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| | TIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4 Ame | File No.* SR - 2020 - * 804 ndment No. (req. for Amendments *) | | |
| Filing by National Securities Clearing Corporation Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934 | | | | |
| Initial * Amendment * Withdraw | ral Section 19(b)(2) * Section | on 19(b)(3)(A) * Section 19(b)(3)(B) * | | |
| Pilot Extension of Time Period for Commission Action * | pires * | a 19b-4(f)(2) b 19b-4(f)(5) | | |
| Notice of proposed change pursuant to the Payn | | 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 *). Introduce the Margin Liquidity Adjustment Charge and Include a Bid-Ask Risk Charge in the VaR 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 07/30/2020 By Nikki Poulos | (Title *) Managing Director and Deputy G | eneral Counsel | | |
| (Name *) NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed. | | | | |

| SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 | | | |
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| 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 * | 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 CopiesAddRemoveView | 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. | | |
| 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) The advance notice of National Securities Clearing Corporation ("NSCC") is annexed hereto as Exhibit 5 and consists of modifications to NSCC's Rules & Procedures ("Rules") to (1) introduce a new component of the Clearing Fund, the Margin Liquidity Adjustment ("MLA") charge, and (2) enhance the calculation of the volatility component of the Clearing Fund formula that utilizes a parametric Value-at-Risk ("VaR") model (defined for purposes of this filing as the "VaR Charge," and described in more detail in Item 10(i) below) by including a bid-ask spread risk charge, as described in greater detail below.¹

- (b) Not applicable.
- (c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposal to introduce an MLA charge was approved by the Risk Committee of the Board of Directors on September 12, 2017, October 16, 2018 and February 18, 2020, and the proposal to enhance the VaR Charge was approved by the Risk Committee of the Board of Directors on April 12, 2019.

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 Securities and Exchange Commission ("Commission") of any written comments received by NSCC.

6. Extension of Time Period for Commission Action

Not applicable.

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

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 Change

NSCC is proposing to enhance its Clearing Fund methodology by (1) introducing a new component, the MLA charge, which would be calculated to address the risk presented to NSCC when a Member's portfolio contains large Net Unsettled Positions² in a particular group of securities with a similar risk profile or in a particular asset type (referred to as "asset groups"), and (2) enhancing the calculation of the VaR Charge by including a bid-ask spread risk charge, as described in more detail below.³

² "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, and are referred to collectively in this filing as Net Unsettled Positions. <u>See</u> Procedure XV (Clearing Fund Formula and Other Matters) of the Rules, <u>id.</u>

³ The results of a study of the potential impact of adopting the proposed changes have been provided to the Commission and are annexed hereto as Exhibit 3a.

(i) Overview of the Required Fund 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 Fund Deposits to the Clearing Fund and monitoring its sufficiency, as provided for in the Rules.⁴ The Required Fund Deposit serves as each Member's margin.

The objective of a Member's Required Fund Deposit is to mitigate potential losses to NSCC associated with liquidating a Member's portfolio in the event NSCC ceases to act for that Member (hereinafter referred to as a "default").⁵ The aggregate of all Members' Required Fund Deposits constitutes the Clearing Fund of NSCC. NSCC would access its Clearing Fund should a defaulting Member's own Required Fund Deposit be insufficient to satisfy losses to NSCC caused by the liquidation of that Member's portfolio.

Pursuant to the Rules, each Member's Required Fund 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.⁶ The volatility component of each Member's Required Fund 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,⁷ and usually comprises the largest portion of a Member's Required Fund 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

⁶ <u>Supra</u> note 1.

⁴ <u>See</u> Rule 4 (Clearing Fund) and Procedure XV (Clearing Fund Formula and Other Matters), <u>supra</u> 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 ("Act"), where these risks are referred to as "credit risks." 17 CFR 240.17Ad-22(e)(4).

⁵ The Rules identify when NSCC may cease to act for a Member and the types of actions NSCC 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. <u>See</u> Rule 46 (Restrictions on Access to Services) of the Rules, <u>supra</u> note 1.

As described in Procedure XV, Section I(A)(1)(a)(ii), (iii) and (iv), and Section I(A)(2)(a)(ii), (iii) and (iv) 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.

based on historical data as NSCC deems reasonable and a volatility range that NSCC deems appropriate.⁸

NSCC regularly assesses market and liquidity risks as such risks relate to its margining methodologies to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market. The proposed changes to include the MLA charge to its Clearing Fund methodology and to enhance the VaR Charge by including a bid-ask spread risk charge, as described below, are the result of NSCC's regular review of the effectiveness of its margining methodology.

(ii) Overview of Liquidation Transaction Costs and Proposed Changes

Each of the proposed changes addresses a similar, but separate, risk that NSCC faces increased transaction costs when it liquidates the Net Unsettled Positions of a defaulted Member due to the unique characteristics of that Member's portfolio. The transaction costs to NSCC to liquidate a defaulted Member's portfolio include both market impact costs and fixed costs. Market impact costs are the costs due to the marketability of a security, and generally increase when a portfolio contains large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type, as described more below. Fixed costs are the costs that generally do not fluctuate and may be caused by the bid-ask spread of a particular security. The bid-ask spread of a security accounts for the difference between the observed market price that a buyer is willing to pay for that security and the observed market price that a seller is willing to sell that security.

The transaction cost to liquidate a defaulted Member's portfolio is currently captured by the measurement of market risk through the calculation of the applicable volatility charge.⁹ The proposed changes would supplement and enhance the current measurement of this market risk to address situations where the characteristics of the defaulted Member's portfolio could cause these costs to be higher than the amount collected for the applicable volatility charge.

⁸ Procedure XV, Section I(A)(1)(a)(i) and Section I(A)(2)(a)(i) of the Rules, <u>supra</u> note 1.

⁹ The calculation of the VaR Charge and the haircut-based volatility charge are described in Sections I.(A)(1)(a) and I.(A)(2)(a) of Procedure XV of the Rules. <u>Supra</u> note 1. The methodologies for these calculations and how they are designed to address risks faced by NSCC have been described in recent proposed rule change and advance notice filings. <u>See</u> Securities Exchange Act Release Nos. 82780 (February 26, 2018), 82 FR 9035 (March 2, 2018) (File No. SR-NSCC-2017-808); 82781 (February 26, 2018), 82 FR 9042 (March 2, 2018) (File No. SR-NSCC-2017-020).

First, as described in more detail below, the MLA charge is designed to address the market impact costs of liquidating a defaulted Member's portfolio that may increase when that portfolio includes large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type. These positions may be more difficult to liquidate because a large number of securities with similar risk profiles could reduce the marketability of those large Net Unsettled Positions, increasing the market impact costs to NSCC. As described below, the MLA charge would supplement the applicable volatility charge.

Second, as described in more detail below, the bid-ask spread risk charge would address the risk that the transaction costs of liquidating a defaulted Member's Net Unsettled Positions may increase due to the fixed costs related to the bid-ask spread. As described below, this proposed change would be incorporated into, and, thereby, enhance the current measure of transaction costs through, the VaR Charge.

(iii) Proposed Margin Liquidity Adjustment Charge

In order to address the risks of an increased market impact cost presented by portfolios that contain large Net Unsettled Positions in the same asset group, NSCC is proposing to introduce a new component to the Clearing Fund formula, the MLA charge.

As noted above, a Member portfolio with large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type may be more difficult to liquidate in the market in the event the Member defaults because a concentration in that group of securities or in an asset type could reduce the marketability of those large Net Unsettled Positions. Therefore, such portfolios create a risk that NSCC may face increased market impact cost to liquidate that portfolio in the assumed margin period of risk of three business days at market prices.

The proposed MLA charge would be calculated to address this increased market impact cost by assessing sufficient margin to mitigate this risk. As described below, the proposed MLA charge would be calculated for different asset groups, and subgroups for the equities asset group. Essentially, the calculation is designed to compare the total market value of a Net Unsettled Position in a particular asset group or subgroup, which NSCC would be required to liquidate in the event of a Member default, to the available trading volume of that asset group or equities subgroup in the market.¹⁰ If the market value of the Net Unsettled Position is large, as compared to the available trading volume of that asset group, then there is an increased risk that NSCC would face additional market impact costs in liquidating that position in the event of a Member default. Therefore, the proposed calculation would provide NSCC with a measurement of the possible increased market impact cost that NSCC could face when it liquidates a large Net Unsettled Position in a particular asset group or subgroup.

