Required fields are shown with yellow backgrounds and asterisks.

Filing by National Securities Clearing Corporation

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

Section 19(b)(2) *

Rule

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

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

Section 806(e)(1) *

Section 806(e)(2) *

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

Section 3(c)(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 *).

Refine the Margin Liquidity Adjustment ("MLA") Charge Calculation and the Description of the MLA 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 *
Title *
E-mail * RuleFilingAdmin@dtcc.com
Telephone *

Signature

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

Date 11/17/2023
By (Name *)

NOTE: Clicking the signature block at right will initiate digitally signing the form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.
For complete Form 19b-4 instructions please refer to the EFFS website.

**Form 19b-4 Information**
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- View

Narrative - MLA Refinement - 2023-111

**Exhibit 1 - Notice of Proposed Rule Change**
- Add
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Exh 1A - MLA Refinement - 2023-111

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 Advanced Notice by Clearing Agencies**
- Add
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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 2 - Notices, Written Comments, Transcripts, Other Communications**
- Add
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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 Sent As Paper Document

**Exhibit 3 - Form, Report, or Questionnaire**
- Add
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Exh 3 (Redacted) - MLA Refinement -

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 Sent As Paper Document

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

**Exhibit 5 - Proposed Rule Text**
- Add
- Remove
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Exh 5 - MLA Refinement - 2023-1117

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

   (a) The proposed rule change of National Securities Clearing Corporation (“NSCC”) is annexed hereto as Exhibit 5 and consists of modifications to NSCC’s Rules & Procedures (“Rules”) to refine the Margin Liquidity Adjustment (“MLA”) charge calculation and the description of the MLA charge, as described in greater detail below.\(^1\)

   (b) Not applicable.

   (c) Not applicable.

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

   The proposal to enhance the MLA charge was approved by the Risk Committee of the Board of Directors on June 21, 2022.

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

   (a) **Purpose**

      NSCC is proposing to refine the MLA charge calculation to more accurately calculate the impact costs of liquidating a security/portfolio by (i) moving all exchange traded products (“ETPs”) (other than those deemed to be Illiquid Securities) into the equities asset group and calculating impact cost at the security level rather than at the subgroup level for the equities asset subgroups and (ii) improving the calculations relating to exchange traded funds (“ETFs”) by adding a calculation for latent liquidity for equity ETFs with in-kind baskets, as described in more detail below.

      NSCC conducted an impact study of the proposed changes based on data from January 3, 2022 through June 30, 2023.\(^2\) The impact study indicated that if the proposed changes had been in place during the impact study period, the proposed changes would have resulted in an approximately $62 million daily average increase during the impact study period, which accounts for approximately 0.52% of the daily total Clearing Fund during that period. Currently, the daily MLA charge accounts for approximately 3.54% of the daily total Clearing Fund. With the proposed MLA charge refinements, the MLA charge would have accounted for approximately 4.06% of the daily total Clearing Fund.

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\(^2\) In order to more accurately assess the impact of the proposed changes, the impact study included changes to the gap risk measure that were implemented on October 2, 2023 as if such changes had been in effect during the impact study period. See Securities Exchange Act Release No. 98086 (Aug. 8, 2023), 88 FR 55100 (Aug. 14, 2023) (File No. SR-NSCC-2022-015) (order approving proposed rule change to change the gap risk measure).
NSCC is also proposing to enhance the description of the MLA charge to clarify the
description of the calculation with respect to SFT Positions in connection with Securities
Financing Transactions, as described below.

(i) **Overview of Required Fund Deposit and MLA Charge**

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.3 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”).4 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.5

**Volatility Charge**

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 Generally, the largest component of
Members’ Required Fund Deposits is the volatility charge. The volatility charge is designed to
capture the market price risk associated with each Member’s portfolio at a 99th percentile level
of confidence.

NSCC has two methodologies for calculating the volatility charge. For the majority of
Net Unsettled Positions,7 NSCC calculates the volatility charge as the sum of (1) the greater of

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

4 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 1.

5 See Rule 4 (Clearing Fund), supra note 1.

6 Supra note 1.

7 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
(a) the larger of two separate calculations that utilize a parametric Value at Risk (“VaR”) model and (b) a portfolio margin floor calculation based on the market values of the long and short positions in the portfolio and (2) a gap risk measure calculation based on the concentration threshold of the two largest non-diversified positions in a portfolio (“VaR Charge”). NSCC excludes certain Net Unsettled Positions from the calculation of the VaR Charge and instead applies a haircut-based volatility charge that is calculated by multiplying the absolute value of those Net Unsettled Positions by a percentage.

**MLA Charge**

NSCC applies an MLA charge to address situations where the characteristics of the defaulted Member’s portfolio could cause the market impact costs to be higher than the amount collected for the applicable volatility charge. 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 (referred to as “asset groups”). 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 MLA charge is calculated to address this increased market impact cost by assessing sufficient margin to mitigate this risk. The MLA charge is calculated for different asset groups. Essentially, the calculation is currently designed to compare the total market value of a Net Unsettled Position in a particular asset group, 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.

NSCC regularly assesses market and liquidity risks as such risks relate to NSCC’s margining methodologies to evaluate whether margin levels are commensurate with the

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9 See Section I(A)(1)(a)(ii), (iii) and (iv), and Section I(A)(2)(a)(ii), (iii) and (iv), of Procedure XV of the Rules, supra note 1.
10 See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1.
particular risk attributes of each relevant product, portfolio, and market. The proposed changes to enhance the MLA charge by improving the calculation of the impact costs of liquidating Net Unsettled Positions in certain securities, as described below, are the result of NSCC’s regular review of the effectiveness of its margining methodology and in response to regulatory feedback.

(ii) Proposed Changes to Market Impact Cost Calculations

Existing Market Impact Cost Calculations

To calculate the MLA charge, NSCC currently categorizes securities into separate asset groups that have similar risk profiles – (1) equities (excluding equities defined as Illiquid Securities pursuant to the Rules), (2) Illiquid Securities, (3) unit investment trusts, or UITs, (4) municipal bonds (including municipal bond ETPs), and (5) corporate bonds (including corporate bond ETPs). NSCC then further segments 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.

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12 NSCC excludes 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 1.

13 See Rule 1 (Definitions), supra note 1.

14 See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1.

15 Id. The market capitalization categorizations currently are as follows: (i) micro-capitalization equities have a capitalization of less than $300 million, (ii) small capitalization equities have a capitalization of equal to or greater than $300 million and less than $2 billion, (iii) medium capitalization equities have a capitalization of equal to or greater than $2 billion and less than $10 billion, and (iv) large capitalization equities have a capitalization of equal to or greater than $10 billion. NSCC reviews these categories annually, and any changes that NSCC deems appropriate are 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 (Aug. 25, 2017), 82 FR 41433 (Aug. 31, 2017) (File No. SR-NSCC-2017-008); 84458 (Oct. 19, 2018), 83 FR 53925 (Oct. 25, 2018) (File No. SR-NSCC-2018-009); 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (File No. SR-NSCC-2020-008); 92381 (July 13, 2021), 86 FR 38163 (July 19, 2021) (SR-NSCC-2021-008); and 94272 (Feb. 17, 2022), 87 FR 10419 (Feb., 24 2022) (SR-NSCC-2022-001).
NSCC first calculates a measurement of market impact cost for each asset group and equities asset subgroup for which a Member has Net Unsettled Positions in its portfolio. 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.

**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 is currently 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 divided by an assumed percentage of the average daily trading volume of that subgroup, and (4) a measurement of the concentration of the Net Unsettled Position in that subgroup in the portfolio (as described in greater detail below). Rather than calculate the market impact cost for each security for the MLA charge, NSCC currently estimates market impact cost at the portfolio-level using aggregated volume data.

The measurement of the concentration of the Net Unsettled Position in the subgroup includes aggregating the relative weight of each security in that Net Unsettled Position relative to the weight of that security in the subgroup, such that a portfolio with fewer positions in a subgroup would have a higher measure of concentration for that subgroup.

**Market Impact Cost Calculation for Other Asset Groups and Equities Asset 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 are currently 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 divided by an assumed percentage of the average daily trading volume of that asset group or subgroup.

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16 See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1.

17 Id.

18 The relative weight is calculated by dividing the absolute market value of a single security in the Member’s portfolio by the total absolute market value of that portfolio.

19 See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1.
Total MLA Charge Calculation for Each Portfolio

For each asset group or subgroup, NSCC compares 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 cost to the applicable 1-day volatility charge is greater than a threshold, an MLA charge is 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 is not applied to that asset group or subgroup. The threshold is 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 applies only when the calculated market impact cost exceeds this threshold.

When applicable, an MLA charge for each asset group or subgroup is calculated as a proportion of the product of (1) the amount by which the ratio of the calculated market impact cost to the applicable 1-day volatility charge exceeds the threshold, and (2) the 1-day volatility charge allocated to that asset group or subgroup.\(^{22}\)

For each Member portfolio, NSCC adds 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 then adds 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.\(^{23}\)

The ratio of the calculated market impact cost to the 1-day volatility charge also determines if NSCC would apply a downward adjustment, based on a scaling factor, to the total

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\(^{20}\) Supra note 1. NSCC’s margining methodology uses a three-day assumed period of risk. For purposes of this calculation, NSCC uses 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 15. See also Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1.

\(^{21}\) See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1. The threshold is currently 0.4 because approximately 40 percent of the 1-day volatility charge addresses market impact costs. NSCC reviews 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. See id.

\(^{22}\) See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1.

\(^{23}\) Id.
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 applies a larger adjustment to the MLA charge by assuming that NSCC 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 applies 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 is 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 is calculated daily and, when the charge is applicable, as described above, is included as a component of Members’ Required Fund Deposits.

