

NATIONAL SECURITIES CLEARING CORPORATION

RULES & PROCEDURES

TEXT OF PROPOSED RULE CHANGE

Bold and underlined text indicates proposed added language.

Bold and strikethrough text indicates proposed deleted language.

PROCEDURE XV. CLEARING FUND FORMULA AND OTHER MATTERS1

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

I.(A) Clearing Fund Formula for Members

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

(1) For CNS Transactions

- (a) (i) The volatility of such Member's net of unsettled Regular Way, When-Issued and When-Distributed pending positions (i.e., net positions that have not yet passed Settlement Date) and fail positions (i.e., net positions that did not settle on Settlement Date), hereinafter collectively referred to as Net Unsettled Positions, which shall be the highest resultant value among the following:
 - I. an estimation of volatility calculated in accordance with any generally accepted portfolio volatility model including, but not limited to, any margining formula employed by any other clearing agency registered under Section 17A of the Securities Exchange Act of 1934, provided, however, that not less than two standard deviations' volatility shall be calculated under any model chosen. Such calculation shall be made utilizing (1) such assumptions and based on such historical data as the Corporation deems reasonable and shall cover such range of historical volatility as the Corporation from time to time deems appropriate; and (2) each of the following estimations:
 - A. an exponentially-weighted moving average volatility estimation using a decay factor of less than 1, and
 - B. an evenly-weighted volatility estimation using a look-back period of not less than 253 days.

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

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

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

<u>plus</u>

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

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

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

- i. For Net Unsettled Positions in the market capitalization subgroups of the equities asset group, by multiplying four components:
 - an impact cost coefficient that is a multiple of the oneday market volatility of that subgroup,
 - 2. <u>the gross market value of the Net Unsettled Position in that subgroup,</u>
 - 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. <u>a measurement of the concentration of each Net Unsettled Position in that subgroup.</u>
- ii. For Net Unsettled Positions in the Illiquid Securities, UIT, municipal bond, and corporate bond asset groups and for Net Unsettled Positions in the treasury ETP and other ETP subgroups of the equities asset group, by multiplying three components:
 - 1. <u>an impact cost coefficient that is a multiple of the one-day market volatility of that asset group or subgroup,</u>
 - 2. <u>the gross market value of the Net Unsettled Position in that asset group or subgroup, and</u>
 - 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 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. All MLA charges for each of the asset groups shall be added together to result in a total MLA charge.

The Corporation may apply a downward adjusting scaling factor to the total MLA charge based on the ratio of calculated market impact cost to a portion of the applicable volatility charge, where a higher ratio would

trigger a larger downward adjustment of the MLA charge and a lower ratio would trigger no downward adjustment of the MLA charge.

(2) For Balance Order Transactions

- (a) (i) The volatility of such Member's net of unsettled Regular Way, When-Issued and When-Distributed positions that have not yet passed Settlement Date, hereinafter collectively referred to as Net Balance Order Unsettled Positions, which shall be the highest resultant value among the following:
 - I. an estimation of volatility calculated in accordance with any generally accepted portfolio volatility model, including, but not limited to, any margining formula employed by any other clearing agency registered under Section 17A of the Securities Exchange Act of 1934, provided, however, that not less than two standard deviations' volatility shall be calculated under any model chosen. Such calculation shall be made utilizing (1) such assumptions and based on such historical data as the Corporation deems reasonable and shall cover such range of historical volatility as the Corporation from time to time deems appropriate and (2) each of the following estimations:
 - A. an exponentially-weighted moving average volatility estimation using a decay factor of less than 1, and
 - B. an evenly-weighted volatility estimation using a look-back period of not less than 253 days.

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

In calculating these estimations of volatility, the Corporation shall include an additional bid-ask spread risk charge measured by multiplying the gross market value of each Net Balance Order

Unsettled Position by a basis point charge, where the applicable basis point charge shall be reviewed at least annually and shall be based on the following risk groups: (i) large and medium capitalization equities, (ii) small capitalization equities, (iii) microcapitalization equities, and (iv) ETPs.

<u>plus</u>

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

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

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

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

I.(B) Additional Clearing Fund Formula

(2) Excess Capital Premium

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