¹⁰ NSCC would determine average daily trading volume by reviewing data that is made publicly available by the Securities Industry and Financial Markets Association ("SIFMA"), at https://www.sifma.org/resources/archive/research/statistics.

Rather than calculate the market impact cost for each CUSIP, NSCC's MLA charge would estimate market impact cost at the portfolio-level using aggregated CUSIP-level volume data. For example, as described in greater detail below, the calculation of market impact cost would include a measurement of the gross market value of the portfolio. Given the vast number of CUSIPs processed by NSCC, this approach is simpler and is expected to result in more predicable calculations of the MLA charge.

To calculate the MLA charge, NSCC would categorize securities into separate asset groups, which have similar risk profiles – (1) equities¹¹ (excluding equities defined as Illiquid Securities pursuant to the Rules¹²), (2) Illiquid Securities, (3) unit investment trusts, or UITs, (4) municipal bonds (including municipal bond exchange-traded products, or "ETPs"), and (5) corporate bonds (including corporate bond ETPs). NSCC would then further segment the equities asset group into the following subgroups: (i) micro-capitalization equities, (ii) small capitalization equities, (iii) medium capitalization equities, (iv) large capitalization equities, (v) treasury ETPs, and (vi) all other ETPs.¹³

NSCC would first calculate a measurement of market impact cost for each asset group and equities subgroup for which a Member has Net Unsettled Positions in its portfolio. As described above, the calculation of an MLA charge is designed to measure the potential additional market impact cost to NSCC of closing out a large Net Unsettled Position in that particular asset group or equities subgroup.

¹¹ NSCC would exclude long positions in Family-Issued Securities, as defined in Rule 1 (Definitions) of the Rules, from the MLA charge. NSCC believes the margin charge applicable to long Net Unsettled Positions in Family-Issued Securities pursuant to Sections I.(A)(1)(a)(iv) and (2)(a)(iv) of Procedure XV of the Rules provides adequate mitigation of the risks presented by those Net Unsettled Positions, such that an MLA charge would not be triggered. <u>Supra</u> note 1.

¹² <u>See Rule 1 (Definitions), supra note 1.</u>

¹³ Initially, the market capitalization categorizations would be: (i) micro-capitalization equities would be less than \$300 million, (ii) small capitalization equities would be equal to or greater than \$200 million and less than \$2 billion, (iii) medium capitalization equities would be equal to or greater than \$2 billion and less than \$10 billion, and (iv) large capitalization equities would be equal to or greater than \$10 billion. In determining the range of these market capitalization categorizations, NSCC would consult publications issued by sources it deems appropriate. NSCC would review these categories annually and any changes that NSCC deems appropriate would be subject to NSCC's model risk management governance procedures set forth in the Clearing Agency Model Risk Management Framework ("Model Risk Management Framework"). See Securities Exchange Act Release Nos. 81485 (August 25, 2017), 82 FR 41433 (August 31, 2017) (File No. SR-NSCC-2017-008); 84458 (October 19, 2018), 83 FR 53925 (October 25, 2018) (File No. SR-NSCC-2018-009); 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (File No. SR-NSCC-2020-008).

Market Impact Cost Calculation for Market Capitalization Subgroups of Equities Asset Group

The market impact cost for each Net Unsettled Position in a market capitalization subgroup of the equities asset group would be calculated by multiplying four components: (1) an impact cost coefficient that is a multiple of the one-day market volatility of that subgroup and is designed to measure impact costs, (2) the gross market value of the Net Unsettled Position in that subgroup, (3) the square root of the gross market value of the Net Unsettled Position in that subgroup in the portfolio measured as a percentage of the average daily trading volume of that subgroup (as described in greater detail below), and (4) a measurement of the concentration of the Net Unsettled Position in that subgroup in the portfolio (as described in greater detail below).¹⁴

NSCC represents that its measurement of the gross market value of the Net Unsettled Position would be calculated using the gross market value of the portfolio, divided by the average daily trading volume of that subgroup multiplied by an assumed percentage of available market volume for that subgroup. NSCC also represents that its measurement of the concentration of the Net Unsettled Position in the portfolio would include aggregating the relative weight of each CUSIP in that Net Unsettled Position relative to the weight of that CUSIP in the subgroup, such that a portfolio with fewer positions in a subgroup would have a higher measure of concentration for that subgroup.¹⁵

Market Impact Cost Calculation for the Other Asset Groups and Equities Subgroups

The market impact cost for Net Unsettled Positions in the municipal bond, corporate bond, Illiquid Securities and UIT asset groups and for Net Unsettled Positions in the treasury ETP and other ETP subgroups of the equities asset group would be calculated by multiplying three components: (1) an impact cost coefficient that is a multiple of the one-day market volatility of that asset group or subgroup, (2) the gross market value of the Net Unsettled Position in that asset group or subgroup, and (3) the square root of the gross market value of the Net Unsettled Position in that asset group or subgroup in the portfolio measured as a percentage of the average trading volume of that asset group or subgroup.¹⁶

As noted above, NSCC represents that the measurement of the market value of the Net Unsettled Position would be calculated using the gross market value of the portfolio, divided by the average daily trading volume of that asset group or subgroup multiplied by an assumed percentage of available market volume for that asset group or subgroup.

¹⁴ <u>See supra note 10.</u>

¹⁵ The relative weight would be calculated by dividing the absolute market value of a single CUSIP in the Member's portfolio by the total absolute market value of that portfolio.

¹⁶ See supra note 10.

Total MLA Charge Calculation for Each Portfolio

For each asset group or subgroup, NSCC would compare the calculated market impact cost to a portion of the volatility charge that is allocated to Net Unsettled Positions in that asset group or subgroup (as determined by Sections I.(A)(1)(a) and I.(A)(2)(a) of Procedure XV of the Rules).¹⁷ If the ratio of the calculated market impact cost to the applicable 1-day volatility charge is greater than a threshold, an MLA charge would be applied to that asset group or subgroup.¹⁸ If the ratio of these two amounts is equal to or less than this threshold, an MLA charge would not be applied to that asset group or subgroup. The threshold would be based on an estimate of the market impact cost that is incorporated into the calculated market impact cost exceeds this threshold.

For each Member portfolio, NSCC would add the MLA charges for Net Unsettled Positions in each of the subgroups of the equities asset group to determine an MLA charge for the Net Unsettled Positions in the equities asset group. NSCC would then add the MLA charge for Net Unsettled Positions in the equities asset group with each of the MLA charges for Net Unsettled Positions in the other asset groups to determine a total MLA charge for a Member.

The ratio of the calculated market impact cost to the 1-day volatility charge would also determine if NSCC would apply a downward adjustment, based on a scaling factor, to the total MLA charge, and the size of any adjustment. For Net Unsettled Positions that have a higher ratio of calculated market impact cost to the 1-day volatility charge, NSCC would apply a larger adjustment to the MLA charge by assuming that it would liquidate that position on a different timeframe than the assumed margin period of risk of three business days. For example, NSCC may be able to mitigate potential losses associated with liquidating a Member's portfolio by liquidating a Net Unsettled Position with a larger volatility charge over a longer timeframe. Therefore, when applicable, NSCC would apply a multiplier to the calculated MLA charge. When the ratio of calculated market impact cost to the 1-day volatility charge is lower, the multiplier would be one, and no adjustment would be applied; as the ratio gets higher the multiplier decreases and the MLA charge is adjusted downward.

¹⁷ Supra note 1. NSCC's margining methodology uses a three-day assumed period of risk. For purposes of this calculation, NSCC would use a portion of the applicable volatility charge that is based on one-day assumed period of risk and calculated by applying a simple square-root of time scaling, referred to in this proposed rule change as "1-day volatility charge." Any changes that NSCC deems appropriate to this assumed period of risk would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework. See supra note 13.