NSCC is proposing to refine the calculation relating to the equity asset group by more accurately calculating the impact costs of liquidating a security/portfolio by (i) moving all ETPs (other than those deemed to be Illiquid Securities) into the equities asset group and calculating impact cost at the security level rather than at the subgroup level for the equities asset subgroups and (ii) improving the calculations relating to ETFs by adding a calculation for latent liquidity for equity ETFs with in-kind baskets, as described in more detail below.

Move Liquid ETPs into Equities Asset Group and Provide Security Level Market Impact Cost Calculations

NSCC is proposing to move all ETPs, including corporate bond ETPs and municipal bond ETPs, other than ETPs that are deemed to be Illiquid Securities, into the equities asset group. Currently, corporate bond ETPs and municipal bond ETPs are included as corporate bonds and municipal bonds, respectively, for purposes of the MLA charge calculation. ETPs are traded on an exchange giving them equity-like properties such as trading volume data at the security level apart from their underlying assets which may not be actively traded. Therefore, the impact costs of liquidating ETPs can be estimated in the same manner as other items in the equities asset subgroups, at the security level, as discussed below. ETPs that are deemed to be Illiquid Securities, would be included in the Illiquid Securities category.

NSCC is also proposing to revise the market impact cost calculation for the equities asset group and subgroups to calculate the impact cost at the security level. Based on the review of its margin methodologies (and the ETF Study discussed below), NSCC has determined that equities...
and liquid ETPs display a wide disparity of trading volumes (as measured by average daily volumes) even within subgroups, and the market impact costs are more dependent on specific securities than the subgroup. As a result, NSCC is proposing to calculate the market impact costs for securities in the equities asset group, including liquid ETPs, at the security level rather than at the subgroup level, which has shown to be a more accurate calculation of market impact costs for these securities.

As discussed above, currently the MLA charge calculation for the equity asset subgroups includes a measurement of the concentration of the Net Unsettled Position in the subgroup. Since the market impact cost would be calculated at the security level for the equities asset group, rather than the subgroup level, this measurement would no longer be necessary and would be removed.

In addition, currently for each asset group or subgroup, NSCC compares 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) and compares that ratio to a threshold to determine if an MLA charge is applicable to that asset group or subgroup. Since the market impact cost would be calculated at the security level for all assets in the equity asset group, rather than the subgroup level, this comparison would be at the asset group level for all asset groups, including the equities asset group, and would no longer be made at the subgroup level for subgroups within the equities asset group.

Proposed Improvements to ETF Calculations

NSCC is proposing to refine the impact cost calculations for ETFs to more accurately account for the market impact of these securities and in response to regulatory feedback on NSCC’s margin methodologies. In particular, NSCC is proposing to incorporate “latent” liquidity to more accurately reflect the market liquidity of ETFs.

ETFs are securities that are traded on an exchange and that track underlying securities, indexes or other financial instruments, including equities, corporate and municipal bonds and treasury instruments. Unlike mutual funds, ETFs are created with the assistance of certain financial institutions called authorized participants (“APs”), often banks, that are given the ability to create and redeem ETF shares directly from the ETF issuer. To create ETF shares, an AP can either deliver a pre-specified bundle of securities underlying the ETFs (i.e., an “in-kind basket”) in exchange for ETF shares or provide cash equal to the value of the cost of purchasing underlying securities for the ETF shares. To redeem ETF shares, an AP would do the opposite – deliver ETF shares to the ETF issuer in exchange for an in-kind basket of underlying securities or cash equal to the value of the underlying securities.

Throughout the life of an ETF, APs create and redeem shares depending on the market and arbitrage opportunities. As a result, ETFs, particularly those with in-kind creation/redemption mechanisms, tend to trade close to the value of the underlying securities. For instance, if the market price of the ETF on the secondary market (discussed below) is above

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27 See supra note 20 and accompanying text.
the value of the securities underlying the ETF, the AP can purchase underlying securities (at the lower price) and exchange those securities to create new ETFs. Likewise, if the market price of the ETF falls below the value of the securities underlying the ETFs, an AP can buy ETF shares on the secondary market and redeem them with the ETF issuer in exchange for underlying securities.

**Latent Liquidity**

As a result of this structure, ETF market liquidity can be divided into two markets: the primary market and the secondary market. The primary market consists of APs creating and redeeming ETF shares directly with the ETF issuer. The secondary market consists of investors buying and selling ETFs through exchanges. Often the stocks underlying an ETF basket have much larger trading volume than the ETF itself. Upon the liquidation of a portfolio with ETFs, the ability of APs to create and redeem ETF shares provides additional liquidity, also called “latent liquidity,” which changes the market risk profile of ETFs with in-kind basket creation/redemption processes.

The current impact cost calculation for the MLA charge does not include calculations measuring the impact relating to the latent liquidity. NSCC recently commissioned a review of ETFs (“ETF Study”) that included an ETF market review, risk characteristics and an independent simulation of market impact costs associated with sample clearing portfolios. Based on the ETF Study, it was observed that most equity ETFs with an in-kind creation/redemption process trade with very tight premium/discount to net asset value (“NAV”), or close to the value of the underlying securities. Often, however, the stocks underlying the equity ETF baskets have a much larger trading volume than the equity ETF itself, which creates latent liquidity.

As a result, NSCC is proposing to include as part of an impact calculation, a measure of the latent liquidity for equity ETFs with in-kind basket creation/redemption processes and a measure of the costs associated with primary market arbitrage to more accurately assess the impact costs relating to liquidating portfolios containing equity ETFs. The proposed calculation would take into account liquidity in the primary and secondary market for liquid equity ETFs with in-kind creation/redemption processes, by comparing the market impact cost of such equity ETFs based on a hypothetical liquidation in the primary market and in the secondary market.

To determine the impact costs of a liquidation of equity ETFs with in-kind baskets, NSCC would run the proposed MLA charge calculations described above in two scenarios for portfolios that contain such ETFs and compare the two calculations to determine the impact cost. NSCC would run a baseline calculation (“Baseline Calculation”) to simulate all the ETF positions being liquidated in the secondary market and the impact cost calculation would be at the security level (i.e., the ETF shares) as liquid equities (as discussed above). NSCC would also run an alternative calculation (“Create/Redeem Calculation”) to simulate the ETF positions being liquidated in the primary market using the creation/redemption process.

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28 When an ETF’s market price is higher than its NAV, it’s trading at a premium, when it’s lower, it’s trading at a discount. The spread between the premium or discount to the NAV represents a potential cost to close out the paired ETF and its in-kind basket.
The Create/Redeem Calculation would be calculated in the following steps:

One – the liquid equity ETFs eligible for in-kind create/redeem process would be fully decomposed into (a) the corresponding underlying baskets of the liquid equity ETFs and (b) pairs of such ETFs and their corresponding underlying baskets;

Two – the decomposed underlying baskets and the residual securities in the portfolio (i.e., the securities in the original portfolio that are not ETFs eligible for in-kind create/redeem process) would be netted at the security level;

Three – the impact cost on the portfolio from the second step would be calculated assuming all the securities would be liquidated in the secondary market and the impact costs would be calculated as described above as if such securities are liquid equities;

Four – the impact cost calculated in the third step would be adjusted by an amount to account for the portfolio risk difference\(^{29}\) from the netted securities from the second step to the original portfolio;

Five – the impact cost for paired ETFs and their corresponding underlying baskets would be calculated by multiplying the gross market amount of the ETFs by a haircut representing the premium/discount,\(^{30}\)

Six – the impact costs from step four and step five would be added together.

NSCC would then use the smaller calculated impact costs of either the Baseline Calculation or the Create/Redeem Calculation for purposes of calculating the MLA charge.

(iii) Proposed Changes to MLA Charge Description with Respect to SFT Positions

Rule 56 describes the SFT Clearing Service and contains a description of how the Clearing Fund formula is calculated with respect to SFT Positions, including how such positions

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\(^{29}\) The original portfolio used in the Baseline Calculation and the portfolio from step two would have different portfolio risks. As a result, because such portfolios would contain different positions, they would have different VaR Charges if calculated separately. The VaR Charge of the original portfolio is a component of the MLA charge calculation for the portfolio from step two. Step four would adjust for those differences as part of the impact cost.

\(^{30}\) The haircut is calculated as an estimate of the cost of closing out the ETFs and underlying pairs using the create/redeem process. The haircut is a model parameter and will be reviewed at least monthly in accordance with the model risk management governance procedures set forth in the model Risk Management Framework. See supra note 15.
are calculated with respect to the MLA charge. The proposed rule change would update the language relating to the MLA charge to clarify how NSCC would calculate the MLA charge with respect to SFT Positions for transparency and to reflect the proposed MLA charge refinements. NSCC would clarify how SFT Positions would be categorized for purposes of the MLA charge by replacing language stating that SFT Positions are “aggregated with” Net Unsettled Positions in the same asset group or subgroup with language that clarifies that SFT Positions would be categorized in the same asset groups or subgroups as the underlying SFT Securities in such SFT Positions. NSCC would also clarify language discussing an added calculation relating to the MLA charge in the event a Member’s portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions. The language in Rule 56 relating to the added calculation for SFT positions does not reference Net Balance Order Unsettled Positions which are treated in the same manner as Net Unsettled Positions for purposes of the added calculation when a portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions. The proposed language would add a reference to Net Balance Order Unsettled Positions. The clarifying changes to reference that SFT Positions would be categorized in the same asset group as their underlying SFT Securities and to reference Net Balance Order Unsettled Positions in the added calculation language would not change how NSCC would calculate the MLA charge with respect to SFT positions and are clarifications only.

