



SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-90367; File No. SR-NSCC-2020-802]

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of No Objection to Advance Notice to Enhance National Securities Clearing Corporation's Haircut-Based Volatility Charge Applicable to Illiquid Securities and UITs and Make Certain Other Changes to Procedure XV

November 6, 2020.

I. Introduction

On March 16, 2020, National Securities Clearing Corporation (“NSCC”) filed with the Securities and Exchange Commission (“Commission”) advance notice SR-NSCC-2020-802 (“Advance Notice”) pursuant to Section 806(e)(1) of Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, entitled Payment, Clearing and Settlement Supervision Act of 2010 (“Clearing Supervision Act”)¹ and Rule 19b-4(n)(1)(i)² under the Securities Exchange Act of 1934 (“Exchange Act”)³ to enhance the calculation of certain components of the Clearing Fund formula.⁴ The Advance

¹ 12 U.S.C. 5465(e)(1).

² 17 CFR 240.19b-4(n)(1)(i).

³ 15 U.S.C. 78a et seq.

⁴ NSCC also filed related proposed rule change with the Commission pursuant to Section 19(b)(1) of the Act and Rule 19b-4 thereunder, seeking approval of proposed changes to their rules necessary to implement the Advance Notices (“Proposed Rule Change”). 15 U.S.C. 78s(b)(1) and 17 CFR 240.19b-4, respectively. The Proposed Rule Change was published in the Federal Register on March 21, 2020. Securities Exchange Act Release No. 88474 (March 25, 2020), 85 Fed. Reg. 17910 (March 31, 2020) (SR-NSCC-2020-003). On May 15, 2020, the Commission designated a longer period within which to approve, disapprove, or institute proceedings to determine whether to approve or disapprove the Proposed Rule Change. Securities Exchange Act Release No. 88885 (May 15, 2020), 85 Fed. Reg. 31007 (May 21, 2020) (SR-NSCC-2020-003). On June 24, 2020, the Commission issued an order instituting proceedings to determine whether to approve or disapprove the Proposed Rule Changes.

Notice was published for comment in the Federal Register on April 15, 2020.⁵ The Commission received comments on the proposal.⁶ On May 15, 2020, the Commission requested further information for consideration of the Advance Notices, pursuant to Section 806(e)(1)(D) of the Clearing Supervision Act (“RFI”),⁷ which tolled the Commission’s period of review of the Advance Notices until 60 days from the date the information required by the Commission was received by the Commission.⁸ On September 9, 2020, the Commission received responses to the RFI from NSCC.⁹ This publication serves as notice of no objection to the Advance Notice.

II. The Advance Notice

A. Background

Securities Exchange Act Release No. 89145 (June 24, 2020), 85 Fed. Reg. 39244 (June 30, 2020) (SR-NSCC-2020-003). On September 22, 2020, the Commission designated a longer period for Commission action on the proceedings to determine whether to approve or disapprove the Proposed Rule Change. Securities Exchange Act Release No. 89949 (September 22, 2020), 85 Fed. Reg. 60854 (September 28, 2020) (SR-NSCC-2020-003).

⁵ Securities Exchange Act Release No. 88615 (April 9, 2020), 85 Fed. Reg. 21037 (April 15, 2020) (SR-NSCC-2020-802) (“Notice of Filing”).

⁶ Comments are available at <https://www.sec.gov/comments/sr-nsc-2020-003/srnsc2020003-7108527-215929.pdf>. All but one of the comments were submitted with respect to the Proposed Rule Change. *Supra* note 4. Because the proposals contained in the Advance Notice and the Proposed Rule Change are the same, all public comments received on the proposal were considered regardless of whether the comments were submitted with respect to the Advance Notice or the Proposed Rule Change.

⁷ 12 U.S.C. 5465(e)(1)(D).

