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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Form 19b-4

File No.* SR - 2017 - * 808
Amendment No. (req. for Amendments *)

Filing by National Securities Clearing Corporation

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

Initial *	Amendment *	Withdrawal	Section 19(b)(2) *	Section 19(b)(3)(A) *	Section 19(b)(3)(B) *
☑	☐	☐	☐	☐	☐

Pilot ☐

Extension of Time Period for Commission Action * ☐

Date Expires *

Rule

☐ 19b-4(f)(1) ☐ 19b-4(f)(4)
☐ 19b-4(f)(2) ☐ 19b-4(f)(5)
☐ 19b-4(f)(3) ☐ 19b-4(f)(6)

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010

Section 806(e)(1) * ☑

Section 806(e)(2) * ☐

Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934

Section 3C(b)(2) * ☐

Exhibit 2 Sent As Paper Document ☐

Exhibit 3 Sent As Paper Document ☐

Description

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

To enhance the calculation of the volatility component of the Clearing Fund formula that utilizes a parametric Value-at-Risk model and eliminate the Market Maker Domination charge

Contact Information

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

First Name * Jacqueline Last Name * Chezar

Title * Executive Director and Associate General Counsel

E-mail * jfarinella@dtcc.com

Telephone * (212) 855-3216 Fax

Signature

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

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

Date 12/28/2017

By Nikki Poulos

(Name *)

(Title *)

Managing Director and Deputy General Counsel

npoulos@dtcc.com

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

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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

Form 19b-4 Information * Add Remove View	The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.
Exhibit 1 - Notice of Proposed Rule Change * Add Remove View	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)
Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies * Add Remove View	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)
Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications Add Remove View Exhibit Sent As Paper Document ☐	Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.
Exhibit 3 - Form, Report, or Questionnaire Add Remove View Exhibit Sent As Paper Document ☐	Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.
Exhibit 4 - Marked Copies Add Remove View	The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.
Exhibit 5 - Proposed Rule Text Add Remove View	The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.
Partial Amendment Add Remove View	If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of the Advance Notice

(a) This advance notice of National Securities Clearing Corporation ("NSCC") is annexed hereto as Exhibit 5 and consists of modifications to NSCC's Rules & Procedures ("Rules")[1] in order to enhance the calculation of the volatility component of the Clearing Fund formula that utilizes a parametric Value-at-Risk ("VaR") model ("VaR Charge") by (1) adding an additional calculation utilizing the VaR model that incorporates an evenly-weighted volatility estimation, which would supplement the current calculation that utilizes the VaR model but incorporates an exponentially-weighted moving average ("EWMA") volatility estimation,[2] where the higher of the two calculations would be the core parametric result ("Core Parametric Estimation"); and (2) introducing two additional formulas to the calculation of the VaR Charge – the Gap Risk Measure and the Portfolio Margin Floor, where the results of these two calculations would be compared to the Core Parametric Estimation and the highest of the three would be a Member's final VaR Charge, as described in greater detail below.

NSCC is also proposing to eliminate the existing Market Maker Domination component ("MMD Charge") from the Clearing Fund formula, as described in greater detail below.

(b) Not applicable.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The advance notice was approved by the Risk Committee of the Board of Directors on September 12, 2017 and December 19, 2017.

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1 Capitalized terms not defined herein are defined in the Rules, available at http://dtcc.com/~/media/Files/Downloads/legal/rules/nscc_rules.pdf.

2 As described in greater detail in this filing, an EWMA volatility estimation is an estimation of volatility that gives more weight to most recent market observations, where an evenly-weighted volatility estimation is an estimation of volatility that gives even weight to historic market observations.

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

Not applicable

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

Not applicable.

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

NSCC has not received or solicited any written comments relating to this proposal. NSCC will notify the Commission of any written comments received by NSCC.

6. Extension of Time Period for Commission Action

NSCC does not consent to an extension of the time period specified in Section 19(b)(2) of the Act for Commission action.

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

(a) Not applicable.

(b) Not applicable.

(c) Not applicable.

(d) Not applicable.

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

Not applicable.

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

Not applicable.

10. Advance Notice Filed Pursuant to Section 806(e) of the Payment, Clearing, and Settlement Supervision Act of 2010

Description of Proposed Changes

NSCC is proposing to enhance the calculation of the VaR Charge by introducing an additional estimation of volatility that would be incorporated into the VaR model, and introducing two additional calculations, the Gap Risk Measure and the Portfolio Margin Floor, that NSCC believes would collectively enhance its ability to mitigate market price risk. NSCC currently calculates the VaR Charge by applying a parametric VaR model that incorporates an EWMA volatility estimation. NSCC is proposing to introduce an additional calculation that also applies the parametric VaR model but replaces the EWMA volatility estimation with an evenly-weighted volatility estimation.[3] The result of these two calculations using the parametric VaR model would be compared and the higher of the two would be the Core Parametric Estimation.

NSCC is also proposing to introduce two additional calculations to arrive at a final VaR Charge, the Gap Risk Measure and the Portfolio Margin Floor. NSCC would use the highest result between the Core Parametric Estimation, the Gap Risk Measure, when applicable, and the Portfolio Margin Floor calculations as a Member's final VaR Charge.[4]

Each of the separate calculations would provide NSCC with a measure of the market price risk presented by the Net Unsettled Positions and Net Balance Order Unsettled Positions (for purposes of this filing, referred to collectively herein as "Net Unsettled Positions")[5] in a Member's portfolio. Collectively, the proposed enhancements to the calculation of the VaR Charge would permit NSCC to more effectively cover its credit exposures and produce margin levels commensurate with the risks and particular attributes of each Member's portfolio, as described in greater detail below.

NSCC is also proposing to eliminate the existing MMD Charge from the Clearing Fund formula. When the MMD Charge was first introduced, it was developed to only address concentration risks presented by Net Unsettled Positions in certain securities that are traded by firms that are designated Market Makers, as described in greater detail below. Given this limited scope of application of this charge, and because NSCC believes it more effectively addresses the risks this charge was designed to address through other risk management measures, including the proposed Gap Risk Measure calculation of the VaR Charge, NSCC is proposing to eliminate the MMD Charge.

Each of these proposed changes is described in more detail below.

(i) Overview of the Required Deposit and NSCC's Clearing Fund

As part of its market risk management strategy, NSCC manages its credit exposure to Members by determining the appropriate Required Deposits to the Clearing Fund and monitoring

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3 See id.

4 NSCC may calculate Members' VaR Charge on an intraday basis for purposes of monitoring the risks presented by Members' activity. These calculations would be also be performed using the proposed enhanced methodology.

5 "Net Unsettled Positions" and "Net Balance Order Unsettled Positions" refer to net positions that have not yet passed their settlement date, or did not settle on their settlement date. See Procedure XV (Clearing Fund Formula and Other Matters) of the Rules, supra note 1.

its sufficiency, as provided for in the Rules.[6] The Required Deposit serves as each Member's margin. The objective of a Member's Required Deposit is to mitigate potential losses to NSCC associated with liquidation of such Member's portfolio in the event that NSCC ceases to act for such Member (hereinafter referred to as a "default").[7] The aggregate of all Members' Required Deposits constitutes the Clearing Fund of NSCC, which it would access should a defaulting Member's own Required Deposit be insufficient to satisfy losses to NSCC caused by the liquidation of that Member's portfolio.

Pursuant to NSCC's Rules, each Member's Required Deposit amount consists of a number of applicable components, each of which is calculated to address specific risks faced by NSCC, as identified within Procedure XV of the Rules.[8] The volatility component of each Member's Required Deposit is designed to measure market price volatility and is calculated for Members' Net Unsettled Positions. The volatility component is designed to capture the market price risk associated with each Member's portfolio at a 99th percentile level of confidence. The VaR Charge is the volatility component applicable to most Net Unsettled Positions,[9] and usually comprises the largest portion of a Member's Required Deposit. Procedure XV of the Rules currently provides that the VaR Charge shall be calculated in accordance with a generally accepted portfolio volatility margin model utilizing assumptions based on reasonable historical data and an appropriate volatility range.[10] As such, NSCC currently calculates a Member's VaR Charge utilizing the VaR model, which incorporates an EWMA volatility estimation.

Currently, Members' Required Deposits may also include an MMD Charge, applicable only to Members that are Market Makers and Members that clear for Market Makers.[11] As

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[6] See Rule 4 (Clearing Fund) and Procedure XV (Clearing Fund Formula and Other Matters), supra note 1. NSCC's market risk management strategy is designed to comply with Rule 17Ad-22(e)(4) under the Securities Exchange Act of 1934, as amended ("Act"), where these risks are referred to as "credit risks." 17 CFR 240.17Ad-22(e)(4).

[7] The Rules set out the circumstances under which NSCC may cease to act for a Member and the types of actions it may take. For example, NSCC may suspend a firm's membership with NSCC or prohibit or limit a Member's access to NSCC's services in the event that Member defaults on a financial or other obligation to NSCC. See Rule 46 (Restrictions on Access to Services) of the Rules, supra note 1.

[8] Supra note 1.

[9] As described in Procedure XV, Section I(A)(1)(a)(ii) and (iii) and Section I(A)(2)(a)(ii) and (iii) of the Rules, Net Unsettled Positions in certain securities are excluded from the VaR Charge and instead charged a volatility component that is calculated by multiplying the absolute value of those Net Unsettled Positions by a percentage. Supra note 1.

[10] Procedure XV, Section I(A)(1)(a)(i) and Section I(A)(2)(a)(i) of the Rules, supra note 1.

[11] As used herein, "Market Maker" means a member firm of the Financial Industry Regulatory Authority, Inc. ("FINRA") that is registered by FINRA as a Market Maker pursuant to FINRA's rules, available at http://finra.complinet.com/en/display/display.html.

described in greater detail below, the MMD Charge is imposed when these Members hold a Net Unsettled Position that is greater than 40 percent of the overall unsettled long position (sum of each clearing broker's net long position) in that security in the Continuous Net Settlement ("CNS") system.[12]

NSCC employs daily backtesting to determine the adequacy of each Member's Required Deposit. NSCC compares the Required Deposit[13] for each Member with the simulated liquidation gains/losses using the actual positions in the Member's portfolio, and the historical security returns. NSCC investigates the cause(s) of any backtesting deficiencies. As part of this investigation, NSCC pays particular attention to Members with backtesting deficiencies that bring the results for that Member below the 99 percent confidence target (i.e., greater than two backtesting deficiency days in a rolling twelve-month period) to determine if there is an identifiable cause of repeated backtesting deficiencies.

Further, as a part of its model performance review, and consistent with its regulatory requirements, NSCC regularly assesses its risks as they relate to its model assumptions, parameters, and sensitivities, including those of its parametric VaR model, to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market.[14] As part of NSCC's model performance monitoring, NSCC management analyzes and evaluates the continued effectiveness of its parametric VaR model in order to identify any weaknesses, and determine whether, and which, enhancements may be necessary to its formulas, parameters or assumptions to improve margin coverage.

The proposed changes to the calculation of the VaR Charge, described below, are a result of NSCC's regular review of the effectiveness of its margining methodology.

(ii) Enhancements to the VaR Charge

Adding an Evenly-Weighted Volatility Estimation to the VaR Model. To calculate the VaR Charge, NSCC uses a parametric VaR model that currently only incorporates an EWMA volatility estimation. The EWMA volatility estimation is considered front-weighted as it assigns more weight to most recent market observations based on the assumption that the most recent price history would have more relevance to, and therefore is a better measure of, current market price volatility levels. A calculation using this EWMA volatility estimation is responsive to changing market volatility, and, because NSCC's Member-level model backtesting results have generally remained above a 99th percentile level of confidence over a 10-year performance window, NSCC believes this calculation continues to be an effective measurement of price volatility for the majority of Net Unsettled Positions that are subject to the VaR Charge. More specifically, NSCC believes its backtesting results show that this calculation has been proven to

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12 See Rule 11 (CNS System) and Procedure VII (CNS Accounting Operation), supra note 1.