NSCC is also proposing to add a sentence in Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules clarifying that if a Member’s portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions, the MLA charge shall be calculated as set forth in Rule 56.

(iv) Proposed Changes to NSCC Rules

The proposal described above would be implemented into Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules.32 These sections would be amended to move all ETP categories as subgroups in the equities asset group other than ETPs that are deemed to be Illiquid Securities, which would be categorized as Illiquid Securities. A footnote in each of these sections would be added to the “all other ETPs” category to clarify that ETPs with underlying securities separately categorized in an equities asset subgroup would be categorized by the asset types and capitalizations of their underlying securities, and that ETPs that are deemed Illiquid Securities would be categorized in the Illiquid Securities asset group.

NSCC would also add language in Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV stating that the impact cost for ETFs with in-kind baskets would include calculations comparing impact costs in the secondary market and the primary market for such equity ETFs, as discussed above. NSCC would indicate that it would calculate impact costs in two scenarios: (1) a baseline calculation to simulate such ETFs being liquidated in the secondary market where the

31 See Rule 56 (Securities Financing Transaction Clearing Service) of the Rules, supra note 1.

32 See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 1.
impact costs would be calculated at the security level (i.e., the ETF shares) utilizing the equities asset subgroup security level and (2) a create/redeem calculation to simulate an authorized participant using the primary market to liquidate such ETFs using the creation/redemption process. The proposed language would include a description of how the impact costs for the create/redeem calculation would be calculated by decomposing the ETFs into their underlying securities and calculating impact costs of such underlying securities utilizing the equity asset subgroup calculations (as discussed above). The proposed language would also state that an adjustment would be made in the create/redeem calculation to reflect the different portfolio risks of the original portfolio used in the baseline calculation and the decomposed portfolio used in the create/redeem calculation. The proposed language would provide that NSCC would then use the smaller calculated impact costs of the scenarios for purposes of the MLA charge for such ETFs.

Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV would be restructured to reflect that the market impact calculation for securities in the equities asset group would be calculated at the security level rather than the subgroup level, as discussed above. As a result of this change, the current component that measures the concentration of each Net Unsettled Position in a subgroup would be removed from Sections I(A)(1)(g)(i)(4) and I(A)(2)(f)(i)(4) of Procedure XV. References to subgroup calculations would also be removed in applicable provisions, including the provisions relating to comparing the calculated market impact cost at the subgroup level to the volatility charge applicable to the Net Unsettled Positions and an applicable MLA charge at the subgroup level and a sentence that states that all MLA charges for each of the equities subgroups shall be added together to result in one MLA charge for the equities subgroup. In addition, references to subgroups with respect to calculations relating to asset groups other than the equities asset group currently in Sections I(A)(1)(g)(ii) and I(A)(2)(f)(ii) (i.e., references to the treasury ETP and other ETP subgroups) would be removed since those would be calculated as part of the equities asset group, as discussed above.

NSCC would add language to clarify that for each Member, all MLA charges for each of the asset groups shall be added together to result in a total MLA charge.

The description of the MLA charge with respect to SFT Positions would be updated in Rule 56 and Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV would be updated to reference Rule 56, as described above.

(v) Implementation Timeframe

NSCC would implement the proposed rule change no later than 90 Business Days after the approval of the proposed rule change by the Securities and Exchange Commission (“Commission”). NSCC would announce the effective date of the proposed rule change by Important Notice posted to its website.

(b) Statutory Basis

NSCC believes that the proposed rule change is consistent with the requirements of the Act, and the rules and regulations thereunder applicable to a registered clearing agency. In particular, NSCC believes the proposed changes are consistent with Section 17A(b)(3)(F) of the
Act, and Rules 17Ad-22(e)(4)(i) and (e)(6)(i), each promulgated under the Act, for the reasons described below.

Section 17A(b)(3)(F) of the Act requires that the rules of NSCC be designed to, among other things, assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible. NSCC believes the proposed change to enhance the MLA charge is designed to assure the safeguarding of securities and funds which are in NSCC’s custody or control or for which it is responsible because such change is designed to more accurately calculate the market impact costs to NSCC of liquidating a Member’s portfolio in the event of that Member’s default. Specifically, the proposed enhancements to the MLA charge would allow NSCC to collect sufficient financial resources to cover the exposure that NSCC may face regarding increased market impact costs in liquidating Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type that are not captured by the volatility charge. The proposed enhancements would result in a more accurate calculation of the impact costs of liquidating a security/portfolio by moving all ETPs (except for Illiquid Securities) into the equities asset group and adding a calculation for latent liquidity for equity ETFs and therefore improve NSCC’s ability 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 particular asset groups.

The Clearing Fund is a key tool that NSCC uses to mitigate potential losses to NSCC associated with liquidating a Member’s portfolio in the event of Member default. Therefore, the proposed change to enhance the MLA charge would enable NSCC to better address the increased market impact costs of liquidating Net Unsettled Positions, in particular securities with risk profiles dependent on the particular trading market of the security, such that, in the event of Member default, NSCC’s operations would not be disrupted, and non-defaulting Members would not be exposed to losses they cannot anticipate or control. In this way, the proposed rule change to enhance the MLA charge is designed to assure the safeguarding of securities and funds which are in the custody or control of NSCC or for which it is responsible, consistent with Section 17A(b)(3)(F) of the Act.

NSCC also believes the proposed changes to provide transparency to the Rules by updating the language relating to how the MLA charge is calculated with respect to SFT Positions are consistent with the requirements of Section 17A(b)(3)(F) of the Act. Specifically, by enhancing the transparency of the Rules, the proposed changes would allow Members to more efficiently and effectively conduct their business in accordance with the Rules, which NSCC

34 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).
36 Id.
37 Id.
believes would promote the prompt and accurate clearance and settlement of securities transactions.

Rule 17Ad-22(e)(4)(i) under the Act requires 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.38

As described above, NSCC believes that the proposed changes would enable it to better identify, measure, monitor, and manage its credit exposures to Members by maintaining sufficient financial resources to cover those credit exposures fully with a high degree of confidence.

Specifically, NSCC believes that the proposed enhancements to the MLA charge would effectively mitigate the risks related to large Net Unsettled Positions of securities in the equities 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. The proposed enhancements would result in a more accurate calculation of the impact costs of liquidating a security/portfolio by moving all ETPs (except for Illiquid Securities) into the equities asset group and adding a calculation for latent liquidity for equity ETFs and therefore improve NSCC’s ability 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 particular asset groups.

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.39

Rule 17Ad-22(e)(6)(i) under the Act requires 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.40

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 enhance the MLA charge is designed to more effectively address the risks presented by Net Unsettled Positions in the proposed equities asset group,

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

39 Id.

40 17 CFR 240.17Ad-22(e)(6)(i).
including equity ETFs with in-kind creation/redemption processes. NSCC believes the enhancements of the MLA charge would enable NSCC to assess a more appropriate level of margin that accounts for these risks. The proposed enhancements would result in a more accurate calculation of the impact costs of liquidating a security/portfolio by moving all ETPs (except for Illiquid Securities) into the equities asset group and adding a calculation for latent liquidity for equity ETFs and therefore improve NSCC’s ability 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 particular asset groups. 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 rule change is consistent with Rule 17Ad-22(e)(6)(i) under the Act.41

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

NSCC does not believe the proposed changes to provide transparency to the Rules by updating the language relating to how the MLA charge is calculated with respect to SFT Positions would impact competition. These proposed rule changes would merely enhance the transparency of the Rules. Therefore, this proposed changes would not affect NSCC’s operations or the rights and obligations of Members. As such, NSCC believes this proposed rule change to improve the transparency of the Rules would not have any impact on competition.

NSCC believes that the proposed changes to refine the MLA charge calculation could have an impact on competition. Specifically, NSCC believes the proposed changes could burden competition because they would result in larger Required Fund Deposit amounts for Members when the additional MLA charges are applicable and result in Required Fund Deposits that are greater than the amounts calculated pursuant to the current formula. However, NSCC believes any burden on competition that may result from the proposed rule change would be necessary and appropriate in furtherance of the purposes of the Act,42 for the reasons described below.

When the proposal results in a larger Required Fund Deposit, the proposed change could burden competition for Members that have lower operating margins or higher costs of capital compared to other Members. However, the increase in Required Fund Deposit would be in direct relation to the specific risks presented by each Member’s Net Unsettled Positions, and each Member’s Required Fund Deposit would continue to be calculated with the same parameters and at the same confidence level for each Member. Therefore, Members that present similar Net Unsettled Positions, regardless of the type of Member, would have similar impacts on their Required Fund Deposit amounts. As such, NSCC believes that any burden on competition imposed by the proposed changes would be both necessary and appropriate in

41 Id.
furtherance of NSCC’s efforts to mitigate risks and meet the requirements of the Act, as described in this filing and further below.

NSCC believes the above described burden on competition that may be created by the proposed enhancements to the MLA charge would be necessary in furtherance of the Act, specifically Section 17A(b)(3)(F) of the Act. As stated above, the proposed enhancements to the MLA charge are designed to more effectively address the market impact costs to NSCC of liquidating a Member portfolio in the event of the Member’s default. Specifically, the proposed enhancements to the MLA charge would allow NSCC to collect sufficient financial resources to cover the exposure that NSCC may face regarding increased market impact costs in liquidating Net Unsettled Positions that are not captured by the volatility charge. Therefore, NSCC believes this proposed change is consistent with the requirements of Section 17A(b)(3)(F) of the Act, which requires that the Rules be designed to assure the safeguarding of securities and funds that are in NSCC’s custody or control or for which it is responsible.