⁸ See 12 U.S.C. 5465(e)(1)(E)(ii) and (G)(ii); see Memorandum from the Office of Clearance and Settlement Supervision, Division of Trading and Markets, titled “Commission’s Request for Additional Information,” available at <https://www.sec.gov/rules/sro/nsc-an/2020/34-88615-request-for-info.pdf>.

⁹ See 12 U.S.C. 5465(e)(1)(E)(ii) and (G)(ii); see Memorandum from the Office of Clearance and Settlement Supervision, Division of Trading and Markets, titled “Response to the Commission’s Request for Additional Information,” available at <https://www.sec.gov/rules/sro.shtml>.

NSCC provides clearing, settlement, risk management, central counterparty services, and a guarantee of completion for virtually all broker-to-broker trades involving equity securities, corporate and municipal debt securities, and unit investment trust transactions in the U.S. markets. A key tool that NSCC uses to manage its credit exposure to its Members is collecting an appropriate Required Fund Deposit (i.e., margin) from each Member.¹⁰ A Member's Required Fund Deposit is designed to mitigate potential losses to NSCC associated with liquidation of the Member's portfolio in the event of a Member default.¹¹ The aggregate of all NSCC Members' Required Fund Deposits (together with certain other deposits required under the Rules) constitutes NSCC's Clearing Fund, which NSCC would access should a Member default and that Member's Required Fund Deposit, upon liquidation, be insufficient to satisfy NSCC's losses.¹²

Each Member's Required Fund Deposit consists of a number of applicable components, each of which is calculated to address specific risks faced by NSCC, as identified within NSCC's Rules.¹³ Generally, the largest component of Members' Required Fund Deposits is the volatility component. The volatility component is designed to reflect the amount of money that could be lost on a portfolio over a given

¹⁰ Terms not defined herein are defined in NSCC's Rules and Procedures ("Rules"), available at http://www.dtcc.com/~media/Files/Downloads/legal/rules/nsccl_rules.pdf. See Rule 4 (Clearing Fund) and Procedure XV (Clearing Fund Formula and Other Matters) of the Rules.

¹¹ Under NSCC's Rules, a default would generally be referred to as a "cease to act" and could encompass a number of circumstances, such as a member's failure to make a Required Fund Deposit in a timely fashion. See Rule 46 (Restrictions on Access to Services), supra note 10.

¹² See Rule 46 (Restrictions on Access to Services), supra note 10.

¹³ See Procedure XV, supra note 10.

period within a 99% confidence level. This component represents the amount assumed necessary to absorb losses while liquidating the portfolio.

NSCC's methodology for calculating the volatility component of a Member's Required Fund Deposit depends on the type of security and whether the security has sufficient pricing or trading history for NSCC to perform statistical analysis. Generally, for most securities (e.g., equity securities), NSCC calculates the volatility component using, among other things, a parametric Value at Risk ("VaR") model, which results in a "VaR Charge."¹⁴ However, the VaR model generally relies on predictability, and this model may be less reliable for measuring market risk of securities that exhibit illiquid characteristics. More specifically, the VaR model relies on assumptions that are based on historical observations of security prices. Securities that exhibit illiquid characteristics, which generally have low trading volumes or are not traded frequently may not present sufficient instances of price observations to allow the VaR model to provide a precise measure of market risk for such securities. Accordingly, for securities that do not have sufficient pricing or trading history to perform statistical analysis, NSCC applies a haircut to calculate the volatility component, in lieu of the VaR-based calculation.

B. Current Practice for Determining Volatility Component for Illiquid Securities and UITs

Two types of securities for which NSCC uses a haircut to calculate the volatility component are securities that NSCC deems to be "Illiquid Securities" and UITs. NSCC's Rules currently define an Illiquid Security as a security that is (i) not traded on or subject

¹⁴ Specifically, NSCC calculates the VaR Charge as the greatest of (1) the larger of two separate calculations that utilize the VaR model, (2) a gap risk measure calculation based on the largest non-index position in a portfolio that exceeds a concentration threshold, which addresses concentration risk that can be present in a member's portfolio, and (3) a portfolio margin floor calculation based on the market values of the long and short positions in the portfolio, which addresses risks that might not be adequately addressed with the other volatility component calculations. See Sections I.(A)(1)(a)(i) and I.(A)(2)(a)(i) of Procedure XV, *supra* note 10.

