sup> Additionally, the model has the ability to capture the “Samuelson effect,”<sup>6</sup> when appropriate for a product, thus offering more accurate margins across the term structure.

The enhanced model was initially adopted to replace OCC’s former model for Volatility Index Futures, which modeled the potential final settlement prices of Volatility Index Futures using the underlying index as the risk factor.<sup>7</sup> However, this enhanced model is also fit for use for Cboe’s

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<sup>2</sup> Certain indices are designed to measure the volatility implied by the prices of options on a particular reference index or asset (“Volatility Indexes”). For example, the Cboe Volatility Index (“VIX”) is designed to measure the 30-day expected volatility of the Standard & Poor’s 500 index (“SPX”). OCC clears futures contracts on Volatility Indexes. These futures contracts are referred to herein as “Volatility Index Futures.” See Securities Exchange Act Release No. 85870 (May 15, 2019), 84 FR 23096 (May 21, 2019) (SR-OCC-2019-801) and Securities Exchange Act Release No. 85873 (May 16, 2019), 84 FR 23620 (May 16, 2019) (SR-OCC-2019-002). The proposed change was certified with the CFTC on May 14, 2019.

<sup>3</sup> A “synthetic” futures time series, for the intended purposes of OCC, relates to a uniform substitute for a time series of daily settlement prices for actual futures contracts, which persists over many expiration cycles and thus can be used as a basis for econometric analysis.

<sup>4</sup> A “risk factor” within OCC’s margin system may be defined as a product or attribute whose historical data is used to estimate and simulate the risk for an associated product.

<sup>5</sup> See Securities Exchange Act Release No. 53322 (February 15, 2006), 71 FR 9403 (February 23, 2006) (SR-OCC-2004-20). A detailed description of the STANS methodology is available at <http://optionsclearing.com/risk-management/margins/>.

<sup>6</sup> The Samuelson effect is a term used to describe the observation that shorter tenor contracts tend to be more volatile than back tenor contracts. See Samuelson, Paul A., “Proof that Properly Anticipated Prices Fluctuate Randomly,” *Industrial Management Review*, Vol. 6 (1965).

<sup>7</sup> OCC’s former model for Volatility Index Futures was subject to certain limitations, which were addressed by the enhanced model. For example, Volatility Indexes, unlike futures contracts, are not investible (i.e., they cannot be replicated by static portfolios of traded contracts). In addition, the futures market has a term structure that cannot be modeled using just the underlying index.

AMERIBOR Futures<sup>8</sup> because the model is better able to capture the correlation and idiosyncrasy in futures contracts where coverages across the term structure may potentially be different.<sup>9</sup>

### **Proposed Changes**

OCC proposes to revise its Margins Methodology to clarify the intended scope and use of its “Volatility Index Futures Model,” which would be renamed the “Synthetic Futures Model.” Under the proposed rule change, the Synthetic Futures Model would be available for use for the AMERIBOR Futures cleared by OCC. OCC also proposes to modify the Margins Methodology to describe certain model parameter calibrations more generally for a given futures product. For example, the proposed rule change would allow OCC to adjust certain features of the model involving the use of logarithmic returns and seasonal adjustments so it can be appropriately calibrated for AMERIBOR Futures, which do not exhibit the Samuelson effect observed with Volatility Index Futures. In addition, the methodology would be revised for AMERIBOR Futures to provide flexibility in applying the anti-procyclical floor currently used for Volatility Index Futures. OCC adopted a scaled variance floor for Volatility Index Futures, where the scaling is calculated based on the underlying Volatility Index, to ensure the model had an effective floor to address anti-procyclicality. Based on the characteristics of AMERIBOR Futures, OCC proposes to use the unconditional variance from the 500-days of synthetic futures data to estimate the procyclical floor and the scale factor applied to the variance floor would be set to 1.

OCC also proposes other clean-up changes to the Margins Methodology. Specifically, OCC would clarify that OCC no longer uses a Student’s t-distribution for univariate modeling for most risk factors<sup>10</sup> and remove redundant language used to describe how estimations for synthetic futures are done on a daily basis (i.e., are designated as “non-pending”). OCC also proposes to remove statements related to OCC’s old Clearing Fund methodology, which was replaced in September 2018.<sup>11</sup>

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<sup>8</sup> AMERIBOR Futures are futures on the American Interbank Offered Rate disseminated by the American Financial Exchange, LLC, which is a transactions-based interest rate benchmark that represents market-based borrowing costs (<http://www.cboe.com/products/futures/ameribor-futures>).