¹⁸ Initially, the threshold would be 0.4, because, currently, approximately 40 percent of the 1-day volatility charge addresses market impact costs. NSCC would review this threshold from time to time and any changes that NSCC deems appropriate would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework. <u>See id</u>.

The final MLA charge would be calculated daily and, when the charge is applicable, as described above, would be included as a component of Members' Required Fund Deposit.

Proposed Changes to NSCC Rules

The proposal described above would be implemented into Procedure XV of the NSCC Rules. Specifically, the proposed changes to Procedure XV would describe the calculation of the MLA charge in a new subsection (i) of Section I(A)(1) and a new subsection (g) of Section I(A)(2).

These new subsections would first identify each of the asset groups and subgroups. The proposed new subsections would then separately describe the two calculations of market impact cost for these asset groups and subgroups by identifying the components of these calculations. The new subsections would state that NSCC would compare the calculated market impact cost to a portion of that Member's volatility charge, to determine if an MLA charge would be applied to an asset group or subgroup. The new subsections would then state that NSCC would add each of the applicable MLA charges calculated for each asset group together. Finally, the new subsections would state that NSCC may apply a downward adjusting scaling factor to result in a final MLA charge.

NSCC would also amend Section I(B)(2) of Procedure VX, which describes the Excess Capital Premium charge, to add the MLA charge to the list of Clearing Fund components that are excluded from the calculation of the Excess Capital Premium charge.¹⁹ The Excess Capital Premium is imposed on a Member when the Member's Required Fund Deposit exceeds its excess net capital. NSCC believes that including the MLA charge in the calculation of the Excess Capital Premium could lead to more frequent and unnecessary Excess Capital Premium charges. This is not the intended purpose of the Excess Capital Premium charge and could place an unnecessary burden on Members.

(iv) Proposed Bid-Ask Spread Risk Charge

NSCC has identified potential risk that its margining methodologies do not account for the transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio. Bid-ask spreads account for the difference between the observed market price that a buyer is willing to pay for a security and the observed market price that a seller is willing to sell that security. Therefore, NSCC is proposing to include a bid-ask spread risk charge in the VaR Charge to address this risk.

In order to calculate this charge, NSCC would segment Member's portfolios into four bid-ask spread risk classes: (i) large and medium capitalization equities, (ii) small capitalization equities, (iii) micro capitalization equities, and (iv) ETPs.²⁰

¹⁹ <u>See Section I.(B)(2) of Procedure XV of the Rules.</u> <u>Supra note 1.</u>

 $[\]frac{20}{20}$ See <u>supra</u> note 13.

Each risk class would be assigned a specific bid-ask spread haircut rate in the form of a basis point charge that would be applied to the gross market value in that particular risk class. The applicable bid-ask spread risk charge would be the product of the gross market value in a particular risk class in the Member's portfolio and the applicable basis point charge. The bid-ask spread risk charge would be calculated at the portfolio level, such that NSCC would aggregate the bid-ask spread risk charges of the applicable risk classes for the Member's portfolio.

NSCC proposes to review the haircut rates annually based on either the analysis of liquidation transaction costs related to the bid-ask spread that is conducted in connection with its annual simulation of a Member default or market data that is sourced from a third-party data vendor. Based on the analyses from recent years' simulation exercises, NSCC does not anticipate that these haircut rates would change significantly year over year. NSCC may also adjust the haircut rates following its annual model validation review, to the extent the results of that review indicate the current haircut rates are not adequate to address the risk presented by transaction costs from a bid-ask spread.²¹

The proposed initial haircuts are based on the analysis from the most recent annual default simulation and market data sourced from a third-party data vendor, and are listed in the table below:

| Class | Haircut (bps) |
|--|---------------|
| Large and Medium Capitalization Equities | 5.0 |
| Small Capitalization Equities | 12.3 |
| Micro Capitalization Equities | 23.1 |
| ETPs | 1.5 |

Proposed Changes to NSCC Rules

The proposal described above would be implemented into Procedure XV of the NSCC Rules. Specifically, NSCC would amend subsection (a)(i)(I) of Sections I(A)(1) and I(A)(2) of Procedure XV by stating that the calculations of the estimations of volatility described in these Sections shall include an additional bid-ask spread risk charge measured by multiplying the gross market value of each Net Unsettled Position by a basis point charge. The proposed change to this subsection would also state that the basis point charge would be based on four risk classes and would identify those risk classes.

²¹ All proposed changes to the haircuts would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework. <u>See id</u>.

(v) Implementation Timeframe

NSCC would implement the proposed changes no later than 10 Business Days after the later of the no objection to the advance notice and approval of the related proposed rule change²² by the Commission. NSCC would announce the effective date of the proposed changes by Important Notice posted to its website.

Anticipated Effect on and Management of Risk

NSCC believes that the proposed changes to enhance the margining methodology as described above would enable NSCC to better limit its risk exposures to Members arising out of their Net Unsettled Positions.

As stated above, the proposed MLA charge is designed to help limit NSCC's exposures to the risks presented by a Member portfolio that contains large Net Unsettled Positions in securities of the same asset group, and would enhance NSCC's ability to address risks related to liquidating such positions in the event of a Member default. The proposed MLA charge would allow NSCC to collect sufficient financial resources to cover its exposure that it may face increased market impact costs in liquidating Net Unsettled Positions that is not captured by the applicable volatility charge.

The proposal to enhance the VaR Charge by including a bid-ask spread risk charge is also designed to help limit NSCC's exposures to the risks related to increased transaction costs due to the bid-ask spread in the market that could be incurred when liquidating a portfolio. Therefore, this proposed change would also help address NSCC's risks related to its ability to liquidate such positions in the event of a Member default.

By providing NSCC with a more effective measurement of its exposures, the proposed changes 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.

²² NSCC filed this advance notice as a proposed rule change (File No. SR-NSCC-2020-016) 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 <u>available at http://www.dtcc.com/legal/sec-rule-filings.aspx.</u>

Consistency with Clearing Supervision Act

NSCC believes that the proposals are consistent with 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"), specifically with the risk management objectives and principles of Section 802(b), and with certain of the risk management standards adopted by the Commission pursuant to Section 805(a)(2), for the reasons described below.²³

(i) Consistency with Section 805(b) of 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.²⁴

NSCC believes the proposals 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.

First, the proposal would include the MLA charge as an additional component to the Clearing Fund. As described above, this new margin charge is designed to address the market impact costs of liquidating a defaulted Member's portfolio that may increase when that portfolio includes large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type. These positions may be more difficult to liquidate in the market because a concentrating in that group of securities or in an asset type could reduce the marketability of those large Net Unsettled Positions, increasing the market impact costs to NSCC. The proposed MLA charge would allow NSCC to collect sufficient financial resources to cover its exposure that it may face increased market impact costs in liquidating Net Unsettled Positions that is not captured by the applicable volatility charge.

Second, the proposed bid-ask spread risk charge is designed to help limit NSCC's exposures to the risks related to increased transaction costs due to the bid-ask spread in the market that could be incurred when liquidating a portfolio. As stated above, this proposal would also help address NSCC's risks related to its ability to liquidate such positions in the event of a Member default.

Therefore, because the proposals are designed to enable NSCC to better limit its exposure to Members in the event of a Member default, NSCC believes they are consistent with promoting robust risk management. The proposals would also strengthen the liquidity of NSCC by

²³ 12 U.S.C. 5464(a)(2) and (b)(1).

²⁴ 12 U.S.C. 5464(b)(1).

requiring deposits to the Clearing Fund that are calculated to address the potential risks NSCC may face, which is one of NSCC's default liquidity resources.

As a result, NSCC believes the proposals would be consistent with the objectives and principles of Section 805(b) of the Clearing Supervision Act, which specify the promotion of robust risk management, promotion of safety and soundness, reduction of systemic risks and support of the stability of the broader financial system by, among other things, strengthening the liquidity of systemically important financial market utilities, such as NSCC.

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

Section 805(a)(2) of the Clearing Supervision Act 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.²⁵ The Commission has accordingly adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act²⁶ and Section 17A of the Act ("Covered Clearing Agency Standards").²⁷ The Covered Clearing Agency Standards require covered 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.²⁸

NSCC believes that the proposed changes are consistent with Rules 17Ad-22(e)(4)(i) and (e)(6)(i) of the Covered Clearing Agency Standards²⁹ for the reasons described below.