to the rules of a national securities exchange registered under the Exchange Act, or (ii) an OTC Bulletin Board¹⁵ or OTC Link issue.¹⁶ Based on its interpretation of that definition, NSCC considers securities that are not listed on the national securities exchanges, i.e., those exchanges which are covered by certain third party data/pricing vendors, to be Illiquid Securities.¹⁷ UITs are redeemable securities, or units, issued by investment companies that offer fixed security portfolios for a defined period of time.

Under NSCC's current rules, Illiquid Securities and UITs are subject to haircut-based charges to calculate the volatility component of a Member's Required Fund Deposit based upon two distinct but related rationales. Specifically, Illiquid Securities are considered "securities that are less amenable to statistical analysis, such as OTC Bulletin Board or Pink Sheet issues or issues trading below a designated dollar threshold (e.g., five dollars)," and UITs are considered "securities that are amenable to generally accepted statistical analysis only in a complex manner."¹⁸ Based on these determinations,

¹⁵ The OTC Bulletin Board is an inter-dealer quotation system that is used by subscribing members of the Financial Industry Regulatory Authority ("FINRA") to reflect market making interest in eligible securities (as defined in FINRA's Rules). See <http://www.finra.org/industry/otcbb/otc-bulletin-board-otcbb>.

¹⁶ OTC Link is an electronic inter-dealer quotation system that displays quotes from broker-dealers for many over-the-counter securities. See <https://www.otcm Markets.com>.

¹⁷ NSCC represents that it utilizes multiple third-party vendors to price its eligible securities. NSCC believes that national securities exchanges covered by these third party vendors tend to list securities that exhibit liquid characteristics such as having more available public information, larger trading volumes and higher capitalization. See Notice of Filing, supra note 5, 85 Fed. Reg. at 21040. The exchanges that have established listing services that the vendors cover for this purpose are: New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., The Nasdaq Stock Market and Cboe BZX Exchange, Inc. NSCC represents that Members' Clearing Fund Summary reports, available through the DTCC Risk Portal, identify securities within their portfolio by the ticker symbol and indicate whether those securities are considered Illiquid Securities for purposes of the calculation of the Illiquid Charge. See id.

¹⁸ A security that is less amenable to statistical analysis generally lacks pricing or trading history upon which to perform statistical analysis. A security that is amenable to generally accepted statistical analysis only in a complex manner

NSCC considers Illiquid Securities and UITs as categories of securities that tend to exhibit illiquid characteristics, such as low trading volumes or infrequent trading.¹⁹

NSCC therefore calculates the volatility component for these two categories of securities by multiplying the absolute value of a given position by a percentage that is (1) not less than 10% for securities that are less amenable to statistical analysis, including Illiquid Securities,²⁰ and (2) not less than 2% for securities that are amenable to generally accepted statistical analysis only in a complex manner, including UITs.

In addition to using the haircut-based volatility charge for Illiquid Securities, NSCC currently can also apply an additional charge (an “Illiquid Charge”) for certain positions in Illiquid Securities that exceed volume thresholds set forth in the Rules.²¹ NSCC represents that the Illiquid Charge was designed to address a situation where the defaulting Member may have a relatively large position in an Illiquid Security, which would increase the risk that NSCC might face losses when liquidating the Member’s

generally may have pricing or trading history, but further calculations upon the pricing or trading history would be required to perform statistical analysis.

¹⁹ Because the VaR model generally relies on predictability, this model may be less reliable for measuring market risk of securities that exhibit illiquid characteristics.

²⁰ NSCC currently calculates the volatility charge for IPOs, which have fewer than 31 business days of trading history over the past 153 business days, by applying a haircut of 15% and all other Illiquid Securities by applying a haircut of 20%. See Notice of Filing, supra note 5, 85 Fed. Reg. at 21042.