13 For backtesting comparisons, NSCC uses the Required Deposit amount without regard to the actual collateral posted by the Member.

14 See 17 CFR 240.17Ad-22(e)(6)(i), (vi).

be effective for calculating the price volatility of large diversified portfolios, which represent the majority of Net Unsettled Positions that are subject to the VaR Charge.

However, NSCC believes this calculation may not adequately cover a rapid change in market price volatility levels, including, for example, a drop in portfolio volatility in a stabilizing market. Additionally, NSCC has observed poorer backtesting coverage for those Members with less diversified portfolios in atypical market conditions.

In estimating volatility, the EWMA volatility estimation gives greater weight to more recent market observations, and effectively diminishes the value of older market observations. However, volatility in equity markets often rapidly revert to pre-volatile levels, and then are followed by a subsequent spike in volatility. So, while a calculation that relies exclusively on the EWMA volatility estimation can capture changes in volatility that emerge from a progressively calm or non-volatile market, it may cause a reactive decrease in margin that does not adequately capture the risks related to a rapid shift in market price volatility levels. Alternatively, an evenly-weighted volatility estimation would continue to give even weight to all historical volatility observations in the look-back period (described below), and would prevent margin from decreasing too quickly.

Therefore, in order to more adequately cover a rapid change in market price volatility levels and the risks presented by less diversified portfolios in its calculation of the VaR Charge, NSCC is proposing to add another calculation of the VaR Charge utilizing its parametric VaR model that would incorporate an evenly-weighted volatility estimation. NSCC believes an additional calculation using a volatility estimation that gives even weight to market observations over a set look-back period would allow it to more adequately address risks related to a rapid shift in general market price volatility levels, which can occur as a result of either idiosyncratic, issuer events (also referred to as "gap risk events"),[15] or are due to specific characteristics of a Member's portfolio based on their size, balance, direction, concentration, or the degree of correlation with broad market returns.

The proposed calculation incorporating an evenly-weighted volatility estimation would give equal weight to price observations over a look-back period of at least 253 days. NSCC analyzed the impact of using a look-back period of various lengths and determined that a look-back period of at least 253 days would provide NSCC with an adequate view of recent, past market observations in estimating volatility to meet its backtesting performance targets, and wouldn't result in unnecessarily high margin calculations. NSCC would weigh these considerations periodically to determine an appropriate look-back period that is at least 253 days.

NSCC would perform both calculations using the parametric VaR model – one using the existing EWMA volatility estimation and an additional calculation using the proposed evenly-weighted volatility estimation – and would use the highest result of these calculations as the Core Parametric Estimation in connection with calculating a Member's VaR Charge. NSCC believes that, while the existing EWMA calculation provides adequate responsiveness to increasing

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15 Gap risk events may include, for example, earning reports, management changes, merger announcements, insolvency, or other unexpected, issuer-specific events.

market volatility, as described above, the proposed evenly-weighted calculation would be better at covering the risk of a rapid change in market volatility levels by retaining market observations from the entire historical data set. Therefore, by using both calculations and selecting the higher result, NSCC would be able to more effectively cover its credit exposures and mitigate the risk presented by different market conditions in arriving at a final Core Parametric Estimation.

In order to implement the proposed change, NSCC would amend Procedure XV of the Rules by creating a new subjection (I) to Sections I(A)(1)(a)(i) and I(A)(2)(a)(i) of the Rules, which would define the Core Parametric Estimate as the higher result of two calculations – and EWMA calculation and the proposed evenly-weighted calculation – both utilizing the parametric VaR model.

Gap Risk Measure. NSCC is also proposing to introduce the Gap Risk Measure as an additional calculation that, when applicable, would be used to determine a Member's final VaR Charge.

The proposed Gap Risk Measure would be calculated to address the risks presented by a portfolio that is more susceptible to the effects of gap risk events due to the idiosyncratic nature of the Net Unsettled Positions in that portfolio. For example, the proposed calculation would address the risk that a gap risk event affects the price of a security in which a portfolio holds a Net Unsettled Position that represents more than a certain percent of the entire portfolio's value, such that the event could impact the entire portfolio's value. The proposed Gap Risk Measure would supplement the calculation of the Core Parametric Estimation because a parametric VaR model calculation is not designed to fully capture this specific risk presented by a concentrated position in a Member's portfolio.

The proposed Gap Risk Measure would only be applied for a Member if the Net Unsettled Position with the largest absolute market value in the portfolio represents more than a certain percent of the entire portfolio's value ("concentration threshold"). NSCC is proposing a concentration threshold to the application of the Gap Risk Measure because its backtesting results have shown that portfolios with a Net Unsettled Position that represents a proportional value of the entire portfolio over 30 percent tend to have backtesting coverage below the target 99 percent confidence level. These results also show that these portfolios are more susceptible to the effects of gap risk events that the proposed calculation is designed to measure. Therefore, NSCC would only apply the Gap Risk Measure charge if the Net Unsettled Position with the largest absolute market value in a Member's portfolio represents more than 30 percent of that Member's entire portfolio value. NSCC would set 30 percent as the ceiling for the concentration threshold, and would evaluate the threshold periodically based on the Member's backtesting results during a time period of not less than the previous twelve months to determine if it may be appropriate to the threshold at a lower percent.

Additionally, NSCC believes the risk of large, unexpected price movements, particularly those caused by a gap risk event, may have a greater impact on portfolios with large Net Unsettled Positions in securities that are susceptible to those events. Generally, index-based exchange-traded funds track closely to similar equity indices and are less prone to the effects of gap risk events. As such, if the concentration threshold is met, NSCC would calculate the Gap Risk Measure for Net Unsettled Positions in the portfolio, other than positions in index-based exchange traded funds (referred to herein for ease of reference as "non-index Net Unsettled Positions").[16]

When applicable, NSCC would calculate the Gap Risk Measure by multiplying the gross market value of the largest non-index Net Unsettled Position in the portfolio by a percent of not less than 10 percent.[17] NSCC would determine such percent empirically as no less than the larger of the 1st and 99th percentiles of three-day returns of a set of CUSIPs that are subject to the VaR Charge pursuant to the Rules,[18] giving equal rank to each to determine which has the highest movement over that three-day period. NSCC would use a look-back period of not less than ten years that includes a one-year stress period.[19] If the one-year stress period overlaps with the look-back period, only the non-overlapping period would be combined with the look-back period. The result would then be rounded up to the nearest whole percentage.

By calculating this charge as a percent of the gross market value of the largest non-index Net Unsettled Position that exceeds the set threshold, NSCC believes the proposed Gap Risk Measure would allow it to capture the risk that a gap risk event affects the price of a security in which the Member holds a concentrated position and, due to the disproportionate value of this position in the Member's portfolio, the impact of that event affects the entire portfolio. This calculation, as an additional measure for the VaR Charge, would permit NSCC to assess an adequate amount of margin to cover the gap risks not captured by the parametric VaR model calculations. As such, the proposed calculation would contribute to NSCC's goal of producing margin levels commensurate with the risks and particular attributes of each Member's portfolio.

In order to implement this proposed change, NSCC would amend Procedure XV of the Rules by creating a new subjection (II) to Sections I(A)(1)(a)(i) and I(A)(2)(a)(i) of the Rules, which would describe the calculation of the Gap Risk Measure.

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16 NSCC would use a third-party market provider to identify index-based exchange-traded funds. The third-party market provider would identify index-based exchange-traded funds as those with criteria that requires the portfolio returns to track to a broad market index. Exchange-traded funds that do not meet this criteria would not be considered index-based exchange-traded funds and would be included the Gap Risk Measure calculation.

17 NSCC believes it is prudent to set a floor for the Gap Risk Measure charge, and has determined that a floor of 10 percent would appropriately align this charge with the charge that is applied to Net Unsettled Positions in certain securities that are excluded from the VaR Charge and instead charged a similar haircut-based volatility component. See supra note 9.

18 Supra note 9.

19 NSCC believes using a look-back period of not less than ten years that includes a one-year stress period would provide it with a stable risk measurement that incorporates a sufficient look-back period that would be appropriate for purposes of determining the appropriate percent to use in the calculation of the Gap Risk Measure.

Portfolio Margin Floor. NSCC is also proposing to introduce the Portfolio Margin Floor as an additional calculation that, when applicable, would be used to determine a Member's final VaR Charge.

The proposed Portfolio Margin Floor would be calculated to address risks that may not be adequately accounted for in the other calculations of the VaR Charge by operating as a floor to, or minimum amount of, the final VaR Charge. A parametric VaR model may result in a low VaR Charge for balanced portfolios. For example, in circumstances where the gross market value of a Member's Net Unsettled Positions is high and the cost of liquidation in the event that Member defaults could also be high, the parametric VaR model may not adequately measure the potential costs of liquidation. The proposed charge would be based on the balance and direction of Net Unsettled Positions in the Members' portfolio and is designed to be proportional to the market value of the portfolio. In this way, the Portfolio Margin Floor would allow NSCC to more effectively cover its credit exposures.

The Portfolio Margin Floor would be the sum of two separate calculations, both of which would measure the market value of the portfolio based on the direction of Net Unsettled Positions in that portfolio. In this way, the calculation would effectively set a floor on the VaR Charge based on the composition of the portfolio and would mitigate the risk that low price volatility in portfolios with either large gross market values or large net directional market values could hinder NSCC's ability to effectively liquidate or hedge the Member's portfolio in three business days.

First, NSCC would calculate the net directional market value of the portfolio by calculating the absolute difference between the market value of the long Net Unsettled Positions and the market value of the short Net Unsettled Positions in the portfolio,[20] and then multiplying that amount by a percentage. Such percentage would be determined by examining the annual historical volatility levels of benchmark equity indices over a historical look-back period, as a standard and generally accepted reference that incorporates sufficient data history. Second, NSCC would calculate the balanced market value of the portfolio by taking the lowest market value of either (i) the long Net Unsettled Positions, or (ii) the short Net Unsettled Positions in the portfolio,[21] and then multiplying that value by a percentage. Such percentage would generally be a fraction of the percentage used in the calculation of the net directional market value of the portfolio and would be an amount that covers the transaction costs and other basis risks present for the Net Unsettled Positions in that portfolio.[22]

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[20] For example, if the market value of the long Net Unsettled Positions is $100,000, and the market value of the short Net Unsettled Positions is $200,000, the net directional market value of the portfolio is $100,000.

[21] For example, if the market value of the long Net Unsettled Positions is $100,000, and the market value of the short Net Unsettled Positions is $110,000, the balanced market value of the portfolio is $100,000.

[22] NSCC would use a third-party market provider to identify these transaction costs and other basis risks.

NSCC would add the results of these two calculations to arrive at the final Portfolio Margin Floor amount. The sum of these two calculations would provide a minimum VaR Charge by effectively establishing a margin floor for certain portfolios that may not be effectively assessed in the other calculations of the VaR Charge. NSCC would compare the Portfolio Margin Floor result with the Gap Risk Measure, when applicable, and the Core Parametric Estimation and would use the highest of the three calculations as the final VaR Charge for each Member, as applicable.

In order to implement this proposed change, NSCC would amend Procedure XV of the Rules by creating a new subjection (III) to Sections I(A)(1)(a)(i) and I(A)(2)(a)(i) of the Rules, which would describe the calculation of the Portfolio Margin Floor.