<sup>9</sup> For example, OCC also maintains a “Generic Futures Model,” which is a simple model based on the cost of carry that is primarily used to margin equity-like futures such as SPX futures and interest rates futures such as AMERIBOR Futures. This model also has certain limitations (e.g., the model does not consider the volatility term structure of futures contracts by assuming a flat volatility for all contracts, and it assumes a perfect correlation among different futures contracts on the same underlying asset).

<sup>10</sup> See Securities Exchange Act Release No. 83326 (May 24, 2018), 83 FR 25081 (May 31, 2018) (SR-OCC-2017-022) and Securities Exchange Act Release No. 83305 (May 23, 2018), 83 FR 24536 (May 29, 2018) (SR-OCC-2017-811).

<sup>11</sup> On July 26, 2018, the SEC issued a Notice of No Objection to an advance notice by OCC concerning the adoption of a new stress testing and Clearing Fund methodology. See Securities Exchange Act Release No. 83714 (July 26, 2018), 83 FR 37570 (August 1, 2018) (SR-OCC-2018-803). On July 27,

OCC reviewed the derivatives clearing organization (“DCO”) core principles as set forth in the Act (“Core Principles”). During this review, OCC identified the following Core Principles as potentially being impacted:

**Risk management.** OCC believes that implementing the proposed rule change will be aligned with the requirements of Core Principle D.<sup>12</sup> Core Principle D requires, in part, that each DCO limit, through the use of margin and other risk control mechanisms, its potential losses from defaults by members and participants of the DCO to ensure that its operations would not be disrupted and that its non-defaulting members or participants are not exposed to losses they cannot anticipate or control.<sup>13</sup> Core Principle D further requires that each DCO have margin requirements sufficient to cover potential exposures in normal market conditions and that such margin requirements be set using risk-based models and parameters.<sup>14</sup>

As described above, the proposed rule change would allow OCC to use the Synthetic Futures Model to generate margin requirements for the AMERIBOR Futures cleared by OCC. OCC believes the Synthetic Futures Model may provide better margin coverage for these products than other margin models maintained by OCC. OCC believes the proposed rule change is therefore designed to ensure that OCC sets margin requirements that would serve to limit its exposures to potential losses from defaults by its participants under normal market conditions so that the operations of OCC would not be disrupted, and non-defaulting participants would not be exposed to losses that they cannot anticipate or control. Moreover, OCC believes the proposed change would allow OCC to use risk-based models and parameters that are reasonably designed to consider and produce margin levels commensurate with the risks and particular attributes of AMERIBOR Futures. In this way, OCC believes the proposed change promotes compliance with Core Principle D under the Act.<sup>15</sup>

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2018, the SEC approved a proposed rule change by OCC concerning the same proposal. See Securities Exchange Act Release No. 83735 (July 27, 2018), 83 FR 37855 (August 2, 2018) (SR-OCC-2018-008). The proposed change was certified with the CFTC on August 20, 2018.

<sup>12</sup> 7 U.S.C. 7a-1(c)(2)(D).

<sup>13</sup> 7 U.S.C. 7a-1(c)(2)(D)(iii).

<sup>14</sup> 7 U.S.C. 7a-1(c)(2)(D)(iv) - (v). CFTC Regulation 39.13(g)(2)(i) further implements Core Principle D by requiring that each DCO establish initial margin requirements that are commensurate with the risks of each product and portfolio, including any unusual characteristics of, or risks associated with, particular products or portfolios. See 17 CFR 39.13(g)(2)(i).

<sup>15</sup> 7 U.S.C. 7a-1(c)(2)(D).

Opposing Views

No opposing views were expressed related to the rule amendments.

Notice of Pending Rule Certification

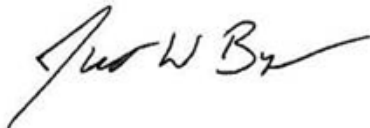
OCC hereby certifies that notice of this rule filing has been given to Clearing Members of OCC in compliance with Regulation 40.6(a)(2) by posting a copy of the submission on OCC's website concurrently with the filing of this submission.

Certification

OCC hereby certifies that the rule set forth at Item 1 of the enclosed filing complies with the Act and the CFTC's regulations thereunder.

Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Justin W. Byrne". The signature is written in a cursive style with a long horizontal stroke at the end.