NSCC believes these proposed changes would also support NSCC’s compliance with Rules 17Ad-22(e)(4)(i) and (e)(6)(i) under the Act, which require NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to (x) 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; and (y) 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.

As described above, the enhancements to the MLA charge would allow NSCC to employ a risk-based methodology that would better address the increased market impact costs that NSCC could face when liquidating Net Unsettled Positions in particular securities. Therefore, NSCC believes the proposed changes would better limit NSCC’s credit exposures to Members, consistent with the requirements of Rules 17Ad-22(e)(4)(i) and (e)(6)(i) under the Act.

The proposed enhancements to the MLA charge would also enable NSCC to produce margin levels more commensurate with the risks and particular attributes of each Member’s portfolio by measuring the increased market impact costs that NSCC may face when liquidating a defaulted Member’s portfolio that includes Net Unsettled Positions in particular securities. Therefore, because the proposed changes are designed to provide NSCC with an appropriate measure of the risks related to market impact costs presented by Members’ portfolios, NSCC

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44 Id.
45 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).
46 Id.
believes the proposal is appropriately designed to meet NSCC’s risk management goals and its regulatory obligations.

NSCC believes that it has designed the proposed changes in an appropriate way in order to meet compliance with its obligations under the Act. Specifically, the proposal would improve the risk-based margining methodology that NSCC employs to set margin requirements and better limit NSCC’s credit exposures to its Members. Therefore, as described above, NSCC believes the proposed changes are necessary and appropriate in furtherance of NSCC’s obligations under the Act, specifically Section 17A(b)(3)(F) of the Act,\(^{47}\) and Rules 17Ad-22(e)(4)(i) and (e)(6)(i) under the Act.\(^{48}\)

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. If any written comments are received, they will be publicly filed as an Exhibit 2 to this filing, as required by Form 19b-4 and the General Instructions thereto.

Persons submitting comments are cautioned that, according to Section IV (Solicitation of Comments) of the Exhibit 1A in the General Instructions to Form 19b-4, the Commission does not edit personal identifying information from comment submissions. Commenters should submit only information that they wish to make available publicly, including their name, email address, and any other identifying information.

All prospective commenters should follow the Commission’s instructions on how to submit comments, available at www.sec.gov/regulatory-actions/how-to-submit-comments. General questions regarding the rule filing process or logistical questions regarding this filing should be directed to the Main Office of the Commission’s Division of Trading and Markets at tradingandmarkets@sec.gov or 202-551-5777.

NSCC reserves the right to not respond to any comments received.

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

NSCC does not consent to an extension of the time period specified in Section 19(b)(2) of the Act\(^{49}\) for Commission action.


\(^{48}\) 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).

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

Not applicable.

11. Exhibits

Exhibit 1 – Not applicable.

Exhibit 1A – Notice of proposed rule change 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 – Methodology Documentation, NSCC Quantitative Margin Risk Models. Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3b pursuant to 17 CFR 240.24b-2 being requested.

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

Exhibit 4 – Not applicable.

Exhibit 5 – Proposed changes to the Rules.
Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing of Proposed Rule Change to Refine the Margin Liquidity Adjustment (“MLA”) Charge Calculation and the Description of the MLA Charge

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”) and Rule 19b-4 thereunder, notice is hereby given that on November __, 2023, National Securities Clearing Corporation (“NSCC”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II and III below, which Items have been prepared by the clearing agency. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

The proposed rule change consists of modifications to NSCC’s Rules & Procedures (“Rules”) to refine the Margin Liquidity Adjustment (“MLA”) charge calculation and the description of the MLA charge, as described in greater detail below.3

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

In its filing with the Commission, the clearing agency included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The clearing agency has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

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

1. Purpose

NSCC is proposing to refine the MLA charge calculation to more accurately calculate the impact costs of liquidating a security/portfolio by (i) moving all exchange traded products (“ETPs”) (other than those deemed to be Illiquid Securities) into the equities asset group and calculating impact cost at the security level rather than at the subgroup level for the equities asset subgroups and (ii) improving the calculations relating to exchange traded funds (“ETFs”) by adding a calculation for latent liquidity for equity ETFs with in-kind baskets, as described in more detail below.

NSCC conducted an impact study of the proposed changes based on data from January 3, 2022 through June 30, 2023. The impact study indicated that if the proposed

In order to more accurately assess the impact of the proposed changes, the impact study included changes to the gap risk measure that were implemented on October 2, 2023 as if such changes had been in effect during the impact study period. See Securities Exchange Act Release No. 98086 (Aug. 8, 2023), 88 FR 55100 (Aug. 14, 2023) (File No. SR-NSCC-2022-015) (order approving proposed rule change to change the gap risk measure).
changes had been in place during the impact study period, the proposed changes would have resulted in an approximately $62 million daily average increase during the impact study period, which accounts for approximately 0.52% of the daily total Clearing Fund during that period. Currently, the daily MLA charge accounts for approximately 3.54% of the daily total Clearing Fund. With the proposed MLA charge refinements, the MLA charge would have accounted for approximately 4.06% of the daily total Clearing Fund.

NSCC is also proposing to enhance the description of the MLA charge to clarify the description of the calculation with respect to SFT Positions in connection with Securities Financing Transactions, as described below.

(i)  Overview of Required Fund Deposit and MLA Charge

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. 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”). The aggregate of

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5 See Rule 4 (Clearing Fund) and Procedure XV (Clearing Fund Formula and Other Matters), supra note 3. 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).

6 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 3.
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.\textsuperscript{7}

\textit{Volatility Charge}

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.\textsuperscript{8} Generally, the largest component of Members’ Required Fund Deposits is the volatility charge. The volatility charge is designed to capture the market price risk associated with each Member’s portfolio at a 99th percentile level of confidence.

NSCC has two methodologies for calculating the volatility charge. For the majority of Net Unsettled Positions,\textsuperscript{9} NSCC calculates the volatility charge as the sum of (1) the greater of (a) the larger of two separate calculations that utilize a parametric Value at Risk (“VaR”) model and (b) a portfolio margin floor calculation based on the market values of the long and short positions in the portfolio and (2) a gap risk measure calculation based on the concentration threshold of the two largest non-diversified

\textsuperscript{7} See Rule 4 (Clearing Fund), supra note 3.

\textsuperscript{8} Supra note 3.

\textsuperscript{9} 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.” See Procedure XV (Clearing Fund Formula and Other Matters) of the Rules, supra note 3.
positions in a portfolio (“VaR Charge”).\(^{10}\) NSCC excludes certain Net Unsettled Positions from the calculation of the VaR Charge and instead applies a haircut-based volatility charge that is calculated by multiplying the absolute value of those Net Unsettled Positions by a percentage.\(^{11}\)

**MLA Charge**

NSCC applies an MLA charge\(^{12}\) to address situations where the characteristics of the defaulted Member’s portfolio could cause the market impact costs to be higher than the amount collected for the applicable volatility charge.\(^{13}\) 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 (referred to as “asset groups”). 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

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11. See Section I(A)(1)(a)(ii), (iii) and (iv), and Section I(A)(2)(a)(ii), (iii) and (iv), of Procedure XV of the Rules, supra note 3.

12. See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3.

increased market impact cost to liquidate that portfolio in the assumed margin period of risk of three business days at market prices.

The MLA charge is calculated to address this increased market impact cost by assessing sufficient margin to mitigate this risk. The MLA charge is calculated for different asset groups. Essentially, the calculation is currently designed to compare the total market value of a Net Unsettled Position in a particular asset group, 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.

NSCC regularly assesses market and liquidity risks as such risks relate to NSCC’s 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 enhance the MLA charge by improving the calculation of the impact costs of liquidating Net Unsettled Positions in certain securities, as described below, are the result of NSCC’s regular review of the effectiveness of its margining methodology and in response to regulatory feedback.

(ii) Proposed Changes to Market Impact Cost Calculations

Existing Market Impact Cost Calculations

To calculate the MLA charge, NSCC currently categorizes securities into separate asset groups that have similar risk profiles – (1) equities\(^{14}\) (excluding equities defined as

\[^{14}\) NSCC excludes 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 3.
Illiquid Securities pursuant to the Rules),\(^{15}\) (2) Illiquid Securities, (3) unit investment trusts, or UITs, (4) municipal bonds (including municipal bond ETPs), and (5) corporate bonds (including corporate bond ETPs).\(^{16}\) NSCC then further segments 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.\(^{17}\)

NSCC first calculates a measurement of market impact cost for each asset group and equities asset subgroup for which a Member has Net Unsettled Positions in its portfolio.\(^{18}\) The calculation of an MLA charge is designed to measure the potential

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\(^{15}\) See Rule 1 (Definitions), supra note 3.

\(^{16}\) See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3.

\(^{17}\) Id. The market capitalization categorizations currently are as follows: (i) micro-capitalization equities have a capitalization of less than $300 million, (ii) small capitalization equities have a capitalization of equal to or greater than $300 million and less than $2 billion, (iii) medium capitalization equities have a capitalization of equal to or greater than $2 billion and less than $10 billion, and (iv) large capitalization equities have a capitalization of equal to or greater than $10 billion. NSCC reviews these categories annually, and any changes that NSCC deems appropriate are 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 (Aug. 25, 2017), 82 FR 41433 (Aug. 31, 2017) (File No. SR-NSCC-2017-008); 84458 (Oct. 19, 2018), 83 FR 53925 (Oct. 25, 2018) (File No. SR-NSCC-2018-009); 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (File No. SR-NSCC-2020-008); 92381 (July 13, 2021), 86 FR 38163 (July 19, 2021) (SR-NSCC-2021-008); and 94272 (Feb. 17, 2022), 87 FR 10419 (Feb., 24 2022) (SR-NSCC-2022-001).