(iii) Eliminating the MMD Charge

Finally, NSCC is proposing to eliminate the MMD Charge from its Clearing Fund calculation. The MMD Charge is an existing component of the Clearing Fund formula and is calculated for Members that are Market Makers and Members that clear for Market Makers.[23] The charge was introduced during a period of rapid growth in the adaptation of the Internet, and was developed to address the risks presented by concentrated positions held specifically by Market Makers. The MMD Charge is described in Procedure XV of the Rules, which provides that, if the Market Maker (either the Member or the correspondent of the Member) holds a Net Unsettled Position that is greater than 40 percent of the overall unsettled long position (sum of each clearing broker's net long position) in that security in the CNS system, NSCC may impose the MMD Charge. NSCC calculates the MMD charge as the sum of each of the absolute values of the Net Unsettled Positions in these securities, less the reported amount of excess net capital for that Member.[24] The MMD charge is designed to address dominated securities that are susceptible to marketability and liquidation impairment because of the relative size of the Net Unsettled Positions that NSCC would have to liquidate or hedge in the case of Member default.

Since the MMD Charge was implemented, the U.S. equities market has evolved with improved price transparency, access across exchange venues, and participation by market liquidity providers to reduce the risks that the charge was designed to address. Further, NSCC believes the MMD Charge may not effectively address concentration risk because (1) it only applies to Net Unsettled Positions in certain dominated securities, as described above and currently in Procedure XV of the Rules; (2) it does not address concentration risk presented by Net Unsettled Positions in securities that are not listed on NASDAQ or in securities traded by firms that are not Market Makers; and (3) it does not account for concentration in market capitalization categories.

NSCC also believes that the proposed enhancements to the VaR Charge, specifically the introduction of an evenly-weighted volatility measure and the calculation of the Gap Risk

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23 See Procedure XV, Section I(A)(1)(d) of the Rules, supra note 1.

24 NSCC does not apply the excess net capital offset for Members rated 7 on the Credit Risk Rating Matrix. See Procedure XV, Sections I(A)(1)(d) and I(A)(2)(c) of the Rules, supra note 1.

Measure, would provide it with more effective measures of risks related to concentrated positions in its Members' portfolios. Subject to applicable thresholds, these proposed risk measures would be applicable to all Members as part of the calculation VaR Charge, and would not, like the MMD Charge, be limited to positions held by Market Makers. Further, as a threshold-based calculation, the Gap Risk Measure would provide NSCC with a more appropriate measure of the potential risk presented by a large Net Unsettled Position in a portfolio. Therefore, NSCC believes that these proposed enhancements to the VaR Charge and other existing risk management measures (described below) would provide it with more effective measures of the risks presented by concentrated positions, and, as such, it is appropriate to eliminate the MMD Charge.

In order to implement this proposed change, NSCC would amend Procedure XV of the Rules by removing subsection (d) of Section I(A)(1) and subsection (c) of Section I(A)(2) of the Rules, and renumbering the subsequent subsections accordingly, as shown on Exhibit 5 hereto.

(iv) Mitigating Risks of Concentrated Positions

For the reasons described above, NSCC believes that the proposed enhancements to its VaR Charge would allow it to better measure and mitigate the risks presented by certain Net Unsettled Positions, including the risk presented to NSCC when those positions are concentrated in a particular security. One of the risks presented by a Net Unsettled Position concentrated in an asset class is that NSCC may not be able to liquidate or hedge the Net Unsettled Positions of a defaulted Member in the assumed timeframe at the market price in the event of a Member default. Because NSCC relies on external market data in connection with monitoring exposures to its Members, the market data may not reflect the market impact transaction costs associated with the potential liquidation as the concentration risk of a Net Unsettled Position increases. However, NSCC believes that, through the proposed changes and through existing risk management measures,[25] it would be able to effectively measure and mitigate risks presented when a Member's Net Unsettled Positions are concentrated in a particular security.

NSCC will continue to evaluate its exposures to these risks. Any future, proposed changes to the margining methodology to address such risks would be subject to a separate proposed rule change pursuant to Section 19(b)(1) of the Act,[26] and the rules thereunder, and advance notice pursuant to Section 806(e)(1) of the Dodd-Frank Wall Street Reform and

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25 For example, pursuant to existing authority under Procedure XV, Sections I(A)(1)(e) and I(A)(2)(d) of the Rules (to be re-numbered pursuant this advance notice to Sections I(A)(1)(d) and I(A)(2)(c) of Procedure XV of the Rules, as shown in Exhibit 5 hereto), NSCC may require an additional payment as part of a Member's Required Deposit in the event it observes price fluctuations in or volatility or lack of liquidity of any security that are not otherwise addressed by its VaR Charge or the other components of the Clearing Fund. An example of where this additional payment may be required is in circumstances where NSCC identifies an exposure that is not adequately addressed by its margining methodology. <u>Supra</u> note 1.

26 15 U.S.C. 78s(b)(1).

Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act"),[27] and the rules thereunder.

Expected Effect on and Management of Risk

NSCC believes that the proposed changes to enhance the calculation of the VaR Charge would enable NSCC to better limit its exposure to Members arising out of their Net Unsettled Positions. The proposal to enhance the calculation of the VaR Charge would enable NSCC to limit its credit exposures posed by portfolios whose risk characteristics are not effectively covered by the current VaR Charge. The proposal to add another calculation of the VaR Charge using the VaR model but incorporating an evenly-weighted volatility measure would permit NSCC to more effectively measure the risk of a rapid change in market price volatility, which may not be adequately covered by the calculation that incorporates an EWMA volatility estimation. The addition of the Gap Risk Measure, when applicable, and the Portfolio Margin Floor calculations would provide alternative measurements of the market price volatility of a Member's Net Unsettled Positions, enabling NSCC to assess a VaR Charge that accounts for risks related to gap risk events, and risks related to the unique compositions of securities within a Member's Net Unsettled Positions, respectively and as described in greater detail above. Therefore, by enabling NSCC to calculate and collect margin that more accurately reflects the risk characteristics of securities in its Members' Net Unsettled Positions, the proposal would enhance NSCC's risk management capabilities.

NSCC's proposal to eliminate the MMD Charge would affect NSCC's management of risk by removing a component from the Clearing Fund calculations that has a limited scope, and was designed to address risks related to a Member's concentration risks that would be more adequately addressed by other proposed and existing risk management measures.

By providing NSCC with a more effective measurement of its exposures, as described above, the proposed change would also mitigate risk for Members because lowering the risk profile for NSCC would in turn lower the risk exposure that Members may have with respect to NSCC in its role as a central counterparty.

Consistency with the Clearing Supervision Act

Although the Clearing Supervision Act does not specify a standard of review for an advance notice, its stated purpose is instructive: 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.[28]

Section 805(a)(2) of the Clearing Supervision Act[29] authorizes the Commission to prescribe risk management standards for the payment, clearing and settlement activities of

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[27] 12 U.S.C. 5465(e)(1).

[28] See 12 U.S.C. 5461(b).

[29] 12 U.S.C. 5464(a)(2).

designated clearing entities, like NSCC, and financial institutions engaged in designated activities for which the Commission is the supervisory agency or the appropriate financial regulator. Section 805(b) of the Clearing Supervision Act[30] states that the objectives and principles for the risk management standards prescribed under Section 805(a) shall be to, among other things, promote robust risk management, promote safety and soundness, reduce systemic risks, and support the stability of the broader financial system. The Commission has adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act[31] and Section 17A of the Exchange Act ("Covered Clearing Agency Standards").[32] The Covered Clearing Agency Standards require registered clearing agencies to establish, implement, maintain, and enforce written policies and procedures that are reasonably designed to meet certain minimum requirements for their operations and risk management practices on an ongoing basis.[33]

(i) Consistency with Section 805(b) of the Clearing Supervision Act

For the reasons described below, NSCC believes that the proposed changes in this advance notice are consistent with the objectives and principles of these risk management standards as described in Section 805(b) of the Clearing Supervision Act and in the Covered Clearing Agency Standards.

As discussed above, NSCC is proposing a number of changes to the way it calculates the VaR Charge, one of the components of its Members' Required Deposits – a key tool that NSCC uses to mitigate potential losses to NSCC associated with liquidating a Member's portfolio in the event of Member default. NSCC believes the proposed changes are consistent with promoting robust risk management because they are designed to enable NSCC to better limit its exposure to Members in the event of a Member default.

First, NSCC's proposal to introduce an additional calculation using its parametric VaR model that uses an evenly-weighted volatility estimation would better enable NSCC to limit its exposures to Members by enhancing the calculation of the VaR Charge to better cover the risk of a rapid change in market price volatility levels, including, for example, a drop in portfolio volatility in a stabilizing market. Second, the proposal to introduce the Gap Risk Measure calculation as an additional measure of volatility in connection with the calculation of the VaR Charge would better enable NSCC to limit its exposures to Members by more effectively capturing the risk that gap risk events impact the entire portfolio's value due to the idiosyncratic nature of the Net Unsettled Positions in that portfolio. Third, the proposal to introduce the Portfolio Margin Floor in its calculation of a Member's VaR Charge would enable NSCC to better limit its exposures to Members by better capturing the risks that may not be adequately accounted for in the other calculations of the VaR Charge. Finally, NSCC's proposal to

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30 12 U.S.C. 5464(b).

31 12 U.S.C. 5464(a)(2).

32 See 17 CFR 240.17Ad-22(e).

33 Id.

eliminate the MMD Charge would enable NSCC to remove a component of the Required Deposit that provides NSCC with only a limited measure of risks presented by Net Unsettled Positions that are concentrated in certain securities, which NSCC believes it can more adequately measure through other proposed and existing risk management measures, as described above.

Therefore, because the proposal is designed to enable NSCC to better limit its exposure to Members in the manner described above, NSCC believes it is consistent with promoting robust risk management.

Furthermore, NSCC believes that the changes proposed in this advance notice are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system, consistent with Section 805(b) of the Clearing Supervision Act.[34] The proposed changes are designed to better limit NSCC's exposures to Members in the event of Member default. As discussed above, the proposed enhancements to the calculation of the VaR Charge would enable NSCC to view and respond more effectively to market price risk. The proposal to introduce an additional calculation of the VaR Charge using the VaR model that incorporates an evenly-weighted volatility measure, rather than an EWMA volatility estimation, would permit NSCC to more effectively measure the risk of a rapid change in market price volatility. The proposed Gap Risk Measure would provide NSCC with a more appropriate measure of the potential risk presented by a large Net Unsettled Position in a portfolio. The proposed Portfolio Margin Floor would ensure NSCC collects at least a minimum VaR Charge. Finally, removing the MMD Charge would help ensure the Clearing Fund calculation would not include unnecessary components that have only limited application, particularly where NSCC is able to better address the risks this charge was designed to address through other proposed and existing risk management measures.

By better limiting NSCC's exposures to Members in the event of a Member default, the proposed changes are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system.

(ii) Consistency with Rule 17Ad-22(e)(4)(i) and (e)(6)(i) and (v) under the Act

NSCC believes that the proposed changes are consistent with Rule 17Ad-22(e)(4)(i) and (e)(6)(i) and (v), each promulgated under the Act.[35]

Rule 17Ad-22(e)(4)(i) under the Act[36] requires, in part, that NSCC 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 sufficient financial

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[34] 12 U.S.C. 5464(b).

[35] 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i) and (v).

[36] 17 CFR 240.17Ad-22(e)(4)(i).

resources to cover its credit exposure to each participant fully with a high degree of confidence.