Justin W. Byrne  
Vice President, Regulatory Filings

Enclosure

Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * <input type="text" value="63"/>	SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4	File No.* SR - <input type="text" value="2020"/> - * <input type="text" value="007"/>	Amendment No. (req. for Amendments *) <input type="text"/>
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Filing by Options Clearing Corporation  
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial * <input checked="" type="checkbox"/>	Amendment * <input type="checkbox"/>	Withdrawal <input type="checkbox"/>	Section 19(b)(2) * <input type="checkbox"/>	Section 19(b)(3)(A) * <input checked="" type="checkbox"/>	Section 19(b)(3)(B) * <input type="checkbox"/>
			Rule		
Pilot <input type="checkbox"/>	Extension of Time Period for Commission Action * <input type="checkbox"/>	Date Expires * <input type="text"/>	<input type="checkbox"/> 19b-4(f)(1)	<input checked="" type="checkbox"/> 19b-4(f)(4)	<input type="checkbox"/> 19b-4(f)(6)
			<input type="checkbox"/> 19b-4(f)(2)	<input type="checkbox"/> 19b-4(f)(5)	
			<input type="checkbox"/> 19b-4(f)(3)	<input type="checkbox"/> 19b-4(f)(6)	

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010	Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934
Section 806(e)(1) * <input type="checkbox"/>	Section 806(e)(2) * <input type="checkbox"/>
Section 3C(b)(2) * <input type="checkbox"/>	

Exhibit 2 Sent As Paper Document <input type="checkbox"/>	Exhibit 3 Sent As Paper Document <input type="checkbox"/>
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**Description**

Provide a brief description of the action (limit 250 characters, required when Initial is checked \*).

Proposed rule change concerning The Options Clearing Corporation's Synthetic Futures Model.

**Contact Information**

Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.

First Name * <input type="text" value="Justin"/>	Last Name * <input type="text" value="Byrne"/>
Title * <input type="text" value="Vice President, Regulatory Filings"/>	
E-mail * <input type="text" value="jbyrne@theocc.com"/>	
Telephone * <input type="text" value="(202) 971-7238"/>	Fax <input type="text" value="(312) 322-6280"/>

**Signature**

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

(Title \*)

Date <input type="text" value="07/10/2020"/>	<input type="text" value="Vice President, Regulatory Filings"/>
By <input type="text" value="Justin W. Byrne"/>	<input type="text" value="Justin W. Byrne"/>
(Name *)	<input type="text" value="Justin Byrne, jbyrne@theocc.com"/>

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

**Form 19b-4 Information \***

Add Remove View

The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

**Exhibit 1 - Notice of Proposed Rule Change \***

Add Remove View

The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

**Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies \***

Add Remove View

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**Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications**

Add Remove View

Exhibit Sent As Paper Document

Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

**Exhibit 3 - Form, Report, or Questionnaire**

Add Remove View

Exhibit Sent As Paper Document

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

**Exhibit 4 - Marked Copies**

Add Remove View

The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

**Exhibit 5 - Proposed Rule Text**

Add Remove View

The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.

**Partial Amendment**

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

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Form 19b-4

Proposed Rule Change  
by

**THE OPTIONS CLEARING CORPORATION**

Pursuant to Rule 19b-4 under the  
Securities Exchange Act of 1934



**Item 1. Text of the Proposed Rule Change**

Pursuant to the provisions of 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> The Options Clearing Corporation (“OCC”) is filing with the Securities and Exchange Commission (“Commission”) a proposed rule change to clarify the intended scope of use of an existing OCC margin model. OCC filed the proposed rule change pursuant to Section 19(b)(3)(A)<sup>3</sup> of the Act and Rule 19b-4(f)(4)(ii)<sup>4</sup> thereunder so that the proposal was effective upon filing with the Commission.

The proposed changes to OCC’s Margins Methodology are contained in confidential Exhibit 5. Material proposed to be added to the Margins Methodology 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>

**Item 2. Procedures of the Self-Regulatory Organization**

The proposed changes were approved for filing with the Commission by the Board of Directors at a meeting held on December 11, 2019.

Questions should be addressed to Justin W. Byrne, Vice President, Regulatory Filings, at (202) 971-7238.

**Item 3. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change****A. Purpose**

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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)(4)(ii).

<sup>5</sup> OCC’s By-Laws and Rules can be found on OCC’s public website: <http://optionsclearing.com/about/publications/bylaws.jsp>.