Rule 17Ad-22(e)(4)(i) under the Act 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.³⁰

As described above, NSCC believes that both of the proposed changes would enable it to better identify, measure, monitor, and, through the collection of Members' Required Fund

- ²⁶ <u>Id.</u>
- ²⁷ 17 CFR 240.17Ad-22(e).
- ²⁸ <u>Id.</u>
- ²⁹ 17 CFR 240.17Ad-22(e)(4)(i), (e)(6)(i).
- ³⁰ 17 CFR 240.17Ad-22(e)(4)(i).

²⁵ 12 U.S.C. 5464(a)(2).

Deposits, manage its credit exposures to Members by maintaining sufficient resources to cover those credit exposures fully with a high degree of confidence.

Specifically, NSCC believes that the proposed MLA charge would effectively mitigate the risks related to large Net Unsettled Positions of securities in the same asset group within a portfolio and would address the potential increased risks NSCC may face related to its ability to liquidate such positions in the event of a Member default.

Therefore, NSCC believes that 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.³¹

Additionally, NSCC believes that the proposed bid-ask spread risk charge would enhance NSCC's ability to identify, measure, monitor and manage its credit exposures to Members and those exposures arising from its payment, clearing, and settlement processes because the proposed changes would better ensure that NSCC maintains sufficient financial resources to cover its credit exposure to each Member with a high degree of confidence. NSCC believes that the proposed change would enable NSCC to more effectively identify, measure, monitor and manage its exposures to risks related to market price, and enable it to better limit its exposure to potential losses from Member defaults by providing a more effective measure of the risks related to market price. As described above, due to the bid-ask spread in the market, there is an observable transaction cost to liquidate a portfolio. The proposed bid-ask spread risk charge is designed to manage the risk related to this transaction cost in the event a Member's portfolio is liquidated. As such, NSCC believes that the proposed change would better address the potential risks that NSCC may face that are related to its ability liquidate a Member's Net Unsettled Positions in the event of that firm's default, and thereby 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. In this way, NSCC believes this proposed change is also consistent with Rule 17Ad-22(e)(4)(i) under the Act.³²

Rule 17Ad-22(e)(6)(i) under the Act 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.³³

³¹ <u>Id.</u>

³² <u>Id.</u>

³³ 17 CFR 240.17Ad-22(e)(6)(i).

The Required Fund Deposits are made up of risk-based components (as margin) that are calculated and assessed daily to limit NSCC's credit exposures to Members, including the VaR Charge. NSCC's proposed change to introduce an MLA charge is designed to more effectively address the risks presented by large Net Unsettled Positions in the same asset group. NSCC believes the addition of the MLA charge would enable NSCC to assess a more appropriate level of margin that accounts for these risks. This proposed change is 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 contain large Net Unsettled Positions in the same asset group and may be more difficult to liquidate in the event of a Member default. Therefore, NSCC believes the proposed change is consistent with Rule 17Ad-22(e)(6)(i) under the Act.³⁴

Furthermore, NSCC believes that including the bid-ask spread risk charge within the calculation of the final VaR Charge would provide NSCC with a better assessment of its risks related to market price. This proposed change would enable NSCC to assess a more appropriate level of margin that accounts for this risk at the portfolio level. As such, each Member portfolio would be subject to a risk-based margining system that, at minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market, consistent with Rule 17Ad-22(e)(6)(i) under the Act.³⁵

11. Exhibits

Exhibit 1 – Not applicable.

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

Exhibit 2 – Not applicable.

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

Exhibit 3b – NSCC Methodology Document, NSCC Margin Liquidity Adjustment. Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3b pursuant to 17 CFR 240.24b-2 being requested.

Exhibit 3c – NSCC Methodology Document, Bid-Ask Spread Risk Charge. Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3c pursuant to 17 CFR 240.24b-2 being requested.

³⁵ <u>Id.</u>

³⁴ <u>Id.</u>

Exhibit 3d – Responses to SEC Information Requests. Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3d pursuant to 17 CFR 240.24b-2 being requested.

Exhibit 4 – Not applicable.

Exhibit 5 – Proposed changes to the Rules.

EXHIBIT 1A

SECURITIES AND EXCHANGE COMMISSION (Release No. 34-[____]; File No. SR-NSCC-2020-804)

[DATE]

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing of Advance Notice to Introduce the Margin Liquidity Adjustment Charge and Include a Bid-Ask Risk Charge in the VaR 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 ("Act"),² notice is hereby given that on July __, 2020, National Securities Clearing Corporation ("NSCC") filed with the Securities and Exchange Commission ("Commission") the advance notice SR-NSCC-2020-804 ("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.

¹ 12 U.S.C. 5465(e)(1).

² 17 CFR 240.19b-4(n)(1)(i).

³ On July __, 2020, NSCC filed this Advance Notice as a proposed rule change (SR-NSCC-2020-016) 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 <u>available at http://www.dtcc.com/legal/sec-rule-filings.aspx</u>.

I. <u>Clearing Agency's Statement of the Terms of Substance of the Advance Notice</u>

This Advance Notice consists of modifications to NSCC's Rules & Procedures ("Rules") to (1) introduce a new component of the Clearing Fund, the Margin Liquidity Adjustment ("MLA") charge, and (2) enhance the calculation of the volatility component of the Clearing Fund formula that utilizes a parametric Value-at-Risk ("VaR") model (defined for purposes of this filing as the "VaR Charge," and described in more detail in Item II(B)(i) below) by including a bid-ask spread risk charge, as described in greater detail below.⁴

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

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 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) <u>Clearing Agency's Statement on Comments on the Advance Notice</u> <u>Received from Members, Participants, or Others</u>

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.

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

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

Description of Proposed Change

NSCC is proposing to enhance its Clearing Fund methodology by (1) introducing a new component, the MLA charge, which would be calculated to address the risk presented to NSCC when a Member's portfolio contains large Net Unsettled Positions⁵ in a particular group of securities with a similar risk profile or in a particular asset type (referred to as "asset groups"), and (2) enhancing the calculation of the VaR Charge by including a bid-ask spread risk charge, as described in more detail below.⁶

(i) Overview of the Required Fund 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 Fund Deposits to the Clearing Fund and monitoring its sufficiency, as provided for in the Rules.⁷ The Required Fund Deposit serves as each Member's margin.

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, and are referred to collectively in this filing as Net Unsettled Positions. <u>See</u> Procedure XV (Clearing Fund Formula and Other Matters) of the Rules, <u>id.</u>

⁶ The results of a study of the potential impact of adopting the proposed changes have been provided to the Commission.

⁷ See Rule 4 (Clearing Fund) and Procedure XV (Clearing Fund Formula and Other Matters), <u>supra</u> 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).

The objective of a Member's Required Fund Deposit is to mitigate potential losses to NSCC associated with liquidating a Member's portfolio in the event NSCC ceases to act for that Member (hereinafter referred to as a "default").⁸ The aggregate of all Members' Required Fund Deposits constitutes the Clearing Fund of NSCC. NSCC would access its Clearing Fund should a defaulting Member's own Required Fund Deposit be insufficient to satisfy losses to NSCC caused by the liquidation of that Member's portfolio.

Pursuant to the Rules, each Member's Required Fund 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.⁹ The volatility component of each Member's Required Fund 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,¹⁰ and usually comprises the

⁸ The Rules identify when NSCC may cease to act for a Member and the types of actions NSCC 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.

⁹ <u>Supra</u> note 4.

¹⁰ As described in Procedure XV, Section I(A)(1)(a)(ii), (iii) and (iv), and Section I(A)(2)(a)(ii), (iii) and (iv) 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. <u>Supra</u> note 4.

largest portion of a Member's Required Fund 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 historical data as NSCC deems reasonable and a volatility range that NSCC deems appropriate.¹¹

NSCC regularly assesses market and liquidity risks as such risks relate to its margining methodologies to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market. The proposed changes to include the MLA charge to its Clearing Fund methodology and to enhance the VaR Charge by including a bid-ask spread risk charge, as described below, are the result of NSCC's regular review of the effectiveness of its margining methodology.