As described above, the proposed changes would enable NSCC to better identify, measure, monitor, and, through the collection of Members' Required Deposits, manage its credit exposures to Members by maintaining sufficient resources to cover those credit exposures fully with a high degree of confidence. Each of the additional calculations that NSCC is proposing to introduce to enhance its methodology for calculating a Member's VaR Charge would provide NSCC with a more effective measure of the risks these calculations were designed to assess, as described above. As such, the proposed enhancements to the calculation of the VaR Charge would permit NSCC to more effectively identify, measure, monitor and manage its exposures to market price risk, and would enable it to better limit its exposure to potential losses from Member default. The proposal to use the highest result of each of the calculations as among the Core Parametric Estimation, the Gap Risk Measure and the Portfolio Margin Floor, would enable NSCC to manage its credit exposures by allowing it to collect and maintain sufficient resources to cover those exposures fully and with a high degree of confidence.

Furthermore, removing the MMD Charge would enable NSCC to remove from the Clearing Fund calculations a component that is limited in scope and would allow it to address the risks presented by Net Unsettled Positions that are concentrated in certain securities more effectively by other Clearing Fund components and risk management measures.

Therefore, the proposal would enhance NSCC's ability to effectively identify, measure and monitor its credit exposures and would enhance its ability to maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. As such, NSCC believes the proposed changes are consistent with Rule 17Ad-22(e)(4)(i) under the Act.[37]

Rule 17Ad-22(e)(6)(i) under the Act[38] requires, in part, that NSCC establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, at a minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market. Rule 17Ad-22(e)(6)(v) under the Act[39] requires, in part, that NSCC establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, at a minimum, uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products.

The Required Deposits are made up of risk-based components (as margin) that, that are calculated and assessed daily to limit NSCC's credit exposures to Members. NSCC's proposal to enhance the calculation of its VaR Charge in order to more effectively address market price volatility would permit it to produce margin levels that are commensurate with the particular risk

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[37] Id.

[38] 17 CFR 240.17Ad-22(e)(6)(i).

[39] 17 CFR 240.17Ad-22(e)(6)(v).

attributes, including risks related to rapid changes in market price volatility levels due to gap risk events, or risks related to a unique composition of securities within a portfolio, as described above. For example, the use of an evenly-weighted volatility estimation utilizing the VaR model, as an additional calculation of the VaR Charge, which gives equal weight to a long historical data set, rather than more weight to recent observations, would permit NSCC to more effectively measure the risk of a rapid change in market price volatility. The addition of the Gap Risk Measure and the Portfolio Margin Floor would also provide NSCC with additional measurements of the market price volatility of a Member's Net Unsettled Position, enabling NSCC to assess a VaR Charge that accounts for the risks those charges are designed to address, as described above.

Finally, NSCC is proposing to eliminate the MMD Charge because this component of the Clearing Fund has only a limited application and, as such, does not provide as effective a measurement of the risk presented by Net Unsettled Positions that are concentrated in certain securities as other proposed and existing risk management measures. Therefore, the proposal to eliminate this charge would enable NSCC to remove an unnecessary component from the Clearing Fund calculation, and would help NSCC to rely on an appropriate method of measuring its exposures to this risk.

The proposed changes are designed to assist NSCC in maintaining a risk-based margin system that considers, and produces margin levels commensurate with, the risks and particular attributes of portfolios that exhibit idiosyncratic risk attributes, are more susceptible to price volatility caused by to gap risk events, and contain concentrated Net Unsettled Positions. Therefore, NSCC believes the proposed change is consistent with Rule 17Ad-22(e)(6)(i) and (v) under the Act.[40]

11. Exhibits

Exhibit 1 – Not applicable.

Exhibit 1A - Notice of advance notice for publication in the Federal Register.

Exhibit 2 – Not applicable.

Exhibit 3a – Quantitative Margin Risk Model Methodology Document. **Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3a pursuant to 17 CFR 240.24b-2 being requested.**

Exhibit 3b – Backtesting Study. **Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3b pursuant to 17 CFR 240.24b-2 being requested.**

Exhibit 3c – Impact Study. **Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3c pursuant to 17 CFR 240.24b-2 being requested.**

Exhibit 4 – Not applicable.

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40 17 CFR 240.17Ad-22(e)(6)(i) and (v).

Exhibit 5 – Proposed Changes to the Rules.

EXHIBIT 1A

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-[_________]; File No. SR-NSCC-2017-808)

[DATE]

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing of Advance Notice to Enhance the Calculation of the Volatility Component of the Clearing Fund Formula that Utilizes a Parametric Value-at-Risk Model and Eliminate the Market Maker Domination Charge

Pursuant to Section 806(e)(1) of Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act")[1] and Rule 19b-4(n)(1)(i) under the Securities Exchange Act of 1934, as amended ("Act"),[2] notice is hereby given that on December __, 2017, National Securities Clearing Corporation ("NSCC") filed with the Securities and Exchange Commission ("Commission") the advance notice SR-NSCC-2017-808 ("Advance Notice") as described in Items I, II and III below, which Items have been prepared by the clearing agency.[3] The Commission is publishing this notice to solicit comments on the Advance Notice from interested persons.

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[1] 12 U.S.C. 5465(e)(1).

[2] 17 CFR 240.19b-4(n)(1)(i).

[3] On December __, 2017, NSCC filed this Advance Notice as a proposed rule change (SR-NSCC-2017-020) with the Commission pursuant to Section 19(b)(1) of the Act, 15 U.S.C. 78s(b)(1), and Rule 19b-4 thereunder, 17 CFR 240.19b-4. A copy of the proposed rule change is available at http://www.dtcc.com/legal/sec-rule-filings.

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

The advance notice of NSCC consists of modifications to NSCC's Rules & Procedures ("Rules")[4] in order to enhance the calculation of the volatility component of the Clearing Fund formula that utilizes a parametric Value-at-Risk ("VaR") model ("VaR Charge") by (1) adding an additional calculation utilizing the VaR model that incorporates an evenly-weighted volatility estimation, which would supplement the current calculation that utilizes the VaR model but incorporates an exponentially-weighted moving average ("EWMA") volatility estimation,[5] where the higher of the two calculations would be the core parametric result ("Core Parametric Estimation"); and (2) introducing two additional formulas to the calculation of the VaR Charge – the Gap Risk Measure and the Portfolio Margin Floor, where the results of these two calculations would be compared to the Core Parametric Estimation and the highest of the three would be a Member's final VaR Charge, as described in greater detail below.

NSCC is also proposing to eliminate the existing Market Maker Domination component ("MMD Charge") from the Clearing Fund formula, as described in greater detail below.

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

In its filing with the Commission, the clearing agency included statements concerning the purpose of and basis for the Advance Notice and discussed any comments

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4 Capitalized terms not defined herein are defined in the Rules, available at http://dtcc.com/~/media/Files/Downloads/legal/rules/nscc_rules.pdf.

5 As described in greater detail in the filing, an EWMA volatility estimation is an estimation of volatility that gives more weight to most recent market observations, where an evenly-weighted volatility estimation is an estimation of volatility that gives even weight to historic market observations.

it received on the Advance Notice. The text of these statements may be examined at the places specified in Item IV below. The clearing agency has prepared summaries, set forth in sections A and B below, of the most significant aspects of such statements.

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

While NSCC has not solicited or received any written comments relating to this proposal, NSCC has conducted outreach to Members in order to provide them with notice of the proposal. NSCC will notify the Commission of any written comments received by NSCC.

(B) Advance Notice Filed Pursuant to Section 806(e) of the Clearing Supervision Act

Description of Proposed Changes

NSCC is proposing to enhance the calculation of the VaR Charge by introducing an additional estimation of volatility that would be incorporated into the VaR model, and introducing two additional calculations, the Gap Risk Measure and the Portfolio Margin Floor, that NSCC believes would collectively enhance its ability to mitigate market price risk. NSCC currently calculates the VaR Charge by applying a parametric VaR model that incorporates an EWMA volatility estimation. NSCC is proposing to introduce an additional calculation that also applies the parametric VaR model but replaces the EWMA volatility estimation with an evenly-weighted volatility estimation.[6] The result of these two calculations using the parametric VaR model would be compared and the higher of the two would be the Core Parametric Estimation.

[6] See id.

NSCC is also proposing to introduce two additional calculations to arrive at a final VaR Charge, the Gap Risk Measure and the Portfolio Margin Floor. NSCC would use the highest result between the Core Parametric Estimation, the Gap Risk Measure, when applicable, and the Portfolio Margin Floor calculations as a Member's final VaR Charge.[7]

Each of the separate calculations would provide NSCC with a measure of the market price risk presented by the Net Unsettled Positions and Net Balance Order Unsettled Positions (for purposes of this filing, referred to collectively herein as "Net Unsettled Positions")[8] in a Member's portfolio. Collectively, the proposed enhancements to the calculation of the VaR Charge would permit NSCC to more effectively cover its credit exposures and produce margin levels commensurate with the risks and particular attributes of each Member's portfolio, as described in greater detail below.

NSCC is also proposing to eliminate the existing MMD Charge from the Clearing Fund formula. When the MMD Charge was first introduced, it was developed to only address concentration risks presented by Net Unsettled Positions in certain securities that are traded by firms that are designated Market Makers, as described in greater detail below. Given this limited scope of application of this charge, and because NSCC believes it more effectively addresses the risks this charge was designed to address

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[7] NSCC may calculate Members' VaR Charge on an intraday basis for purposes of monitoring the risks presented by Members' activity. These calculations would be also be performed using the proposed enhanced methodology.

[8] "Net Unsettled Positions" and "Net Balance Order Unsettled Positions" refer to net positions that have not yet passed their settlement date, or did not settle on their settlement date. <u>See</u> Procedure XV (Clearing Fund Formula and Other Matters) of the Rules, <u>supra</u> note 4.

through other risk management measures, including the proposed Gap Risk Measure calculation of the VaR Charge, NSCC is proposing to eliminate the MMD Charge.

Each of these proposed changes is described in more detail below.

(i) Overview of the Required Deposit and NSCC's Clearing Fund

As part of its market risk management strategy, NSCC manages its credit exposure to Members by determining the appropriate Required Deposits to the Clearing Fund and monitoring its sufficiency, as provided for in the Rules.[9] The Required Deposit serves as each Member's margin. The objective of a Member's Required Deposit is to mitigate potential losses to NSCC associated with liquidation of such Member's portfolio in the event that NSCC ceases to act for such Member (hereinafter referred to as a "default").[10] The aggregate of all Members' Required Deposits constitutes the Clearing Fund of NSCC, which it would access should a defaulting Member's own Required Deposit be insufficient to satisfy losses to NSCC caused by the liquidation of that Member's portfolio.

Pursuant to NSCC's Rules, each Member's Required Deposit amount consists of a number of applicable components, each of which is calculated to address specific risks

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9 See Rule 4 (Clearing Fund) and Procedure XV (Clearing Fund Formula and Other Matters), supra note 4. NSCC's market risk management strategy is designed to comply with Rule 17Ad-22(e)(4) under the Act, where these risks are referred to as "credit risks." 17 CFR 240.17Ad-22(e)(4).

10 The Rules set out the circumstances under which NSCC may cease to act for a Member and the types of actions it may take. For example, NSCC may suspend a firm's membership with NSCC or prohibit or limit a Member's access to NSCC's services in the event that Member defaults on a financial or other obligation to NSCC. See Rule 46 (Restrictions on Access to Services) of the Rules, supra note 4.

faced by NSCC, as identified within Procedure XV of the Rules.[11] The volatility component of each Member's Required Deposit is designed to measure market price volatility and is calculated for Members' Net Unsettled Positions. The volatility component is designed to capture the market price risk associated with each Member's portfolio at a 99th percentile level of confidence. The VaR Charge is the volatility component applicable to most Net Unsettled Positions,[12] and usually comprises the largest portion of a Member's Required Deposit. Procedure XV of the Rules currently provides that the VaR Charge shall be calculated in accordance with a generally accepted portfolio volatility margin model utilizing assumptions based on reasonable historical data and an appropriate volatility range.[13] As such, NSCC currently calculates a Member's VaR Charge utilizing the VaR model, which incorporates an EWMA volatility estimation.