## Background

On May 15, 2019, the Commission issued a Notice of No Objection to an advance notice filing by OCC to enhance its margin model for Volatility Index Futures.<sup>6</sup> On May 16, 2019, the Commission approved a proposed rule change by OCC concerning the same changes.<sup>7</sup> The model enhancements included: (1) the daily re-estimation of prices and correlations using “synthetic” futures;<sup>8</sup> (2) an enhanced statistical distribution for modeling price returns for synthetic futures (i.e., an asymmetric Normal Reciprocal Inverse Gaussian (or “NRIG”) distribution); and (3) a new anti-procyclical floor for variance estimates. The main feature of the enhanced model was the replacement of the use of the underlying index itself as a risk factor<sup>9</sup> (e.g., the VIX) with risk factors that are based on observed futures prices (i.e., the “synthetic” futures contracts). These risk factors are then used in the generation of Monte Carlo scenarios for the futures by using volatility and correlations obtained from the existing simulation models in OCC’s propriety margin system, the System for Theoretical Analysis and Numerical

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<sup>6</sup> See Securities Exchange Act Release No. 85870 (May 15, 2019), 84 FR 23096 (May 21, 2019) (SR-OCC-2019-801). Certain indices are designed to measure the volatility implied by the prices of options on a particular reference index or asset (“Volatility Indexes”). For example, the Cboe Volatility Index (“VIX”) is designed to measure the 30-day expected volatility of the Standard & Poor’s 500 index (“SPX”). OCC clears futures contracts on Volatility Indexes. These futures contracts are referred to herein as “Volatility Index Futures.”

<sup>7</sup> See Securities Exchange Act Release No. 85873 (May 16, 2019), 84 FR 23620 (May 16, 2019) (SR-OCC-2019-002).

<sup>8</sup> A “synthetic” futures time series, for the intended purposes of OCC, relates to a uniform substitute for a time series of daily settlement prices for actual futures contracts, which persists over many expiration cycles and thus can be used as a basis for econometric analysis.

<sup>9</sup> A “risk factor” within OCC’s margin system may be defined as a product or attribute whose historical data is used to estimate and simulate the risk for an associated product.

Simulations (“STANS”).<sup>10</sup> Additionally, the model has the ability to capture the “Samuelson effect,”<sup>11</sup> when appropriate for a product, thus offering more accurate margins across the term structure.

The enhanced model was initially adopted to replace OCC’s former model for Volatility Index Futures, which modeled the potential final settlement prices of Volatility Index Futures using the underlying index as the risk factor.<sup>12</sup> However, this enhanced model is also fit for use for Cboe’s AMERIBOR Futures<sup>13</sup> because the model is better able to capture the correlation and idiosyncrasy in futures contracts where coverages across the term structure may potentially be different.<sup>14</sup>

### Proposed Changes

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<sup>10</sup> See Securities Exchange Act Release No. 53322 (February 15, 2006), 71 FR 9403 (February 23, 2006) (SR-OCC-2004-20). A detailed description of the STANS methodology is available at <http://optionsclearing.com/risk-management/margins/>.

<sup>11</sup> The Samuelson effect is a term used to describe the observation that shorter tenor contracts tend to be more volatile than back tenor contracts. See Samuelson, Paul A., “Proof that Properly Anticipated Prices Fluctuate Randomly,” *Industrial Management Review*, Vol. 6 (1965).

<sup>12</sup> OCC’s former model for Volatility Index Futures was subject to certain limitations, which were addressed by the enhanced model. For example, Volatility Indexes, unlike futures contracts, are not investible (*i.e.*, they cannot be replicated by static portfolios of traded contracts). In addition, the futures market has a term structure that cannot be modeled using just the underlying index.

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<sup>14</sup> For example, OCC also maintains a “Generic Futures Model,” which is a simple model based on the cost of carry that is primarily used to margin equity-like futures such as SPX futures and interest rates futures such as AMERIBOR Futures. This model also has certain limitations (*e.g.*, the model does not consider the volatility term structure of futures contracts by assuming a flat volatility for all contracts, and it assumes a perfect correlation among different futures contracts on the same underlying asset).

