

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-83561; File No. SR-OCC-2018-803)

June 29, 2018

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing of Advance Notice, as Modified by Amendment No. 1, Concerning Proposed Changes to The Options Clearing Corporation's Stress Testing and Clearing Fund Methodology

Pursuant to Section 806(e)(1) of Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, entitled Payment, Clearing and Settlement Supervision Act of 2010 ("Clearing Supervision Act")<sup>1</sup> and Rule 19b-4(n)(1)(i)<sup>2</sup> under the Securities Exchange Act of 1934 ("Exchange Act" or "Act"),<sup>3</sup> notice is hereby given that on May 30, 2018, the Options Clearing Corporation ("OCC") filed with the Securities and Exchange Commission ("Commission") an advance notice as described in Items I, II and III below, which Items have been prepared by OCC. On June 7, 2018, OCC filed Amendment No. 1 to the advance notice.<sup>4</sup> The Commission is publishing this notice to solicit comments on the advance notice from interested persons.

I. Clearing Agency's Statement of the Terms of Substance of the Advance Notice

This advance notice is filed in connection with proposed changes to OCC's By-Laws and Rules, the formalization of a substantially new Clearing Fund Methodology Policy ("Policy"), and the adoption of a document describing OCC's new Clearing Fund and stress testing methodology ("Methodology Description"). The proposed changes are primarily designed to enhance OCC's overall resiliency, particularly with respect to the

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<sup>1</sup> 12 U.S.C. 5465(e)(1).

<sup>2</sup> 17 CFR 240.19b-4(n)(1)(i).

<sup>3</sup> 15 U.S.C. 78a et seq.

<sup>4</sup> In Amendment No. 1, OCC corrected formatting errors in Exhibits 5A and 5B without changing the substance of the advance notice.

level of OCC's pre-funded financial resources. Specifically, the proposed changes would:

- (1) reorganize, restate, and consolidate the provisions of OCC's By-Laws and Rules relating to the Clearing Fund into a newly revised Chapter X of OCC's Rules;
- (2) modify the coverage level of OCC's Clearing Fund sizing requirement to protect OCC against losses stemming from the default of the two Clearing Member Groups that would potentially cause the largest aggregate credit exposure for OCC in extreme but plausible market conditions (i.e., adopt a "Cover 2 Standard" for sizing the Clearing Fund);
- (3) adopt a new risk tolerance for OCC to cover a 1-in-50 year hypothetical market event at a 99.5% confidence level over a two-year look-back period;
- (4) adopt a new Clearing Fund and stress testing methodology, which would be underpinned by a new scenario-based one-factor risk model stress testing approach, as detailed in the newly proposed Policy and Methodology Description;
- (5) document governance, monitoring, and review processes related to Clearing Fund and stress testing;
- (6) provide for certain anti-procyclical limitations on the reduction in Clearing Fund size from month to month;
- (7) increase the minimum Clearing Fund contribution requirement for Clearing Members to \$500,000;
- (8) modify OCC's allocation weighting methodology for Clearing Fund contributions;
- (9) reduce from five to two business days the timeframe within which Clearing

Members are required to fund Clearing Fund deficits due to monthly or intra-month resizing or due to Rule amendments;

(10) provide additional clarity in OCC's Rules regarding certain anti-procyclicality measures in OCC's margin model; and

(11) make a number of other non-substantive clarifying, conforming, and organizational changes to OCC's By-Laws, Rules, Collateral Risk Management Policy, Default Management Policy, and filed procedures, including retiring OCC's existing Clearing Fund Intra-Month Re-sizing Procedure, Financial Resources Monitoring and Call Procedure ("FRMC Procedure"), and Monthly Clearing Fund Sizing Procedure, as these procedures would no longer be relevant to OCC's proposed Clearing Fund and stress testing methodology and would be replaced by the proposed Rules, Policy, and Methodology Description described herein.

The proposed amendments to OCC's By-Laws and Rules can be found in Exhibits 5A and 5B, respectively. Material proposed to be added to OCC's By-Laws and Rules as currently in effect is marked by underlining, and material proposed to be deleted is marked in strikethrough text.<sup>5</sup> As proposed, existing Chapter X would be deleted and replaced with new Chapter X in its entirety, as set forth in Exhibit 5B.

The proposed Policy and Methodology Description have been submitted in Exhibits 5C and 5D, respectively, and have been submitted without marking to facilitate

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<sup>5</sup> OCC recently proposed changes to Article VIII of its By-Laws in connection with advance notice and proposed rule change filings related to enhanced and new tools for recovery scenarios. See Securities Exchange Act Release No. 82351 (December 19, 2017), 82 FR 61107 (December 26, 2017) (SR-OCC-2017-020) and Securities Exchange Act Release No. 82513 (January 17, 2018), 83 FR 3244 (January 23, 2018) (SR-OCC-2017-809). The proposed changes currently pending Commission review in SR-OCC-2017-020 and SR-OCC-2017-809 are indicated in Exhibit 5B with double underlined and double strikethrough text.

review and readability of the documents as they are being submitted in their entirety as new rule text.<sup>6</sup>

The Clearing Fund Intra-Month Re-sizing Procedure, FRMC Procedure, and Monthly Clearing Fund Sizing Procedure can be found in Exhibits 5E, 5F and 5G, respectively, with the deletion (or retirement) of these procedures indicated by strikethrough text.

The proposed changes to OCC's Collateral Risk Management Policy and Default Management Policy can be found in Exhibits 5H and 5I, respectively. Material proposed to be added to the policies as currently in effect is marked by underlining, and material proposed to be deleted is marked in strikethrough text.

All terms with initial capitalization not defined herein have the same meaning as set forth in OCC's By-Laws and Rules.<sup>7</sup>

II. Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Advance Notice

In its filing with the Commission, OCC included statements concerning the purpose of and basis for the advance notice and discussed any comments it received on the advance notice. 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 and B below, of the most significant aspects of these statements.

(A) Clearing Agency's Statement on Comments on the Advance Notice Received from Members, Participants or Others

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<sup>6</sup> Id. Proposed changes currently pending Commission review in SR-OCC-2017-020 and SR-OCC-2017-809 are indicated in Exhibit 5C with double underlined and double strikethrough text.

<sup>7</sup> OCC's By-Laws and Rules can be found on OCC's public website: <http://optionsclearing.com/about/publications/bylaws.jsp>.

Written comments were not and are not intended to be solicited with respect to the proposed rule change and none have been received. OCC will notify the Commission of any written comments received by OCC.

(B) Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing, and Settlement Supervision Act

### **Description of the Proposed Change**

#### **Overview of OCC's Existing Clearing Fund Methodology**

OCC currently sizes its Clearing Fund at an amount sufficient to protect OCC against losses under simulated default scenarios that include (1) an idiosyncratic default scenario that includes the default of the single Clearing Member Group whose default would be likely to result in the largest draw against the Clearing Fund at a 99% confidence level and (2) a minor systemic event default scenario involving the near-simultaneous default of two randomly-selected Clearing Member Groups calculated at a 99.9% confidence level ("Cover 1 Standard").<sup>8</sup> OCC then uses the daily peak of such draw estimates to determine the monthly size of the Clearing Fund, which is established at the greater of (i) a "base amount" equal to the peak five-day rolling average of the Clearing Fund Draws<sup>9</sup> observed over the preceding three calendar months, plus a prudential margin of safety equal to \$1.8 billion, or (ii) 110% of OCC's committed credit facilities. Upon each monthly determination of the Clearing Fund's size, each Clearing Member is required to contribute an amount equal to the sum of: (i) the \$150,000 minimum membership requirement, and (ii) an amount equal to the weighted average of the Clearing Member's proportionate share of open interest, volume, and total risk

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<sup>8</sup> See Rule 1001(a).

<sup>9</sup> The term "Clearing Fund Draw" refers to an estimated stress loss exposure in excess of margin requirements.

charges.<sup>10</sup> Any deficits resulting from a difference between a Clearing Member's required Clearing Fund contribution and the amount that such member currently has on deposit are due within five business days of the resizing.<sup>11</sup>

Supplemental to the monthly Clearing Fund sizing process, OCC's Financial Risk Management department ("FRM") assesses on a daily basis the sufficiency of the Clearing Fund by monitoring Clearing Fund Draw estimates in order to identify exposures that may require collection of additional margin from a Clearing Member Group or an intra-month resizing of the Clearing Fund in accordance with OCC's FRMC Procedure.<sup>12</sup> In instances where an estimate of a particular Clearing Member Group's Clearing Fund Draw (referred to herein as an "idiosyncratic" estimate) exceeds 75% of the amount currently in the Clearing Fund (i.e., the current Clearing Fund requirement less any deficits), OCC issues a margin call against the Clearing Member Group(s) generating such draw(s) for an amount equal to the difference between such estimated draw amount and the base amount of the Clearing Fund.<sup>13</sup> The margin call per-Clearing Member may be limited to an amount equal to the lesser of \$500 million or 100% of such

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<sup>10</sup> See Rule 1001(b).

<sup>11</sup> See Rule 1003.

<sup>12</sup> See Securities Exchange Act Release No. 74980 (May 15, 2015), 80 FR 29364 (May 21, 2015) (SR-OCC-2015-009). See also Securities Exchange Act Release No. 74981 (May 15, 2015), 80 FR 29367 (May 21, 2015) (SR-OCC-2014-811).

<sup>13</sup> In the case where an estimated draw is associated with multiple Clearing Members within a single Clearing Member Group, the margin call is allocated among the individual Clearing Members in the Clearing Member Group based on each Clearing Member's proportionate share of the "total risk" for such Clearing Member Group, as that term is defined in current Rule 1001(b). See Rule 1001(b). Accordingly, the term "total risk" in this context means the margin requirement with respect to all accounts of the Clearing Member Group exclusive of the net asset value of the positions in such accounts aggregated across all such accounts.

Clearing Member's net capital, subject to OCC management discretion. All margin calls issued must be satisfied by each applicable Clearing Member within one hour of having been notified and remain in place until deficits associated with the next monthly Clearing Fund sizing are collected.<sup>14</sup>

In more extreme circumstances, where OCC observes an idiosyncratic Clearing Fund Draw estimate (after factoring in margin calls issued) exceeding 90% of the Clearing Fund, OCC increases the size of the Clearing Fund by a minimum amount equal to the greater of (i) \$1 billion, or (ii) 125% of the difference between the projected draw (reduced by margin calls issued) and the Clearing Fund in effect. Each Clearing Member not subject to OCC's minimum \$150,000 Clearing Fund requirement (e.g., a Futures-Only Affiliated Clearing Member) receives a proportionate share of the Clearing Fund increase equal to its proportionate share of the variable portion of the Clearing Fund for the current month (i.e., the Clearing Member's proportionate share of the Clearing Fund amount as determined pursuant to current Rule 1001(b)(y)). Any deficits associated with the increase to the Clearing Fund must be satisfied within five business days of the resizing.

OCC has identified a number of limitations to its current methodology, which is unable to incorporate historical stress test scenarios and which can result in disproportionate changes to the Clearing Fund size in response to even transitory changes in volatility. As a result, OCC is proposing to replace its current Clearing Fund sizing methodology with a new methodology that would allow OCC to size and assess the sufficiency of its Clearing Fund with a wider range of historical and hypothetical

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<sup>14</sup> See supra note 11.

scenarios.

## **Proposed Changes to OCC's Clearing Fund and Stress Testing Rules and**

### **Methodology**

OCC is proposing a number of enhancements intended to strengthen its overall resiliency, particularly with respect to OCC's Pre-Funded Financial Resources,<sup>15</sup> including, but not limited to, the following:

- (1) reorganize, restate, and consolidate the provisions of OCC's By-Laws and Rules relating to the Clearing Fund into a newly revised Chapter X of OCC's Rules;
- (2) modify the coverage level of OCC's Clearing Fund sizing requirement to ensure that the size of the Clearing Fund is sufficient to protect OCC against losses stemming from the default of the two Clearing Member Groups that would potentially cause the largest aggregate credit exposure for OCC in extreme but plausible market conditions (i.e., adopt a "Cover 2 Standard" for sizing the Clearing Fund);
- (3) adopt a new risk tolerance for OCC to cover a 1-in-50 year hypothetical market event at a 99.5% confidence level over a two-year look-back period;
- (4) adopt a new Clearing Fund and stress testing methodology, which would be underpinned by a new scenario-based one-factor risk model stress testing approach, as detailed in the newly proposed Policy and Methodology Description;<sup>16</sup>

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<sup>15</sup> The proposed Policy would define OCC's "Pre-Funded Financial Resources" to mean margin of the defaulted Clearing Member and the required Clearing Fund less any deficits, exclusive of OCC's assessment powers.

<sup>16</sup> OCC has separately submitted to the Commission its Comprehensive Stress Testing and Clearing Fund Methodology document and Dynamic VIX Calibration Process paper, which are included in this filing as Exhibits 3A and 3B, and for which OCC has requested confidential treatment. These Exhibits are being provided as supplemental information to the filing and would not constitute part of OCC's rules, which have been provided in Exhibit 5.

(5) document governance, monitoring, and review processes related to Clearing Fund and stress testing;

(6) provide for certain anti-procyclical<sup>17</sup> limitations on the reduction in Clearing Fund size from month to month;

(7) increase the minimum Clearing Fund contribution requirement for Clearing Members to \$500,000;

(8) modify OCC's allocation weighting methodology for Clearing Fund contributions;

(9) reduce from five to two business days the timeframe within which Clearing Members are required to fund Clearing Fund deficits due to monthly or intra-month resizing or due to Rule amendments;

(10) provide additional clarity in OCC's Rules regarding certain anti-procyclicality measures in OCC's margin model; and

(11) make a number of other non-substantive clarifying, conforming, and organizational changes to OCC's By-Laws, Rules, and filed procedures.

### ***1. Reorganization and Consolidation of Clearing Fund By-Laws and Rules***

The primary provisions that address OCC's Clearing Fund are currently located in Article VIII of the By-Laws and Chapter X of the Rules. Because the proposed changes to the Clearing Fund would substantially amend the relevant By-Law and Rule

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<sup>17</sup> A quality that is positively correlated with the overall state of the market is deemed to be "procyclical." For example, procyclicality may be evidenced by increasing margin or Clearing Fund requirements in times of stressed market conditions and low margin or Clearing Fund requirements when markets are calm. Hence, anti-procyclical features in a model are measures intended to prevent risk-base models from fluctuating too drastically in response to changing market conditions.

provisions, OCC believes that this is an appropriate opportunity to consolidate the primary provisions that address the Clearing Fund into Chapter X of the Rules. As a result, the content of Article VIII of the By-Laws would be consolidated into Chapter X of the Rules, subject to the proposed amendments described herein.<sup>18</sup> In place of this, Article VIII of the By-Laws would contain a general statement that OCC shall maintain a Clearing Fund, as provided in and subject to the terms of Chapter X of the Rules, and the size of the Clearing Fund shall at all times be subject to minimum sizing requirements and generally be calculated on a monthly basis by OCC; however, the size of the Clearing Fund may be adjusted more frequently than monthly under certain conditions specified in proposed Rule 1001. OCC believes that consolidating all of the Clearing Fund-related provisions of its By-Laws and Rules into one place would provide more clarity around, and enhance the readability of, OCC's Clearing Fund requirements.