²¹ Specifically, the Illiquid Charge applies to Illiquid Positions as defined under NSCC’s Rules. The Rules specify the applicable thresholds that result in an Illiquid Position determination. For example, where a Member’s net buy position in an Illiquid Security exceeds a threshold no greater than 100 million shares, that position may become subject to the Illiquid Charge. However, NSCC’s rules also provide for certain offsets and credit risk considerations that will be considered when determining whether a position in an Illiquid Security should be considered an Illiquid Position and, thus, subject to the additional Illiquid Charge. See Rule 1 and Sections I.(A)(1)(h) and I.(A)(2)(f) of Procedure XV, supra note 10.

position in these securities due to the securities' lack of marketability and other characteristics.²²

NSCC states that it regularly assesses its market and credit risks, as such risks are related to its margin methodologies, to evaluate whether margin levels are commensurate with the particular risk attributes of each relevant product, portfolio, and market.²³ Based on such assessments, NSCC seeks to refine its current approach to risk managing Member positions in Illiquid Securities and UITs. More specifically, NSCC proposes to (1) revise the definition of Illiquid Security, (2) adopt specific exclusions from the VaR model, and corresponding haircut-based methods for determining volatility components for positions in Illiquid Securities and UITs, (3) eliminate the existing Illiquid Charge, and (4) make certain conforming changes regarding municipal and corporate bonds and Family-Issued Securities.²⁴

C. Proposed Revision to the Definition of Illiquid Security

Under the Advance Notice, NSCC proposes a new definition of Illiquid Security that would consist of three particular categories of securities. As noted further below, application of the new definition of Illiquid Security would capture a broader set of securities than the current definition.

(i) Securities Not Listed on a Specified Securities Exchange

The first category of the new definition of Illiquid Securities would include any security that is not listed on a “specified securities exchange.” For purposes of this

²² See Notice of Filing, supra note 5, 85 Fed. Reg. at 21038. See also Securities Exchange Act Release No. 80597 (May 4, 2017), 82 Fed. Reg. 21863 (May 10, 2017) (SR-NSCC-2017-001) (order approving proposed rule change to describe the illiquid charge that may be imposed on Members).

²³ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21039.

²⁴ The term “Family-Issued Security” means a security that was issued by a Member or an affiliate of that Member. See Rule 1, supra note 10.

definition, NSCC's Rules would define a "specified securities exchange" as a national securities exchange that has established listing services and is covered by industry pricing and data vendors.²⁵ NSCC would make the determination of whether a security falls in this category on a daily basis. NSCC represents that this new definition would reflect the process that it currently employs to determine whether a security is not traded on or subject to the rules of a national securities exchange registered under the Securities Exchange Act of 1934, as amended.²⁶

(ii) Micro-capitalization Securities and ADRs Subject to an Illiquidity Ratio

The second category of the new definition of Illiquid Securities would apply to certain securities that are listed on a specified securities exchange. Specifically, the types of securities that would potentially be considered as Illiquid Securities under this second category either (i) have a market capitalization that is considered by NSCC to be a micro-capitalization ("micro-capitalization" or "micro-cap") as of the last business day of the prior month, or (ii) are American depository receipts ("ADRs").²⁷ To determine whether these securities qualify as Illiquid Securities, NSCC would apply, on a monthly basis, an illiquidity ratio test to these two sets of securities.

1. Micro-capitalization Definition

²⁵ NSCC has stated that the exchanges that would initially be specified securities exchanges are those listed in note 17. See supra note 17.

²⁶ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21040. Based on historic performances, NSCC believes the national securities exchanges that the vendors cover are appropriate for determining if a security exhibits characteristics of liquidity because such exchanges tend to list securities that exhibit liquid characteristics such as having more available public information, larger trading volumes, and higher capitalization. See id.