OCC proposes to revise its Margins Methodology to clarify the intended scope and use of its “Volatility Index Futures Model,” which would be renamed the “Synthetic Futures Model.” Under the proposed rule change, the Synthetic Futures Model would be available for use for the AMERIBOR Futures cleared by OCC. OCC also proposes to modify the Margins Methodology to describe certain model parameter calibrations more generally for a given futures product. For example, the proposed rule change would allow OCC to adjust certain features of the model involving the use of logarithmic returns and seasonal adjustments so it can be appropriately calibrated for AMERIBOR Futures, which do not exhibit the Samuelson effect observed with Volatility Index Futures. In addition, the methodology would be revised for AMERIBOR Futures to provide flexibility in applying the anti-procyclical floor currently used for Volatility Index Futures. OCC adopted a scaled variance floor for Volatility Index Futures, where the scaling is calculated based on the underlying Volatility Index, to ensure the model had an effective floor to address anti-procyclicality. Based on the characteristics of AMERIBOR Futures, OCC proposes to use the unconditional variance from the 500-days of synthetic futures data to estimate the procyclical floor and the scale factor applied to the variance floor would be set to 1.

OCC also proposes other clean-up changes to the Margins Methodology. Specifically, OCC would clarify that OCC no longer uses a Student’s t-distribution for univariate modeling for most risk factors<sup>15</sup> and remove redundant language used to describe how estimations for synthetic futures are done on a daily basis (i.e., are designated as “non-pending”). OCC also proposes to remove statements related to OCC’s old Clearing Fund methodology, which was

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<sup>15</sup> See Securities Exchange Act Release No. 83326 (May 24, 2018), 83 FR 25081 (May 31, 2018) (SR-OCC-2017-022) and Securities Exchange Act Release No. 83305 (May 23, 2018), 83 FR 24536 (May 29, 2018) (SR-OCC-2017-811).

replaced in September 2018.<sup>16</sup>

B. Statutory Basis

OCC believes the proposed rule change is consistent with Section 17A of the Act<sup>17</sup> and the rules thereunder applicable to OCC. Section 17A(b)(3)(F) of the Act<sup>18</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. The proposed rule change would make minor changes to OCC's Margins Methodology so that the Synthetic Futures Model can be used to model Cboe's AMERIBOR Futures. OCC believes the Synthetic Futures Model may provide better margin coverage for these products than other margin models maintained by OCC. OCC uses the margin it collects from a defaulting Clearing Member to protect other Clearing Members from losses as a result of the default and ensure that OCC is able to continue the prompt and accurate clearance and settlement of its cleared products. OCC therefore believes that the proposed rule change is designed to promote the prompt and accurate clearance and settlement derivatives transactions in accordance with Section 17A(b)(3)(F) of the Act.<sup>19</sup>

Exchange Act Rules 17Ad-22(e)(6)(i), (iii), and (v)<sup>20</sup> further require that a covered clearing agency establish, implement, maintain and enforce written policies and procedures

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<sup>16</sup> On July 26, 2018, the SEC issued a Notice of No Objection to an advance notice by OCC concerning the adoption of a new stress testing and Clearing Fund methodology. See Securities Exchange Act Release No. 83714 (July 26, 2018), 83 FR 37570 (August 1, 2018) (SR-OCC-2018-803). On July 27, 2018, the SEC approved a proposed rule change by OCC concerning the same proposal. See Securities Exchange Act Release No. 83735 (July 27, 2018), 83 FR 37855 (August 2, 2018) (SR-OCC-2018-008).

<sup>17</sup> 15 U.S.C. 78q-1.

<sup>18</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>19</sup> Id.

<sup>20</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).

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; (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; and (3) uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products. OCC believes that using the Synthetic Futures Model for AMERIBOR Futures would produce margin levels commensurate with the risks and particular attributes of product in question, generate margin requirements to cover OCC's potential future exposure to its participants, and appropriately take into account relevant product risk factors for AMERIBOR Futures. In this way, OCC believes the proposed rule change is consistent with the requirements of Rules 17Ad-22(e)(6)(i), (iii), and (v).<sup>21</sup>

**Item 4. Self-Regulatory Organization's Statement on Burden on Competition**

Section 17A(b)(3)(I) of the Act<sup>22</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. Recent impact analysis by OCC indicates that the impact on margin requirements for currently affected Clearing Members would be relatively minimal, both in terms of absolute dollars and as a percentage of aggregate account-level margin requirements.<sup>23</sup>

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<sup>21</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).

<sup>22</sup> 15 U.S.C. 78q-1(b)(3)(I).

<sup>23</sup> OCC has provided impact analysis of the proposed change in confidential Exhibit 3 to

As a result, 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. Accordingly, OCC does not believe that the proposed rule change would have any impact or impose a burden on competition.