OCC notes that, while the content of Article VIII is being moved out of the By-Laws and into the Rules, subject to the proposed changes described herein, OCC is not proposing to change the existing governance requirements with respect to amending the provisions currently contained in Article VIII. Article XI, Section 2 of the By-Laws provides that the Board of Directors may amend the Rules by a majority vote, while Article XI, Section 1 of the By-Laws provides that amendments to the By-Laws require an affirmative vote of two-thirds of the directors then in office, but not less than a majority of the number of directors fixed by the By-Laws. To ensure that the latter, heightened governance standard continues to apply to the Clearing Fund provisions that

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<sup>18</sup> While Article VIII of the By-Laws would effectively be reserved for future use, a statement would be added to indicate that OCC maintains the Clearing Fund as provided in and subject to the Rules provided in Chapter X.

will be moved from Article VIII of the By-Laws to Chapter X of the Rules, OCC is proposing to amend Article XI, Section 2 of the By-Laws to apply the heightened approval requirements to the provisions of Chapter X of the Rules that would be carried over from the By-Laws. Specifically, OCC would amend Article XI of the By-Laws to stipulate that while the Rules may be amended at any time by the Board of Directors, any amendment of the introduction to newly proposed Chapter X of the Rules, Rule 1002, Rule 1006, Rule 1009 and Rule 1010 (the substance of which is primarily derived from Article VIII of the By-Laws) shall require the affirmative vote of two-thirds of the directors then in office (but not less than a majority of the number of directors fixed by the By-Laws). Moreover, Article XI of the By-Laws would be amended to provide that the first sentence of proposed Rule 1006(e) may not be amended by action of the Board of Directors without the approval of the holders of all of the outstanding Common Stock of the OCC entitled to vote thereon. Proposed Rule 1006(e) is derived from existing Article VIII, Section 5(d) of the By-Laws, which is currently subject to this stockholder consent requirement under Article XI, Section 1 of the By-Laws. A detailed discussion of other organizational changes can be found in Section 10 below.

As noted above, and further described below, OCC also proposes to adopt a new Policy and Methodology Description to supplement its proposed Rules and provide further details around OCC's Clearing Fund and stress testing methodology and the related governance framework.

## ***2. Adoption of a Cover 2 Standard for OCC's Clearing Fund***

Under existing Rule 1001(a) and consistent with applicable Exchange Act

requirements,<sup>19</sup> OCC currently maintains a Cover 1 Standard with respect to the size of its Clearing Fund. The current methodology uses a sizing approach whereby OCC estimates draws against the Clearing Fund under a simulated idiosyncratic default scenario (representing simulated losses of a single Clearing Member Group) and a minor systemic default scenario (representing all pairings of two Clearing Member Groups, with each pair of distinct Clearing Member Groups being deemed equally likely).

OCC is proposing to amend its Rules and adopt a new Policy and Methodology Description to implement a Cover 2 Standard with respect to sizing the Clearing Fund. As a result, new Rule 1001(a), which replaces existing Rule 1001(a), would provide, in part, that the size of the Clearing Fund shall be established on a monthly basis at an amount determined by OCC to be sufficient to protect it against losses stemming from the default of the two Clearing Member Groups that would potentially cause the largest aggregate credit exposure for OCC under stress test scenarios that represent extreme but plausible market conditions (subject to certain minimum sizing requirements) (such stress tests being “Sizing Stress Tests”).<sup>20</sup> The proposed Sizing Stress Tests would be supplemented by additional historical or hypothetical stress test scenarios (“Sufficiency Stress Tests”) and, in the event Sufficiency Stress Tests call for a larger Clearing Fund size, the Clearing Fund shall be re-sized based on such Sufficiency Stress Tests (as described in more detail in Section 4.e below).

The adoption of a Cover 2 Standard for the Clearing Fund would continue to

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<sup>19</sup> See 17 CFR 240.17Ad-22(b)(3) and (e)(4)(iii).

<sup>20</sup> The calculated size of the Clearing Fund may also be determined more frequently than monthly under certain conditions, as specified within proposed Rule 1001(c).

satisfy OCC's existing obligations under the Exchange Act<sup>21</sup> and also would be consistent with international standards and best practices for central counterparties ("CCPs").<sup>22</sup> OCC believes that moving to an industry best practice Cover 2 Standard would increase OCC's resiliency and enable it to better withstand the default of multiple Clearing Members. OCC's proposed approach of adopting a Cover 2 Standard is reiterated in the proposed Policy and Methodology Description, and the stress tests referred to in new Rule 1001(a) are described in more detail in Section 4 below.<sup>23</sup>

### ***3. New Risk Tolerance for OCC's Pre-Funded Financial Resources***

OCC proposes to adopt a new risk tolerance with respect to credit risk that its Clearing Fund, along with OCC's other Pre-Funded Financial Resources,<sup>24</sup> should be sufficient to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two Clearing Member Groups that would potentially cause the largest aggregate credit exposure in extreme but plausible market conditions. In developing a risk tolerance with regard to the sizing of the Clearing Fund, OCC believes

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<sup>21</sup> See supra note 18.

<sup>22</sup> See Committee on Payment and Settlement Systems and Technical Committee of the International Organization of Securities Commissions, Principles for financial market infrastructures (Apr. 16, 2012), available at <http://www.bis.org/publ/cpss101a.pdf>.

<sup>23</sup> Under the proposed Clearing Fund methodology, OCC would no longer maintain the prudential margin of safety, as currently provided for in existing Rule 1001(a). As described further herein, OCC's proposed risk tolerance would be set at a 1-in-50 year market event; however, OCC would size its Clearing Fund to cover a more conservative 1-in-80 year event, creating a buffer beyond its risk tolerance. As a result, OCC believes the prudential margin of safety would no longer be necessary.

<sup>24</sup> Under the proposed Policy, "Pre-Funded Financial Resources" would be defined as the margin of the defaulted Clearing Member and the required Clearing Fund less any deficits. OCC would not include assessment powers as a Pre-Funded Financial Resource.

that a 1-in-50 year hypothetical market event<sup>25</sup> represents the outer range of extreme but plausible scenarios for OCC's cleared products. Accordingly, OCC proposes to adopt a new risk tolerance with respect to sizing its Pre-Funded Financial Resources that would cover a 1-in-50 year hypothetical market event on a Cover 2 Standard at a 99.5% confidence level over a two-year look-back period. The hypothetical scenarios used to establish the proposed risk tolerance would be based on the statistical fit of the historical returns for the "risk drivers" of equity products (or "risk factors") for a 1-in-50 year decline and rally in the Standard & Poor's S&P 500 Index ("SPX").<sup>26</sup> OCC would then set the size of its Clearing Fund on a monthly basis at an amount sufficient to cover this risk tolerance, as described in more detail in Section 4.d below.

#### ***4. Adoption of New Clearing Fund and Stress Testing Methodology***

OCC proposes to adopt a new methodology for sizing and monitoring its Clearing Fund and overall Pre-Funded Financial Resources, which primarily would be detailed in the proposed Policy and the Methodology Description. OCC believes that its proposed methodology would enable it to measure its credit exposure and to size its Pre-Funded Financial Resources at a level sufficient to cover potential losses under extreme but plausible market conditions.

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<sup>25</sup> OCC notes that a 1-in-50 year hypothetical market event corresponds to a 99.9921% confidence interval under OCC's chosen distribution of 2-day logarithmic S&P 500 index returns. The construction of Hypothetical stress test scenarios, including the 1-in-50 year market event used for OCC's risk tolerance, is discussed in Section 4 below.

<sup>26</sup> "Risk factors" refer broadly to all of the individual underlying securities (such as Google, IBM and Standard & Poor's Depository Receipts ("SPDR"), S&P 500 Exchange Traded Funds ("SPY"), etc.) listed on a market. The "risk drivers" are a selected set of securities or market indices (e.g., the SPX or the Cboe Volatility Index ("VIX")) that are used to represent the main sources or drivers for the price changes of the risk factors. The use and application of risk factors and risk drivers in OCC's proposed methodology are discussed further in Section 4 below.

Under the requirements of the proposed Policy, OCC would base its determination of the Clearing Fund size on the results of stress tests conducted daily using standard predetermined parameters and assumptions. These daily stress tests would consider a range of relevant stress scenarios and possible price changes in liquidation periods, including but not limited to: (1) relevant peak historic price volatilities; (2) shifts in other market factors including, as appropriate, price determinants and yield curves; and (3) the default of one or multiple Clearing Members. OCC also would conduct reverse stress tests for informational purposes aimed at identifying extreme default scenarios and extreme market conditions for which the OCC's financial resources would be insufficient.

As further described in the proposed Methodology Description, the stress scenarios used in the proposed methodology would consist of two types of scenarios: "Historical Scenarios" and "Hypothetical Scenarios." Historical Scenarios would replicate historical events in current market conditions, which include the set of currently existing securities, their prices and volatility levels. These scenarios provide OCC with information regarding pre-defined reference points determined to be relevant benchmarks for assessing OCC's exposure to Clearing Members and the adequacy of its financial resources. Hypothetical Scenarios would represent events in which market conditions change in ways that have not yet been observed. The Hypothetical Scenarios would be derived using statistical methods (e.g., draws from estimated multivariate distributions) or created based on expert judgment (e.g., a 15% decline in market prices and 50% in volatility). These scenarios would give OCC the ability to change the distribution and level of stress in ways necessary to produce an effective forward-looking stress testing

methodology. OCC would use these pre-determined stress scenarios in stress tests, conducted on a daily basis, to determine OCC's risk exposure to each Clearing Member Group by simulating the profits and losses of the positions in their respective account portfolios under each such stress scenario.

The proposed Methodology Description would also describe OCC's proposed approach for constructing stress test portfolios. For purposes of the proposed methodology, OCC would construct portfolios based on "liquidation positions," which are designed to more closely reflect how positions would be internalized (or netted) as part of OCC's default management process. The liquidation position set is created through an internalization process where long and short positions in the same contract series are closed out within an account type at the Clearing Member level. This replicates the process OCC would perform in the case of a Clearing Member default when offsetting positions are internalized before liquidating the remainder of the defaulter's portfolio. For simplicity purposes, OCC developed its current set of liquidation positions by internalizing within an account type at the Clearing Member level but does not incorporate potential internalization that can occur across account types. As a result, liquidation positions only reflect a portion of the potential exposure-reducing benefits associated with internalization and may lead to more conservative estimates of exposure.

As described further below, the proposed Policy and Methodology Description would include stress tests designed to: (1) determine the size of the Clearing Fund (i.e., Sizing Stress Tests run using OCC's inventory of "Sizing Scenarios"), (2) assess OCC's Clearing Fund size with respect to its risk tolerance and any other scenarios determined by the Risk Committee (i.e., Adequacy Stress Tests run using OCC's inventory of

“Adequacy Scenarios”), (3) measure the exposure of the Clearing Fund to the portfolios of individual Clearing Member Groups and determine whether any such exposure is sufficiently large as to necessitate OCC calling for additional margin resources from that individual Clearing Member Group (or Groups) or from Clearing Members generally through an intra-month resizing of the Clearing Fund (i.e., Sufficiency Stress Tests run using OCC’s inventory of “Sufficiency Scenarios”), and (4) monitor and assess OCC’s total financial resources under a variety of market conditions (i.e., Informational Stress Tests run using OCC’s inventory of “Informational Scenarios”).

OCC’s proposed stress testing model, the construction of Hypothetical and Historical Scenarios, and the variety of stress tests thereunder are described in more detail below.

***a. Proposed Stress Testing Model***

***(i). Risk Drivers and Stress Scenarios***

As detailed in the proposed Methodology Description, the proposed stress testing methodology is a scenario-based risk factor model with the following principal elements. First, a set of risk drivers are selected based on the portfolio exposures of all Clearing Member Groups in the aggregate. Second, each individual underlying security contained in the portfolio of a Clearing Member Group (each a “risk factor”) is mapped to a risk driver, and the sensitivity or “beta” of the security with respect to the corresponding risk driver is estimated (i.e., the sensitivity of the price of the security relative to the price of the risk driver). Third, a set of stress scenarios is generated by assigning a stress shock to each of the risk drivers, with the shocks of an individual underlying security or risk factor determined by the shock of its risk driver and its sensitivity (or beta) to the risk driver.

Fourth, for each of the stress scenarios, the risk exposure or shortfall of each portfolio of a Clearing Member is calculated and aggregated at the Clearing Member Group level.

Under the proposed stress testing methodology, each individual underlying security in the Clearing Members' portfolios is represented by a risk factor (such as Google, IBM, Standard & Poor's Depository Receipts ("SPDR"), S&P 500 Exchange Traded Funds ("SPY"), etc.). The number of risk factors is typically in the thousands. Because the vast amount of OCC's products are equity based, the risk drivers comprise a small set of underlying securities or market indices (e.g., Cboe S&P 500 Index ("SPX"), or the VIX) that are used to represent the main sources or drivers for the price changes of the risk factors. Other relevant risk drivers are included to cover U.S. and Canadian Government Security collateral positions, as well as commodity based exchange-traded funds ("ETFs") and futures products. The risk drivers are selected based on the characteristics of the risk factors in the Clearing Members' portfolios.

After the risk drivers are selected, each risk factor would be mapped to one risk driver. This mapping allows OCC to simulate movements for a large number of risk factors by the movements of a smaller number of risk drivers. In general, the mapping depends on the type of risk factor. For example, equity price risk factors generally are mapped to SPX and volatility risk factors to VIX. Government bond risk factors generally would be mapped to either U.S. Dollar ("USD") Treasury yields or Canadian Dollar ("CAD") government bond yields depending on the currency. The Treasury ETFs generally would be mapped to one of the Treasury bond ETFs. The commodity products generally would be mapped to one of the representative ETFs of the corresponding commodity class. All other risk factors initially would be mapped by default to SPX.

Under the proposed Methodology Description, risk drivers and the corresponding shocks would be reviewed regularly by OCC's Stress Testing Working Group ("STWG"), a cross-departmental team including senior officers from FRM, Quantitative Risk Management ("QRM"), Model Validation Group ("MVG"), and Enterprise Risk Management. The addition of a new risk driver or change in an existing risk driver would most likely be driven by a change in OCC's product exposure or by other changes in the market. Changes to risk drivers would be reviewed and approved by the STWG. QRM would recalibrate scenario shocks at least annually. In addition, on a quarterly basis (or more frequently if QRM or STWG determines that updates are necessary to capture significant market events in a timely fashion), QRM would recalibrate the risk driver shocks and report those results to the STWG who would review and approve any updates to the risk driver shocks.

To simulate a stressed market scenario, OCC would construct two kinds of scenarios, namely Hypothetical Scenarios (including statistically derived scenarios) and Historical Scenarios. Hypothetical Scenarios constructed using statistical methods would be based on various quantiles of the fitted distribution of the log returns of the main risk driver (e.g., SPX). Historical Scenarios on the other hand would be created using historic price moves for the risk factors on a given date where the scenario is defined. Additional details on the proposed stress testing model by asset class are discussed below.

***(i). Equity Risk Drivers and Shocks***

Under the proposed methodology, price shocks used for equity instruments in the statistically-derived Hypothetical Scenarios would be based on the quantiles of fitted statistical distributions of the 2-day returns of the risk driver (e.g., a 1-in-80 year event

SPX down shock). For example, as noted above, OCC uses the SPX as a risk driver for equity price moves. OCC would construct the majority of its Hypothetical Scenarios by fitting an appropriate statistical distribution to SPX returns. OCC would construct a historical dataset of SPX 2-day log returns dating back to 1957,<sup>27</sup> to characterize its fat-tailed<sup>28</sup> and asymmetric distribution. In order to reduce pro-cyclicality in Clearing Fund sizing and also to represent betas in a stressed market, OCC would shock risk factors using (1) a historical beta and (2) a beta equal to 1. The portfolio level profit and loss would be calculated with both betas separately for each Hypothetical Scenario, and OCC would use the calculation yielding the worst of the two outcomes in the subsequent Clearing Fund sizing.