Currently, Members' Required Deposits may also include an MMD Charge, applicable only to Members that are Market Makers and Members that clear for Market Makers.[14] As described in greater detail below, the MMD Charge is imposed when these

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[11] Supra note 4.

[12] As described in Procedure XV, Section I(A)(1)(a)(ii) and (iii) and Section I(A)(2)(a)(ii) and (iii) of the Rules, Net Unsettled Positions in certain securities are excluded from the VaR Charge and instead charged a volatility component that is calculated by multiplying the absolute value of those Net Unsettled Positions by a percentage. Supra note 4.

[13] Procedure XV, Section I(A)(1)(a)(i) and Section I(A)(2)(a)(i) of the Rules, supra note 4.

[14] As used herein, "Market Maker" means a member firm of the Financial Industry Regulatory Authority, Inc. ("FINRA") that is registered by FINRA as a Market Maker pursuant to FINRA's rules, available at http://finra.complinet.com/en/display/display.html.

Members hold a Net Unsettled Position that is greater than 40 percent of the overall unsettled long position (sum of each clearing broker's net long position) in that security in the Continuous Net Settlement ("CNS") system.[15]

NSCC employs daily backtesting to determine the adequacy of each Member's Required Deposit. NSCC compares the Required Deposit[16] for each Member with the simulated liquidation gains/losses using the actual positions in the Member's portfolio, and the historical security returns. NSCC investigates the cause(s) of any backtesting deficiencies. As part of this investigation, NSCC pays particular attention to Members with backtesting deficiencies that bring the results for that Member below the 99 percent confidence target (i.e., greater than two backtesting deficiency days in a rolling twelve-month period) to determine if there is an identifiable cause of repeated backtesting deficiencies.

Further, as a part of its model performance review, and consistent with its regulatory requirements, NSCC regularly assesses its risks as they relate to its model assumptions, parameters, and sensitivities, including those of its parametric VaR model, to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market.[17] As part of NSCC's model performance monitoring, NSCC management analyzes and evaluates the continued effectiveness of its parametric VaR model in order to identify any weaknesses, and determine whether, and

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15 See Rule 11 (CNS System) and Procedure VII (CNS Accounting Operation), supra note 4.

16 For backtesting comparisons, NSCC uses the Required Deposit amount without regard to the actual collateral posted by the Member.

17 See 17 CFR 240.17Ad-22(e)(6)(i), (vi).

which, enhancements may be necessary to its formulas, parameters or assumptions to improve margin coverage.

The proposed changes to the calculation of the VaR Charge, described below, are a result of NSCC's regular review of the effectiveness of its margining methodology.

(ii) Enhancements to the VaR Charge

Adding an Evenly-Weighted Volatility Estimation to the VaR Model. To calculate the VaR Charge, NSCC uses a parametric VaR model that currently only incorporates an EWMA volatility estimation. The EWMA volatility estimation is considered front-weighted as it assigns more weight to most recent market observations based on the assumption that the most recent price history would have more relevance to, and therefore is a better measure of, current market price volatility levels. A calculation using this EWMA volatility estimation is responsive to changing market volatility, and, because NSCC's Member-level model backtesting results have generally remained above a 99th percentile level of confidence over a 10-year performance window, NSCC believes this calculation continues to be an effective measurement of price volatility for the majority of Net Unsettled Positions that are subject to the VaR Charge. More specifically, NSCC believes its backtesting results show that this calculation has been proven to be effective for calculating the price volatility of large diversified portfolios, which represent the majority of Net Unsettled Positions that are subject to the VaR Charge.

However, NSCC believes this calculation may not adequately cover a rapid change in market price volatility levels, including, for example, a drop in portfolio volatility in a stabilizing market. Additionally, NSCC has observed poorer backtesting coverage for those Members with less diversified portfolios in atypical market conditions.

In estimating volatility, the EWMA volatility estimation gives greater weight to more recent market observations, and effectively diminishes the value of older market observations. However, volatility in equity markets often rapidly revert to pre-volatile levels, and then are followed by a subsequent spike in volatility. So, while a calculation that relies exclusively on the EWMA volatility estimation can capture changes in volatility that emerge from a progressively calm or non-volatile market, it may cause a reactive decrease in margin that does not adequately capture the risks related to a rapid shift in market price volatility levels. Alternatively, an evenly-weighted volatility estimation would continue to give even weight to all historical volatility observations in the look-back period (described below), and would prevent margin from decreasing too quickly.

Therefore, in order to more adequately cover a rapid change in market price volatility levels and the risks presented by less diversified portfolios in its calculation of the VaR Charge, NSCC is proposing to add another calculation of the VaR Charge utilizing its parametric VaR model that would incorporate an evenly-weighted volatility estimation. NSCC believes an additional calculation using a volatility estimation that gives even weight to market observations over a set look-back period would allow it to more adequately address risks related to a rapid shift in general market price volatility levels, which can occur as a result of either idiosyncratic, issuer events (also referred to as "gap risk events"),[18] or are due to specific characteristics of a Member's portfolio based on their size, balance, direction, concentration, or the degree of correlation with broad market returns.

The proposed calculation incorporating an evenly-weighted volatility estimation would give equal weight to price observations over a look-back period of at least 253 days. NSCC analyzed the impact of using a look-back period of various lengths and determined that a look-back period of at least 253 days would provide NSCC with an adequate view of recent, past market observations in estimating volatility to meet its backtesting performance targets, and wouldn't result in unnecessarily high margin calculations. NSCC would weigh these considerations periodically to determine an appropriate look-back period that is at least 253 days.

NSCC would perform both calculations using the parametric VaR model – one using the existing EWMA volatility estimation and an additional calculation using the proposed evenly-weighted volatility estimation – and would use the highest result of these calculations as the Core Parametric Estimation in connection with calculating a Member's VaR Charge. NSCC believes that, while the existing EWMA calculation provides adequate responsiveness to increasing market volatility, as described above, the proposed evenly-weighted calculation would be better at covering the risk of a rapid change in market volatility levels by retaining market observations from the entire historical data set. Therefore, by using both calculations and selecting the higher result, NSCC would be able to more effectively cover its credit exposures and mitigate the risk

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[18] Gap risk events may include, for example, earning reports, management changes, merger announcements, insolvency, or other unexpected, issuer-specific events.

presented by different market conditions in arriving at a final Core Parametric Estimation.

In order to implement the proposed change, NSCC would amend Procedure XV of the Rules by creating a new subjection (I) to Sections I(A)(1)(a)(i) and I(A)(2)(a)(i) of the Rules, which would define the Core Parametric Estimate as the higher result of two calculations – and EWMA calculation and the proposed evenly-weighted calculation – both utilizing the parametric VaR model.

Gap Risk Measure. NSCC is also proposing to introduce the Gap Risk Measure as an additional calculation that, when applicable, would be used to determine a Member's final VaR Charge.

The proposed Gap Risk Measure would be calculated to address the risks presented by a portfolio that is more susceptible to the effects of gap risk events due to the idiosyncratic nature of the Net Unsettled Positions in that portfolio. For example, the proposed calculation would address the risk that a gap risk event affects the price of a security in which a portfolio holds a Net Unsettled Position that represents more than a certain percent of the entire portfolio's value, such that the event could impact the entire portfolio's value. The proposed Gap Risk Measure would supplement the calculation of the Core Parametric Estimation because a parametric VaR model calculation is not designed to fully capture this specific risk presented by a concentrated position in a Member's portfolio.

The proposed Gap Risk Measure would only be applied for a Member if the Net Unsettled Position with the largest absolute market value in the portfolio represents more than a certain percent of the entire portfolio's value ("concentration threshold"). NSCC is proposing a concentration threshold to the application of the Gap Risk Measure because its backtesting results have shown that portfolios with a Net Unsettled Position that represents a proportional value of the entire portfolio over 30 percent tend to have backtesting coverage below the target 99 percent confidence level. These results also show that these portfolios are more susceptible to the effects of gap risk events that the proposed calculation is designed to measure. Therefore, NSCC would only apply the Gap Risk Measure charge if the Net Unsettled Position with the largest absolute market value in a Member's portfolio represents more than 30 percent of that Member's entire portfolio value. NSCC would set 30 percent as the ceiling for the concentration threshold, and would evaluate the threshold periodically based on the Member's backtesting results during a time period of not less than the previous twelve months to determine if it may be appropriate to the threshold at a lower percent.

Additionally, NSCC believes the risk of large, unexpected price movements, particularly those caused by a gap risk event, may have a greater impact on portfolios with large Net Unsettled Positions in securities that are susceptible to those events. Generally, index-based exchange-traded funds track closely to similar equity indices and are less prone to the effects of gap risk events. As such, if the concentration threshold is met, NSCC would calculate the Gap Risk Measure for Net Unsettled Positions in the portfolio, other than positions in index-based exchange traded funds (referred to herein for ease of reference as "non-index Net Unsettled Positions").[19]

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19 NSCC would use a third-party market provider to identify index-based exchange-traded funds. The third-party market provider would identify index-based exchange-traded funds as those with criteria that requires the portfolio returns to track to a broad market index. Exchange-traded funds that do not meet this

When applicable, NSCC would calculate the Gap Risk Measure by multiplying the gross market value of the largest non-index Net Unsettled Position in the portfolio by a percent of not less than 10 percent.[20] NSCC would determine such percent empirically as no less than the larger of the 1st and 99th percentiles of three-day returns of a set of CUSIPs that are subject to the VaR Charge pursuant to the Rules,[21] giving equal rank to each to determine which has the highest movement over that three-day period. NSCC would use a look-back period of not less than ten years that includes a one-year stress period.[22] If the one-year stress period overlaps with the look-back period, only the non-overlapping period would be combined with the look-back period. The result would then be rounded up to the nearest whole percentage.

By calculating this charge as a percent of the gross market value of the largest non-index Net Unsettled Position that exceeds the set threshold, NSCC believes the proposed Gap Risk Measure would allow it to capture the risk that a gap risk event affects the price of a security in which the Member holds a concentrated position and, due to the disproportionate value of this position in the Member's portfolio, the impact of that

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criteria would not be considered index-based exchange-traded funds and would be included the Gap Risk Measure calculation.

[20] NSCC believes it is prudent to set a floor for the Gap Risk Measure charge, and has determined that a floor of 10 percent would appropriately align this charge with the charge that is applied to Net Unsettled Positions in certain securities that are excluded from the VaR Charge and instead charged a similar haircut-based volatility component. See supra note 12.

[21] Supra note 12.

[22] NSCC believes using a look-back period of not less than ten years that includes a one-year stress period would provide it with a stable risk measurement that incorporates a sufficient look-back period that would be appropriate for purposes of determining the appropriate percent to use in the calculation of the Gap Risk Measure.

event affects the entire portfolio. This calculation, as an additional measure for the VaR Charge, would permit NSCC to assess an adequate amount of margin to cover the gap risks not captured by the parametric VaR model calculations. As such, the proposed calculation would contribute to NSCC's goal of producing margin levels commensurate with the risks and particular attributes of each Member's portfolio.

In order to implement this proposed change, NSCC would amend Procedure XV of the Rules by creating a new subjection (II) to Sections I(A)(1)(a)(i) and I(A)(2)(a)(i) of the Rules, which would describe the calculation of the Gap Risk Measure.