(ii) Overview of Liquidation Transaction Costs and Proposed Changes

Each of the proposed changes addresses a similar, but separate, risk that NSCC faces increased transaction costs when it liquidates the Net Unsettled Positions of a defaulted Member due to the unique characteristics of that Member's portfolio. The transaction costs to NSCC to liquidate a defaulted Member's portfolio include both market impact costs and fixed costs. Market impact costs are the costs due to the marketability of a security, and generally increase when a portfolio contains large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type, as described more below. Fixed costs are the costs that generally do not fluctuate and may be caused by the bid-ask spread of a particular security. The bid-

¹¹ Procedure XV, Section I(A)(1)(a)(i) and Section I(A)(2)(a)(i) of the Rules, <u>supra</u> note 4.

ask spread of a security accounts for the difference between the observed market price that a buyer is willing to pay for that security and the observed market price that a seller is willing to sell that security.

The transaction cost to liquidate a defaulted Member's portfolio is currently captured by the measurement of market risk through the calculation of the applicable volatility charge.¹² The proposed changes would supplement and enhance the current measurement of this market risk to address situations where the characteristics of the defaulted Member's portfolio could cause these costs to be higher than the amount collected for the applicable volatility charge.

First, as described in more detail below, the MLA charge is designed to address the market impact costs of liquidating a defaulted Member's portfolio that may increase when that portfolio includes large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type. These positions may be more difficult to liquidate because a large number of securities with similar risk profiles could reduce the marketability of those large Net Unsettled Positions, increasing the market impact costs to NSCC. As described below, the MLA charge would supplement the applicable volatility charge.

¹² The calculation of the VaR Charge and the haircut-based volatility charge are described in Sections I.(A)(1)(a) and I.(A)(2)(a) of Procedure XV of the Rules. <u>Supra</u> note 4. The methodologies for these calculations and how they are designed to address risks faced by NSCC have been described in recent proposed rule change and advance notice filings. <u>See</u> Securities Exchange Act Release Nos. 82780 (February 26, 2018), 82 FR 9035 (March 2, 2018) (File No. SR-NSCC-2017-808); 82781 (February 26, 2018), 82 FR 9042 (March 2, 2018) (File No. SR-NSCC-2017-020).

Second, as described in more detail below, the bid-ask spread risk charge would address the risk that the transaction costs of liquidating a defaulted Member's Net Unsettled Positions may increase due to the fixed costs related to the bid-ask spread. As described below, this proposed change would be incorporated into, and, thereby, enhance the current measure of transaction costs through, the VaR Charge.

(iii) Proposed Margin Liquidity Adjustment Charge

In order to address the risks of an increased market impact cost presented by portfolios that contain large Net Unsettled Positions in the same asset group, NSCC is proposing to introduce a new component to the Clearing Fund formula, the MLA charge.

As noted above, a Member portfolio with large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type may be more difficult to liquidate in the market in the event the Member defaults because a concentration in that group of securities or in an asset type could reduce the marketability of those large Net Unsettled Positions. Therefore, such portfolios create a risk that NSCC may face increased market impact cost to liquidate that portfolio in the assumed margin period of risk of three business days at market prices.

The proposed MLA charge would be calculated to address this increased market impact cost by assessing sufficient margin to mitigate this risk. As described below, the proposed MLA charge would be calculated for different asset groups, and subgroups for the equities asset group. Essentially, the calculation is designed to compare the total market value of a Net Unsettled Position in a particular asset group or subgroup, which NSCC would be required to liquidate in the event of a Member default, to the available trading volume of that asset group or equities subgroup in the market.¹³ If the market value of the Net Unsettled Position is large, as compared to the available trading volume of that asset group or subgroup, then there is an increased risk that NSCC would face additional market impact costs in liquidating that position in the event of a Member default. Therefore, the proposed calculation would provide NSCC with a measurement of the possible increased market impact cost that NSCC could face when it liquidates a large Net Unsettled Position in a particular asset group or subgroup.

Rather than calculate the market impact cost for each CUSIP, NSCC's MLA charge would estimate market impact cost at the portfolio-level using aggregated CUSIPlevel volume data. For example, as described in greater detail below, the calculation of market impact cost would include a measurement of the gross market value of the portfolio. Given the vast number of CUSIPs processed by NSCC, this approach is simpler and is expected to result in more predicable calculations of the MLA charge.

To calculate the MLA charge, NSCC would categorize securities into separate asset groups, which have similar risk profiles -(1) equities¹⁴ (excluding equities defined

¹³ NSCC would determine average daily trading volume by reviewing data that is made publicly available by the Securities Industry and Financial Markets Association ("SIFMA"), at https://www.sifma.org/resources/archive/research/statistics.

¹⁴ NSCC would exclude long positions in Family-Issued Securities, as defined in Rule 1 (Definitions) of the Rules, from the MLA charge. NSCC believes the margin charge applicable to long Net Unsettled Positions in Family-Issued Securities pursuant to Sections I.(A)(1)(a)(iv) and (2)(a)(iv) of Procedure XV of the Rules provides adequate mitigation of the risks presented by those Net Unsettled Positions, such that an MLA charge would not be triggered. Supra note 4.

as Illiquid Securities pursuant to the Rules¹⁵), (2) Illiquid Securities, (3) unit investment trusts, or UITs, (4) municipal bonds (including municipal bond exchange-traded products, or "ETPs"), and (5) corporate bonds (including corporate bond ETPs). NSCC would then further segment the equities asset group into the following subgroups: (i) micro-capitalization equities, (ii) small capitalization equities, (iii) medium capitalization equities, (iv) large capitalization equities, (v) treasury ETPs, and (vi) all other ETPs.¹⁶

NSCC would first calculate a measurement of market impact cost for each asset group and equities subgroup for which a Member has Net Unsettled Positions in its portfolio. As described above, the calculation of an MLA charge is designed to measure the potential additional market impact cost to NSCC of closing out a large Net Unsettled Position in that particular asset group or equities subgroup.

¹⁵ <u>See</u> Rule 1 (Definitions), <u>supra</u> note 4.

¹⁶ Initially, the market capitalization categorizations would be: (i) microcapitalization equities would be less than \$300 million, (ii) small capitalization equities would be equal to or greater than \$300 million and less than \$2 billion, (iii) medium capitalization equities would be equal to or greater than \$2 billion and less than \$10 billion, and (iv) large capitalization equities would be equal to or greater than \$10 billion. In determining the range of these market capitalization categorizations, NSCC would consult publications issued by sources it deems appropriate. NSCC would review these categories annually and any changes that NSCC deems appropriate would be subject to NSCC's model risk management governance procedures set forth in the Clearing Agency Model Risk Management Framework ("Model Risk Management Framework"). See Securities Exchange Act Release Nos. 81485 (August 25, 2017), 82 FR 41433 (August 31, 2017) (File No. SR-NSCC-2017-008); 84458 (October 19, 2018), 83 FR 53925 (October 25, 2018) (File No. SR-NSCC-2018-009); 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (File No. SR-NSCC-2020-008).

Market Impact Cost Calculation for Market Capitalization Subgroups of Equities Asset Group

The market impact cost for each Net Unsettled Position in a market capitalization subgroup of the equities asset group would be calculated by multiplying four components: (1) an impact cost coefficient that is a multiple of the one-day market volatility of that subgroup and is designed to measure impact costs, (2) the gross market value of the Net Unsettled Position in that subgroup, (3) the square root of the gross market value of the Net Unsettled Position in that subgroup in the portfolio measured as a percentage of the average daily trading volume of that subgroup (as described in greater detail below), and (4) a measurement of the concentration of the Net Unsettled Position in that subgroup in the portfolio (as described in greater detail below).¹⁷

NSCC represents that its measurement of the gross market value of the Net Unsettled Position would be calculated using the gross market value of the portfolio, divided by the average daily trading volume of that subgroup multiplied by an assumed percentage of available market volume for that subgroup. NSCC also represents that its measurement of the concentration of the Net Unsettled Position in the portfolio would include aggregating the relative weight of each CUSIP in that Net Unsettled Position relative to the weight of that CUSIP in the subgroup, such that a portfolio with fewer positions in a subgroup would have a higher measure of concentration for that subgroup.¹⁸

¹⁷ <u>See supra note 13.</u>

¹⁸ The relative weight would be calculated by dividing the absolute market value of a single CUSIP in the Member's portfolio by the total absolute market value of that portfolio.