The proposed Methodology Description would describe in detail OCC's proposed methodology for calculating price shocks for equity instruments, including leveraged products and any underlying baskets.

***(ii). Volatility Shock Model***

As noted above, under the proposed methodology, OCC would use the VIX as the

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<sup>27</sup> OCC would extend this dataset from March 1957 to the present if OCC determines that price shocks need to be re-calibrated. As a general matter, OCC has established this look-back period primarily on the basis of the quality of available data. The SPX, in its current form, dates back to 1957, and OCC therefore uses all of the index's data since that date. Furthermore, based on OCC's analysis of various observation windows dating back to the Great Depression, OCC has observed that the price shocks vary with the different periods used in the calibration. OCC's decision to use the entire history of the SPX is based on its desire to minimize the effects associated with a pre-defined observation window, and to avoid the subjective determination of higher or lower periods of volatility or the sudden exclusion of dates that fall outside of a fixed look back period. As noted above, QRM would recalibrate the risk driver shocks on a quarterly basis and report those results to the STWG who would review and approve any updates to the risk driver shocks.

<sup>28</sup> A data set with a "fat tail" is one in which extreme price returns have a higher probability of occurrence than would be the case in a normal distribution.

key risk driver for volatility shocks in its proposed stress testing model. The VIX is a measure of the one-month implied volatility<sup>29</sup> of the SPX, which represents the market's expectation of stock market volatility over the next 30-day period. For risk factors with SPX as their risk driver, implied volatility shocks would be modeled from SPX implied volatility shocks and the price beta of the risk factor.<sup>30</sup> For non-SPX driven risk factors, the implied volatility shock would be based on historical volatility beta regressed directly against the VIX. Accordingly, the proposed Methodology Description would describe in detail OCC's proposed methodology for calibrating VIX shocks, including those risk factors with SPX as the key risk driver, those risk factors with a non-SPX risk driver, and implied volatilities of any underlying baskets.

***(iii). Price Shock Models for Other Instruments***

OCC's proposed Methodology Description also would describe OCC's proposed approach to modeling price shocks for fixed income instruments and futures products. Specifically, the Methodology Description would discuss OCC's proposed approach for modeling foreign exchange currency shocks and yield curve shocks, which are used to shock U.S. Treasury bonds and Canadian government bonds held as collateral. The

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<sup>29</sup> Generally speaking, the implied volatility of an option is a measure of the expected future volatility of the value of the option's annualized standard deviation of the price of the underlying security, index, or future at exercise, which is reflected in the current option premium in the market. Using the Black-Scholes options pricing model, the implied volatility is the standard deviation of the underlying asset price necessary to arrive at the market price of an option of a given strike, time to maturity, underlying asset price and given the current risk-free rate. In effect, the implied volatility is responsible for that portion of the premium that cannot be explained by the then-current intrinsic value (i.e., the difference between the price of the underlying and the exercise price of the option) of the option, discounted to reflect its time value.

<sup>30</sup> For defined Historical Scenarios, the implied volatility shock leverages a beta based on the ratio of the risk factor price shock to the SPX price shock.

Methodology Description would also cover price and volatility shocks for commodity/energy products. The price shock model for commodity/energy products is the same as that for equity class drivers and the volatility shock model used for options on commodities is the same as that for non-SPX driven risk factors.

***b. Stress Testing Scenario Construction***

OCC proposes to construct Hypothetical and Historical scenarios using two different methodologies: a statistical methodology and a historical/defined shock methodology. Each of these approaches is discussed in further detail below.

***(i). Hypothetical Scenarios***

Under the proposed methodology, price shocks determined in the statistically-derived Hypothetical Scenarios would be based on the quantiles of fitted statistical distributions of the 2-day log returns of the risk driver. For example, Adequacy Scenarios would be based on the generated statistical down and up shocks for the SPX from a 1-in-50 year market event. On the other hand, Sizing Scenarios would be based on the generated statistical down and up shocks for the SPX from a 1-in-80 year market event. Specifically, OCC would use four Hypothetical Scenarios to guide the sizing of the Clearing Fund: (1) a 1-in-80 year market rally using a historical beta; (2) a 1-in-80 year market rally using a beta equal to 1; (3) a 1-in-80 year market decline using a historical beta; and (4) a 1-in-80 year market decline using a beta equal to 1.

Not all Statistical Scenarios would be generated using fitted distributions, however. For example, the Statistical Scenarios for interest rates are based on the “Principal Component Analysis” methods (a commonly used statistical method to analyze the movements of yield curves of Treasury bonds), while the Statistical Scenarios

for commodity ETFs would be based on the empirical price changes.

The proposed Methodology Description would describe how OCC would calibrate price and volatility shocks for equities, fixed income products, and commodity/energy products in its Hypothetical Scenarios.

***(ii).Historical Scenarios***

OCC would construct Historical Scenarios using historically accurate price moves for risk factors on a given date, provided the underlying securities were available on the date for which the scenario is defined. Historical Scenarios, which are based on significant market events, would allow OCC to analyze how current portfolios would perform if a historical event were to occur again. Because not all of the securities or risk factors in current portfolios existed on past scenario dates, OCC has developed methodologies to approximate the past price and volatility movements of such risk factors. Under the proposed methodology, a technique known as “Survival Method Pricing” would be used to backfill missing historical shocks. In the backfill technique, the observable 2-day returns of all risk factors would be averaged by industry sectors, and these sector averages would then be used to backfill the missing price returns of the securities (for example, Facebook stock would use the technology sector average under a 2008 Historical Scenario).<sup>31</sup>

***c. Clearing Fund Sizing and Stress Testing***

Under the proposed methodology, OCC would perform daily stress testing using a

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<sup>31</sup> With respect to volatility risk driver shocks, the exact volatility scenarios for a historical event may often be overridden by VIX shocks generated using OCC’s dynamic VIX calibration process because: (1) the historical volatility data is not available; and 2) even when the data is available, the sizes of the exact historical moves are too low to generate any realistic losses.

wide range of scenarios, both Hypothetical and Historical, designed to serve multiple purposes. Specifically, OCC's proposed stress testing inventory would contain scenarios designed to: (1) determine whether the financial resources collected from all Clearing Members collectively are adequate to cover OCC's risk tolerance; (2) establish the monthly size of the Clearing Fund; (3) measure the exposure of the Clearing Fund to the portfolios of individual Clearing Member Groups, and determine whether any such exposure is sufficiently large as to necessitate OCC calling for additional resources so that OCC continues to maintain sufficient financial resources to guard against potential losses under a wide range of stress scenarios, including extreme but plausible market conditions; and (4) monitor and assess the size of OCC's Pre-Funded Financial Resources against a wide range of stress scenarios that may include extreme but implausible and reverse stress testing scenarios. Each of these categories of stress tests is discussed in further detail below.

*(i). Adequacy Stress Tests*

Under the proposed Policy and Methodology Description, on a daily basis, OCC would perform a set of Adequacy Stress Tests designed to determine whether the financial resources collected from all Clearing Members collectively are adequate to cover OCC's risk tolerance (and other specified scenarios as may be approved by the Risk Committee) (i.e., Adequacy Scenarios). The performance of these Adequacy Stress Tests would allow OCC to assess the size of its Clearing Fund against its risk tolerance; however, Adequacy Stress Tests would not drive calls for additional financial resources. Adequacy Scenarios would include, at a minimum, scenarios reflecting OCC's proposed risk tolerance, which corresponds to a Clearing Fund size that would cover a 1-in-50 year

market event on a Cover 2 Standard. Adequacy Stress Tests should demonstrate that OCC maintains sufficient Pre-Funded Financial resources to cover all Adequacy Scenarios at a 99.5% coverage level over a two-year look back period.

*(ii). Sizing Stress Tests*

Under the proposed Policy and Methodology Description, FRM would determine the monthly Clearing Fund size based on the results of Sizing Stress Tests conducted daily using standard predetermined parameters and assumptions. Specifically, OCC would use Sizing Stress Tests to project the Clearing Fund size necessary for OCC to maintain sufficient Pre-Funded Financial Resources to cover losses arising from the default of the two Clearing Member Groups that would potentially cause the largest aggregate credit exposure to OCC as a result of a 1-in-80 year hypothetical market event, which OCC believes would provide sufficient coverage of OCC's 1-in-50 year event risk tolerance (and any other Adequacy Scenarios as may be approved by the Risk Committee) and to guard against intra-month scenario volatility and procyclicality.<sup>32</sup>

Under existing Rule 1001(a), OCC's Clearing Fund size determination is based on the peak five-day rolling average of its Clearing Fund sizing calculations observed over the preceding three calendar months plus a prudential margin of safety. As described in the proposed Policy and Methodology Description, OCC would continue to determine the Clearing Fund size for a given month by using a peak five-day rolling average of the Sizing Stress Test results over the prior three months but, as noted above, would no

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<sup>32</sup> In addition, OCC proposes conforming changes to delete Interpretation and Policy .02 of Rule 1001, which concerns the minimum confidence level used to size the Clearing Fund, as the confidence level used to size the Clearing Fund would now be addressed in the Policy and Methodology Description.

longer require a prudential margin of safety.<sup>33</sup> OCC believes that sizing the Clearing Fund at a more conservative 1-in-80 year market event scenario (over the proposed 1-in-50 year risk tolerance) would help to reduce volatility in its Clearing Fund sizing methodology and ensure that OCC continues to maintain sufficient resources in the event of large peaks and volatile markets, thereby providing a similar anti-procyclical buffer to the current prudential margin of safety.

In addition, under the proposed Policy, the minimum size of the Clearing Fund would continue to be set in accordance with OCC's minimum liquidity resources to equal 110% of OCC's committed liquidity facilities plus OCC's Cash Clearing Fund Requirement. However, if a temporary increase to the Cash Clearing Fund Requirement is made pursuant to OCC's Rules, the Executive Chairman, Chief Administrative Officer, or Chief Operating Officer would be authorized to determine whether such an increase should result in an increase in the minimum size of the Clearing Fund (which is tied to, in part, OCC's Cash Clearing Fund Requirement).

OCC also proposes to introduce some anti-procyclical measures for its monthly sizing process, which are discussed in Section 6 below.

***(iii). Sufficiency Stress Tests***

On a daily basis, OCC would run a set of Sufficiency Stress Tests to measure the exposure of the Clearing Fund to the portfolios of individual Clearing Member Groups and determine whether any such exposure is sufficiently large as to necessitate OCC calling for additional resources (1) from that individual Clearing Member Group (or Groups) in the form of margin or (2) from Clearing Members generally through an intra-

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<sup>33</sup> See supra note 22.

month resizing of the Clearing Fund. OCC initially expects to implement a set of historically-based Sufficiency Scenarios that would include, among others, the worst two-day price moves, up and down, during the 2008 financial crisis, which constitute the two most extreme two-day price moves observed in the entire history of SPX with the exception of the 1987 market crash, to be covered on a Cover 2 basis. OCC also would include as a Sufficiency Scenario a historical October 1987 market crash event to be covered on a Cover 1 basis.

Under the proposed Sufficiency Stress Tests, the largest Clearing Fund Draw from each Sufficiency Scenario shall be compared against the Clearing Fund size on a daily basis to assess whether OCC maintains sufficient financial resources to cover the stress scenario. If a Sufficiency Stress Test indicates that a Clearing Fund Draw would breach certain established thresholds, OCC would initiate (depending on the threshold breached) the process of (1) conducting additional monitoring, (2) collecting additional margin from the specific Clearing Member Group (or Groups) causing the breach, or (3) in extreme cases, resizing the Clearing Fund. Such thresholds have been designed to ensure that OCC's Pre-Funded Financial Resources would remain sufficient to cover losses that may be incurred by its largest one or two Clearing Member Groups, depending on the scenario in question. Each proposed threshold is set forth below, and included with each threshold are mitigating actions that OCC would take in the event of a breach of the threshold.

***(1). Enhanced Monitoring***

Under the proposed Policy, in the event that Sufficiency Stress Tests identify a Clearing Fund Draw for one or two Clearing Member Groups that causes the largest

aggregate credit exposure to OCC to exceed 65% of the current Clearing Fund requirement less deficits, but that does not breach a Sufficiency Stress Test Threshold (as defined below), FRM would promptly conduct enhanced monitoring and notify the relevant Clearing Member Group (or Groups) that they are approaching a margin call threshold in accordance with internal OCC procedures.<sup>34</sup>

***(2). Sufficiency Stress Test Threshold 1 – Intra-Day Margin Calls***

OCC proposes to amend Rule 609 to provide that, in addition to its existing authority to require intra-day margin deposits, OCC may require additional margin deposits if a Sufficiency Stress Test identifies a breach that exceeds 75% of the current Clearing Fund requirement less deficits (the “75% threshold” or “Sufficiency Stress Test Threshold 1”). The proposed change is designed to ensure that OCC continues to maintain sufficient Pre-Funded Financial Resources to cover its largest one or two Clearing Member Group exposures under a wide range of stress scenarios, including extreme but plausible scenarios, where one of the proposed Sufficiency Stress Test scenarios identifies a potential breach in OCC’s Clearing Fund size. In the event of a breach of the 75% threshold, OCC would initially collateralize this potential stress exposure by collecting margin from the Clearing Member Group(s) driving the breach.

Pursuant to the proposed Policy and Methodology Description, if a Sufficiency Stress Test identifies a Clearing Fund Draw for any one or two Clearing Member Groups that exceeds Sufficiency Stress Test Threshold 1, OCC would be authorized to issue a margin call against the Clearing Member Group(s) and/or Clearing Member(s) causing

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<sup>34</sup> OCC notes that it performs a similar enhanced monitoring process under its current FRMC Procedure when Idiosyncratic Clearing Fund Draws exceed 65% of the Clearing Fund currently in effect.

the breach in accordance with Rule 609. In the case of Cover 1 Sufficiency Scenarios (e.g., the historical Cover 1 1987 scenario), the amount of the margin call for a Clearing Member Group would be equal to the excess of such Clearing Member Group's projected Clearing Fund Draw over the 75% threshold. In the case of Cover 2 Sufficiency Scenarios (e.g., a historical Cover 2 2008 market event scenario) the total amount of the margin call shall be equal to the excess of the Cover 2 Clearing Fund Draw over the 75% threshold.<sup>35</sup> In the event a Clearing Member Group's Clearing Fund Draws exceed the 75% threshold in more than one Sufficiency Scenario, the Clearing Member Group would be subject to the largest margin call resulting from scenarios. Margin calls would be allocated to Clearing Members and related accounts within the Clearing Member Group in accordance with OCC procedures.<sup>36</sup>

All margin calls would be required to be approved by a Vice President (or higher) of FRM and would remain in effect until the collection of additional funds associated with the next monthly resizing of the Clearing Fund, after which the margin call would be (1) released or (2) recalculated based on the current Clearing Fund Draw.<sup>37</sup> If the margin

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<sup>35</sup> In the event only one Clearing Member Group's Clearing Fund Draw exceeds 50% of Sufficiency Stress Test Threshold 1, that Clearing Member Group would pay the entire call. In the event both Clearing Member Groups' Clearing Fund Draws exceed 50% of Sufficiency Stress Test Threshold 1, both Clearing Member Groups would pay an amount equal to the excess of their respective Clearing Fund Draw over 50% of the Sufficiency Stress Test threshold.