\(^{18}\) See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3.
additional market impact cost to NSCC of closing out a large Net Unsettled Position in that particular asset group or equities subgroup.

*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 is currently 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 divided by an assumed percentage of the average daily trading volume of that subgroup, and (4) a measurement of the concentration of the Net Unsettled Position in that subgroup in the portfolio (as described in greater detail below).\(^{19}\) Rather than calculate the market impact cost for each security for the MLA charge, NSCC currently estimates market impact cost at the portfolio-level using aggregated volume data.

The measurement of the concentration of the Net Unsettled Position in the subgroup includes aggregating the relative weight of each security in that Net Unsettled Position relative to the weight of that security in the subgroup, such that a portfolio with fewer positions in a subgroup would have a higher measure of concentration for that subgroup.\(^{20}\)

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\(^{19}\) *Id.*

\(^{20}\) The relative weight is calculated by dividing the absolute market value of a single security in the Member’s portfolio by the total absolute market value of that portfolio.
Market Impact Cost Calculation for Other Asset Groups and Equities Asset 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 are currently 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 divided by an assumed percentage of the average daily trading volume of that asset group or subgroup.21

Total MLA Charge Calculation for Each Portfolio

For each asset group or subgroup, NSCC compares 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).22 If the ratio of the calculated market impact cost to the applicable 1-day volatility charge is greater than a threshold, an MLA charge is applied to

21 See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3.

22 Supra note 3. NSCC’s margining methodology uses a three-day assumed period of risk. For purposes of this calculation, NSCC uses 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 17. See also Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3.
that asset group or subgroup.\textsuperscript{23} If the ratio of these two amounts is equal to or less than this threshold, an MLA charge is not applied to that asset group or subgroup. The threshold is 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 applies only when the calculated market impact cost exceeds this threshold.

When applicable, an MLA charge for each asset group or subgroup is calculated as a proportion of the product of (1) the amount by which the ratio of the calculated market impact cost to the applicable 1-day volatility charge exceeds the threshold, and (2) the 1-day volatility charge allocated to that asset group or subgroup.\textsuperscript{24}

For each Member portfolio, NSCC adds 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 then adds 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.\textsuperscript{25}

The ratio of the calculated market impact cost to the 1-day volatility charge also determines if NSCC would apply a downward adjustment, based on a scaling factor, to

\textsuperscript{23} See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3. The threshold is currently 0.4 because approximately 40 percent of the 1-day volatility charge addresses market impact costs. NSCC reviews 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. See id.

\textsuperscript{24} See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3.

\textsuperscript{25} Id.
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 applies a larger adjustment to the MLA charge by assuming that NSCC 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 applies 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 is 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 is calculated daily and, when the charge is applicable, as described above, is included as a component of Members’ Required Fund Deposits.

NSCC is proposing to refine the calculation relating to the equity asset group by more accurately calculating the impact costs of liquidating a security/portfolio by (i) moving all ETPs (other than those deemed to be Illiquid Securities) into the equities asset group and calculating impact cost at the security level rather than at the subgroup level for the equities asset subgroups and (ii) improving the calculations relating to ETFs by adding a calculation for latent liquidity for equity ETFs with in-kind baskets, as described in more detail below.

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26 Id.
27 The multiplier is referred to as a downward adjusting scaling factor in Procedure XV. See id.
Move Liquid ETPs into Equities Asset Group and Provide Security Level Market Impact Cost Calculations

NSCC is proposing to move all ETPs, including corporate bond ETPs and municipal bond ETPs, other than ETPs that are deemed to be Illiquid Securities, into the equities asset group. Currently, corporate bond ETPs and municipal bond ETPs are included as corporate bonds and municipal bonds, respectively, for purposes of the MLA charge calculation. ETPs are traded on an exchange giving them equity-like properties such as trading volume data at the security level apart from their underlying assets which may not be actively traded. Therefore, the impact costs of liquidating ETPs can be estimated in the same manner as other items in the equities asset subgroups, at the security level, as discussed below. ETPs that are deemed to be Illiquid Securities, would be included in the Illiquid Securities category.28

NSCC is also proposing to revise the market impact cost calculation for the equities asset group and subgroups to calculate the impact cost at the security level. Based on the review of its margin methodologies (and the ETF Study discussed below), NSCC has determined that equities and liquid ETPs display a wide disparity of trading volumes (as measured by average daily volumes) even within subgroups, and the market impact costs are more dependent on specific securities than the subgroup. As a result, NSCC is proposing to calculate the market impact costs for securities in the equities asset group, including liquid ETPs, at the security level rather than at the subgroup level,

28 See definition of “Illiquid Security” in Rule 1, supra note 3. For instance, if an ETP is not listed on a specified securities exchange or has a limited trading history, as defined in the definition, it would be treated as an Illiquid Security for purposes of the MLA charge calculations.
which has shown to be a more accurate calculation of market impact costs for these securities.

As discussed above, currently the MLA charge calculation for the equity asset subgroups includes a measurement of the concentration of the Net Unsettled Position in the subgroup. Since the market impact cost would be calculated at the security level for the equities asset group, rather than the subgroup level, this measurement would no longer be necessary and would be removed.

In addition, currently for each asset group or subgroup, NSCC compares 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) and compares that ratio to a threshold to determine if an MLA charge is applicable to that asset group or subgroup. Since the market impact cost would be calculated at the security level for all assets in the equity asset group, rather than the subgroup level, this comparison would be at the asset group level for all asset groups, including the equities asset group, and would no longer be made at the subgroup level for subgroups within the equities asset group.

Proposed Improvements to ETF Calculations

NSCC is proposing to refine the impact cost calculations for ETFs to more accurately account for the market impact of these securities and in response to regulatory feedback on NSCC’s margin methodologies. In particular, NSCC is proposing to incorporate “latent” liquidity to more accurately reflect the market liquidity of ETFs.

See supra note 22 and accompanying text.
ETFs are securities that are traded on an exchange and that track underlying securities, indexes or other financial instruments, including equities, corporate and municipal bonds and treasury instruments. Unlike mutual funds, ETFs are created with the assistance of certain financial institutions called authorized participants (“APs”), often banks, that are given the ability to create and redeem ETF shares directly from the ETF issuer. To create ETF shares, an AP can either deliver a pre-specified bundle of securities underlying the ETFs (i.e., an “in-kind basket”) in exchange for ETF shares or provide cash equal to the value of the cost of purchasing underlying securities for the ETF shares. To redeem ETF shares, an AP would do the opposite – deliver ETF shares to the ETF issuer in exchange for an in-kind basket of underlying securities or cash equal to the value of the underlying securities.

Throughout the life of an ETF, APs create and redeem shares depending on the market and arbitrage opportunities. As a result, ETFs, particularly those with in-kind creation/redemption mechanisms, tend to trade close to the value of the underlying securities. For instance, if the market price of the ETF on the secondary market (discussed below) is above the value of the securities underlying the ETF, the AP can purchase underlying securities (at the lower price) and exchange those securities to create new ETFs. Likewise, if the market price of the ETF falls below the value of the securities underlying the ETFs, an AP can buy ETF shares on the secondary market and redeem them with the ETF issuer in exchange for underlying securities.

*Latent Liquidity*

As a result of this structure, ETF market liquidity can be divided into two markets: the primary market and the secondary market. The primary market consists of
APs creating and redeeming ETF shares directly with the ETF issuer. The secondary market consists of investors buying and selling ETFs through exchanges. Often the stocks underlying an ETF basket have much larger trading volume than the ETF itself. Upon the liquidation of a portfolio with ETFs, the ability of APs to create and redeem ETF shares provides additional liquidity, also called “latent liquidity,” which changes the market risk profile of ETFs with in-kind basket creation/redemption processes.

The current impact cost calculation for the MLA charge does not include calculations measuring the impact relating to the latent liquidity. NSCC recently commissioned a review of ETFs (“ETF Study”) that included an ETF market review, risk characteristics and an independent simulation of market impact costs associated with sample clearing portfolios. Based on the ETF Study, it was observed that most equity ETFs with an in-kind creation/redemption process trade with very tight premium/discount to net asset value (“NAV”), or close to the value of the underlying securities. Often, however, the stocks underlying the equity ETF baskets have a much larger trading volume than the equity ETF itself, which creates latent liquidity.

As a result, NSCC is proposing to include as part of an impact calculation, a measure of the latent liquidity for equity ETFs with in-kind basket creation/redemption processes and a measure of the costs associated with primary market arbitrage to more accurately assess the impact costs relating to liquidating portfolios containing equity ETFs. The proposed calculation would take into account liquidity in the primary and

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When an ETF’s market price is higher than its NAV, it’s trading at a premium, when it’s lower, it’s trading at a discount. The spread between the premium or discount to the NAV represents a potential cost to close out the paired ETF and its in-kind basket.
secondary market for liquid equity ETFs with in-kind creation/redemption processes, by comparing the market impact cost of such equity ETFs based on a hypothetical liquidation in the primary market and in the secondary market.

To determine the impact costs of a liquidation of equity ETFs with in-kind baskets, NSCC would run the proposed MLA charge calculations described above in two scenarios for portfolios that contain such ETFs and compare the two calculations to determine the impact cost. NSCC would run a baseline calculation (“Baseline Calculation”) to simulate all the ETF positions being liquidated in the secondary market and the impact cost calculation would be at the security level (i.e., the ETF shares) as liquid equities (as discussed above). NSCC would also run an alternative calculation (“Create/Redeem Calculation”) to simulate the ETF positions being liquidated in the primary market using the creation/redemption process.