Market Impact Cost Calculation for the Other Asset Groups and Equities Subgroups

The market impact cost for Net Unsettled Positions in the municipal bond, corporate bond, Illiquid Securities and UIT asset groups and for Net Unsettled Positions in the treasury ETP and other ETP subgroups of the equities asset group would be calculated by multiplying three components: (1) an impact cost coefficient that is a multiple of the one-day market volatility of that asset group or subgroup, (2) the gross market value of the Net Unsettled Position in that asset group or subgroup, and (3) the square root of the gross market value of the Net Unsettled Position in that asset group or subgroup in the portfolio measured as a percentage of the average trading volume of that asset group or subgroup.¹⁹

As noted above, NSCC represents that the measurement of the market value of the Net Unsettled Position would be calculated using the gross market value of the portfolio, divided by the average daily trading volume of that asset group or subgroup multiplied by an assumed percentage of available market volume for that asset group or subgroup.

Total MLA Charge Calculation for Each Portfolio

For each asset group or subgroup, NSCC would compare the calculated market impact cost to a portion of the volatility charge that is allocated to Net Unsettled Positions in that asset group or subgroup (as determined by Sections I.(A)(1)(a) and I.(A)(2)(a) of Procedure XV of the Rules).²⁰ If the ratio of the calculated market impact

¹⁹ <u>See supra note 13.</u>

²⁰ <u>Supra</u> note 4. NSCC's margining methodology uses a three-day assumed period of risk. For purposes of this calculation, NSCC would use a portion of the applicable volatility charge that is based on one-day assumed period of risk and calculated by applying a simple square-root of time scaling, referred to in this

cost to the applicable 1-day volatility charge is greater than a threshold, an MLA charge would be applied to that asset group or subgroup.²¹ If the ratio of these two amounts is equal to or less than this threshold, an MLA charge would not be applied to that asset group or subgroup. The threshold would be based on an estimate of the market impact cost that is incorporated into the calculation of the applicable 1-day volatility charge, such that an MLA charge would apply only when the calculated market impact cost exceeds this threshold.

For each Member portfolio, NSCC would add the MLA charges for Net Unsettled Positions in each of the subgroups of the equities asset group to determine an MLA charge for the Net Unsettled Positions in the equities asset group. NSCC would then add the MLA charge for Net Unsettled Positions in the equities asset group with each of the MLA charges for Net Unsettled Positions in the other asset groups to determine a total MLA charge for a Member.

proposed rule change as "1-day volatility charge." Any changes that NSCC deems appropriate to this assumed period of risk would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework. <u>See supra</u> note 16.

²¹ Initially, the threshold would be 0.4, because, currently, approximately 40 percent of the 1-day volatility charge addresses market impact costs. NSCC would review this threshold from time to time and any changes that NSCC deems appropriate would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework. <u>See id</u>.

The ratio of the calculated market impact cost to the 1-day volatility charge would also determine if NSCC would apply a downward adjustment, based on a scaling factor, to the total MLA charge, and the size of any adjustment. For Net Unsettled Positions that have a higher ratio of calculated market impact cost to the 1-day volatility charge, NSCC would apply a larger adjustment to the MLA charge by assuming that it would liquidate that position on a different timeframe than the assumed margin period of risk of three business days. For example, NSCC may be able to mitigate potential losses associated with liquidating a Member's portfolio by liquidating a Net Unsettled Position with a larger volatility charge over a longer timeframe. Therefore, when applicable, NSCC would apply a multiplier to the calculated MLA charge. When the ratio of calculated market impact cost to the 1-day volatility charge is lower, the multiplier would be one, and no adjustment would be applied; as the ratio gets higher the multiplier decreases and the MLA charge is adjusted downward.

The final MLA charge would be calculated daily and, when the charge is applicable, as described above, would be included as a component of Members' Required Fund Deposit.

Proposed Changes to NSCC Rules

The proposal described above would be implemented into Procedure XV of the NSCC Rules. Specifically, the proposed changes to Procedure XV would describe the calculation of the MLA charge in a new subsection (i) of Section I(A)(1) and a new subsection (g) of Section I(A)(2).

These new subsections would first identify each of the asset groups and subgroups. The proposed new subsections would then separately describe the two calculations of market impact cost for these asset groups and subgroups by identifying the components of these calculations. The new subsections would state that NSCC would compare the calculated market impact cost to a portion of that Member's volatility charge, to determine if an MLA charge would be applied to an asset group or subgroup. The new subsections would then state that NSCC would add each of the applicable MLA charges calculated for each asset group together. Finally, the new subsections would state that NSCC may apply a downward adjusting scaling factor to result in a final MLA charge.

NSCC would also amend Section I(B)(2) of Procedure VX, which describes the Excess Capital Premium charge, to add the MLA charge to the list of Clearing Fund components that are excluded from the calculation of the Excess Capital Premium charge.²² The Excess Capital Premium is imposed on a Member when the Member's Required Fund Deposit exceeds its excess net capital. NSCC believes that including the MLA charge in the calculation of the Excess Capital Premium could lead to more frequent and unnecessary Excess Capital Premium charges. This is not the intended purpose of the Excess Capital Premium charge and could place an unnecessary burden on Members.

²² <u>See Section I.(B)(2) of Procedure XV of the Rules.</u> <u>Supra note 4.</u>

(iv) Proposed Bid-Ask Spread Risk Charge

NSCC has identified potential risk that its margining methodologies do not account for the transaction costs related to bid-ask spread in the market that could be incurred when liquidating a portfolio. Bid-ask spreads account for the difference between the observed market price that a buyer is willing to pay for a security and the observed market price that a seller is willing to sell that security. Therefore, NSCC is proposing to include a bid-ask spread risk charge in the VaR Charge to address this risk.

In order to calculate this charge, NSCC would segment Member's portfolios into four bid-ask spread risk classes: (i) large and medium capitalization equities, (ii) small capitalization equities, (iii) micro capitalization equities, and (iv) ETPs.²³

Each risk class would be assigned a specific bid-ask spread haircut rate in the form of a basis point charge that would be applied to the gross market value in that particular risk class. The applicable bid-ask spread risk charge would be the product of the gross market value in a particular risk class in the Member's portfolio and the applicable basis point charge. The bid-ask spread risk charge would be calculated at the portfolio level, such that NSCC would aggregate the bid-ask spread risk charges of the applicable risk classes for the Member's portfolio.

 $[\]frac{23}{\text{See supra note 16.}}$

NSCC proposes to review the haircut rates annually based on either the analysis of liquidation transaction costs related to the bid-ask spread that is conducted in connection with its annual simulation of a Member default or market data that is sourced from a third-party data vendor. Based on the analyses from recent years' simulation exercises, NSCC does not anticipate that these haircut rates would change significantly year over year. NSCC may also adjust the haircut rates following its annual model validation review, to the extent the results of that review indicate the current haircut rates are not adequate to address the risk presented by transaction costs from a bid-ask spread.²⁴

The proposed initial haircuts are based on the analysis from the most recent annual default simulation and market data sourced from a third-party data vendor, and are listed in the table below:

| Class | Haircut (bps) |
|--|---------------|
| Large and Medium Capitalization Equities | 5.0 |
| Small Capitalization Equities | 12.3 |
| Micro Capitalization Equities | 23.1 |
| ETPs | 1.5 |

All proposed changes to the haircuts would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework. <u>See id</u>.

Proposed Changes to NSCC Rules

The proposal described above would be implemented into Procedure XV of the NSCC Rules. Specifically, NSCC would amend subsection (a)(i)(I) of Sections I(A)(1) and I(A)(2) of Procedure XV by stating that the calculations of the estimations of volatility described in these Sections shall include an additional bid-ask spread risk charge measured by multiplying the gross market value of each Net Unsettled Position by a basis point charge. The proposed change to this subsection would also state that the basis point charge would be based on four risk classes and would identify those risk classes.