<sup>36</sup> OCC notes that under the current FRMC Procedure, in the event that FRM observes a scenario where the Idiosyncratic Clearing Fund Draw exceeds 75% of the Clearing Fund, an intra-day margin call would be issued against the Clearing Member or Clearing Member Group that caused such a draw, with the amount of the margin call being the difference between the projected draw and the "base amount." See supra note 11 and accompanying text.

<sup>37</sup> OCC notes that, under the current FRMC Procedure, for the days prior to the collection of any Clearing Fund payments due that result from the re-sizing of the Clearing Fund on the first business day of the month, both the base Clearing Fund

call imposed on an individual Clearing Member exceeds \$500 million, OCC's Stress Testing and Liquidity Risk Management group ("STLRM") would provide written notification to the Executive Chairman and Chief Executive Officer, President and Chief Operating Officer, and Chief Administrative Officer (collectively referred to as the "Office of the Chief Executive Officer" or "OCEO").<sup>38</sup> If the margin call imposed on an individual Clearing Member would exceed 100% an individual Clearing Member's net capital, the issue would be escalated to the OCEO, and each of the Executive Chairman, Chief Administrative Officer, and Chief Operating Officer would have the authority to determine whether OCC should continue calling for additional margin in excess of this amount. OCC believes that this notification and escalation process would enable OCC to appropriately require those Clearing Members that bring elevated risk exposures to OCC

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requirement and the Clearing Fund in effect are further reduced by any outstanding deficits. The proposed changes would clarify that upon the collection of funds to satisfy such deficits, any margin calls would be (1) released or (2) recalculated based on the current Clearing Fund Draw.

<sup>38</sup> OCC notes that, under its current FRMC Procedure, margin calls may be subject to a per-Clearing Member cap equal to the lesser of \$500 million or 100% of such Clearing Member's net capital; however, OCC's management retains discretion under the FRMC Procedure to call for additional margin beyond those amounts with certain reporting requirements when these caps are exceeded. Under the proposed Policy, these thresholds would no longer be characterized as "caps" and there would no longer be a requirement for reporting to OCC's Management Committee and Risk Committee as the \$500 million threshold would no longer function as a cap and the 100% of net capital threshold would now require escalation to the OCEO for approval of further margin calls. OCC believes the proposed changes to the reporting and approval process are appropriate given that (1) OCC management (typically an officer of OCEO) currently has discretion to waive any margin call caps, (2) under the proposal, these thresholds would no longer be characterized as caps and therefore there would be an assumption that OCC would call for margin in excess of these thresholds, (3) since the adoption of OCC's current FRMC Procedure, OCC has gained comfort in its Clearing Members' ability to meet and maintain margin calls in excess of these thresholds and (4) OCEO would retain the ability to notify or escalate an issue to the Risk Committee if they determine such actions are necessary.

to bear the costs of those risks in the form of margin charges while also allowing OCC to take into consideration a particular Clearing Member's ability to meet the call based on its financial condition, and the amount of collateral it has available to pledge when certain pre-identified thresholds have been exceeded.

***(3). Sufficiency Stress Test Threshold 2 – Intra-Month Clearing Fund***

***Resizing***

Under proposed Rule 1001(c) (and as described in the proposed Policy and Methodology Description), if a Sufficiency Stress Test were to identify a Clearing Fund Draw for any one or two Clearing Member Groups that exceed 90% of the current Clearing Fund size (after subtracting any monies deposited as a result of a margin call in accordance with a breach of Sufficiency Stress Test Threshold 1), OCC would effect an intra-month resizing of the Clearing Fund to ensure that OCC continues to maintain sufficient Pre-Funded Financial Resources to cover its exposures under a wide range of stress scenarios, including extreme but plausible market conditions. The amount of such an increase would be the greater of: (1) \$1 billion or (2) 125% of the difference between the projected draw under the Sufficiency Stress Test (less any monies deposited pursuant to a margin call resulting from a breach of Sufficiency Stress Test Threshold 1) and the current Clearing Fund size. Each Clearing Member's proportionate share of the increase would be based on its proportionate share of the Clearing Fund as determined pursuant to proposed Rule 1003(a), with the exception of those Clearing Members subject to the minimum contribution amount. OCC's Executive Chairman, Chief Administrative Officer or Chief Operating Officer would be responsible for reviewing and approving any intra-month increase to the size of the Clearing Fund based on a breach of Sufficiency

Stress Test Threshold 2 prior to implementation, and any such intra-month increase due to a breach of Sufficiency Stress Test Threshold 2 would remain in effect for any sizing calculations performed during the three month period subsequent to the intra-month increase to ensure that OCC continues to maintain sufficient financial resources to cover its credit exposures during that time.

In addition to intra-month resizing based on Sufficiency Stress Testing, OCC proposes to include additional authority in proposed Rule 1001(d) to provide the Risk Committee, or each of the Executive Chairman, Chief Administrative Officer, or Chief Operating Officer, upon notice to the Risk Committee, with the authority to increase the size of the Clearing Fund at any time for the protection of OCC, Clearing Members or the general public. Any determination by the Executive Chairman, Chief Administrative Officer, or Chief Operating Officer to implement a temporary increase in Clearing Fund size would (1) be based upon then-existing facts and circumstances, (2) be in furtherance of the integrity of OCC and the stability of the financial system, and (3) take into consideration the legitimate interests of Clearing Members and market participants. Under the proposed Policy, any temporary increase in Clearing Fund size would be reviewed by the Risk Committee at its next regularly scheduled meeting, or as soon as otherwise practical, and, if such temporary increase is still in effect at the time of that meeting, the Risk Committee would determine whether (1) the increase in Clearing Fund size is no longer required or (2) the Clearing Fund sizing methodology should be modified to ensure that OCC continues to maintain sufficient Pre-Funded Financial

Resources to cover its established risk tolerance.<sup>39</sup>

*(iv). Informational Stress Tests*

Under the proposed Policy and Methodology Description, OCC would run a variety of stress tests for informational purposes (i.e., Informational Stress Tests) to monitor and assess the size of OCC's Pre-Funded Financial Resources against other stress scenarios. The Informational Stress Tests could be comprised of a number of Historical and Hypothetical scenarios, which may include extreme but implausible scenarios and reverse stress test scenarios (i.e., "Informational Scenarios").

Informational Scenarios would not directly drive the size of the Clearing Fund or calls for additional margin; however, they would be an important risk monitoring tool that OCC would use to evaluate the appropriateness of its Adequacy, Sizing, and Sufficiency Scenarios and perform risk escalations and evaluations.

OCC would continually evaluate its inventory of Informational Scenarios and could add additional Informational Scenarios, as needed, to ensure that it understands the limits of its Pre-Funded Financial Resources. Scenarios may later be reclassified as a different scenario type with the approval of OCC's Risk Committee. For instance, a new scenario would typically be introduced as an Informational Scenario, but later may be elevated to a Sizing or Sufficiency Scenario.

**5. *Clearing Fund and Stress Testing Governance, Monitoring and Review***

The proposed Policy would establish governance, monitoring and review

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<sup>39</sup> In the event that the Risk Committee would determine to permanently increase or change the methodology used to size the Clearing Fund, OCC would initiate any regulatory approval process required to effect such a change in Clearing Fund size. However, OCC would not decrease the size of its Clearing Fund while the regulatory approvals for such permanent increase are being obtained to ensure that OCC continues to maintain sufficient financial resources during that time.

requirements for OCC's Clearing Fund and stress testing methodology. On a daily basis, STLRM would monitor the results of all of the Adequacy and Sufficiency Stress Tests, including whether the Adequacy Stress Test demonstrates that OCC maintains Pre-Funded Financial Resources above OCC's Adequacy Scenarios, in accordance with internal OCC procedures. Under the proposed Policy, STLRM or the Executive Vice President of FRM ("EVP-FRM") would immediately escalate any material issues identified with respect to the adequacy of OCC's financial resources to the STWG (provided that STWG review is practical under the circumstances) and the Management Committee to determine if it would be appropriate to recommend a change to the Hypothetical Scenarios used to size the Clearing Fund in accordance with applicable OCC procedures.

Under the proposed Policy, on a monthly basis, STLRM would prepare reports that provide details and trend analysis of daily stress tests with respect to the Clearing Fund, including the results of daily Adequacy Stress Tests, Sizing Stress Tests and Sufficiency Stress Tests and review the adequacy of OCC's financial resources in accordance with internal procedures. On a monthly basis, STWG would perform a comprehensive analysis of these stress testing results, as well as information related to the scenarios, models, parameters, and assumptions impacting the sizing of the Clearing Fund. Pursuant to this review, STWG would consider, and may recommend at its discretion, modifications to OCC's stress test scenario inventory and models for financial resources (including the creation and/or retirement of stress test scenarios, the reclassification of stress test scenarios, and/or modifications to the stress test scenarios' underlying parameters and assumptions), as well as related Policies and Procedures, to

ensure their appropriateness for determining OCC's required level of financial resources in light of current and evolving market conditions, and as pursuant to the related Procedures established for this purpose. The reviews would be conducted more frequently than monthly when the products cleared or markets served display high volatility or become less liquid; the size or concentration of positions held by OCC's participants increases significantly; or as otherwise appropriate. The Policy would require that OCC maintain procedures for determining whether, and in what circumstances, such intra-month reviews shall be conducted, and would indicate the persons responsible for making the determination.

Pursuant to the proposed Policy, STLRM would report the results of stress tests and its monthly analysis to OCC's Management Committee and Risk Committee on at least a monthly basis and would maintain procedures for determining whether, and in what circumstances, the results of stress tests must be reported to the Management Committee or the Risk Committee more frequently than monthly, and would indicate the persons responsible for making the determination. In the performance of monthly review of stress testing results and analysis and considering whether escalation is appropriate, due consideration would be given to the intended purpose of the proposed Policy to: (1) assess the adequacy of, and adjust as necessary, OCC's total amount of financial resources; (2) support compliance with the minimum financial resources requirements under applicable regulations; and (3) evaluate the adequacy of, and recommend adjustments to OCC's margin methodology, margin parameters, models used to generate margin or guaranty fund requirements, and any other relevant aspects of OCC's credit risk management.

Under the proposed Policy, OCC's Model Validation Group would be required to perform a model validation of OCC's Clearing Fund model on an annual basis, and the Risk Committee would be responsible for reviewing the model validation report. The Risk Committee would also be required to review and approve the Policy on an annual basis.

Under the proposed Policy, stress test inventories would be maintained by STLRM, and the STWG would be required to review and approve or recommend changes to stress test inventories recommended by STLRM staff in accordance with STWG procedures. The STWG would meet at least monthly and approve or recommend approval of changes to the inventory in accordance with the stress test procedures. The approval authority for such changes would be as follows:

- Informational Stress Tests – The STWG may approve the creation or retirement of Informational Stress Tests; and
- Sizing, Sufficiency, and Adequacy Stress Tests – The STWG may recommend approval to the Management Committee (however, if timing considerations make such recommendation to the Management Committee impracticable, then STWG would make its recommendation to the OCEO) and the Risk Committee the creation or retirement of Adequacy, Sizing, or Sufficiency Stress Tests

Pursuant to the proposed Policy, any request for an exception to the Policy must be made in writing to a member of the OCEO, who would then be responsible for reviewing the exception request and providing a decision in writing to the person requesting the exception. All requests for exceptions and their dispositions would be

reported to the Board or Risk Committee no later than its next regularly scheduled meeting, in a format approved by the Chair of the Board or Risk Committee. Finally, the Policy would require that violations of the Policy be reported to the Policy owner and OCC's Chief Compliance Officer.

#### ***6. Limitations on Reduction in Monthly Clearing Fund Size***

OCC also proposes to adopt rules imposing certain anti-procyclical measures for its monthly Clearing Fund sizing process. Under proposed Rule 1001(a), the size of the Clearing Fund would not be permitted to decrease more than 5% from month-to-month to avoid pro-cyclicality. This limitation, which is also reflected in the proposed Policy and Methodology Description, is designed to promote stability and to prevent the Clearing Fund from decreasing rapidly when a previous peak falls out of the look-back period.

In addition, if the results of a daily Sufficiency Stress Test over the final five business days preceding the monthly Clearing Fund sizing exceed 90% of the projected Clearing Fund size for the upcoming month, the Clearing Fund size must be set such that the peak Sufficiency Stress Test draw is no greater than 90% of the Clearing Fund size. The proposed change is designed to reduce the likelihood that the Clearing Fund would be set at a size such that a Clearing Member Group with stress test exposures that are trending upward at the end of the sizing period would exceed the threshold for an intra-month resize immediately following the decline.

#### ***7. Clearing Fund Contribution Allocations***

##### ***a. Proposed Changes to Initial Contributions***

Pursuant to existing Article VIII, Section 2 of the By-Laws, the minimum initial Clearing Fund contribution of each newly admitted Clearing Member is set at an amount

equal to at least \$150,000, which is also equal to OCC's minimum "fixed" contribution amount (discussed in detail below). Under proposed Rule 1002(d), which is based on existing Article VIII, Section 2(a), OCC would increase the initial Clearing Fund contribution amount to \$500,000. OCC's existing minimum contribution requirements have been in place since June 5, 2000,<sup>40</sup> and as a result, OCC undertook an analysis to determine the appropriateness of this amount given the passage of time. As part of this analysis, OCC considered a number of factors such as the potential impact on Clearing Members that are at the minimum or otherwise below or just over the newly proposed \$500,000 requirement, the impact to those members in dollar and percentage terms as well as compared to their net capital, evolving market conditions, evolution in the size of the Clearing Fund, minimum contribution requirements of other CCPs, and heightened regulatory obligations on OCC given its status as a systemically important financial market utility. For example, OCC notes that the minimum initial (and fixed) contribution requirement has remained static over time while the Clearing Fund has grown from approximately \$2 billion in 2000 to several multiples of that, both currently and under the proposed changes described herein. Additionally, OCC reviewed the contribution requirements of other CCPs and noted that they were well in excess of OCC's current minimum contribution requirement (and in several cases, would be in excess of the newly

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<sup>40</sup> On June 5, 2000, the Commission approved a proposed rule change by OCC to merge the equity and non-equity elements of its Clearing Fund into a combined Clearing Fund with a minimum contribution requirement of \$150,000. See Securities Exchange Act Release No. 42897 (June 5, 2000), 65 FR 36750 (June 9, 2000) (SR-OCC-99-9). OCC notes that, as a practical matter, the \$150,000 minimum contribution amount dates back prior to June 2000 for the majority of its Clearing Members as most members already contributed to both the equity and non-equity elements of the Clearing Fund and were subject to a \$75,000 minimum contribution for each element prior to the June 2000 rule change.

proposed minimum amount).<sup>41</sup> OCC also performed an analysis of Clearing Members that had a Clearing Fund contribution requirement larger than the current minimum requirement of \$150,000 but less than or equal to the proposed requirement of \$500,000.<sup>42</sup> OCC also reviewed the impact of this change and discussed it with potentially impacted Clearing Members firm, the majority of which did not express concerns over the proposed increase. As a result of this analysis, OCC determined \$500,000 would be the appropriate initial and minimum Clearing Fund contribution amount required to maintain membership at OCC. Consistent with existing authority, OCC's Risk Committee would also be able to fix a different initial contribution amount with regard to any new Clearing Member at the time its application is approved. In either case, the initial contribution amount would remain in effect for not more than three months after the admission of the relevant Clearing Member. After that time, or at an earlier time as may be determined by the Risk Committee, the Clearing Member's contribution amount would instead be determined using the allocated contribution method in proposed Rule 1003. OCC also proposes to clarify in new Rule 1002(d) that initial contribution requirements would at all times remain subject to the minimum "fixed amount" of \$500,000 under proposed Rule 1003 and to adjustments by OCC under Rule 1004.