The Create/Redeem Calculation would be calculated in the following steps:

One – the liquid equity ETFs eligible for in-kind create/redeem process would be fully decomposed into (a) the corresponding underlying baskets of the liquid equity ETFs and (b) pairs of such ETFs and their corresponding underlying baskets;

Two – the decomposed underlying baskets and the residual securities in the portfolio (i.e., the securities in the original portfolio that are not ETFs eligible for in-kind create/redeem process) would be netted at the security level;

Three – the impact cost on the portfolio from the second step would be calculated assuming all the securities would be liquidated in the secondary market and the
impact costs would be calculated as described above as if such securities are liquid equities;

Four – the impact cost calculated in the third step would be adjusted by an amount to account for the portfolio risk difference\(^{31}\) from the netted securities from the second step to the original portfolio;

Five – the impact cost for paired ETFs and their corresponding underlying baskets would be calculated by multiplying the gross market amount of the ETFs by a haircut representing the premium/discount,\(^{32}\)

Six – the impact costs from step four and step five would be added together.

NSCC would then use the smaller calculated impact costs of either the Baseline Calculation or the Create/Redeem Calculation for purposes of calculating the MLA charge.

(iii) Proposed Changes to MLA Charge Description with Respect to SFT Positions

Rule 56 describes the SFT Clearing Service and contains a description of how the Clearing Fund formula is calculated with respect to SFT Positions, including how such

\(^{31}\) The original portfolio used in the Baseline Calculation and the portfolio from step two would have different portfolio risks. As a result, because such portfolios would contain different positions, they would have different VaR Charges if calculated separately. The VaR Charge of the original portfolio is a component of the MLA charge calculation for the portfolio from step two. Step four would adjust for those differences as part of the impact cost.

\(^{32}\) The haircut is calculated as an estimate of the cost of closing out the ETFs and underlying pairs using the create/redeem process. The haircut is a model parameter and will be reviewed at least monthly in accordance with the model risk management governance procedures set forth in the model Risk Management Framework. See supra note 17.
positions are calculated with respect to the MLA charge.\textsuperscript{33} The proposed rule change would update the language relating to the MLA charge to clarify how NSCC would calculate the MLA charge with respect to SFT Positions for transparency and to reflect the proposed MLA charge refinements. NSCC would clarify how SFT Positions would be categorized for purposes of the MLA charge by replacing language stating that SFT Positions are “aggregated with” Net Unsettled Positions in the same asset group or subgroup with language that clarifies that SFT Positions would be categorized in the same asset groups or subgroups as the underlying SFT Securities in such SFT Positions. NSCC would also clarify language discussing an added calculation relating to the MLA charge in the event a Member’s portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions. The language in Rule 56 relating to the added calculation for SFT positions does not reference Net Balance Order Unsettled Positions which are treated in the same manner as Net Unsettled Positions for purposes of the added calculation when a portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions. The proposed language would add a reference to Net Balance Order Unsettled Positions. The clarifying changes to reference that SFT Positions would be categorized in the same asset group as their underlying SFT Securities and to reference Net Balance Order Unsettled Positions in the added calculation language would not change how NSCC would calculate the MLA charge with respect to SFT positions and are clarifications only.

\textsuperscript{33} See Rule 56 (Securities Financing Transaction Clearing Service) of the Rules, supra note 3.
NSCC is also proposing to add a sentence in Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules clarifying that if a Member’s portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions, the MLA charge shall be calculated as set forth in Rule 56.

(iv) Proposed Changes to NSCC Rules

The proposal described above would be implemented into Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules. These sections would be amended to move all ETP categories as subgroups in the equities asset group other than ETPs that are deemed to be Illiquid Securities, which would be categorized as Illiquid Securities. A footnote in each of these sections would be added to the “all other ETPs” category to clarify that ETPs with underlying securities separately categorized in an equities asset subgroup would be categorized by the asset types and capitalizations of their underlying securities, and that ETPs that are deemed Illiquid Securities would be categorized in the Illiquid Securities asset group.

NSCC would also add language in Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV stating that the impact cost for ETFs with in-kind baskets would include calculations comparing impact costs in the secondary market and the primary market for such equity ETFs, as discussed above. NSCC would indicate that it would calculate impact costs in two scenarios: (1) a baseline calculation to simulate such ETFs being liquidated in the secondary market where the impact costs would be calculated at the security level (i.e., the ETF shares) utilizing the equities asset subgroup security level and (2) a

See Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV of the Rules, supra note 3.
create/redeem calculation to simulate an authorized participant using the primary market to liquidate such ETFs using the creation/redemption process. The proposed language would include a description of the how the impact costs for the create/redeem calculation would be calculated by decomposing the ETFs into their underlying securities and calculating impact costs of such underlying securities utilizing the equity asset subgroup calculations (as discussed above). The proposed language would also state that an adjustment would be made in the create/redeem calculation to reflect the different portfolio risks of the original portfolio used in the baseline calculation and the decomposed portfolio used in the create/redeem calculation. The proposed language would provide that NSCC would then use the smaller calculated impact costs of the scenarios for purposes of the MLA charge for such ETFs.

Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV would be restructured to reflect that the market impact calculation for securities in the equities asset group would be calculated at the security level rather than the subgroup level, as discussed above. As a result of this change, the current component that measures the concentration of each Net Unsettled Position in a subgroup would be removed from Sections I(A)(1)(g)(i)(4) and I(A)(2)(f)(i)(4) of Procedure XV. References to subgroup calculations would also be removed in applicable provisions, including the provisions relating to comparing the calculated market impact cost at the subgroup level to the volatility charge applicable to the Net Unsettled Positions and an applicable MLA charge at the subgroup level and a sentence that states that all MLA charges for each of the equities subgroups shall be added together to result in one MLA charge for the equities subgroup. In addition, references to subgroups with respect to calculations relating to asset groups other than the
equities asset group currently in Sections I(A)(1)(g)(ii) and I(A)(2)(f)(ii) (i.e., references to the treasury ETP and other ETP subgroups) would be removed since those would be calculated as part of the equities asset group, as discussed above.

NSCC would add language to clarify that for each Member, all MLA charges for each of the asset groups shall be added together to result in a total MLA charge.

The description of the MLA charge with respect to SFT Positions would be updated in Rule 56 and Sections I(A)(1)(g) and I(A)(2)(f) of Procedure XV would be updated to reference Rule 56, as described above.

(v) Implementation Timeframe

NSCC would implement the proposed rule change no later than 90 Business Days after the approval of the proposed rule change by the Commission. NSCC would announce the effective date of the proposed rule change by Important Notice posted to its website.

2. Statutory Basis

NSCC believes that the proposed rule change is consistent with the requirements of the Act, and the rules and regulations thereunder applicable to a registered clearing agency. In particular, NSCC believes the proposed changes are consistent with Section 17A(b)(3)(F) of the Act,35 and Rules 17Ad-22(e)(4)(i) and (e)(6)(i), each promulgated under the Act,36 for the reasons described below.

Section 17A(b)(3)(F) of the Act requires that the rules of NSCC be designed to, among other things, assure the safeguarding of securities and funds which are in the

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36 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).
custody or control of the clearing agency or for which it is responsible. NSCC believes the proposed change to enhance the MLA charge is designed to assure the safeguarding of securities and funds which are in NSCC’s custody or control or for which it is responsible because such change is designed to more accurately calculate the market impact costs to NSCC of liquidating a Member’s portfolio in the event of that Member’s default. Specifically, the proposed enhancements to the MLA charge would allow NSCC to collect sufficient financial resources to cover the exposure that NSCC may face regarding increased market impact costs in liquidating Net Unsettled Positions in a particular group of securities with a similar risk profile or in a particular asset type that are not captured by the volatility charge. The proposed enhancements would result in a more accurate calculation of the impact costs of liquidating a security/portfolio by moving all ETPs (except for Illiquid Securities) into the equities asset group and adding a calculation for latent liquidity for equity ETFs and therefore improve NSCC’s ability 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 particular asset groups.

The Clearing Fund is a key tool that NSCC uses to mitigate potential losses to NSCC associated with liquidating a Member’s portfolio in the event of Member default. Therefore, the proposed change to enhance the MLA charge would enable NSCC to better address the increased market impact costs of liquidating Net Unsettled Positions, in particular securities with risk profiles dependent on the particular trading market of the security, such that, in the event of Member default, NSCC’s operations would not be

disrupted, and non-defaulting Members would not be exposed to losses they cannot anticipate or control. In this way, the proposed rule change to enhance the MLA charge is designed to assure the safeguarding of securities and funds which are in the custody or control of NSCC or for which it is responsible, consistent with Section 17A(b)(3)(F) of the Act.\textsuperscript{38}

NSCC also believes the proposed changes to provide transparency to the Rules by updating the language relating to how the MLA charge is calculated with respect to SFT Positions are consistent with the requirements of Section 17A(b)(3)(F) of the Act.\textsuperscript{39} Specifically, by enhancing the transparency of the Rules, the proposed changes would allow Members to more efficiently and effectively conduct their business in accordance with the Rules, which NSCC believes would promote the prompt and accurate clearance and settlement of securities transactions.

Rule 17Ad-22(e)(4)(i) under the Act requires 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.\textsuperscript{40}

\textsuperscript{38} Id.
\textsuperscript{39} Id.
\textsuperscript{40} 17 CFR 240.17Ad-22(e)(4)(i).
As described above, NSCC believes that the proposed changes would enable it to better identify, measure, monitor, and, through the collection of Members’ Required Fund Deposits, manage its credit exposures to Members by maintaining sufficient financial resources to cover those credit exposures fully with a high degree of confidence.