**Item 5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others**

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

**Item 6. Extension of Time Period for Commission Action**

OCC does not consent to an extension of the time period specified in Section 19(b)(2) of the Act.<sup>24</sup>

**Item 7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2) or Section 19(b)(7)(D)**

Pursuant to Section 19(b)(3)(A)<sup>25</sup> of the Act, and Rule 19b-4(f)(4)(ii) thereunder,<sup>26</sup> the proposed rule change is filed for immediate effectiveness because it effects a change in an existing service of a registered clearing agency that (i) primarily affects the clearing operations of the clearing agency with respect to products that are not securities, including futures that are not security futures, and (ii) does not significantly affect any securities clearing operations of the clearing agency or any rights or obligations of the clearing agency with respect to securities clearing or persons using such securities-clearing service. The proposed rule change would

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filing SR-OCC-2020-007.

<sup>24</sup> 15 U.S.C. 78s(b)(2).

<sup>25</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>26</sup> 17 CFR 240.19b-4(f)(4)(ii).

enhance OCC's existing futures clearing services by expanding the scope of use of its Synthetic Futures Model beyond Volatility Index Futures to include the AMERIBOR Futures cleared by OCC, which are futures products subject to the exclusive jurisdiction of the Commodity Futures Trading Commission ("CFTC"). Accordingly, the Synthetic Futures Model would only be available for use for futures cleared by OCC that are not security futures. Moreover, given that AMERIBOR Futures account for a small part of OCC's overall clearing activity,<sup>27</sup> it is anticipated that the proposed rule change would not significantly affect the operation of OCC's Clearing Fund, which is designed to support all of OCC's clearing activities in securities and futures products. Thus, it is anticipated that the proposed rule change would not significantly affect the securities clearing operations of OCC or any rights or obligations of OCC with respect to securities clearing or of persons using such securities clearing services.

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>28</sup>

**Item 8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission**

Not applicable.

**Item 9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act**

Not applicable.

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<sup>27</sup> Open interest for AMERIBOR Futures is currently less than 600 contracts compared to OCC's total open interest, which has generally been fluctuating between 300-350 million contracts.

<sup>28</sup> Notwithstanding its immediate effectiveness, implementation of this rule change will be delayed until this change is deemed certified under CFTC Regulation 40.6.



**Item 10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act**

Not applicable.

**Item 11. Exhibits**

Exhibit 1A. Completed Notice of Proposed Rule Change for publication in the Federal Register.

Exhibit 3. Confidential Data and Analysis.

Exhibit 5. Margins Methodology.

**Exhibits 3 and 5 have been omitted and filed separately with the Commission. Confidential treatment of Exhibits 3 and 5 is requested pursuant to SEC Rule 24b-2 (17 CFR 240.24b-2).**

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, The Options Clearing Corporation has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

**THE OPTIONS CLEARING CORPORATION**

**By:**

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**Justin W. Byrne**  
**Vice President, Regulatory Filings**

## EXHIBIT 1A

## SECURITIES AND EXCHANGE COMMISSION

(Release No. 34-[\_\_\_\_\_]; File No. SR-OCC-2020-007)

July \_\_, 2020

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Concerning The Options Clearing Corporation's Synthetic Futures Model

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 July 10, 2020, 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 primarily 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)(4)(ii)<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 clarify the intended scope of use of an existing OCC margin model. The proposed changes to OCC's Margins Methodology are contained in confidential Exhibit 5 of filing SR-OCC-2020-007. Material proposed to be added to the Margins Methodology as currently in effect is underlined and material

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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)(4)(ii).

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**

On May 15, 2019, the Commission issued a Notice of No Objection to an advance notice filing by OCC to enhance its margin model for Volatility Index Futures.<sup>6</sup> On May 16, 2019, the Commission approved a proposed rule change by OCC concerning the same changes.<sup>7</sup> The model enhancements included: (1) the daily re-estimation of prices

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<sup>5</sup> OCC's By-Laws and Rules can be found on OCC's public website: <http://optionsclearing.com/about/publications/bylaws.jsp>.

<sup>6</sup> See Securities Exchange Act Release No. 85870 (May 15, 2019), 84 FR 23096 (May 21, 2019) (SR-OCC-2019-801). Certain indices are designed to measure the volatility implied by the prices of options on a particular reference index or asset ("Volatility Indexes"). For example, the Cboe Volatility Index ("VIX") is designed to measure the 30-day expected volatility of the Standard & Poor's 500 index ("SPX"). OCC clears futures contracts on Volatility Indexes. These futures contracts are referred to herein as "Volatility Index Futures."