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<sup>41</sup> For example, at the time of OCC's analysis, ICE Clear US had a minimum contribution requirement of \$2,000,000 and CME had minimum contribution requirements of \$500,000 for exchange listed futures and options and \$2.5 million for OTC products covered in its Base Guaranty Fund.

<sup>42</sup> Based on this analysis, OCC determined that there are currently eleven Clearing Members either subject to the minimum Clearing Fund contribution requirement of \$150,000 or below the proposed \$500,000 requirement that would be impacted by the proposal.

**b. *Proposed Changes to Contribution Allocation Methodology***

Current Rule 1001(b) provides, in part, that each Clearing Member's monthly contribution requirement is based on a sum of \$150,000 (which is a fixed amount, equal to the current initial contribution amount) plus such Clearing Member's proportionate share of the amount necessary for OCC to maintain the total Clearing Fund size required under Rule 1001(a) (which is a variable amount). OCC proposes to adopt new Rule 1003(a), which would increase the minimum "fixed" contribution amount to \$500,000, consistent with the proposed increase in the minimum initial contribution described above. Specifically, proposed Rule 1003(a) would provide that each Clearing Member's contribution to the Clearing Fund shall equal the sum of (x) \$500,000 (a higher "fixed amount," equal to the proposed initial contribution amount described above) and (y) such Clearing Member's proportionate share of an amount sufficient to cause the amount of the Clearing Fund (after taking into account each Clearing Member's fixed amount) to be equal to the Clearing Fund size determined pursuant to proposed Rule 1001(a) (the "variable amount"). The proposed change was determined under the same analysis and justification discussed above regarding the proposed change in the minimum initial contribution amount (i.e., OCC analyzed the potential impact on Clearing Members that are at the minimum fixed contribution amount or otherwise below or just over the newly proposed \$500,000 requirement, the impact to those members in dollar and percentage terms as well as compared to their net capital, evolving market conditions, evolution in the size of the Clearing Fund, minimum contribution requirements of other CCPs, and heightened regulatory expectations on OCC given its status as a systemically important financial market utility). Collectively, proposed Rules 1002(d) and Rule 1003(a) would

effectively provide for a new minimum Clearing Fund contribution amount of \$500,000 per Clearing Member.<sup>43</sup>

OCC also proposes to clarify in proposed Rule 1004, in line with its current operational practice, that OCC may adjust an individual Clearing Member's Clearing Fund contributions due to mergers, consolidations, position transfers, business expansions, membership approval, or other similar events in order to ensure that Clearing Fund allocations are appropriately aligned with the change in risks associated with such events (e.g., the increased risk a Clearing Member may present after taking on positions of another Clearing Member through a merger or position transfer).

#### ***8. Allocation Weighting Methodology***

Under existing Rule 1001(b), Clearing Fund contributions are allocated among Clearing Members based on a weighted average of each Clearing Member's proportionate share of total risk,<sup>44</sup> open interest, and volume in all accounts (including paired X-M accounts) according to the following weighting allocation methodology: 35% total risk, 50% open interest, and 15% volume. OCC proposes to modify its allocation methodology in new Rule 1003 to more closely align Clearing Members' Clearing Fund contribution requirements with the level of risk they bring to OCC. Specifically, OCC proposes that Clearing Fund contribution requirements would be based on an allocation

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<sup>43</sup> OCC notes that the current exception for Futures-Only Affiliated Clearing Members in By-Law Article VIII, Section 2 and Rule 1001(f) would be retained under proposed Rules 1002(d) and 1002(f).

<sup>44</sup> As noted above, "total risk" in this context means the margin requirement with respect to all accounts of the Clearing Member Group exclusive of the net asset value of the positions in such accounts aggregated across all such accounts.

methodology of 70% total risk, 15% volume and 15% open interest.<sup>45</sup> OCC also proposes to modify the volume component of the weighting allocation methodology to provide that OCC would use cleared volume, as opposed to executed volume, to base the allocation on where the position is ultimately cleared.<sup>46</sup>

In addition, OCC proposes to adopt new Interpretation and Policy .02 of Rule 1003, which would be based without material amendment on the clauses in paragraphs (d) and (e) of current Rule 1001 that address how OTC options are included within the fraction used to compute a Clearing Member's proportionate share of open interest and volume, respectively. The numerator and denominator in each case would continue to include OTC option contracts within the number of open cleared contracts of a Clearing Member, with that number of OTC option contracts being adjusted to ensure that it is approximately equal to the number of options contracts, other than OTC option contracts, that would cover the same notional value or units of the same underlying interest. OCC believes that placing this aspect of the computation in an Interpretation and Policy would enhance the readability of Rule 1003(b).

OCC's contribution allocation and associated weighting methodology also would

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<sup>45</sup> Under the proposed Policy, this new allocation approach would be phased in over a three month period following implementation of the proposed changes herein by gradually shifting 35% of the weighting to total risk from open interest by 10% in the first month, 10% in the second month, and 15% in the third month. Accordingly, OCC proposes conforming changes to delete Interpretation and Policy .03 of Rule 1001, which concerns the phase-in of the former allocation methodology, and would no longer be required.

<sup>46</sup> For both volume and open interest, OCC would adjust stock loan shares by a factor of 100 to normalize them with the size of a standard option contract. Interpretation and Policy .04 of existing Rule 1001, which concerns the calculation used to determine cleared contract equivalent units for stock loan and borrow positions, would be relocated to Interpretation and Policy .01 of proposed Rule 1003 without change.

be generally described in the proposed Policy and Methodology Description documents.

### ***9. Reduction in Time to Fund Deficits***

OCC proposes to adopt new Rule 1005(a), which would address the time within which a Clearing Member would generally be required to satisfy a deficit in its required Clearing Fund contribution to reduce the timeframe during which OCC potentially would be operating with less than its required amount of Pre-Funded Financial Resources. As a general rule, whenever a report made available by OCC as described in proposed Rule 1007 shows a deficit, the applicable Clearing Member(s) would be required to satisfy the deficit in a form approved by OCC no later than one hour after being notified by OCC of such deficit. Examples of deficits that would need to be satisfied by this deadline include those caused by a decrease in the value of a Clearing Member's contribution or by an adjusted contribution pursuant to proposed Rule 1004. The one-hour deadline would be subject to the application of alternative timing requirements specified in Chapter X, such as in the case of deficits arising due to regular monthly sizing or an intra-month resizing (as addressed in proposed Rule 1005(b)), and deficits arising due to amendments of OCC's Rules (as addressed in proposed Rule 1002(e)). Proposed Rule 1004 would also provide OCC with discretion to agree to alternative written terms regarding the satisfaction of a deficit that would otherwise be governed by the requirements described above.

Proposed Rule 1005(b), which is based on existing Rule 1003 with certain modifications, would address deficits arising due to regular monthly sizing of the Clearing Fund under proposed Rule 1001(a), as well as due to intra-month sizing adjustments under proposed Rule 1001(c). The proposed provision would reduce the

amount of time within which a Clearing Member must satisfy a deficit shown on a report made available by OCC under Rule 1007 from five business days of the date on which the report is made available to two business days of such date. OCC believes that this change is appropriate because it would expedite adjustment of Clearing Fund contributions to the appropriate size as determined by OCC and allow OCC to respond more quickly in rapidly changing or emergency market conditions.

Proposed Rule 1002(e) would address the circumstance in which a Clearing Member's contribution is increased as a result of an amendment of OCC's Rules. The proposed provision is based on existing By-Law Article VIII, Section 2(b), modified, however, to require that such an increased contribution be satisfied within two business days of the Clearing Member receiving notice of the amendment, rather than within five business days of such notice (as is required under current By-Law Article VII, Section 2(b)). For the reasons noted above, OCC believes that this change is appropriate because it would expedite both the effectiveness of the increased contribution requirement (and, indirectly, the size of the Clearing Fund) and the actual funding of Clearing Member contributions related thereto. Consistent with OCC's current requirement, a Clearing Member would not be obligated to make such an increased contribution, however, if, before the effective date of the relevant amendment, it notifies OCC in writing that it is terminating its status as a Clearing Member and closes out or transfers all of its open long and short positions. In addition, newly proposed Interpretation and Policy .02 of Rule 1002 would clarify that the authority of a Clearing Member to terminate its status as such under Rule 1006(h) regarding assessments by OCC is separate and distinct from the analogous authority under Rule 1002(e) concerning membership terminations in

connection with an increase in Clearing Fund contributions due to a change in OCC's Rules.

In addition, and consistent with existing operational practice, new Rule 1005(c) would establish that, upon the failure of a Clearing Member for any reason to timely satisfy a deficit regarding its required Clearing Fund contribution, OCC would be authorized to withdraw an amount equal to such deficit from the Clearing Member's bank account maintained in respect of an OCC firm account. The proposed rule change is designed to ensure that OCC is able to obtain funds owed from its Clearing Members to satisfy a Clearing Fund deficit in a timely fashion so that OCC can continue to meet its overall financial resource requirements as stipulated under its rules and by applicable regulatory requirements. Any such withdrawn amount would thereafter be treated as a cash contribution to the Clearing Fund. The provision would also clarify that, if OCC is unable to withdraw an amount equal to the deficit, the Clearing Member's failure to satisfy such deficit in accordance with OCC's Rules may subject such Clearing Member to disciplinary action or suspension, including under Chapters XI and XII of OCC's Rules.

OCC also proposes to specify in proposed Rules 1005(b) and 1002(e) that Clearing Members shall have until 9:00AM Central Time on the second business day after the issuance of the Clearing Fund Status Report to meet their required Clearing Fund contribution if such contribution increases as a result of monthly Clearing Fund sizing or an intra-month resizing of the Clearing Fund. The proposed change would more closely align with the settlement time for the collection of other deficits (e.g., the required time for making good any deficiency generally under existing Article VIII, Section 6 of

the By-Laws or for satisfying any margin deficits under Rule 605). The proposed change would also be reflected in the proposed Policy.

Finally, OCC proposes to relocate the substance of current Rule 1002 (regarding Clearing Fund reports) to proposed Rule 1007, with modifications that allow OCC to provide more real-time transparency to Clearing Members by mandating more frequent reporting, as well as certain modifications to address the intra-month resizing of the Clearing Fund. Current Rule 1002 provides that OCC must make available to each Clearing Member, within ten days after the close of each calendar month, a report that lists the current amount and form of such Clearing Member's contribution, the amount of the contribution required of such Clearing Member for the current calendar month, and any surplus over and above the amount required for the current calendar month. Under proposed Rule 1007, OCC would make available each business day certain reports listing the current amount and form of each Clearing Member's contribution to the Clearing Fund, the current amount of the contribution required of such Clearing Member (including the Clearing Member's required cash contribution to the Clearing Fund, as discussed in more detail in Section 10 below) and any deficit in the Clearing Member's contribution or surplus over and above the required amount, as applicable. OCC would also issue a report whenever the calculated size of the Clearing Fund has changed, whether as the result of regular monthly sizing of the Clearing Fund or otherwise.

#### ***10. Anti-Procyclicality Measures in OCC's Margin Methodology***

OCC proposes to amend current Rule 601(c), regarding margin requirements for accounts other than customers' accounts and firm non-lien accounts, to clarify in OCC's Rules that OCC's existing methodology for calculating margin requirements incorporates

measures designed to ensure that margin requirements are not lower than those that would be calculated using volatility estimated over a historical look-back period of at least ten years. The proposed change reflects an existing practice in OCC's margin methodology and is intended only to provide more clarity and transparency regarding this anti-procyclicality measure in OCC's Rules.

### ***11. Other Clarifying, Conforming, and Organizational Changes***

OCC also proposes a number of other clarifying, conforming, and organizational changes to its By-Laws, Rules, Collateral Risk Management Policy, Default Management Policy, and Clearing Fund-related procedures in connection with the proposed enhancements to its Pre-Funded Financial Resources and the relocation of OCC's Clearing Fund-related By-Laws into Chapter X of the Rules. Specifically, proposed Rules 1006(a)–(c) would address both the purpose of the Clearing Fund and the seven conditions under which the Clearing Fund generally may be used by OCC to make good certain losses that it suffers. The proposed Rule is based on a consolidation of existing Article VIII, Section 1(a) (concerning the maintenance and purpose of the Clearing Fund) and Section 5(a)–(c) (concerning the application of the Clearing Fund) with minor modifications. Accordingly, under proposed Rule 1006, and consistent with existing authority, OCC would maintain, and be permitted to use, the Clearing Fund to make good losses relating to: (1) the failure of a Clearing Member to discharge an obligation on or arising from any confirmed trade accepted by OCC; (2) the failure of any Clearing Member or the Canadian Depository for Securities to perform its obligations under or arising from any exercised or assigned option contract or matured future or any other contract or obligation issued, undertaken, or guaranteed by OCC or in respect of which

OCC is otherwise liable;<sup>47</sup> (3) the failure of any Clearing Member in respect of its stock loan or borrow positions to perform its obligations to OCC; (4) any liquidation of a Clearing Member's open positions; (5) any protective transactions effected for OCC's own account under Chapter XI of the Rules regarding the suspension of a Clearing Member; (6) the failure of any Clearing Member to make any required payment or render any required performance; or (7) the failure of any bank or securities or commodities clearing organization to perform obligations to OCC under certain conditions as set forth in proposed Rule 1006(c).<sup>48</sup>

Proposed Rule 1006(g) would address payments to and from Cross-Guaranty Parties<sup>49</sup> in respect of Common Members.<sup>50</sup> This provision is based on current Article VIII, Sections 5(f) and 5(g) of OCC's By-Laws, which would be transferred to Rule 1006(g) without material changes. OCC would, therefore, continue to use a suspended

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<sup>47</sup> OCC notes that proposed Rule 1006(a) would contain a minor modification to clarify that matured futures contracts are included within the scope of other contracts or obligations issued, undertaken, or guaranteed by OCC or in respect of which OCC is otherwise liable.

<sup>48</sup> Existing Interpretation and Policy .01 and .02 of Article VIII, Section 5 concerning the share of any deficiency to be borne by each Clearing Member as a result of a charge against the Clearing Fund would be consolidated and relocated to new Interpretation and Policy .01 of Rule 1006 with only minor, non-substantive conforming changes and cross-references to new Interpretation and Policy .01 of Rule 1006 would be added to proposed Rules 1006(b) and (c) to provide additional clarity in OCC's rules.

<sup>49</sup> A Cross-Guaranty Party is a party, other than OCC, to a Limited Cross Guaranty Agreement, which is an agreement between OCC and one or more other clearing corporations and/or clearing organizations relating to the cross-guaranty by OCC and the other party or parties of certain obligations of a suspended Common Member to the parties to the agreement. See Article I, Section 1.C.(35) of the By-Laws (defining Cross-Guaranty Party) and Section 1.L.(4) (defining Limited Cross-Guaranty Agreement).

<sup>50</sup> A Common Member is "a Clearing Member that is concurrently a member or participant of a Cross-Guaranty Party." See Article I, Section 1.C.(27) of the By-Laws.

Clearing Member's Clearing Fund contribution, after appropriately applying other funds in the accounts of the Clearing Member, to make a required payment to a Cross-Guaranty Party pursuant to a Limited Cross-Guaranty Agreement in respect of such Clearing Member. Proposed Rule 1006(g) would clarify, however, that OCC would credit funds to the Clearing Fund that it receives in respect of a suspended Clearing Member from a Cross-Guaranty Party pursuant to a Limited Cross-Guaranty Agreement, where OCC must still make a charge on a proportionate basis against other Clearing Members' required contributions to the Clearing Fund even after application of such funds, or where OCC has already made a charge on a proportionate basis against other Clearing Members' required contributions to the Clearing Fund.