Portfolio Margin Floor. NSCC is also proposing to introduce the Portfolio Margin Floor as an additional calculation that, when applicable, would be used to determine a Member's final VaR Charge.

The proposed Portfolio Margin Floor would be calculated to address risks that may not be adequately accounted for in the other calculations of the VaR Charge by operating as a floor to, or minimum amount of, the final VaR Charge. A parametric VaR model may result in a low VaR Charge for balanced portfolios. For example, in circumstances where the gross market value of a Member's Net Unsettled Positions is high and the cost of liquidation in the event that Member defaults could also be high, the parametric VaR model may not adequately measure the potential costs of liquidation. The proposed charge would be based on the balance and direction of Net Unsettled Positions in the Members' portfolio and is designed to be proportional to the market value of the portfolio. In this way, the Portfolio Margin Floor would allow NSCC to more effectively cover its credit exposures.

The Portfolio Margin Floor would be the sum of two separate calculations, both of which would measure the market value of the portfolio based on the direction of Net Unsettled Positions in that portfolio. In this way, the calculation would effectively set a floor on the VaR Charge based on the composition of the portfolio and would mitigate the risk that low price volatility in portfolios with either large gross market values or large net directional market values could hinder NSCC's ability to effectively liquidate or hedge the Member's portfolio in three business days.

First, NSCC would calculate the net directional market value of the portfolio by calculating the absolute difference between the market value of the long Net Unsettled Positions and the market value of the short Net Unsettled Positions in the portfolio,[23] and then multiplying that amount by a percentage. Such percentage would be determined by examining the annual historical volatility levels of benchmark equity indices over a historical look-back period, as a standard and generally accepted reference that incorporates sufficient data history. Second, NSCC would calculate the balanced market value of the portfolio by taking the lowest market value of either (i) the long Net Unsettled Positions, or (ii) the short Net Unsettled Positions in the portfolio,[24] and then multiplying that value by a percentage. Such percentage would generally be a fraction of the percentage used in the calculation of the net directional market value of the portfolio

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[23] For example, if the market value of the long Net Unsettled Positions is $100,000, and the market value of the short Net Unsettled Positions is $200,000, the net directional market value of the portfolio is $100,000.

[24] For example, if the market value of the long Net Unsettled Positions is $100,000, and the market value of the short Net Unsettled Positions is $110,000, the balanced market value of the portfolio is $100,000.

and would be an amount that covers the transaction costs and other basis risks present for the Net Unsettled Positions in that portfolio.[25]

NSCC would add the results of these two calculations to arrive at the final Portfolio Margin Floor amount. The sum of these two calculations would provide a minimum VaR Charge by effectively establishing a margin floor for certain portfolios that may not be effectively assessed in the other calculations of the VaR Charge. NSCC would compare the Portfolio Margin Floor result with the Gap Risk Measure, when applicable, and the Core Parametric Estimation and would use the highest of the three calculations as the final VaR Charge for each Member, as applicable.

In order to implement this proposed change, NSCC would amend Procedure XV of the Rules by creating a new subjection (III) to Sections I(A)(1)(a)(i) and I(A)(2)(a)(i) of the Rules, which would describe the calculation of the Portfolio Margin Floor.

(iii) Eliminating the MMD Charge

Finally, NSCC is proposing to eliminate the MMD Charge from its Clearing Fund calculation. The MMD Charge is an existing component of the Clearing Fund formula and is calculated for Members that are Market Makers and Members that clear for Market Makers.[26] The charge was introduced during a period of rapid growth in the adaptation of the Internet, and was developed to address the risks presented by concentrated positions held specifically by Market Makers. The MMD Charge is described in Procedure XV of the Rules, which provides that, if the Market Maker (either the Member or the correspondent of the Member) holds a Net Unsettled Position that is greater than

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25 NSCC would use a third-party market provider to identify these transaction costs and other basis risks.

26 See Procedure XV, Section I(A)(1)(d) of the Rules, supra note 4.

40 percent of the overall unsettled long position (sum of each clearing broker's net long position) in that security in the CNS system, NSCC may impose the MMD Charge. NSCC calculates the MMD charge as the sum of each of the absolute values of the Net Unsettled Positions in these securities, less the reported amount of excess net capital for that Member.[27] The MMD charge is designed to address dominated securities that are susceptible to marketability and liquidation impairment because of the relative size of the Net Unsettled Positions that NSCC would have to liquidate or hedge in the case of Member default.

Since the MMD Charge was implemented, the U.S. equities market has evolved with improved price transparency, access across exchange venues, and participation by market liquidity providers to reduce the risks that the charge was designed to address. Further, NSCC believes the MMD Charge may not effectively address concentration risk because (1) it only applies to Net Unsettled Positions in certain dominated securities, as described above and currently in Procedure XV of the Rules; (2) it does not address concentration risk presented by Net Unsettled Positions in securities that are not listed on NASDAQ or in securities traded by firms that are not Market Makers; and (3) it does not account for concentration in market capitalization categories.

NSCC also believes that the proposed enhancements to the VaR Charge, specifically the introduction of an evenly-weighted volatility measure and the calculation of the Gap Risk Measure, would provide it with more effective measures of risks related to concentrated positions in its Members' portfolios. Subject to applicable thresholds,

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[27] NSCC does not apply the excess net capital offset for Members rated 7 on the Credit Risk Rating Matrix. See Procedure XV, Sections I(A)(1)(d) and I(A)(2)(c) of the Rules, supra note 4.

these proposed risk measures would be applicable to all Members as part of the calculation VaR Charge, and would not, like the MMD Charge, be limited to positions held by Market Makers. Further, as a threshold-based calculation, the Gap Risk Measure would provide NSCC with a more appropriate measure of the potential risk presented by a large Net Unsettled Position in a portfolio. Therefore, NSCC believes that these proposed enhancements to the VaR Charge and other existing risk management measures (described below) would provide it with more effective measures of the risks presented by concentrated positions, and, as such, it is appropriate to eliminate the MMD Charge.

In order to implement this proposed change, NSCC would amend Procedure XV of the Rules by removing subsection (d) of Section I(A)(1) and subsection (c) of Section I(A)(2) of the Rules, and renumbering the subsequent subsections accordingly.

(iv) Mitigating Risks of Concentrated Positions

For the reasons described above, NSCC believes that the proposed enhancements to its VaR Charge would allow it to better measure and mitigate the risks presented by certain Net Unsettled Positions, including the risk presented to NSCC when those positions are concentrated in a particular security. One of the risks presented by a Net Unsettled Position concentrated in an asset class is that NSCC may not be able to liquidate or hedge the Net Unsettled Positions of a defaulted Member in the assumed timeframe at the market price in the event of a Member default. Because NSCC relies on external market data in connection with monitoring exposures to its Members, the market data may not reflect the market impact transaction costs associated with the potential liquidation as the concentration risk of a Net Unsettled Position increases. However, NSCC believes that, through the proposed changes and through existing risk management measures,[28] it would be able to effectively measure and mitigate risks presented when a Member's Net Unsettled Positions are concentrated in a particular security.

NSCC will continue to evaluate its exposures to these risks. Any future, proposed changes to the margining methodology to address such risks would be subject to a separate proposed rule change pursuant to Section 19(b)(1) of the Act,[29] and the rules thereunder, and advance notice pursuant to Section 806(e)(1) of the Clearing Supervision Act,[30] and the rules thereunder.

Expected Effect on and Management of Risk

NSCC believes that the proposed changes to enhance the calculation of the VaR Charge would enable NSCC to better limit its exposure to Members arising out of their Net Unsettled Positions. The proposal to enhance the calculation of the VaR Charge would enable NSCC to limit its credit exposures posed by portfolios whose risk characteristics are not effectively covered by the current VaR Charge. The proposal to add another calculation of the VaR Charge using the VaR model but incorporating an evenly-weighted volatility measure would permit NSCC to more effectively measure the risk of a rapid change in market price volatility, which may not be adequately covered by

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28 For example, pursuant to existing authority under Procedure XV, Sections I(A)(1)(e) and I(A)(2)(d) of the Rules (to be re-numbered pursuant this advance notice to Sections I(A)(1)(d) and I(A)(2)(c) of Procedure XV of the Rules), NSCC may require an additional payment as part of a Member's Required Deposit in the event it observes price fluctuations in or volatility or lack of liquidity of any security that are not otherwise addressed by its VaR Charge or the other components of the Clearing Fund. An example of where this additional payment may be required is in circumstances where NSCC identifies an exposure that is not adequately addressed by its margining methodology. Supra note 4.

29 15 U.S.C. 78s(b)(1).

30 12 U.S.C. 5465(e)(1).

the calculation that incorporates an EWMA volatility estimation. The addition of the Gap Risk Measure, when applicable, and the Portfolio Margin Floor calculations would provide alternative measurements of the market price volatility of a Member's Net Unsettled Positions, enabling NSCC to assess a VaR Charge that accounts for risks related to gap risk events, and risks related to the unique compositions of securities within a Member's Net Unsettled Positions, respectively and as described in greater detail above. Therefore, by enabling NSCC to calculate and collect margin that more accurately reflects the risk characteristics of securities in its Members' Net Unsettled Positions, the proposal would enhance NSCC's risk management capabilities.

NSCC's proposal to eliminate the MMD Charge would affect NSCC's management of risk by removing a component from the Clearing Fund calculations that has a limited scope, and was designed to address risks related to a Member's concentration risks that would be more adequately addressed by other proposed and existing risk management measures.

By providing NSCC with a more effective measurement of its exposures, as described above, the proposed change would also mitigate risk for Members because lowering the risk profile for NSCC would in turn lower the risk exposure that Members may have with respect to NSCC in its role as a central counterparty.

Consistency with the Clearing Supervision Act

Although the Clearing Supervision Act does not specify a standard of review for an advance notice, its stated purpose is instructive: 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.[31]

Section 805(a)(2) of the Clearing Supervision Act[32] authorizes the Commission to prescribe risk management standards for the payment, clearing and settlement activities of designated clearing entities, like NSCC, and financial institutions engaged in designated activities for which the Commission is the supervisory agency or the appropriate financial regulator. Section 805(b) of the Clearing Supervision Act[33] states that the objectives and principles for the risk management standards prescribed under Section 805(a) shall be to, among other things, promote robust risk management, promote safety and soundness, reduce systemic risks, and support the stability of the broader financial system. The Commission has adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act[34] and Section 17A of the Exchange Act ("Covered Clearing Agency Standards").[35] The Covered Clearing Agency Standards require registered clearing agencies to establish, implement, maintain, and enforce written policies and procedures that are reasonably designed to meet certain minimum requirements for their operations and risk management practices on an ongoing basis.[36]

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31 See 12 U.S.C. 5461(b).

32 12 U.S.C. 5464(a)(2).

33 12 U.S.C. 5464(b).

34 12 U.S.C. 5464(a)(2).

35 See 17 CFR 240.17Ad-22(e).

36 Id.

(i) Consistency with Section 805(b) of the Clearing Supervision Act

For the reasons described below, NSCC believes that the proposed changes in this advance notice are consistent with the objectives and principles of these risk management standards as described in Section 805(b) of the Clearing Supervision Act and in the Covered Clearing Agency Standards.

As discussed above, NSCC is proposing a number of changes to the way it calculates the VaR Charge, one of the components of its Members' Required Deposits – a key tool that NSCC uses to mitigate potential losses to NSCC associated with liquidating a Member's portfolio in the event of Member default. NSCC believes the proposed changes are consistent with promoting robust risk management because they are designed to enable NSCC to better limit its exposure to Members in the event of a Member default.