<sup>7</sup> See Securities Exchange Act Release No. 85873 (May 16, 2019), 84 FR 23620 (May 16, 2019) (SR-OCC-2019-002).

and correlations using “synthetic” futures;<sup>8</sup> (2) an enhanced statistical distribution for modeling price returns for synthetic futures (*i.e.*, an asymmetric Normal Reciprocal Inverse Gaussian (or “NRIG”) distribution); and (3) a new anti-procyclical floor for variance estimates. The main feature of the enhanced model was the replacement of the use of the underlying index itself as a risk factor<sup>9</sup> (*e.g.*, the VIX) with risk factors that are based on observed futures prices (*i.e.*, the “synthetic” futures contracts). These risk factors are then used in the generation of Monte Carlo scenarios for the futures by using volatility and correlations obtained from the existing simulation models in OCC’s propriety margin system, the System for Theoretical Analysis and Numerical Simulations (“STANS”).<sup>10</sup> Additionally, the model has the ability to capture the “Samuelson effect,”<sup>11</sup> when appropriate for a product, thus offering more accurate margins across the term structure.

The enhanced model was initially adopted to replace OCC’s former model for Volatility Index Futures, which modeled the potential final settlement prices of Volatility

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<sup>8</sup> A “synthetic” futures time series, for the intended purposes of OCC, relates to a uniform substitute for a time series of daily settlement prices for actual futures contracts, which persists over many expiration cycles and thus can be used as a basis for econometric analysis.

<sup>9</sup> A “risk factor” within OCC’s margin system may be defined as a product or attribute whose historical data is used to estimate and simulate the risk for an associated product.

<sup>10</sup> See Securities Exchange Act Release No. 53322 (February 15, 2006), 71 FR 9403 (February 23, 2006) (SR-OCC-2004-20). A detailed description of the STANS methodology is available at <http://optionsclearing.com/risk-management/margins/>.

<sup>11</sup> The Samuelson effect is a term used to describe the observation that shorter tenor contracts tend to be more volatile than back tenor contracts. See Samuelson, Paul A., “Proof that Properly Anticipated Prices Fluctuate Randomly,” *Industrial Management Review*, Vol. 6 (1965).

Index Futures using the underlying index as the risk factor.<sup>12</sup> However, this enhanced model is also fit for use for Cboe's AMERIBOR Futures<sup>13</sup> because the model is better able to capture the correlation and idiosyncrasy in futures contracts where coverages across the term structure may potentially be different.<sup>14</sup>

### **Proposed Changes**

OCC proposes to revise its Margins Methodology to clarify the intended scope and use of its "Volatility Index Futures Model," which would be renamed the "Synthetic Futures Model." Under the proposed rule change, the Synthetic Futures Model would be available for use for the AMERIBOR Futures cleared by OCC. OCC also proposes to modify the Margins Methodology to describe certain model parameter calibrations more generally for a given futures product. For example, the proposed rule change would allow OCC to adjust certain features of the model involving the use of logarithmic returns and seasonal adjustments so it can be appropriately calibrated for AMERIBOR Futures, which do not exhibit the Samuelson effect observed with Volatility Index Futures. In

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<sup>12</sup> OCC's former model for Volatility Index Futures was subject to certain limitations, which were addressed by the enhanced model. For example, Volatility Indexes, unlike futures contracts, are not investible (*i.e.*, they cannot be replicated by static portfolios of traded contracts). In addition, the futures market has a term structure that cannot be modeled using just the underlying index.

<sup>13</sup> AMERIBOR Futures are futures on the American Interbank Offered Rate disseminated by the American Financial Exchange, LLC, which is a transactions-based interest rate benchmark that represents market-based borrowing costs (<http://www.cboe.com/products/futures/ameribor-futures>).

<sup>14</sup> For example, OCC also maintains a "Generic Futures Model," which is a simple model based on the cost of carry that is primarily used to margin equity-like futures such as SPX futures and interest rates futures such as AMERIBOR Futures. This model also has certain limitations (*e.g.*, the model does not consider the volatility term structure of futures contracts by assuming a flat volatility for all contracts, and it assumes a perfect correlation among different futures contracts on the same underlying asset).

addition, the methodology would be revised for AMERIBOR Futures to provide flexibility in applying the anti-procyclical floor currently used for Volatility Index Futures. OCC adopted a scaled variance floor for Volatility Index Futures, where the scaling is calculated based on the underlying Volatility Index, to ensure the model had an effective floor to address anti-procyclicality. Based on the characteristics of AMERIBOR Futures, OCC proposes to use the unconditional variance from the 500-days of synthetic futures data to estimate the procyclical floor and the scale factor applied to the variance floor would be set to 1.