Proposed Interpretation and Policy .02-.04 to Rule 1006 would also address certain aspects of payments to and from Cross-Guaranty Parties in respect of Common Members. All of these proposed provisions are based without material amendment on existing Interpretations and Policies to Article VIII, Section 5 of OCC's By-Laws, as described below.

Proposed Interpretation and Policy .02 to Rule 1006 is based without material amendment on existing Interpretation and Policy .03 to Article VIII, Section 5 of OCC's By-Laws. Under the proposed Interpretation and Policy, if OCC has a deficiency after it applies all the available funds of a suspended Common Member but cannot determine whether, when, or in what amount it will be entitled under a Limited Cross-Guaranty Agreement to receive funds from a Cross-Guaranty Party, OCC may make a charge against other Clearing Members' contributions for the deficiency in accordance with Rule 1006(b). If OCC receives funds from a Cross-Guaranty Party after making such a charge,

OCC would credit the funds to the Clearing Fund in accordance with Rule 1006(g).

Proposed Interpretation and Policy .03 to Rule 1006 is based without material amendment on existing Interpretation and Policy .04 to Article VIII, Section 5 of OCC's By-Laws. Under the proposed Interpretation and Policy, if OCC has a deficiency after it applies all the available funds of a suspended Common Member and OCC determines that it is likely to receive funds from a Cross-Guaranty Party under a Limited Cross-Guaranty Agreement, OCC may, in anticipation of receipt of such funds, forego making a charge, or make a reduced charge in accordance with proposed Rule 1006(b), against other Clearing Members' Clearing Fund contributions. If OCC does not subsequently receive the funds or receives a smaller amount than anticipated, OCC may make a charge or additional charges against contributions in accordance with proposed Rule 1006(b).

Proposed Interpretation and Policy .04 to Rule 1006 is based without material amendment on existing Interpretation and Policy .05 to Article VIII, Section 5 of OCC's By-Laws. Under the proposed Interpretation and Policy, if, under a Limited Cross-Guaranty Agreement, OCC receives funds from a Cross-Guaranty Party in respect of a suspended Common Member but is subsequently required to return such funds for any reason, OCC may make itself whole by making a charge or additional charges, as the case may be, against the contributions of Clearing Members, other than the suspended Common Member.

Existing Article VIII, Section 1(b) of OCC's By-Laws, which concerns the general lien on all cash, Government securities, and other property of the Clearing Member contributed to the Clearing Fund, would be moved without material change to new Rule 1006(i). Additionally, existing Interpretation and Policy .02 of Article VIII,

Section 3 of OCC's By-Laws, which concerns the treatment of securities deposited in an account of OCC at an approved custodian, would be relocated to new Rule 1006(j) without change.

OCC also proposes to relocate existing Article VIII, Sections 5(c), and (e) of OCC's By-Laws, which concern notice of any charges against the Clearing Fund, the use of current and retained earnings to address losses, and the use of the Clearing Fund to effect borrowings, to new Rules 1006(d), (e), and (f),<sup>51</sup> respectively, without material amendment.<sup>52</sup> OCC would also relocate existing Article VIII, Section 6 of OCC's By-Laws, which concerns the making good of any charges against the Clearing Fund (i.e., Clearing Fund replenishment and assessments) to new Rule 1006(h) without material changes.<sup>53</sup> The proposed Policy and Methodology Description would also contain a discussion of OCC's Clearing Fund replenishment and assessment powers generally intended to reflect this existing authority in the By-Laws. In addition, the proposed

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<sup>51</sup> Under clause (i) of new Rule 1006(f), OCC would also be permitted to take possession of Government securities in anticipation of a potential default by or suspension of a Clearing Member, as is currently the case under existing Interpretation and Policy .06 to Article VIII, Section 5.

<sup>52</sup> OCC notes that it would make a number of non-substantive clarifying changes to the rule text in proposed Rule 1006 so that existing rule text referencing "computed contributions to the Clearing Fund" and "as fixed at the time" would be rephrased as "required contributions to the Clearing Fund" and "as calculated at the time." The proposed change is designed to more accurately reflect that these rules are intended to refer to a Clearing Member's required Clearing Fund contribution amount as calculated under the proposed Rules, Policy and Methodology Description and eliminate any potential confusion with a Clearing Member's "fixed amount" as determined under Rule 1003(a).

<sup>53</sup> OCC notes that it would modify the rule text in question to clarify that a Clearing Member's obligation to make good the deficiency in its Clearing Fund contribution, resulting from a proportionate charge or otherwise, would be in relation to its currently "required" contribution amount and not the amount of the contribution on deposit as of the time of the charge.

Policy would (1) provide the Executive Chairman, Chief Administrative Officer, or Chief Operating Officer with the authority to approve proportionate charges against the Clearing Fund and (2) require that OCC's Accounting department maintain procedures for the allocation of losses due to a Clearing Member default and to replenish the Clearing Fund in the event a deficiency in the Clearing Fund results from events other than those specified in proposed Rule 1006.

Additionally, OCC proposes to amend the definition of "Clearing Fund" in Article I and Article V, Section 3 of the By-Laws to reflect the fact that OCC's Clearing Fund-related provisions would now be contained in Chapter X of the Rules. In addition, OCC proposes to change references to "Chapter 11" of the Rules in Article VI, Section 27 of OCC's By-Laws to "Chapter XI" To conform the references to OCC's Rules. OCC proposes conforming changes to Rule 1106 to reflect the reorganization of Article VIII of the By-Laws into Chapter X of the Rules. OCC also proposes to amend Rule 609 to change the term "securities" to "contracts" to clarify that its authority to call for intra-day margin also applies to non-securities products cleared by OCC.

OCC also proposes conforming changes to delete existing Interpretations and Policies .02 and .03 of Rule 1001, which deal with the minimum confidence level used to size the Clearing Fund and the phase-in of the former weighting allocation methodology, respectively. Under the proposed change, the confidence level used to size the Clearing Fund and the phase-in of the proposed weighting allocation methodology would be addressed in the Policy and Methodology Description (as described above). As a result, these Interpretations and Policies would no longer be needed.

In addition, consistent with its effort to aggregate all Clearing Fund-related

provisions to Chapter X of the Rules, OCC proposes to relocate Article VIII, Sections 7 (Contribution Refund) and 8 (Recovery of Loss) of the By-Laws to new Rules 1009, and 1010, respectively, without material amendment.

OCC also proposes to relocate certain By-Law provisions related to the form and method of Clearing Fund contributions into Chapter X of the Rules. Specifically, OCC proposes to relocate Article VIII, Section 3(a) and (c); Interpretation and Policy .04 to Article VIII, Section 3; and Article VIII, Section 4 to proposed Rule 1002 concerning Clearing Fund contributions. These By-Law provisions would be relocated to Chapter X of the Rules without material amendment. OCC also would relocate Interpretation and Policy .01 to Rule 1001 concerning minimum Clearing Fund size into new Rule 1001(b). The form and method of OCC's Clearing Fund contributions also would be generally described in the proposed Policy and Methodology Description documents. In addition, and consistent with current OCC practice, the proposed Policy would impose a requirement that the specific securities eligible to be used as Clearing Fund contributions be permitted to be pledged in exchange for cash through one of OCC's committed liquidity facilities so that OCC continues to maintain sufficient eligible securities to fully access such facilities.

As noted above, under proposed Rule 1007, OCC would make available on a daily basis certain reports listing the current amount and form of each Clearing Member's contribution to the Clearing Fund, the current amount of the contribution required of such Clearing Member, and any deficit in the Clearing Member's contribution or surplus over and above the required amount, as applicable. Proposed Rule 1007 would also include reporting on the Clearing Member's required cash contribution to the Clearing Fund.

OCC also proposes to relocate existing Rule 1004 (Withdrawals) to new Rule 1008 and would modify the proposed rule to reflect that Clearing Members may withdraw excess Clearing Fund deposits on the same day that OCC issues a report to the Clearing Member showing a surplus (as opposed to the following business day), which is consistent with current operational practices.

In addition, OCC proposes to update references to Article VIII of the By-Laws in its Collateral Risk Management Policy and Default Management Policy to reflect the relocation of OCC's Clearing Fund-related By-Laws into Chapter X of the Rules.

Finally, OCC currently maintains procedures regarding its processes for (i) the monthly resizing of its Clearing Fund (Monthly Clearing Fund Sizing Procedure), (ii) the addition of financial resources through intra-day margin calls and/or an intra-month increase of the Clearing Fund to ensure that it maintains adequate financial resources in the event of a default of a Clearing Member/Clearing Members Group presenting the largest exposure to OCC (FRMC Procedure), and the execution of any intra-month resizing of the Clearing Fund (Clearing Fund Intra-Month Re-sizing Procedure).<sup>54</sup> OCC proposes to retire its existing Clearing Fund Intra-Month Re-sizing Procedure, FRMC Procedure, and Monthly Clearing Fund Sizing Procedure as these procedures would no longer be relevant to OCC's proposed Clearing Fund and stress test methodology and would be replaced by the proposed Rules, Policy and Methodology Description described herein.

OCC's Monthly Clearing Fund Sizing Procedure provides that the Clearing Fund is resized on the first business day of each month by identifying the peak five-day rolling

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<sup>54</sup> See supra note 11.

average of Clearing Fund Draws (using OCC’s current Clearing Fund methodology) over the most recent three-month period. This peak five-day rolling average is supplemented with a prudential margin of safety of \$1.8 billion. The Monthly Clearing Fund Sizing Procedure further describes the internal procedural and administrative steps taken by OCC staff in the monthly Clearing Fund sizing processes (e.g., the internal reports and processes used to populate relevant data and calculate the monthly Clearing Fund size and the internal reporting and notifications made by OCC staff during the resizing process). Under the proposed Policy and Methodology Description, OCC would continue to determine the Clearing Fund size for a given month by using a peak five-day rolling average of Clearing Fund Draws over the prior three months; however, these calculations would be done using the proposed Sizing Stress Test results and would no longer require a prudential margin of safety.<sup>55</sup> The remaining internal procedural and administrative steps taken by OCC staff in the monthly Clearing Fund sizing processes would no longer be “rules” of OCC as defined by the Exchange Act<sup>56</sup> as those aspects of the procedure: (1) would no longer be relevant to OCC’s proposed Clearing Fund and

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<sup>55</sup> See supra note 22.

<sup>56</sup> Section 19(b)(1) of the Exchange Act requires a self-regulatory organization (“SRO”) such as OCC to file with the Commission any proposed rule or any proposed change in, addition to, or deletion from the rules of such SRO. See 15 U.S.C. 78s(b)(1). Section 3(a)(27) of the Exchange Act defines “rules of a clearing agency” to mean its (1) constitution, (2) articles of incorporation, (3) bylaws, (4) rules, (5) instruments corresponding to the foregoing and (6) such “stated policies, practices and interpretations” (“SPPI”) as the Commission may determine by rule. See 15 U.S.C. 78c(a)(27). Exchange Act Rule 19b-4(a)(6) defines the term “SPPI” to mean, in addition to certain publicly facing statements, “any material aspect of the operation of the facilities of the [SRO].” See 17 CFR 240.19b-4(a)(6). Rule 19b-4(c) provides, however, that an SPPI may not be deemed to be a proposed rule change if it is: (i) reasonably and fairly implied by an existing rule of the SRO or (ii) concerned solely with the administration of the SRO and is not an SPPI with respect to the meaning, administration, or enforcement of an existing rule the SRO.

stress testing methodologies and processes, (2) would be reasonably and fairly implied by the proposed Rules, Policy, and Methodology Description, and/or (3) would otherwise not be deemed to be material aspects of OCC's Clearing Fund-related operations.<sup>57</sup>

OCC's FRMC Procedure outlines various responsibilities, deliverables and communications with respect to OCC's financial resource monitoring and resource call processes. While the FRMC Procedure describes material aspects of OCC's current financial resource monitoring and call-related operations, it also describes the non-material procedural and administrative steps taken by OCC staff in carrying out these processes. For example, the FRMC Procedure contains procedural steps for (1) comparing Clearing Fund Draws against the Clearing Fund size and determining whether applicable thresholds are breached, (2) internal notifications and reporting within OCC regarding the imposition of enhanced monitoring or recommendations for margin calls or intra-month resizing of the Clearing Fund,<sup>58</sup> (3) other external communications to Clearing Members<sup>59</sup> regarding margin calls, and (4) determining whether a cash draft is required to satisfy a deficit resulting from a margin call. Under the proposal, the

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<sup>57</sup> OCC notes that it would adopt new internal procedures to address the procedural and administrative steps associated with the monthly Clearing Fund sizing, Clearing Fund sufficiency monitoring, and intra-month resizing processes; however, these procedures would not be filed as "rules" of OCC under the Exchange Act. These procedures also would conform to the proposed changes described herein.

<sup>58</sup> OCC notes that the weekly reporting process currently described in the FRMC Procedure would no longer be codified in the "rules" of OCC; however, the proposed Policy would establish new governance, monitoring and review requirements for OCC's Clearing Fund and stress testing methodology, which are described in detail above.

<sup>59</sup> The proposed Policy would contain a general requirement that Clearing Members be notified of any intra-day margin calls under the policy but the procedural details of such notification would be contained in the Clearing Fund Sufficiency Monitoring Procedure.

proposed Policy would continue to describe the material aspects of OCC's Clearing Fund operations as they relate to the financial resource monitoring and resource call process under the new Clearing Fund and stress testing methodology, subject to a number of modifications describe above.<sup>60</sup> Any remaining procedural details would not be "rules" of OCC as OCC believes that those aspects of the procedures: (1) would no longer be relevant to OCC's proposed Clearing Fund and stress testing methodologies and processes, (2) would be reasonably and fairly implied by the proposed Rules, Policy, and Methodology Description, and/or (3) would otherwise not be deemed to be material aspects of OCC's Clearing Fund-related operations.

OCC's Clearing Fund Intra-Month Re-sizing Procedure outlines the various internal responsibilities, deliverables and communications with respect to an intra-month re-sizing the Clearing Fund as determined under the FRMC Procedure. The procedure describes the procedural and administrative steps taken by OCC staff in the intra-month resizing process, including the procedural steps for (1) calculating increased contribution requirements based on various internal reports and processes, (2) preparing information memoranda announcing an intra-month resizing, (3) internal notifications and reporting within OCC regarding an intra-month resizing, (4) other external communications to Clearing Members<sup>61</sup> and OCC's regulators regarding an intra-month resizing of the Clearing Fund, and (5) determining whether a cash draft is required to satisfy a deficit resulting from an intra-month resizing of the Clearing Fund. Under the proposed changes

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<sup>60</sup> See e.g., supra notes 33-37 and associated text.

<sup>61</sup> The proposed Policy would contain a general requirement that Clearing Members, OCC's Risk Committee, and OCC's regulators be notified of any intra-month Clearing Fund resizing but the procedural details of such notification would be contained in the Clearing Fund Sizing Procedure.

described herein, these procedural details would not be “rules” of OCC as OCC believes that those aspects of the procedure: (1) would no longer be relevant to OCC’s proposed Clearing Fund and stress testing methodologies and processes, (2) would be reasonably and fairly implied by the proposed Rules, Policy, and Methodology Description, and/or (3) would otherwise not be deemed to be material aspects of OCC’s Clearing Fund-related operations.