Specifically, NSCC believes that the proposed enhancements to the MLA charge would effectively mitigate the risks related to large Net Unsettled Positions of securities in the equities 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. The proposed enhancements would result in a more accurate calculation of the impact costs of liquidating a security/portfolio by moving all ETPs (except for Illiquid Securities) into the equities asset group and adding a calculation for latent liquidity for equity ETFs and therefore improve NSCC’s ability 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 particular asset groups.

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.41

41 Id.
Rule 17Ad-22(e)(6)(i) under the Act requires 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.⁴²

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 enhance the MLA charge is designed to more effectively address the risks presented by Net Unsettled Positions in the proposed equities asset group, including equity ETFs with in-kind creation/redemption processes. NSCC believes the enhancements of the MLA charge would enable NSCC to assess a more appropriate level of margin that accounts for these risks. The proposed enhancements would result in a more accurate calculation of the impact costs of liquidating a security/portfolio by moving all ETPs (except for Illiquid Securities) into the equities asset group and adding a calculation for latent liquidity for equity ETFs and therefore improve NSCC’s ability 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 particular asset groups. 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 default.

⁴² 17 CFR 240.17Ad-22(e)(6)(i).
Member default. Therefore, NSCC believes the proposed rule change is consistent with Rule 17Ad-22(e)(6)(i) under the Act.43

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

NSCC does not believe the proposed changes to provide transparency to the Rules by updating the language relating to how the MLA charge is calculated with respect to SFT Positions would impact competition. These proposed rule changes would merely enhance the transparency of the Rules. Therefore, this proposed changes would not affect NSCC’s operations or the rights and obligations of Members. As such, NSCC believes this proposed rule change to improve the transparency of the Rules would not have any impact on competition.

NSCC believes that the proposed changes to refine the MLA charge calculation could have an impact on competition. Specifically, NSCC believes the proposed changes could burden competition because they would result in larger Required Fund Deposit amounts for Members when the additional MLA charges are applicable and result in Required Fund Deposits that are greater than the amounts calculated pursuant to the current formula. However, NSCC believes any burden on competition that may result from the proposed rule change would be necessary and appropriate in furtherance of the purposes of the Act,44 for the reasons described below.

When the proposal results in a larger Required Fund Deposit, the proposed change could burden competition for Members that have lower operating margins or higher costs of capital compared to other Members. However, the increase in Required

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43 Id.
Fund Deposit would be in direct relation to the specific risks presented by each Member’s Net Unsettled Positions, and each Member’s Required Fund Deposit would continue to be calculated with the same parameters and at the same confidence level for each Member. Therefore, Members that present similar Net Unsettled Positions, regardless of the type of Member, would have similar impacts on their Required Fund Deposit amounts. As such, NSCC believes that any burden on competition imposed by the proposed changes would be both necessary and appropriate in furtherance of NSCC’s efforts to mitigate risks and meet the requirements of the Act, as described in this filing and further below.

NSCC believes the above described burden on competition that may be created by the proposed enhancements to the MLA charge would be necessary in furtherance of the Act, specifically Section 17A(b)(3)(F) of the Act. As stated above, the proposed enhancements to the MLA charge are designed to more effectively address the market impact costs to NSCC of liquidating a Member portfolio in the event of the Member’s default. Specifically, the proposed enhancements to the MLA charge would allow NSCC to collect sufficient financial resources to cover the exposure that NSCC may face regarding increased market impact costs in liquidating Net Unsettled Positions that are not captured by the volatility charge. Therefore, NSCC believes this proposed change is consistent with the requirements of Section 17A(b)(3)(F) of the Act, which requires that the Rules be designed to assure the safeguarding of securities and funds that are in NSCC’s custody or control or for which it is responsible.\(^{46}\)


\(^{46}\) Id.
NSCC believes these proposed changes would also support NSCC’s compliance with Rules 17Ad-22(e)(4)(i) and (e)(6)(i) under the Act, which require NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to (x) 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; and (y) 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.\textsuperscript{47}

As described above, the enhancements to the MLA charge would allow NSCC to employ a risk-based methodology that would better address the increased market impact costs that NSCC could face when liquidating Net Unsettled Positions in particular securities. Therefore, NSCC believes the proposed changes would better limit NSCC’s credit exposures to Members, consistent with the requirements of Rules 17Ad-22(e)(4)(i) and (e)(6)(i) under the Act.\textsuperscript{48}

The proposed enhancements to the MLA charge would also enable NSCC to produce margin levels more commensurate with the risks and particular attributes of each Member’s portfolio by measuring the increased market impact costs that NSCC may face when liquidating a defaulted Member’s portfolio that includes Net Unsettled Positions in

\textsuperscript{47} 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).

\textsuperscript{48} Id.
particular securities. Therefore, because the proposed changes are designed to provide
NSCC with an appropriate measure of the risks related to market impact costs presented
by Members’ portfolios, NSCC believes the proposal is appropriately designed to meet
NSCC’s risk management goals and its regulatory obligations.

NSCC believes that it has designed the proposed changes in an appropriate way in
order to meet compliance with its obligations under the Act. Specifically, the proposal
would improve the risk-based margining methodology that NSCC employs to set margin
requirements and better limit NSCC’s credit exposures to its Members. Therefore, as
described above, NSCC believes the proposed changes are necessary and appropriate in
furtherance of NSCC’s obligations under the Act, specifically Section 17A(b)(3)(F) of
the Act,\textsuperscript{49} and Rules 17Ad-22(e)(4)(i) and (e)(6)(i) under the Act.\textsuperscript{50}

(C) Clearing Agency’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. If any written comments are received, they will be publicly filed as an Exhibit
2 to this filing, as required by Form 19b-4 and the General Instructions thereto.

Persons submitting comments are cautioned that, according to Section IV
(Solicitation of Comments) of the Exhibit 1A in the General Instructions to Form 19b-4,
the Commission does not edit personal identifying information from comment
submissions. Commenters should submit only information that they wish to make


\textsuperscript{50} 17 CFR 240.17Ad-22(e)(4)(i) and (e)(6)(i).
available publicly, including their name, email address, and any other identifying information.

All prospective commenters should follow the Commission’s instructions on how to submit comments, available at www.sec.gov/regulatory-actions/how-to-submit-comments. General questions regarding the rule filing process or logistical questions regarding this filing should be directed to the Main Office of the Commission’s Division of Trading and Markets at tradingandmarkets@sec.gov or 202-551-5777.

NSCC reserves the right to not respond to any comments received.

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

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) by order approve or disapprove such proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission’s Internet comment form (http://www.sec.gov/rules/sro.shtml); or
Send an e-mail to rule-comments@sec.gov. Please include File Number SR-NSCC-2023-011 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-2023-011. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission’s Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of 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). Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to File Number SR-NSCC-
2023-011 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\textsuperscript{51}

Secretary

\textsuperscript{51} 17 CFR 200.30-3(a)(12).
The information contained in this Exhibit 3 is subject to exemption from mandatory disclosure under Exemptions #4 and #8 of the Freedom of Information Act because the information concerns (i) trade secrets and commercial information that is privileged or confidential and (ii) the supervision of National Securities Clearing Corporation (NSCC), a financial institution. This Exhibit 3 contains electronic files, each embedded in a one-page document for filing efficiency, as listed below. The information contained in the embedded files is not intended for public disclosure. Accordingly, this Exhibit 3 has been redacted and confidential treatment requested pursuant to 17 CFR 240.24b-2. An unredacted version was filed separately and confidentially with the Securities and Exchange Commission. Notwithstanding the request for confidential treatment, NSCC believes the substance of this Exhibit 3 is clearly and adequately described in the accompanying Exhibit 1A and Form 19b-4 narrative to the proposed rule change filing, thus allowing for meaningful public comment.

Embedded Files:

- Exhibit 3a – Impact Study Data; spreadsheet file; impact study data.

- Exhibit 3b – Methodology Documentation, NSCC Quantitative Margin Risk Models; 152 pages; proposed changes to the Methodology Documentation, NSCC Quantitative Margin Risk Models.

- Exhibit 3c – ETF Study; 106 pages; report on review of ETFs.
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PAGE REDACTED IN ITS ENTIRETY
NATIONAL SECURITIES CLEARING CORPORATION

RULES & PROCEDURES

TEXT OF PROPOSED RULE CHANGE

**Bold and underlined** text indicates proposed added language.

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

**Bold, underlined and shaded text** indicates proposed language added in connection with a separate proposal that has been approved by the SEC but not yet implemented (SR-NSCC-2023-009).

**Bold, strikethrough and shaded text** indicates proposed deleted language in connection with a separate proposal that has been approved by the SEC but not yet implemented (SR-NSCC-2023-009).
RULE 56. SECURITIES FINANCING TRANSACTION CLEARING SERVICE

[Changes to this Rule, as amended by File No. SR-NSCC-2023-011, are available at www.dtcc.com/legal/sec-rule-filings. These changes have been approved by the SEC but have not yet been implemented. By no later than [insert date within 90 Business Days after the approval of SR-NSCC-2023-011], these changes will be implemented, and this legend will automatically be removed from this Rule.]