(v) Implementation Timeframe

NSCC would implement the proposed changes no later than 10 Business Days after the later of the no objection to the Advance Notice and approval of the related proposed rule change²⁵ by the Commission. NSCC would announce the effective date of the proposed changes by Important Notice posted to its website.

Anticipated Effect on and Management of Risk

NSCC believes that the proposed changes to enhance the margining methodology as described above would enable NSCC to better limit its risk exposures to Members arising out of their Net Unsettled Positions.

As stated above, the proposed MLA charge is designed to help limit NSCC's exposures to the risks presented by a Member portfolio that contains large Net Unsettled Positions in securities of the same asset group, and would enhance NSCC's ability to

 $[\]frac{25}{\text{Supra}}$ note 3.

address risks related to liquidating such positions in the event of a Member default. The proposed MLA charge would allow NSCC to collect sufficient financial resources to cover its exposure that it may face increased market impact costs in liquidating Net Unsettled Positions that is not captured by the applicable volatility charge.

The proposal to enhance the VaR Charge by including a bid-ask spread risk charge is also designed to help limit NSCC's exposures to the risks related to increased transaction costs due to the bid-ask spread in the market that could be incurred when liquidating a portfolio. Therefore, this proposed change would also help address NSCC's risks related to its ability to liquidate such positions in the event of a Member default.

By providing NSCC with a more effective measurement of its exposures, the proposed changes 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 Clearing Supervision Act

NSCC believes that the proposals are consistent with the Clearing Supervision Act, specifically with the risk management objectives and principles of Section 802(b), and with certain of the risk management standards adopted by the Commission pursuant to Section 805(a)(2), for the reasons described below.²⁶

(i) Consistency with Section 805(b) of 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

²⁶ 12 U.S.C. 5464(a)(2) and (b)(1).

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.²⁷

NSCC believes the proposals 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.

First, the proposal would include the MLA charge as an additional component to the Clearing Fund. As described above, this new margin charge is designed to address the market impact costs of liquidating a defaulted Member's portfolio that may increase when that portfolio includes large Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type. These positions may be more difficult to liquidate in the market because a concentrating in that group of securities or in an asset type could reduce the marketability of those large Net Unsettled Positions, increasing the market impact costs to NSCC. The proposed MLA charge would allow NSCC to collect sufficient financial resources to cover its exposure that it may face increased market impact costs in liquidating Net Unsettled Positions that is not captured by the applicable volatility charge.

Second, the proposed bid-ask spread risk charge is designed to help limit NSCC's exposures to the risks related to increased transaction costs due to the bid-ask spread in the market that could be incurred when liquidating a portfolio. As stated above, this

²⁷ 12 U.S.C. 5464(b)(1).

proposal would also help address NSCC's risks related to its ability to liquidate such positions in the event of a Member default.

Therefore, because the proposals are designed to enable NSCC to better limit its exposure to Members in the event of a Member default, NSCC believes they are consistent with promoting robust risk management. The proposals would also strengthen the liquidity of NSCC by requiring deposits to the Clearing Fund that are calculated to address the potential risks NSCC may face, which is one of NSCC's default liquidity resources.

As a result, NSCC believes the proposals would be consistent with the objectives and principles of Section 805(b) of the Clearing Supervision Act, which specify the promotion of robust risk management, promotion of safety and soundness, reduction of systemic risks and support of the stability of the broader financial system by, among other things, strengthening the liquidity of systemically important financial market utilities, such as NSCC.

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

Section 805(a)(2) of the Clearing Supervision Act 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.²⁸ The Commission has accordingly adopted risk

²⁸ 12 U.S.C. 5464(a)(2).

management standards under Section 805(a)(2) of the Clearing Supervision Act²⁹ and Section 17A of the Act ("Covered Clearing Agency Standards").³⁰ The Covered Clearing Agency Standards require covered 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.³¹

NSCC believes that the proposed changes are consistent with Rules 17Ad-22(e)(4)(i) and (e)(6)(i) of the Covered Clearing Agency Standards³² for the reasons described below.

Rule 17Ad-22(e)(4)(i) under the Act 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.³³

As described above, NSCC believes that both of the proposed changes would enable it to better identify, measure, monitor, and, through the collection of Members'

³¹ <u>Id.</u>

³² 17 CFR 240.17Ad-22(e)(4)(i), (e)(6)(i).

³³ 17 CFR 240.17Ad-22(e)(4)(i).

²⁹ <u>Id.</u>

³⁰ 17 CFR 240.17Ad-22(e).

Required Fund Deposits, manage its credit exposures to Members by maintaining sufficient resources to cover those credit exposures fully with a high degree of confidence.

Specifically, NSCC believes that the proposed MLA charge would effectively mitigate the risks related to large Net Unsettled Positions of securities in the same asset group within a portfolio and would address the potential increased risks NSCC may face related to its ability to liquidate such positions in the event of a Member default.

Therefore, NSCC believes that 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.³⁴

Additionally, NSCC believes that the proposed bid-ask spread risk charge would enhance NSCC's ability to identify, measure, monitor and manage its credit exposures to Members and those exposures arising from its payment, clearing, and settlement processes because the proposed changes would better ensure that NSCC maintains sufficient financial resources to cover its credit exposure to each Member with a high degree of confidence. NSCC believes that the proposed change would enable NSCC to more effectively identify, measure, monitor and manage its exposures to risks related to market price, and enable it to better limit its exposure to potential losses from Member defaults by providing a more effective measure of the risks related to market price. As

³⁴ <u>Id.</u>

described above, due to the bid-ask spread in the market, there is an observable transaction cost to liquidate a portfolio. The proposed bid-ask spread risk charge is designed to manage the risk related to this transaction cost in the event a Member's portfolio is liquidated. As such, NSCC believes that the proposed change would better address the potential risks that NSCC may face that are related to its ability liquidate a Member's Net Unsettled Positions in the event of that firm's default, and thereby 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. In this way, NSCC believes this proposed change is also consistent with Rule 17Ad-22(e)(4)(i) under the Act.³⁵

Rule 17Ad-22(e)(6)(i) under the Act 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.³⁶

The Required Fund Deposits are made up of risk-based components (as margin) that are calculated and assessed daily to limit NSCC's credit exposures to Members, including the VaR Charge. NSCC's proposed change to introduce an MLA charge is designed to more effectively address the risks presented by large Net Unsettled Positions

³⁵ <u>Id.</u>

³⁶ 17 CFR 240.17Ad-22(e)(6)(i).

in the same asset group. NSCC believes the addition of the MLA charge would enable NSCC to assess a more appropriate level of margin that accounts for these risks. This proposed change is 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 contain large Net Unsettled Positions in the same asset group and may be more difficult to liquidate in the event of a Member default. Therefore, NSCC believes the proposed change is consistent with Rule 17Ad-22(e)(6)(i) under the Act.³⁷

Furthermore, NSCC believes that including the bid-ask spread risk charge within the calculation of the final VaR Charge would provide NSCC with a better assessment of its risks related to market price. This proposed change would enable NSCC to assess a more appropriate level of margin that accounts for this risk at the portfolio level. As such, each Member portfolio would be subject to a risk-based margining system that, at minimum, considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market, consistent with Rule 17Ad-22(e)(6)(i) under the Act.³⁸

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

³⁷ <u>Id.</u>

³⁸ <u>Id.</u>

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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:

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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-2020-804 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-2020-804. 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-2020-804 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

By the Commission.

Secretary

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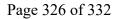
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EXHIBIT 5





NATIONAL SECURITIES CLEARING CORPORATION

RULES & PROCEDURES

TEXT OF PROPOSED RULE CHANGE

<u>Bold and underlined</u> text indicates proposed added language.

Bold and strikethrough text indicates proposed deleted language.