OCC also proposes other clean-up changes to the Margins Methodology. Specifically, OCC would clarify that OCC no longer uses a Student's t-distribution for univariate modeling for most risk factors<sup>15</sup> and remove redundant language used to describe how estimations for synthetic futures are done on a daily basis (i.e., are designated as "non-pending"). OCC also proposes to remove statements related to OCC's old Clearing Fund methodology, which was replaced in September 2018.<sup>16</sup>

(2) Statutory Basis

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<sup>15</sup> See Securities Exchange Act Release No. 83326 (May 24, 2018), 83 FR 25081 (May 31, 2018) (SR-OCC-2017-022) and Securities Exchange Act Release No. 83305 (May 23, 2018), 83 FR 24536 (May 29, 2018) (SR-OCC-2017-811).

<sup>16</sup> On July 26, 2018, the SEC issued a Notice of No Objection to an advance notice by OCC concerning the adoption of a new stress testing and Clearing Fund methodology. See Securities Exchange Act Release No. 83714 (July 26, 2018), 83 FR 37570 (August 1, 2018) (SR-OCC-2018-803). On July 27, 2018, the SEC approved a proposed rule change by OCC concerning the same proposal. See Securities Exchange Act Release No. 83735 (July 27, 2018), 83 FR 37855 (August 2, 2018) (SR-OCC-2018-008).

OCC believes the proposed rule change is consistent with Section 17A of the Act<sup>17</sup> and the rules thereunder applicable to OCC. Section 17A(b)(3)(F) of the Act<sup>18</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. The proposed rule change would make minor changes to OCC's Margins Methodology so that the Synthetic Futures Model can be used to model Cboe's AMERIBOR Futures. OCC believes the Synthetic Futures Model may provide better margin coverage for these products than other margin models maintained by OCC. OCC uses the margin it collects from a defaulting Clearing Member to protect other Clearing Members from losses as a result of the default and ensure that OCC is able to continue the prompt and accurate clearance and settlement of its cleared products. OCC therefore believes that the proposed rule change is designed to promote the prompt and accurate clearance and settlement derivatives transactions in accordance with Section 17A(b)(3)(F) of the Act.<sup>19</sup>

Exchange Act Rules 17Ad-22(e)(6)(i), (iii), and (v)<sup>20</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; (2) calculates margin sufficient to cover its

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<sup>17</sup> 15 U.S.C. 78q-1.

<sup>18</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>19</sup> Id.

<sup>20</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).



potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default; and (3) uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products. OCC believes that using the Synthetic Futures Model for AMERIBOR Futures would produce margin levels commensurate with the risks and particular attributes of product in question, generate margin requirements to cover OCC's potential future exposure to its participants, and appropriately take into account relevant product risk factors for AMERIBOR Futures. In this way, OCC believes the proposed rule change is consistent with the requirements of Rules 17Ad-22(e)(6)(i), (iii), and (v).<sup>21</sup>

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

Section 17A(b)(3)(I) of the Act<sup>22</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. Recent impact analysis by OCC indicates that the impact on margin requirements for currently affected Clearing Members would be relatively minimal, both in terms of absolute dollars and as a percentage of aggregate account-level margin requirements.<sup>23</sup> As a result, 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. Accordingly, OCC does not

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<sup>21</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).

<sup>22</sup> 15 U.S.C. 78q-1(b)(3)(I).

<sup>23</sup> OCC has provided impact analysis of the proposed change in confidential Exhibit 3 to filing SR-OCC-2020-007.

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.

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>24</sup> and Rule 19b-4(f)(4)(ii) thereunder,<sup>25</sup> the proposed rule change is filed for immediate effectiveness because it effects a change in an existing service of OCC that (i) primarily affects the clearing operations of OCC with respect to products that are not securities and (ii) does not significantly affect any securities clearing operations of OCC or any rights or obligations of OCC with respect to securities clearing or persons using such securities clearing services.

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>26</sup>

IV. Solicitation of Comments

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<sup>24</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>25</sup> 17 CFR 240.19b-4(f)(4)(ii).

<sup>26</sup> Notwithstanding its immediate effectiveness, implementation of this rule change will be delayed until this change is deemed certified under CFTC Rule 40.6.

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-2020-007 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-OCC-2020-007. 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/about/publications/bylaws.jsp>.

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-2020-007 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>27</sup>

Secretary

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<sup>27</sup> 17 CFR 200.30-3(a)(12).