First, NSCC's proposal to introduce an additional calculation using its parametric VaR model that uses an evenly-weighted volatility estimation would better enable NSCC to limit its exposures to Members by enhancing the calculation of the VaR Charge to better cover the risk of a rapid change in market price volatility levels, including, for example, a drop in portfolio volatility in a stabilizing market. Second, the proposal to introduce the Gap Risk Measure calculation as an additional measure of volatility in connection with the calculation of the VaR Charge would better enable NSCC to limit its exposures to Members by more effectively capturing the risk that gap risk events impact the entire portfolio's value due to the idiosyncratic nature of the Net Unsettled Positions in that portfolio. Third, the proposal to introduce the Portfolio Margin Floor in its calculation of a Member's VaR Charge would enable NSCC to better limit its exposures to Members by better capturing the risks that may not be adequately accounted for in the other calculations of the VaR Charge. Finally, NSCC's proposal to eliminate the MMD Charge would enable NSCC to remove a component of the Required Deposit that provides NSCC with only a limited measure of risks presented by Net Unsettled Positions that are concentrated in certain securities, which NSCC believes it can more adequately measure through other proposed and existing risk management measures, as described above.

Therefore, because the proposal is designed to enable NSCC to better limit its exposure to Members in the manner described above, NSCC believes it is consistent with promoting robust risk management.

Furthermore, NSCC believes that the changes proposed in this advance notice are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system, consistent with Section 805(b) of the Clearing Supervision Act.[37] The proposed changes are designed to better limit NSCC's exposures to Members in the event of Member default. As discussed above, the proposed enhancements to the calculation of the VaR Charge would enable NSCC to view and respond more effectively to market price risk. The proposal to introduce an additional calculation of the VaR Charge using the VaR model that incorporates an evenly-weighted volatility measure, rather than an EWMA volatility estimation, would permit NSCC to more effectively measure the risk of a rapid change in market price volatility. The proposed Gap Risk Measure would provide NSCC with a more appropriate measure of the potential risk presented by a large Net Unsettled Position in a portfolio. The proposed Portfolio Margin Floor would ensure NSCC

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[37] 12 U.S.C. 5464(b).

collects at least a minimum VaR Charge. Finally, removing the MMD Charge would help ensure the Clearing Fund calculation would not include unnecessary components that have only limited application, particularly where NSCC is able to better address the risks this charge was designed to address through other proposed and existing risk management measures.

By better limiting NSCC's exposures to Members in the event of a Member default, the proposed changes are consistent with promoting safety and soundness, which, in turn, is consistent with reducing systemic risks and supporting the stability of the broader financial system.

(ii) Consistency with Rule 17Ad-22(e)(4)(i) and (e)(6)(i) and (v) under the Act

NSCC believes that the proposed changes are consistent with Rule 17Ad-22(e)(4)(i) and (e)(6)(i) and (v), each promulgated under the Act.[38]

Rule 17Ad-22(e)(4)(i) under the Act[39] requires, in part, that NSCC 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 sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.

As described above, the proposed changes would enable NSCC to better identify, measure, monitor, and, through the collection of Members' Required Deposits, manage its credit exposures to Members by maintaining sufficient resources to cover those credit

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38 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i) and (v).

39 17 CFR 240.17Ad-22(e)(4)(i).

exposures fully with a high degree of confidence. Each of the additional calculations that NSCC is proposing to introduce to enhance its methodology for calculating a Member's VaR Charge would provide NSCC with a more effective measure of the risks these calculations were designed to assess, as described above. As such, the proposed enhancements to the calculation of the VaR Charge would permit NSCC to more effectively identify, measure, monitor and manage its exposures to market price risk, and would enable it to better limit its exposure to potential losses from Member default. The proposal to use the highest result of each of the calculations as among the Core Parametric Estimation, the Gap Risk Measure and the Portfolio Margin Floor, would enable NSCC to manage its credit exposures by allowing it to collect and maintain sufficient resources to cover those exposures fully and with a high degree of confidence.

Furthermore, removing the MMD Charge would enable NSCC to remove from the Clearing Fund calculations a component that is limited in scope and would allow it to address the risks presented by Net Unsettled Positions that are concentrated in certain securities more effectively by other Clearing Fund components and risk management measures.

Therefore, the proposal would enhance NSCC's ability to effectively identify, measure and monitor its credit exposures and would enhance its ability to maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. As such, NSCC believes the proposed changes are consistent with Rule 17Ad-22(e)(4)(i) under the Act.[40]

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40 Id.

Rule 17Ad-22(e)(6)(i) under the Act[41] requires, in part, that NSCC establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, at a minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market. Rule 17Ad-22(e)(6)(v) under the Act[42] requires, in part, that NSCC establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, at a minimum, uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products.

The Required Deposits are made up of risk-based components (as margin) that, that are calculated and assessed daily to limit NSCC's credit exposures to Members. NSCC's proposal to enhance the calculation of its VaR Charge in order to more effectively address market price volatility would permit it to produce margin levels that are commensurate with the particular risk attributes, including risks related to rapid changes in market price volatility levels due to gap risk events, or risks related to a unique composition of securities within a portfolio, as described above. For example, the use of an evenly-weighted volatility estimation utilizing the VaR model, as an additional calculation of the VaR Charge, which gives equal weight to a long historical data set, rather than more weight to recent observations, would permit NSCC to more effectively measure the risk of a rapid change in market price volatility. The addition of the Gap

41 17 CFR 240.17Ad-22(e)(6)(i).

42 17 CFR 240.17Ad-22(e)(6)(v).

Risk Measure and the Portfolio Margin Floor would also provide NSCC with additional measurements of the market price volatility of a Member's Net Unsettled Position, enabling NSCC to assess a VaR Charge that accounts for the risks those charges are designed to address, as described above.

Finally, NSCC is proposing to eliminate the MMD Charge because this component of the Clearing Fund has only a limited application and, as such, does not provide as effective a measurement of the risk presented by Net Unsettled Positions that are concentrated in certain securities as other proposed and existing risk management measures. Therefore, the proposal to eliminate this charge would enable NSCC to remove an unnecessary component from the Clearing Fund calculation, and would help NSCC to rely on an appropriate method of measuring its exposures to this risk.

The proposed changes are designed to assist NSCC in maintaining a risk-based margin system that considers, and produces margin levels commensurate with, the risks and particular attributes of portfolios that exhibit idiosyncratic risk attributes, are more susceptible to price volatility caused by to gap risk events, and contain concentrated Net Unsettled Positions. Therefore, NSCC believes the proposed change is consistent with Rule 17Ad-22(e)(6)(i) and (v) under the Act.[43]

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 that the proposed change was filed with the Commission or (ii) the date that any additional information requested

[43] 17 CFR 240.17Ad-22(e)(6)(i) and (v).

by the Commission is received. The clearing agency 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 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.

The clearing agency 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. Please include File Number SR-NSCC-2017-808 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-NSCC-2017-808. 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 NSCC and on DTCC's website (http://dtcc.com/legal/sec-rule-filings.aspx). 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-NSCC-2017-808 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

By the Commission.

Secretary

EXHIBIT 3a

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EXHIBIT 5

NATIONAL SECURITIES CLEARING CORPORATION

RULES & PROCEDURES

TEXT OF PROPOSED RULE CHANGE

Bold and underlined text indicates proposed added language.

~~**Bold and strikethrough**~~ text indicates proposed deleted language.

PROCEDURE XV. CLEARING FUND FORMULA AND OTHER MATTERS[1]

I.(A) Clearing Fund Formula for Members

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(1) For CNS Transactions

(a)(i) The volatility of such Member's net of unsettled Regular Way, When-Issued and When-Distributed pending positions (i.e., net positions that have not yet passed Settlement Date) and fail positions (i.e., net positions that did not settle on Settlement Date), hereinafter collectively referred to as Net Unsettled Positions**, which shall be the highest resultant value among the following:**

I. an estimation of volatility calculated ~~**Such calculation shall be made**~~ in accordance with any generally accepted portfolio volatility model including, but not limited to, any margining formula employed by any other clearing agency registered under Section 17A of the Securities Exchange Act of 1934, provided, however, that not less than two standard deviations' volatility shall be calculated under any model chosen. Such calculation shall be made utilizing **(1)** such assumptions and based on such historical data as the Corporation deems reasonable and shall cover such range of historical volatility as the Corporation from time to time deems appropriate**; and (2) each of the following estimations:**

A. an exponentially-weighted moving average volatility estimation using a decay factor of less than 1, and

B. an evenly-weighted volatility estimation using a look-back period of not less than 253 days.

The higher of the two estimations described in (A) and (B) above, shall be the "Core Parametric Estimation".

II. if the absolute value of the largest non-index position in the portfolio represents more than 30 percent of the value of the entire portfolio (the "concentration threshold"), an amount determined by multiplying the gross market value of such position by a percentage designated by the Corporation, which percentage shall be not less than 10 percent. Such percentage shall be determined by selecting the largest of the 1st and 99th percentiles of three-day returns of a

[1] All calculations shall be performed daily or, if the Corporation deems it appropriate, on a more frequent basis.

composite set of equities, using a look-back period of not less than 10 years that includes a one-year stress period,[2] and then rounding the result up to the nearest whole percentage.

The concentration threshold would be no more than 30 percent, and would be determined by the Corporation from time to time and calibrated based on the portfolio's backtesting results during a time period of not less than the previous 12 months.

III. the sum of:

A. the net directional market value of the portfolio, which shall be the absolute difference between the market value of the long positions and the short positions in the portfolio, multiplied by a percentage; such percentage shall be determined by the Corporation based on a percentile of the annual historical volatility levels of relevant equity indices (which shall be no less than the historical minimum volatility of the indices), as determined by the Corporation from time to time; and

B. the balanced market value of the portfolio, which shall be the lowest corresponding market value of long positions and short positions in the portfolio, multiplied by a percentage; such percentage shall be a fraction of the percentage used in (A) above, determined by the Corporation from time to time by considering the model backtesting performance of the applicable balanced portfolios.

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plus

(b) The net of each day's difference between (x) the contract price of such Member's Regular Way, When-Issued and When-Distributed net positions for transactions not submitted through the ID Net service that have not yet passed Settlement Date and its fail positions, and (y) the Current Market Price for such positions[~~2~~3] (such difference to be known as the "Regular Mark-to-Market"); provided that: (i) the Corporation shall exclude from this calculation any trades for which the Corporation has, under a Clearing Agency Cross-Guaranty Agreement, either obtained coverage for such difference (if the sum of the differences for the trades subject to the agreement is a positive number) or undertaken an obligation

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2 If the one-year stress period overlaps with the ten-year look-back, only the non-overlapping period will be combined with the look-back window.