### **Anticipated Effect on, and Management of, Risk**

OCC believes that the proposed changes, and in particular, the new Clearing Fund and stress testing methodology, would both enhance OCC’s risk management capabilities as well as promote OCC’s ability to more thoroughly size, monitor and test the sufficiency of its Pre-Funded Financial Resources under a wide range of hypothetical and historical stress scenarios. The proposed Clearing Fund and stress testing methodology is designed to improve OCC’s ability to calibrate its Pre-Funded Financial Resources to withstand a broader range of extreme but plausible circumstances under which its one or two largest Clearing Members may default, thereby reducing the risk that such resources would be insufficient in an actual default.

As noted above, the proposed Clearing Fund and stress testing methodology would enhance OCC’s framework for testing the sizing, adequacy, and sufficiency of its Pre-Funded Financial Resources by incorporating a wide range of extreme hypothetical and historical stress scenarios. Under the proposal, OCC would establish a new risk tolerance with respect to sizing OCC’s Pre-Funded Financial Resources to cover a 1-in-50 year hypothetical market event at a 99.5% confidence level over a two-year look-back period. As noted above, OCC believes that a 1-in-50 year hypothetical market event

represents the outer range of extreme but plausible scenarios for OCC's cleared products. As a result, OCC would size its Clearing Fund based on more conservative 1-in-80 year Hypothetical Scenarios, and would do so under a more conservative Cover 2 Standard, so that OCC sizes its Clearing Fund on a monthly basis at a level designed to cover its potential exposures under extreme but plausible market conditions. Moreover, OCC would utilize Sufficiency Stress Tests to evaluate the sufficiency of its Pre-Funded Financial Resources against potential credit exposures arising from range of scenarios to determine whether OCC should: (1) implement the enhanced monitoring of Clearing Fund Draws, (2) require additional margin deposits, or (3) re-size the Clearing Fund on an intra-month basis so that OCC continues to maintain sufficient financial resources to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two Clearing Member Groups that would potentially cause the largest aggregate credit exposure in extreme but plausible market conditions. Moreover, the proposed changes would introduce a number of Informational Stress Tests that would serve as valuable risk management tools for OCC to monitor and assess its Pre-Funded Financial Resources against a wide range of scenarios, including but not limited to extreme but implausible and reverse stress test scenarios.

The proposed changes also would introduce certain anti-procyclical measures into the monthly Clearing Fund sizing process designed to limit the potential decrease of the Clearing Fund's size from month to month and therefore reduce the likelihood that a market shock would require OCC to call for further resources from Clearing Members on an intra-month basis. The measures would prevent the Clearing Fund from decreasing rapidly when a previous peak falls out of the three month look-back period, and also

reduce the likelihood that the Clearing Fund would be set at a size such that a Clearing Member Group with stress test exposures that are trending upward at the end of the sizing period would exceed the threshold for an intra-month resize immediately following monthly resizing of the Clearing Fund.

Taken together, OCC believes that the proposed changes to its Clearing Fund and stress testing methodology and Policy are designed to improve OCC's ability to calibrate its Pre-Funded Financial Resources, and when necessary, call for additional financial resources from its Clearing Members, so that it can withstand a wide range of scenarios under which its one or two largest Clearing Members may default, thereby reducing the risk that such resources would be insufficient in an actual default and enhancing OCC's ability to manage risks in its role as a systemically important financial market utility.

OCC also proposes to increase its minimum initial and fixed Clearing Fund contribution amounts from \$150,000 to \$500,000. While the proposed change would require a small subset of OCC's Clearing Members to contribute a relatively modest increase in their mutualized contribution to OCC's Clearing Fund (at most, a \$350,000 increase), OCC does not believe the increased minimum contribution requirements would have a material impact on OCC's risk management activities, the risk presented to affected Clearing Members, or the nature or level of risk presented by OCC. OCC notes that in proposing the new minimum contribution amounts, it analyzed, among other things, the potential impact on Clearing Members that are at the minimum or otherwise below or just over the newly proposed \$500,000 requirement, the impact to those members in dollar and percentage terms as well as compared to their net capital, evolving market conditions, evolution in the size of the Clearing Fund, minimum contribution

requirements of other CCPs, and heightened regulatory obligations on OCC given its status as a systemically important financial market utility. In particular, OCC notes that its existing initial and minimum fixed contribution requirements have been in place since June 5, 2000, while its Clearing Fund has grown from approximately \$2 billion in 2000 to several multiples of that, both currently and under the proposal described herein.<sup>62</sup> OCC also notes that the proposed increase in minimum contribution requirements would not affect the overall size of OCC's Clearing Fund. OCC believes the proposed increase in its minimum contribution amounts is reasonable in light of its analysis and would not result in a material change in risk to OCC or its Clearing Members.

Additionally, OCC proposes to modify its allocation weighting methodology to more closely align Clearing Members' Clearing Fund contribution requirements with the level of risk they present to OCC. Specifically, under the proposed Policy, Clearing Fund contribution requirements would be based on an allocation methodology of 70% of total risk, 15% of volume and 15% of open interest (as opposed to the current weighting of 35% total risk, 50% open interest, and 15% volume). In addition, OCC proposes to modify the volume component of its Clearing Fund contribution allocation weighting methodology to provide that OCC would use cleared volume, as opposed to executed volume, to base the volume component of the allocation on where the position is ultimately cleared as opposed to where it was executed. OCC believes that these changes would better align incentives for each Clearing Member to reduce the risk it introduces to the Clearing Fund by determining each Clearing Member's proportionate share of the Clearing Fund based on the risk it presents to OCC.

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<sup>62</sup> See supra note 39 and accompanying text.

OCC also proposes to adopt a new governance, monitoring, and reporting framework in connection with the proposed Clearing and stress testing methodology that would provide for daily, monthly, and annual review and reporting activities designed to ensure that OCC monitors and analyzes its stress testing scenarios, models, and underlying parameters and assumptions on a regular basis and reports the results of these analyses to appropriate decision makers at OCC. OCC does not believe that these changes would materially impact the risk presented to OCC or its participants.

OCC also proposes a number of changes to its Rules to generally reduce the time for Clearing Members to fund Clearing Fund deficits. Specifically, new Rule 1005(a) would require that a Clearing Member satisfy any deficit in its required Clearing Fund contribution resulting from a decrease in the value of a Clearing Member's contribution or by an adjusted contribution pursuant to proposed Rule 1004 by no later than one hour after being notified by OCC of such deficit. In addition, OCC would reduce the amount of time within which a Clearing Member must satisfy a deficit from five business days of the date on which the report is made available to two business days of such date for any deficit arising due to regular monthly sizing of the Clearing Fund, an intra-month resizing of the Clearing Fund, or in circumstance in which a Clearing Member's contribution is increased as a result of an amendment of OCC's Rules. Additionally, and consistent with existing operational practice, the proposed changes would specify that OCC, upon the failure of a Clearing Member for any reason to timely satisfy a deficit regarding its required Clearing Fund contribution, OCC would be authorized to withdraw an amount equal to such deficit from the Clearing Member's bank account maintained in respect of an OCC firm account. OCC also proposes to specify that Clearing Members shall have

until 9:00AM Central Time on the second business day after the issuance of the Clearing Fund Status Report to meet their required Clearing Fund contribution if such contribution increases as a result of monthly Clearing Fund sizing or an intra-month resizing of the Clearing Fund to more closely align with the settlement time for the collection of other deficits (e.g., the required time for making good any deficiency generally under existing Article VIII, Section 6 of the By-Laws or for satisfying any margin deficits under Rule 605). The proposed change is designed to ensure that OCC is able to obtain funds owed from its Clearing Members in a timely fashion so that OCC can continue to meet its overall financial resource requirements, thereby reducing the risk presented to OCC.

OCC notes that it also proposes a number of non-material changes, such as relocating provisions of OCC's By-Laws concerning the Clearing Fund to its Rules, making other clarifying and conforming changes to its Rules, Collateral Risk Management Policy and Default Management Policy, and clarifying certain pro-cyclicality measures in its existing margin methodology, which are not expected to have any impact on OCC's risk management practices or the risk presented to OCC or its participants.

Taken together, OCC believes the enhancements discussed in this proposed rule change would provide for a more comprehensive approach to managing OCC's credit risks and would allow OCC to more accurately measure its credit risk exposures, better test the sufficiency of its financial resources, and respond quickly when OCC believes additional financial resources are required.

#### **Consistency with the Payment, Clearing and Settlement Supervision Act**

The stated purpose of the Clearing Supervision Act is to mitigate systemic risk in

the financial system and promote financial stability by, among other things, promoting uniform risk management standards for systemically important financial market utilities and strengthening the liquidity of systemically important financial market utilities.<sup>63</sup>

Section 805(a)(2) of the Clearing Supervision Act<sup>64</sup> authorizes the Commission to prescribe risk management standards for the payment, clearing and settlement activities of designated clearing entities, like OCC, for which the Commission is the supervisory agency. Section 805(b) of the Clearing Supervision Act<sup>65</sup> states that the objectives and principles for risk management standards prescribed under Section 805(a) shall be to:

- promote robust risk management;
- promote safety and soundness;
- reduce systemic risks; and
- support the stability of the broader financial system.

OCC believes that the proposed changes described herein would enhance its Pre-Funded Financial Resources in a manner consistent with the risk management standards adopted by the Commission in Rule 17Ad-22 under the Act for the reasons set forth below.<sup>66</sup>

### **Clearing Fund Sizing and Sufficiency Changes**

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<sup>63</sup> 12 U.S.C. 5461(b).

<sup>64</sup> 12 U.S.C. 5464(a)(2).

<sup>65</sup> 12 U.S.C. 5464(b).

<sup>66</sup> 17 CFR 240.17Ad-22. See Securities Exchange Act Release Nos. 68080 (October 22, 2012), 77 FR 66220 (November 2, 2012) (S7-08-11) (“Clearing Agency Standards”); 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) (S7-03-14) (“Standards for Covered Clearing Agencies”). The Standards for Covered Clearing Agencies became effective on December 12, 2016. OCC is a “covered clearing agency” as defined in Rule 17Ad-22(a)(5) and therefore must comply with the requirements of Rule 17Ad-22(e).

Rule 17Ad-22(b)(3)<sup>67</sup> requires a registered clearing agency that performs CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient financial resources to withstand, at a minimum, a default by the participant family to which it has the largest exposure in extreme but plausible market conditions. Rules 17Ad-22(e)(4)(iii) and (iv)<sup>68</sup> further require, in part, that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by maintaining additional financial resources (beyond those collected as margin or otherwise maintained to meet the requirements of Rule 17Ad-22(e)(4)(i)<sup>69</sup>) at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the participant family that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions and do so exclusive of assessments for additional guaranty fund contributions or other resources that are not prefunded.

OCC believes that the proposed changes to its By-Laws, Rules and Clearing Fund and stress testing methodology are reasonably designed to measure and manage OCC's credit exposures to participants by maintaining sufficient Pre-Funded Financial Resources to cover a wide range of foreseeable stress scenarios that include, but are not

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<sup>67</sup> 17 CFR 240.17Ad-22(b)(3).

<sup>68</sup> 17 CFR 240.17Ad-22(e)(4)(iii) and (iv).

<sup>69</sup> 17 CFR 240.17Ad-22(e)(4)(i)

limited to, the default of the two Clearing Member Groups that would potentially cause the largest aggregate credit exposure in extreme but plausible market conditions. In order to achieve this, OCC proposes to establish a risk tolerance with regard to the sizing of the Clearing Fund equal to a 1-in-50 year hypothetical market event, which OCC believes represents the outer range of extreme but plausible scenarios for OCC's cleared products for purposes of Rule 17Ad-22(e)(4) under the Act.<sup>70</sup> In order to ensure sufficient coverage of this risk tolerance, which OCC believes represents the outer range of extreme but plausible market conditions for the purposes of Rule 17Ad-22(e)(4) under the Act,<sup>71</sup> and to guard against intra-month scenario volatility and procyclicality, OCC proposes to size its Clearing Fund based on a more conservative 1-in-80 year hypothetical market event (i.e., the Sizing Stress Tests) on a Cover 2 Standard. The proposed changes are designed to size the Clearing Fund at a level that would be expected to cover OCC's potential exposures under extreme but plausible market conditions. In addition, OCC's Rules, Policy and Methodology Description would provide for the collection of additional resources on an intra-month basis if certain Sufficiency Scenario thresholds are breached, as discussed in more detail above. These stress tests are designed, in total, to result in the collection of sufficient Pre-Funded Financial Resources (which by definition in the Policy would exclude OCC's replenishment and assessment powers), and when necessary call for additional financial resources, to cover a wide range of stress scenarios, including extreme but plausible market conditions.

Additionally, the proposed changes to avoid pro-cyclicality in the Clearing Fund (e.g., preventing the Clearing Fund from decreasing more than 5% from month-to-month

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<sup>70</sup> 17 CFR 240.17Ad-22(e)(4).

<sup>71</sup> Id.

and using a three-month look back period in sizing the Clearing Fund) are designed to promote stability and to prevent the Clearing Fund from decreasing rapidly when a previous peak falls out of the look-back period. OCC believes that this conservative approach to anti-procyclicality would help to ensure that OCC continues to maintain adequate Pre-Funded Financial Resources during periods where volatility decreases significantly, market conditions change rapidly, or Clearing Member business activity causes a significant decrease in stress test results.

OCC further believes that the proposed changes to its Rules to generally reduce the timeframe in which Clearing Members must meet deficits in their Clearing Fund contributions are appropriate because it would expedite the adjustment of Clearing Fund contributions to the appropriate size as determined by OCC's new Clearing Fund and stress test methodology, thereby allowing the Clearing Fund to respond more quickly in rapidly changing or emergency market conditions. Moreover, consistent with existing operational practice, new Rule 1005(c) would establish that, upon the failure of a Clearing Member for any reason to timely satisfy a deficit regarding its required Clearing Fund contribution, OCC would be authorized to withdraw an amount equal to such deficit from the Clearing Member's bank account maintained in respect of an OCC firm account. The proposed rule change is designed to ensure that OCC is able to obtain funds owed from its Clearing Members in a timely fashion so that OCC can continue to meet its overall financial resource requirements. OCC believes the proposed changes would help to ensure that OCC maintains sufficient resources to meet its financial resource requirements under Rule 17Ad-22.<sup>72</sup>

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<sup>72</sup> Id.

For these reasons, OCC believes the proposed changes are reasonably designed so that OCC can measure and manage its credit exposure to its participants through the maintenance of additional financial resources at a minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the participant family that would potentially cause the largest aggregate credit exposure for OCC in extreme but plausible market conditions, and do so exclusive of assessments for additional Clearing Fund contributions or other resources that are not prefunded, in a manner consistent with Rule 17Ad-22(b)(3) and Rules 17Ad-22(e)(4)(iii) and (iv).<sup>73</sup>

### **Proposed Stress Testing and Clearing Fund Methodology**

Rule 17Ad-22(e)(4)(vi)(A)<sup>74</sup> requires, in part, that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by testing the sufficiency of its total financial resources available to meet the minimum financial resource requirements under Rule 17Ad-22(e)(4)(iii)<sup>75</sup> by conducting stress testing of its total financial resources once each day using standard predetermined parameters and assumptions.

OCC proposes to adopt a new stress testing methodology, as described in the proposed Policy and Methodology Description, to enable OCC to conduct a variety of Sizing Stress Tests, Adequacy Stress Tests, Sufficiency Stress Tests and Informational Stress Tests, each of which play different but complementary roles in promoting OCC's

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<sup>73</sup> 17 CFR 240.17Ad-22(b)(3) and (e)(4)(iii) and (iv).

<sup>74</sup> 17 CFR 240.17Ad-22(e)(4)(vi)(A).