PROCEDURE XV. CLEARING FUND FORMULA AND OTHER MATTERS¹

<u>Changes to this Procedure XV, as amended by File Nos. SR-NSCC-2020-016 and</u> <u>SR-NSCC-2020-804, are available at dtcc.com/~/media/Files/Downloads/legal/rule-filings/2020/NSCC/SR-NSCC-2020-016.pdf and</u> <u>dtcc.com/~/media/Files/Downloads/legal/rule-filings/2020/NSCC/SR-NSCC-2020-804.pdf, respectively. These changes have been approved by the Securities and Exchange Commission but have not yet been implemented. By no later than [insert date within 10 Business Days after the later of the approval of SR-NSCC-2020-2020-016 and no objection to SR-NSCC-2020-804 by the Securities and Exchange <u>Commission], these changes will be implemented, and this legend will</u> automatically be removed from this Procedure XV.</u>

I.(A) Clearing Fund Formula for Members

Each Member of the Corporation, except as otherwise provided in this Procedure, is required to contribute to the Clearing Fund maintained by the Corporation an amount calculated by the Corporation equal to:

(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 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.

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

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

In calculating these estimations of volatility, the Corporation shall include an additional bid-ask spread risk charge measured by multiplying the gross market value of each Net Unsettled Position by a basis point charge, where the applicable basis point charge shall be reviewed at least annually and shall be based on the following groups: (i) large and medium capitalization equities, (ii) small capitalization equities, (iii) micro-capitalization equities, and (iv) exchange traded products ("ETPs").

plus

(i) A Margin Liquidity Adjustment ("MLA") charge shall apply to a Member's Net Unsettled Positions, other than long Net Unsettled Positions in Family-Issued Securities.

For purposes of calculating this charge, Net Unsettled Positions shall be categorized into the following asset groups: (1) equities (excluding Illiquid Securities), (2) Illiquid Securities, (3) unit investment trusts ("UITs"), (4) municipal bonds (including municipal bond ETPs), and (5) corporate bonds (including corporate bond ETPs). The equities asset group shall be further segmented into the following subgroups: (i) micro-capitalization equities, (ii) small capitalization equities, (iii) medium capitalization equities, (iv) large capitalization equities, (v) treasury ETPs, and (vi) all other ETPs.

The Corporation shall first calculate a measurement of market impact cost for Net Unsettled Positions in each of the asset groups or subgroups, as described below.

- i. <u>For Net Unsettled Positions in the market capitalization</u> <u>subgroups of the equities asset group, by multiplying four</u> <u>components:</u>
 - 1. <u>an impact cost coefficient that is a multiple of the one-</u> <u>day market volatility of that subgroup.</u>
 - 2. <u>the gross market value of the Net Unsettled Position in</u> <u>that subgroup</u>,
 - 3. <u>the square root of the gross market value of the Net</u> <u>Unsettled Position in that subgroup in the portfolio</u>

measured as a percentage of the average trading volume of that subgroup, and

- 4. <u>a measurement of the concentration of each Net</u> <u>Unsettled Position in that subgroup.</u>
- ii. For Net Unsettled Positions in the Illiquid Securities, UIT, municipal bond, and corporate bond asset groups and for Net Unsettled Positions in the treasury ETP and other ETP subgroups of the equities asset group, by multiplying three components:
 - 1. <u>an impact cost coefficient that is a multiple of the one-</u> day market volatility of that asset group or subgroup.
 - 2. <u>the gross market value of the Net Unsettled Position in</u> <u>that asset group or subgroup, and</u>
 - 3. <u>the square root of the gross market value of the Net</u> <u>Unsettled Position in that asset group or subgroup in</u> <u>the portfolio measured as a percentage of the average</u> <u>trading volume of that asset group or subgroup.</u>

For each asset group and equities subgroup, the calculated market impact cost shall be compared to a portion of the volatility charge applicable to Net Unsettled Positions (as determined by Section I.(A)(1)(a) of this Procedure XV). If the ratio of the calculated market impact cost to the portion of the volatility charge is greater than a threshold, to be determined by the Corporation from time to time, an MLA charge will be applicable to that asset group or subgroup. If the ratio of these two amounts is equal to or less than the threshold, an MLA charge will not be applicable to that asset group or subgroup.

All MLA charges for each of the equities subgroups shall be added together to result in one MLA charge for the equities subgroup. All MLA charges for each of the asset groups shall be added together to result in a total MLA charge.

The Corporation may apply a downward adjusting scaling factor to the total MLA charge based on the ratio of calculated market impact cost to a portion of the applicable volatility charge, where a higher ratio would trigger a larger downward adjustment of the MLA charge and a lower ratio would trigger no downward adjustment of the MLA 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 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".

In calculating these estimations of volatility, the Corporation shall include an additional bid-ask spread risk charge measured by multiplying the gross market value of each Net Balance Order Unsettled Position by a basis point charge, where the applicable basis point charge shall be reviewed at least annually and shall be based on the following risk groups: (i) large and medium capitalization equities, (ii) small capitalization equities, (iii) microcapitalization equities, and (iv) ETPs.

<u>plus</u>

(g) An MLA charge shall apply to a Member's Net Balance Order Unsettled Positions, other than long Net Balance Order Unsettled Positions in Family-Issued Securities.

For purposes of calculating this charge, Net Balance Order Unsettled Positions shall be categorized into the following asset groups: (1) equities (excluding Illiquid Securities), (2) Illiquid Securities, (3) UITs, (4) municipal bonds (including municipal bond ETPs), and (5) corporate bonds (including corporate bond ETPs). The equities asset group shall be further segmented into the following subgroups: (i) micro-capitalization equities, (ii) small capitalization equities, (iii) medium capitalization equities, (iv) large capitalization equities, (v) treasury ETPs, and (vi) all other ETPs. The Corporation shall first calculate a measurement of market impact cost for Net Balance Order Unsettled Positions in each of the asset groups or subgroups, as described below.

- i. For Net Balance Order Unsettled Positions in the market capitalization subgroups of the equities asset group, by multiplying four components:
 - 1. <u>an impact cost coefficient that is a multiple of the one-</u> <u>day market volatility of that subgroup.</u>
 - 2. <u>the gross market value of the Net Balance Order</u> <u>Unsettled Position in that subgroup,</u>
 - 3. <u>the square root of the gross market value of the Net</u> <u>Balance Order Unsettled Position in that subgroup in</u> <u>the portfolio measured as a percentage of the average</u> <u>trading volume of that subgroup, and</u>
 - 4. <u>a measurement of the concentration of each Net</u> Balance Order Unsettled Position in that subgroup.
- ii. For Net Balance Order Unsettled Positions in the Illiquid Securities, UIT, municipal bond, and corporate bond asset groups and for Net Balance Order Unsettled Positions in the treasury ETP and other ETP subgroups of the equities asset group, by multiplying three components:
 - 1. <u>an impact cost coefficient that is a multiple of the one-</u> day market volatility of that asset group or subgroup.
 - 2. <u>the gross market value of the Net Balance Order</u> <u>Unsettled Position in that asset group or subgroup, and</u>
 - 3. <u>the square root of the gross market value of the Net</u> <u>Balance Order Unsettled Position in that asset group or</u> <u>subgroup in the portfolio measured as a percentage of</u> <u>the average trading volume of that asset group or</u> <u>subgroup.</u>

For each asset group and equities subgroup, the calculated market impact cost shall be compared to a portion of the volatility charge applicable to Net Balance Order Unsettled Positions (as determined by Section I.(A)(2)(a) of this Procedure XV). If the ratio of the calculated market impact cost to the portion of the volatility charge is greater than a threshold, to be determined by the Corporation from time to time, an MLA charge will be applicable to that asset group or subgroup. If the ratio of these two amounts is equal to or less than the threshold, an MLA charge will not be applicable to that asset group or subgroup.

All MLA charges for each of the equities subgroups shall be added together to result in one MLA charge for the equities subgroup. All MLA charges for each of the asset groups shall be added together to result in a total MLA charge.

The Corporation may apply a downward adjusting scaling factor to the total MLA charge based on the ratio of calculated market impact cost to a portion of the applicable volatility charge, where a higher ratio would trigger a larger downward adjustment of the MLA charge and a lower ratio would trigger no downward adjustment of the MLA charge.

I.(B) Additional Clearing Fund Formula

(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), (f), **and**-(g), **and** (g), **and** (i); and I.(A)(2)(c), (d), **and** (e), **and** (g) 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, such the amount (by which the Calculated Amount exceeds its excess net capital or capital (as applicable), as defined in the membership standards set forth grund 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.