~~2~~3 For fail positions, the contract price used for this purpose is the prior day's Market Price.

to provide coverage for such difference (if the sum of the differences for trades subject to the agreement is a negative number), (ii) the Corporation may, but shall not be required to, exclude from this calculation any shares delivered by the Member in the night cycle to satisfy all or any portion of a short position, and (iii) that if the Member is an ID Net Subscriber and if the value of the Regular Mark-to-Market as computed above is a positive number, then the value of the Regular Mark-to-Market shall be zero;

plus

(c) If such Member is an ID Net Subscriber, the net of each day's difference between (x) the contract price of the net positions attributable to such Member's transactions submitted through the ID Net service, and (y) the Current Market Price for such positions (such difference to be known as the "ID Net Mark-to-Market"), provided that if the value of the ID Net Mark-to-Market as computed above is a positive number, then the value of the ID Net Mark-to-Market shall be zero.

plus

~~**(d) If such Member clears for one or more Market Makers[4] (i.e., the Member's Correspondent(s)) or is itself a Market Maker in any security dominated by either the Member or its Correspondent(s) (where domination is calculated for each Member and each of its Correspondent(s) according to criteria determined by the Corporation from time to time), and if the sum of the absolute values of the Net Unsettled Positions in such dominated security or securities of any one or more of such Market Makers exceeds the excess net capital of the respective Market Maker or the Member (whether or not it is a Market Maker), (i.e., such Market Maker's or Member's Excess), the Corporation may then require the Member to contribute an additional Clearing Fund Deposit to the Corporation (the "Market Maker Domination Charge") either in an amount equal to each such Market Maker's or Member's Excess or the sum of each of the absolute values of the Net Unsettled Positions or a combination of both. In addition, where a Market Maker's Net Unsettled Positions in dominated issues are cleared by one or more Members, the Corporation may treat those positions, for purposes of calculations pursuant to this paragraph, as if they were all cleared by the Market Maker's clearing Member, as listed**~~

[4] ~~**As used in this Procedure, the term "Market Maker" shall mean a member firm of the Financial Industry Regulatory Authority, Inc. (FINRA) that is registered by the FINRA as a Market Maker.**~~

~~**in the records of the Corporation in accordance with Section 3(e) of Rule 3**~~[5]~~**;**~~

plus

(~~**e**~~**d**) An additional payment ("special charge") from Members in view of price fluctuations in or volatility or lack of liquidity of any security. The Corporation shall make any such determination based on such factors as the Corporation determines to be appropriate from time to time;

plus

(~~**f**~~**e**) 5% or such greater amount, as determined by the Corporation, not to exceed 10% of such Member's long fail CNS positions plus 5%, or such greater amount, as determined by the Corporation, not to exceed 10% of such Member's short fail CNS positions;

plus

(~~**g**~~**f**) a margin requirement differential component charge calculated as the sum of the exponentially weighted moving average ("EWMA") of the daily positive changes over a 100-day look back period in the Member's (i) Regular Mark-to-Market component, (ii) ID Net Mark-to-Market component and (iii) volatility component, times a multiplier calibrated based on backtesting results;

plus

(~~**h**~~**g**) a coverage component charge calculated as the EWMA of the Member's daily backtesting coverage deficiency amount over a 100-day look back period; the Member's backtesting deficiency amount for each day is determined as the difference between the simulated profit and loss on the Member's portfolio and the sum of the Member's (i) volatility component, (ii) margin requirement differential component~~,~~ **and** (iii) Illiquid Charge ~~**and (iv) Market Maker domination charge**~~.

plus

(~~**i**~~**h**) For Illiquid Positions, an amount ("Illiquid Charge") equal to:

(1) for buy positions in sub-penny Illiquid Securities, the aggregate shares in such positions multiplied by $0.01, or

(2) for sell positions,

~~5~~ ~~**The Corporation may require or permit such Member to deliver some or all shares necessary to complete a short obligation in lieu of part or all of its requirement under this section or subsection I.(A)(2)(c).**~~

(a) if the position has a Current Market Price equal to or below $1.00, the product of the aggregate quantity of Illiquid Securities in the position and either (i) the One Month High Price, or (ii) the Current Market Price of the Illiquid Securities in the position multiplied by a factor of between 2 and 10, based on the minimum share price, which shall not be less than $0.01; and

(b) if the position has a Current Market Price that is greater than $1.00, the product of the aggregate quantity of Illiquid Securities in the position and either (i) the One Month High Price, or (ii) the Current Market Price of the Illiquid Securities in the position rounded up to the next $0.50.

For purposes of (2)(a) and (b) above, in determining whether to use the One Month High Price or the Current Market Price of the Illiquid Securities in the Illiquid Position,

(A) if the share quantity in the Illiquid Position is less than 100 percent and greater than or equal to 25 percent of the average daily volume ("ADV"), the calculation shall use the lesser of the One Month High Price or the Current Market Price of the Illiquid Securities (rounded up to the next $0.50, if applicable); and

(B) if the share quantity in the Illiquid Position is greater than or equal to 100 percent of the ADV, the calculation shall use the greater of the One Month High Price or the Current Market Price of the Illiquid Securities (rounded up to the next $0.50, if applicable).

~~**The Corporation shall apply the greater of the Illiquid Charge or the Market Maker Domination Charge if it determines that the Illiquid Position is subject to both charges.**~~ Members that are not rated by the credit risk matrix are not subject to the Illiquid Charge.

(2) For Balance Order Transactions

(a)(i)The volatility of such Member's net of unsettled Regular Way, When-Issued and When-Distributed positions that have not yet passed Settlement Date, hereinafter collectively referred to as Net Balance Order Unsettled Positions**, which shall be the highest resultant value among the following:**

I. an estimation of volatility calculated ~~**Such calculation shall be made**~~ in accordance with any generally accepted portfolio volatility model, including, but not limited to, any margining formula employed by any other clearing agency registered under Section 17A of the Securities Exchange Act of 1934, provided, however, that not less than two standard deviations' volatility shall be calculated under any model chosen. Such calculation shall be made utilizing (1) such assumptions and based on such historical data as the Corporation deems reasonable and shall cover such range of historical volatility as the Corporation from time to time deems appropriate; and (2) each of the following estimations:

A. an exponentially-weighted moving average volatility estimation using a decay factor of less than 1, and

B. an evenly-weighted volatility estimation using a look-back period of not less than 253 days.

The higher of the two estimations described in (A) and (B) above, shall be the "Core Parametric Estimation".

II. if the absolute value of the largest non-index position in the portfolio represents more than 30 percent of the value of the entire portfolio (the "concentration threshold"), an amount determined by multiplying the gross market value of such position by a percentage designated by the Corporation, which percentage shall be not less than 10 percent. Such percentage shall be determined by selecting the largest of the 1st and 99th percentiles of three-day returns of a composite set of equities, using a look-back period of not less than 10 years that includes a one-year stress period,[6] and then rounding the result up to the nearest whole percentage.

The concentration threshold would be no more than 30 percent, and would be determined by the Corporation from time to time and calibrated based on the portfolio's backtesting results during a time period of not less than the previous 12 months.

III. the sum of:

A. the net directional market value of the portfolio, which shall be the absolute difference between the market value of the long positions and the short positions in the portfolio, multiplied by a percentage; such percentage shall be determined by the Corporation based on a percentile of the annual historical volatility levels of relevant equity indices (which shall be no less than the historical minimum volatility of the indices), as determined by the Corporation from time to time; and

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[6] If the one-year stress period overlaps with the ten-year look-back, only the non-overlapping period will be combined with the look-back window.

B. the balanced market value of the portfolio, which shall be the lowest corresponding market value of long positions and short positions in the portfolio, multiplied by a percentage; such percentage shall be a fraction of the percentage used in (A) above, determined by the Corporation from time to time by considering the model backtesting performance of the applicable balanced portfolios.

plus

(b) The net of each day's difference between the contract price of such Member's Net Balance Order Unsettled Positions, and the Current Market Price for such positions;

~~**plus**~~

~~**(c) If such Member clears for one or more Market Makers (i.e., the Member's Correspondent(s)) or is itself a Market Maker in any security dominated by either the Member or its Correspondent(s) (where domination is calculated for each Member and each of its Correspondent(s) according to criteria determined by the Corporation from time to time), and if the sum of the absolute values of the Net Balance Order Unsettled Positions in such dominated security or securities of any one or more of such Market Makers exceeds the excess net capital of the respective Market Maker or the Member (whether or not it is a Market Maker), (i.e., such Market Maker's or Member's Excess), the Corporation may then require the Member to contribute the Market Maker Domination Charge either in an amount equal to each such Market Maker's or Member's Excess or the sum of each of the absolute values of the Net Balance Order Unsettled Positions or a combination of both. In addition, where a Market Maker's Net Balance Order Unsettled Positions in dominated issues are cleared by one or more Members, the Corporation may treat those positions, for purposes of calculations pursuant to this paragraph, as if they were all cleared by the Market Maker's clearing Member, as listed in the records of the Corporation in accordance with Section 3(e) of Rule 3;**~~

plus

(~~**d**~~**c**) An additional payment ("special charge") from Members in view of price fluctuations in or volatility or lack of liquidity of any security. The Corporation shall make any such determination based on such factors as the Corporation determines to be appropriate from time to time;

plus

(~~e~~**d**) a margin requirement differential component charge calculated as the sum of the EWMA of the daily positive changes over a 100-day look back period in the Member's (i) Regular Mark-to-Market component and (ii) volatility component, times a multiplier calibrated based on backtesting results;

plus

(~~f~~**e**) a coverage component charge calculated as the EWMA of the Member's daily backtesting coverage deficiency amount over a 100-day look back period; the Member's backtesting deficiency amount for each day is determined as the difference between the simulated profit and loss on the Member's portfolio and the sum of the Member's (i) volatility component, (ii) margin requirement differential component~~,~~ **and** (iii) Illiquid Charge ~~and (iv) Market Maker domination charge~~.

plus

(~~g~~**f**) For Illiquid Positions, an Illiquid Charge equal to:

(1) for buy positions in sub-penny Illiquid Securities, the aggregate shares in such positions multiplied by $0.01, or

(2) for sell positions,

(a) if the position has a Current Market Price equal to or below $1.00, the product of the aggregate quantity of Illiquid Securities in the position and either (i) the One Month High Price, or (ii) the Current Market Price of the Illiquid Securities in the position multiplied by a factor of between 2 and 10, based on the minimum share price, which shall not be less than $0.01; and

(b) if the position has a Current Market Price that is greater than $1.00, the product of the aggregate quantity of Illiquid Securities in the position and either (i) the One Month High Price, or (ii) the Current Market Price of the Illiquid Securities in the position rounded up to the next $0.50.

For purposes of (2)(a) and (b) above, in determining whether to use the One Month High Price or the Current Market Price of the Illiquid Securities in the Illiquid Position,

(A) if the share quantity in the Illiquid Position is less than 100 percent and greater than or equal to 25 percent of the ADV, the calculation shall use the lesser of the One Month High Price or the Current Market Price of the Illiquid Securities (rounded up to the next $0.50, if applicable); and

(B) if the share quantity in the Illiquid Position is greater than or equal to 100 percent of the ADV, the calculation shall use the greater of the One Month High Price or the Current Market Price of the Illiquid Securities (rounded up to the next $0.50, if applicable).

~~**The Corporation shall apply the greater of the Illiquid Charge or the Market Maker Domination Charge if it determines that the Illiquid Position is subject to both charges.**~~ Members that are not rated by the credit risk matrix are not subject to the Illiquid Charge.

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I.(B) Additional Clearing Fund Formula

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(2) Excess Capital Premium

If a Member's contribution to the Clearing Fund, as computed pursuant to Section I.(A) of this Procedure (but excluding any charges as set forth in Subsections I.(A)(1)(d), ~~**(e),**~~ (~~**g**~~<u>**f**</u>) and (~~**h**~~<u>**g**</u>), and I.(A)(2)(c), (d)~~,~~ <u>**and**</u> (e) ~~**and (f)**~~ of this Procedure), plus any amount collected pursuant to 1.(B)(1) above or Rule 15 (such aggregate amount referred to as the "Calculated Amount"), when divided by its excess net capital or capital (as applicable), as defined in the membership standards set forth in Addendum B, is greater than 1.0 (the "Excess Capital Ratio"), then the Corporation may require such Member to deposit, within such timeframe as the Corporation may require, an additional amount (the "Excess Capital Premium") to the Clearing Fund equal to the product of: (a) the amount by which the Calculated Amount exceeds its excess net capital or capital (as applicable), as defined in the membership standards set forth in Addendum B, multiplied by (b) its Excess Capital Ratio.