<sup>75</sup> 17 CFR 240.17Ad-22(e)(4)(iii).

ability to more robustly identify, measure, monitor and manage its credit risks to its participants. These stress tests would be run on a daily basis using standard predetermined parameters and assumptions and would allow OCC to test the sufficiency of its Pre-Funded Financial Resources under a wide range of Historical Scenarios, which take into account stresses on a number of factors such as price and volatility, as well as testing the adequacy of OCC's Pre-Funded Financial Resources with respect to its proposed risk tolerance. In turn, these stress tests would enable OCC to more effectively design margin and Clearing Fund requirements that are calibrated to cover Clearing Member defaults under such scenarios. The proposed Clearing Fund and stress testing methodology would also use Sufficiency Stress Tests to determine whether OCC should call for additional collateral to ensure that it consistently maintains sufficient financial resources. OCC believes that the proposed changes are therefore designed to allow OCC to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, by testing the sufficiency of its Pre-Funded Financial Resources available to meet its minimum financial resource requirements under Rule 17Ad-22<sup>76</sup> in a manner consistent with Rule 17Ad-22(e)(4)(vi).<sup>77</sup>

### **Clearing Fund and Stress Testing Governance, Monitoring, and Review**

Rule 17Ad-22(e)(4)(vi) and (vii)<sup>78</sup> require, in part, that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to

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<sup>76</sup> 17 CFR 240. 17Ad-22.

<sup>77</sup> 17 CFR 240. 17Ad-22(e)(4)(vi).

<sup>78</sup> 17 CFR 240. 17Ad-22(e)(4)(vi)(B)-(D) and (vii).

participants and those arising from its payment, clearing, and settlement processes, including by (i) conducting a comprehensive analysis on at least a monthly basis of the existing stress testing scenarios, models, and underlying parameters and assumptions, and considering modifications to ensure they are appropriate for determining the covered clearing agency's required level of default protection in light of current and evolving market conditions; (ii) conducting a comprehensive analysis of stress testing scenarios, models, and underlying parameters and assumptions more frequently than monthly when the products cleared or markets served display high volatility or become less liquid, or when the size or concentration of positions held by the covered clearing agency's participants increases significantly; (iii) reporting the results of such analyses to appropriate decision makers at the covered clearing agency, including but not limited to, its risk management committee or board of directors, and using these results to evaluate the adequacy of and adjust its margin methodology, model parameters, models used to generate clearing or guaranty fund requirements, and any other relevant aspects of its credit risk management framework, in supporting compliance with the minimum financial resources requirements; and (iv) performing a model validation for its credit risk models not less than annually or more frequently as may be contemplated by the covered clearing agency's risk management framework.

The proposed Policy would set forth requirements for the daily and monthly monitoring, review, and reporting of stress test results. Specifically, under the Policy, STLRM would monitor the results of all of the Adequacy and Sufficiency Stress Tests on a daily basis and immediately escalate any material issues identified with respect to the adequacy of OCC's financial resources to the STWG and the Management Committee to

determine if it would be appropriate to recommend a change to the stress test scenarios used to size the Clearing Fund. In addition, the Policy would require that STWG perform a comprehensive monthly analysis of OCC's stress testing results, as well as information related to the scenarios, models, parameters, and assumptions impacting the sizing of the Clearing Fund and evaluate their appropriateness for determining OCC's required level of financial resources in light of current and evolving market conditions. Moreover, the Policy would require that such review be conducted more frequently than monthly when the products cleared or markets served display high volatility or become less liquid; the size or concentration of positions held by OCC's participants increases significantly; or as otherwise appropriate.

Pursuant to the proposed Policy, STLRM would report the results of stress tests and its comprehensive monthly analysis to OCC's Management Committee and Risk Committee on at least a monthly basis and would maintain procedures for determining whether, and in what circumstances, the results of such stress tests should be reported to the Management Committee or the Risk Committee more frequently than monthly, and would indicate the persons responsible for making that determination. In the performance of the monthly review of stress testing results and analysis and considering whether escalation is appropriate, the Policy would require that due consideration be given to the intended purpose of the Policy to: (a) assess the adequacy of, and adjust as necessary, OCC's total amount of financial resources; (b) support compliance with the minimum financial resources requirements under applicable regulations; and (c) evaluate the adequacy of, and recommend adjustments to OCC's margin methodology, margin parameters, models used to generate margin or guaranty fund requirements, and any other

relevant aspects of OCC's credit risk management.

In addition, the proposed Policy would require that OCC's Model Validation Group perform a model validation of OCC's Clearing Fund model on an annual basis and that the Risk Committee would be responsible for reviewing the model validation report.

Based on the foregoing, OCC believes that the proposed Policy is reasonably designed to ensure that OCC: (i) conducts a comprehensive analysis on at least a monthly basis of the existing stress testing scenarios, models, and underlying parameters and assumptions, and considers modifications to ensure they are appropriate for determining OCC's required level of default protection in light of current and evolving market conditions; (ii) conducts a comprehensive analysis of stress testing scenarios, models, and underlying parameters and assumptions more frequently than monthly when the products cleared or markets served display high volatility or become less liquid, or when the size or concentration of positions held by OCC's participants increases significantly; (iii) reports the results of such analyses to appropriate decision makers, including but not limited to, OCC's Management Committee and the Risk Committee of the Board, and uses these results to evaluate the adequacy of and adjust its margin methodology, model parameters, models used to generate Clearing Fund requirements, and any other relevant aspects of its credit risk management framework, in supporting compliance with the minimum financial resources requirements; and (iv) performs a model validation for its credit risk models not less than annually or more frequently as may be contemplated by OCC's risk management framework in accordance with Rules 17Ad-22(e)(4)(vi) and (vii).<sup>79</sup>

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<sup>79</sup> Id.

## **Proposed Changes to Minimum Contribution Amount and Allocation Methodology**

Rule 17Ad-22(e)(4)<sup>80</sup> generally requires that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. With respect to the use of Clearing Funds and the requirements of Rule 17Ad-22(e)(4),<sup>81</sup> the Commission has noted that, to the extent that a clearing agency uses guaranty or clearing fund contributions to mutualize risk across participants, the clearing agency generally should value margin and guaranty fund contributions so that the contributions are commensurate to the risks posed by the participants' activity, and the clearing agency also generally should consider the appropriate balance of individualized and pooled elements within its default waterfall, with a careful consideration of whether the balance of those elements mitigates risk and to what extent an imbalance among those elements might encourage moral hazard, in that one participant may take more risks because the other participants bear the costs of those risks.<sup>82</sup>

OCC believes that the proposed changes to its initial and minimum Clearing Fund contribution amounts strike an appropriate balance between individualized and mutualized resources for new Clearing Members and those Clearing Members with minimal open interest. As noted above, OCC's existing initial and minimum fixed contribution requirements have been in place since June 5, 2000, while its Clearing Fund has grown from approximately \$2 billion in 2000 to several multiples of that, both

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<sup>80</sup> 17 CFR 240.17Ad-22(e)(4).

<sup>81</sup> Id.

<sup>82</sup> See supra note 65, Standards for Covered Clearing Agencies at 70813.

currently and under the proposal described herein.<sup>83</sup> As a result, OCC undertook an analysis to determine the appropriateness of this amount. As discussed in detail above, OCC considered a number of factors such as the potential impact on Clearing Members that are at the minimum or otherwise below or just over the newly proposed \$500,000 requirement, the impact to those members in dollar and percentage terms as well as compared to their net capital, evolving market conditions, evolution in the size of the Clearing Fund, minimum contribution requirements of other CCPs, and heightened regulatory obligations on OCC given its status as a systemically important financial market utility. OCC believes that the proposed increase is appropriate given the increase in OCC's overall Clearing Fund size and is in line with or lower than the minimum requirements of other CCPs. OCC therefore believes that the proposed increase is reasonably designed to ensure OCC is able to manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes in a manner that considers an appropriate balance of individualized and pooled elements within its default waterfall.

Additionally, OCC proposes to modify its allocation weighting methodology to more closely align Clearing Members' Clearing Fund contribution requirements with the level of risk they bring to OCC. Specifically, the proposed Clearing Fund contribution requirements would be based on an allocation methodology of 70% of total risk, 15% of volume and 15% of open interest (as opposed to the current weighting of 35% total risk, 50% open interest, and 15% volume). OCC believes that this change would better align incentives for each Clearing Member to reduce the risk it introduces to the Clearing Fund

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<sup>83</sup> See supra note 39 and accompanying text.

by determining each Clearing Member's proportionate share of the Clearing Fund based on the risk it presents to OCC.

OCC also proposes to modify the volume component of its Clearing Fund contribution allocation weighting methodology to provide that OCC would use cleared volume, as opposed to executed volume, to base the volume component of the allocation on where the position is ultimately cleared as opposed to where it was executed. OCC believes that the proposed change is designed to more appropriately allocate contribution requirements commensurate to the risks posed by its Clearing Members.

For these reasons, OCC believes that the proposed changes are designed to manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes in a manner consistent with Rule 17Ad-22(e)(4).<sup>84</sup>

#### **Other Clarifying, Conforming and Organizational Changes**

Rule 17Ad-22(e)(1)<sup>85</sup> requires a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for a well-founded, clear, transparent, and enforceable legal basis for each aspect of its activities in all relevant jurisdictions. OCC believes that the proposed clarifying, conforming, and organizational changes to its By-Laws and Rules are designed to provide Clearing Members with enhanced transparency and clarity regarding their obligations associated with the Clearing Fund. As discussed above, the primary provisions that address OCC's Clearing Fund are currently split between Article VIII of the By-Laws and Chapter X of the Rules. Consolidating all of these provisions to Chapter X of the Rules would provide Clearing Members with a single location in which

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<sup>84</sup> 17 CFR 240.17Ad-22(e)(4).

<sup>85</sup> 17 CFR 240.17Ad-22(e)(1).

to find and understand the primary obligations that are associated with the Clearing Fund. In addition, OCC would make a number of non-substantive changes to its rules designed to provide additional clarity and transparency, including for example: (1) consolidating existing Interpretation and Policy .01 and .02 of Article VIII, Section 5 concerning the share of any deficiency to be borne by each Clearing Member as a result of a charge against the Clearing Fund into new Interpretation and Policy .01 of Rule 1006 with conforming changes and cross-references to new Interpretation and Policy .01 of Rule 1006 being added to proposed Rules 1006(b) and (c) to provide additional clarity in OCC's rules; (2) making minor modifications to proposed Rule 1006(a) to clarify that matured futures contracts are included within the scope of other contracts or obligations issued, undertaken, or guaranteed by OCC or in respect of which OCC is otherwise liable; (3) clarifying in the proposed Policy that the Executive Chairman, Chief Administrative Officer, or Chief Operating Officer would have the authority to approve proportionate charges against the Clearing Fund; (4) clarifying in the proposed Policy that OCC's Accounting department is responsible for maintaining procedures for the allocation of losses due to a Clearing Member default and to replenish the Clearing Fund in the event a deficiency in the Clearing Fund results from events other than those specified in proposed Rule 1006; (5) revising Rule 609 to change the term "securities" to "contracts" to clarify that OCC's authority to call for intra-day margin also applies to non-securities products cleared by OCC; (6) codifying in the proposed Policy the existing OCC practice that the specific securities eligible to be used as Clearing Fund contributions be permitted to be pledged in exchange for cash through one of OCC's committed liquidity facilities so that OCC continues to maintain sufficient eligible

securities to fully access such facilities; (7) clarifying in proposed Rule 1002 that the circumstances and terms for a Clearing Member terminating its clearing membership due to an increase in Clearing Fund contribution resulting from an amendment of the Rules is separate from the circumstances and terms for a Clearing Member terminating its status as a result of a proportionate charge against the Clearing Fund; (8) clarifying in the introduction to Chapter X of the Rules that the size of the Clearing Fund shall at all times be subject to minimum sizing requirements and generally be calculated on a monthly basis by OCC; however, the calculated size of the Clearing Fund may be determined more frequently than monthly under certain conditions specified in proposed Rule 1001; and (9) rephrasing current rule text referencing “computed contributions to the Clearing Fund” and “as fixed at the time” to be “required contributions to the Clearing Fund” and “as calculated at the time” to more accurately reflect that these rules are intended to refer to a Clearing Member’s required Clearing Fund Contribution amount as calculated under the proposed Rules, Policy and Methodology Description and eliminate any potential confusion with a Clearing Member’s “fixed amount” as determined under Rule 1003(a). OCC believes that this additional clarity, transparency and enhanced readability regarding the primary provisions pertaining to the Clearing Fund help to provide for a well-founded, clear, transparent and enforceable legal basis for the rights and obligations of Clearing Members and OCC regarding the Clearing Fund consistent with Rule 17Ad-22(e)(1).<sup>86</sup>

In addition, Section 19(b)(1) of the Exchange Act and Rule 19b-4 thereunder set forth the requirements for SRO proposed rule changes, including the regulatory filing

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<sup>86</sup> Id.

requirements for SPPIs.<sup>87</sup> OCC proposes to retire its existing Clearing Fund Intra-Month Re-sizing Procedure, FRMC Procedure, and Monthly Clearing Fund Sizing Procedure, which were previously filed as “rules” with the Commission,<sup>88</sup> as these procedures would no longer be relevant to OCC’s proposed Clearing Fund and stress testing methodology and processes. Under the proposal, the material aspects of OCC’s Clearing Fund-related operations would be contained in the proposed Rules, Policy and Methodology Description described herein. Any applicable procedural details would not be “rules” of OCC as those aspects of the procedures: (1) would no longer be relevant to OCC’s proposed Clearing Fund and stress testing methodologies and processes, (2) would be reasonably and fairly implied by the proposed Rules, Policy, and Methodology Description, and/or (3) would otherwise not be deemed to be material aspects of OCC’s Clearing Fund-related operations. Accordingly, OCC believes the proposed changes would be consistent with the requirements of Rule 17Ad-22(e)(1).<sup>89</sup>

### III. Date of Effectiveness of the Advance Notice and Timing for Commission Action

The proposed change may be implemented if the Commission does not object to the proposed change within 60 days of the later of (i) the date the proposed change was filed with the Commission or (ii) the date any additional information requested by the Commission is received. OCC shall not implement the proposed change if the Commission has any objection to the proposed change.

The Commission may extend the period for review by an additional 60 days if the proposed change raises novel or complex issues, subject to the Commission providing the

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<sup>87</sup> See supra note 55.

<sup>88</sup> See supra note 11.

<sup>89</sup> Id.

clearing agency with prompt written notice of the extension. A proposed change may be implemented in less than 60 days from the date the advance notice is filed, or the date further information requested by the Commission is received, if the Commission notifies the clearing agency in writing that it does not object to the proposed change and authorizes the clearing agency to implement the proposed change on an earlier date, subject to any conditions imposed by the Commission.

OCC shall post notice on its website of proposed changes that are implemented.

The proposal shall not take effect until all regulatory actions required with respect to the proposal are completed.

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the advance notice is consistent with the Clearing Supervision 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-2018-803 on the subject line.

##### Paper Comments:

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

All submissions should refer to File Number SR-OCC-2018-803. 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 advance notice that are filed with the Commission, and all written communications relating to the advance notice 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 the 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/components/docs/legal/rules\\_and\\_bylaws/sr\\_occ\\_18\\_803.pdf](https://www.theocc.com/components/docs/legal/rules_and_bylaws/sr_occ_18_803.pdf).

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-2018-803 and should be submitted on or before [insert date 15 days from publication in the Federal Register].

By the Commission.

Eduardo A. Aleman  
Assistant Secretary