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(c) The Corporation shall calculate the amount of each such SFT Member’s required deposit for SFT Positions, subject to a $250,000 minimum (excluding the minimum contribution to the Clearing Fund as required by Procedure XV, Section II.(A)), by applying the Clearing Fund formula for CNS Transactions in Sections I.(A)(1)(a), (b), (c), (e), (f), (g)¹ of Procedure XV as well as the additional Clearing Fund formula in Section I.(B)(5) (Intraday Mark-to-Market Charge) and (6) (Intraday Volatility Charge) of Procedure XV, except as noted otherwise, in the same manner as such sections apply to CNS Transactions submitted to the Corporation for regular way settlement, plus, with respect to any Non-Returned SFT, an additional charge that is calculated by (x) multiplying the Current Market Price of the SFT Securities that are the subject of such Non-Returned SFTs by the number of such SFT Securities that are the subject of the SFT and (y) multiplying such product by (i) 5% for SFT Members rated 1 through 4 on the Credit Risk Rating Matrix, (ii) 10% for SFT Members rated 5 or 6 on the Credit Risk Rating Matrix, or (iii) 20% for SFT Members rated 7 on the Credit Risk Rating Matrix shall be applied to each SFT Member that is a party thereto (collectively, the “Required SFT Deposit”); provided, however, notwithstanding anything to the contrary, (x) a minimum of 40% of an SFT Member’s Required SFT Deposit shall be made in the form of cash and/or Eligible Clearing Fund Treasury Securities and (y) the lesser of $5,000,000 or 10% of an SFT Member’s Required SFT Deposit, with a minimum of

¹ For the purpose of applying Section I.(A)(1)(g) of Procedure XV (Margin Liquidity Adjustment (MLA) charge), SFT Positions shall be categorized in the same asset groups or subgroups as the underlying SFT Securities in such SFT Positions. In the event a Member’s portfolio contains both (x) SFT Positions and (y) Net Unsettled Positions or Net Balance Order Unsettled Positions, the Corporation shall calculate the MLA charge as the aggregated with Net Unsettled Positions, as defined in Rule 1, in the same asset group or subgroup; provided, however, in the event such aggregation results in a reduction of the aggregate positions in the relevant asset group or subgroup, the Corporation shall apply the greater of (a) the sum of (1) MLA charges separately calculated for SFT Positions and (2) MLA charges separately calculated for Net Unsettled Positions and Net Balance Order Unsettled Positions, and (b) the MLA charge calculated from aggregating combining the SFT Positions, and the Net Unsettled Positions and Net Balance Order Unsettled Positions in the asset group or subgroup.
$250,000, must be made and maintained in cash; provided, further, the additional Clearing Fund formula in Sections I.(B)(1) (Additional Deposits for Members on the Watch List); (2) (Excess Capital Premium); (3) (Backtesting Charge); and (4) (Bank Holiday Charge) of Procedure XV; as well as the Minimum Clearing Fund and Additional Deposit Requirements in Sections II.(A)(a) – (b), II.(B), II.(C), and II.(D); as well as Section III (Collateral Value of Eligible Clearing Fund Securities) of Procedure XV, shall apply to SFT Members in the same manner as such sections apply to Members.

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PROCEDURE XV. CLEARING FUND FORMULA AND OTHER MATTERS

[Changes to this Procedure, as amended by File No. SR-NSCC-2023-011, are available at www.dtcc.com/legal/sec-rule-filings. These changes have been approved by the SEC but have not yet been implemented. By no later than [insert date within 90 Business Days after the approval of SR-NSCC-2023-011], these changes will be implemented, and this legend will automatically be removed from this Procedure.]

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

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(g) 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 [including ETPs that are deemed 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, (vi) corporate bond ETPs, (vii) municipal bond ETPs, and (viii) all other ETPs.?

Equities Asset Subgroup MLA Calculations

For each equities asset subgroup, the Corporation shall first calculate a measurement of market impact cost for each Net Unsettled Positions at the

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

2 ETPs with underlying securities separately categorized in an equities asset subgroup are categorized by the asset types and capitalizations of their underlying securities. ETPs that are deemed Illiquid Securities are categorized in the Illiquid Securities asset group.
security level as the product of the following three components: in each of the asset groups or subgroups, as described below.

i. For Net Unsettled Positions in the market capitalization subgroups of the equities asset group, by multiplying four components:

1. an impact cost coefficient that is a multiple of the one-day market volatility of that the subgroup in which the security is categorized,
2. the gross market value of the Net Unsettled Position in each security that subgroup, and
3. the square root of the gross market value of the Net Unsettled Position in each security that subgroup in the portfolio divided by an assumed percentage of the average daily trading volume of such security that subgroup, and
4. a measurement of the concentration of each Net Unsettled Position in that subgroup.

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:

The impact cost for the equity asset group is the sum of the impact cost calculated at the security level, as described above, for all equity asset subgroups.

The impact cost for equity exchange traded funds ("ETFs") with in-kind baskets that are not Illiquid Securities will include calculations comparing the impact costs if such ETFs were being liquidated in the secondary market to the impact costs if such ETFs were being liquidated in the primary market. The Corporation will calculate impact costs in two scenarios: (1) a baseline calculation to simulate such ETFs being liquidated in the secondary market where the impact costs would be calculated at the security level (i.e., the ETF shares) utilizing the equities asset subgroup calculations (as discussed above) and (2) a create/redeem calculation to simulate an authorized participant using the primary market to liquidate

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1 Liquidation in the secondary market would involve selling the ETF shares in the market. Liquidation in the primary market would involve liquidating the ETFs based on the value of their underlying securities by an authorized participant using the creation/redemption process.
such ETFs using the creation/redemption process. The impact costs for
the create/redeem calculation would be calculated by decomposing the
ETFs into their underlying securities and calculating impact costs of such
underlying securities utilizing the equity asset subgroup calculations (as
discussed above). An adjustment would be made in the create/redeem
calculation to reflect the different portfolio risks of the original portfolio
used in the baseline calculation and the decomposed portfolio used in the
create/redeem calculation.

The Corporation will then use the smaller calculated impact costs of
the baseline calculation and the create/redeem calculation for purposes of
calculating the MLA charge for ETFs.

Other Asset Group Calculations

For asset groups other than the equites asset group, the Corporation
shall first calculate a measurement of market impact cost for Net Unsettled
Positions in each of the asset groups as the product of the following 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 divided by an assumed percentage of the average
daily trading volume of that asset group or subgroup.

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.

When applicable, an MLA charge for each asset group or subgroup
would be calculated as a proportion of the product of (1) the amount by which the
ratio of the calculated market impact cost to the applicable 1-day volatility charge
exceeds the threshold, and (2) the 1-day volatility charge allocated 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.
each Member, 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.

If a Member’s portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions, the MLA charge shall be calculated as set forth in Rule 56.

(2) For Balance Order Transactions

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(f) 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 (including ETPs that are deemed 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, (vi) corporate bond ETPs, (vii) municipal bond ETPs, and (viii) all other ETPs.¹

Equities Asset Subgroup MLA Calculations

For each equities asset subgroup, the Corporation shall first calculate a measurement of market impact cost for each Net Balance Order Unsettled Positions at the security level as the product of the following three components: 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 ETPs with underlying securities separately categorized in an equities asset subgroup are categorized by the asset types and capitalizations of their underlying securities. ETPs that are deemed Illiquid Securities are categorized in the Illiquid Securities asset group.
1. an impact cost coefficient that is a multiple of the one-day market volatility of that subgroup in which the security is categorized.

2. the gross market value of the Net Balance Order Unsettled Position in each security that subgroup, and

3. the square root of the gross market value of the Net Balance Order Unsettled Position in each security in each that subgroup in the portfolio divided by an assumed percentage of the average daily trading volume of such security that subgroup, and

4. a measurement of the concentration of each Net 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:

The impact cost for the equity asset group is the sum of the impact cost calculated at the security level, as described above, for all equity asset subgroups.

The impact cost for ETFs with in-kind baskets that are not Illiquid Securities will include calculations comparing the impact costs if such ETFs were being liquidated in the secondary market to the impact costs if such ETFs were being liquidated in the primary market. The Corporation will calculate impact costs in two scenarios: (1) a baseline calculation to simulate such ETFs being liquidated in the secondary market where the impact costs would be calculated at the security level (i.e., the ETF shares) utilizing the equities asset subgroup calculations (as discussed above) and (2) a create/redeem calculation to simulate an authorized participant using the primary market to liquidate such ETFs using the creation/redemption process. The impact costs for the create/redeem calculation would be calculated by decomposing the ETFs into their underlying securities and calculating impact costs of such underlying securities utilizing the equity asset subgroup calculations (as discussed above). An adjustment would be made in the create/redeem calculation to reflect the different portfolio

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1 Liquidation in the secondary market would involve selling the ETF shares in the market. Liquidation in the primary market would involve liquidating the ETFs based on the value of their underlying securities by an authorized participant using the creation/redemption process.
risks of the original portfolio used in the baseline calculation and the decomposed portfolio used in the create/redeem calculation.

The Corporation will then use the smaller calculated impact costs of the baseline calculation and the create/redeem calculation for purposes of calculating the MLA charge for ETFs.

Other Asset Group Calculations

For asset groups other than the equites asset group, the Corporation shall first calculate a measurement of market impact cost for Net Balance Order Unsettled Positions in each of the asset groups as the product of the following 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 Balance Order Unsettled Position in that asset group or subgroup, and
3. the square root of the gross market value of the Net Balance Order Unsettled Position in that asset group or subgroup in the portfolio divided by an assumed percentage of the average daily trading volume of that asset group or subgroup.

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.

When applicable, an MLA charge for each asset group or subgroup would be calculated as a proportion of the product of (1) the amount by which the ratio of the calculated market impact cost to the applicable 1-day volatility charge exceeds the threshold, and (2) the 1-day volatility charge allocated 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.

*If a Member’s portfolio contains both (i) SFT Positions and (ii) Net Unsettled Positions or Net Balance Order Unsettled Positions, the MLA charge shall be calculated as set forth in Rule 56.*

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