²⁷ ADRs are securities that represent shares of non-U.S. companies that are held by a U.S. depository bank outside of the United States. Each ADR represents one or more shares of foreign stock or a fraction of a share.

Initially, NSCC would define “micro-capitalization” as market capitalization of less than \$300 million. Changes to this threshold amount of \$300 million would not be subject to any particular period of review, but would occur when NSCC determines changes may be appropriate.²⁸ NSCC believes that using market capitalization to consider whether a security is illiquid, in conjunction with the illiquidity ratio test, is appropriate because securities with a market capitalization below a certain threshold tend to exhibit illiquid characteristics such as limited trading volumes and a lack of public information.²⁹

2. ADRs

With respect to ADRs, NSCC believes that subjecting these securities to the illiquidity ratio test to determine whether a particular ADR is an Illiquid Security is appropriate because the market capitalization of an ADR may be difficult to calculate. This is because of challenges associated with the day-to-day fluctuation of the conversion rate of an ADR into the relevant local security, which in turn makes it difficult to price the ADR.³⁰ Without knowing the market capitalization of the ADR, it is therefore difficult to determine whether an ADR represents a non-micro-cap issuer.

3. Application of the Illiquidity Ratio and the Illiquidity Ratio Test to Micro-cap Securities and ADRs

²⁸ Any changes to the micro-cap threshold would be subject to NSCC’s model risk management governance procedures as set forth in the Clearing Agency Model Risk Management Framework (“Model Risk Management Framework”). See Notice of Filing, supra note 5, 85 Fed. Reg. at 21040. See Securities Exchange Act Release No. 81485 (August 25, 2017), 82 FR 41433 (August 31, 2017) (File No. SR-NSCC-2017-008) (describes the adoption of the Model Risk Management Framework of NSCC which sets forth the model risk management practices of NSCC) and Securities Exchange Act Release No. 84458 (October 19, 2018), 83 FR 53925 (October 25, 2018) (File No. SR-NSCC-2018-009) (amends the Model Risk Management Framework). NSCC would notify Members of any changes to the micro-capitalization threshold by Important Notice.

²⁹ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21040.

³⁰ See id.

The proposal would define the illiquidity ratio for a security as the ratio of the security's daily price return divided by the average daily trading amount³¹ of such security over the prior 20 business days. In addition, if NSCC is unable to retrieve data to calculate the illiquidity ratio for a security on any day, NSCC would use a default value for that day for the security (i.e., the security would be treated as illiquid for that day).

In order to classify a micro-cap security or ADR as "illiquid," NSCC then takes the illiquidity ratio calculated for these securities and applies an illiquidity ratio test. The test functions as follows: NSCC determines whether the security's median illiquidity ratio of the prior six months exceeds a threshold that is set to the 99th percentile of the illiquidity ratio of all non-micro-cap common stock using the prior six months of data. Where such a threshold is exceeded, NSCC will designate the relevant security as an Illiquid Security. NSCC performs this exercise, and thereby determines the set of micro-cap securities and ADRs to be considered Illiquid Securities, on a monthly basis.

The illiquidity ratio test is designed to measure the level of a security's price movement relative to its level of trading activity. For example, given the same dollar amount of trading activity, a larger price movement typically indicates less liquidity. Conversely, for price movement of a given magnitude, a smaller dollar amount of trading activity would indicate less liquidity.

Securities that are exchange-traded products ("ETPs") with market capitalization of less than \$300 million could be classified as illiquid upon application of the illiquidity test. However, ETPs and ADRs would be excluded when calculating the illiquidity ratio threshold. ETPs are excluded because the underlying common stocks that make up the ETPs are already included in the calculation. ADRs are excluded because it is difficult to

³¹ The daily trading amount equals the daily trading volume multiplied by the end-of-day price. See id.

determine whether an ADR represents a non-micro-cap issuer. An ADR's market capitalization may be difficult to calculate due to the fact that, as noted above, each ADR often converts to a different number of shares of a local security. The threshold used in the illiquidity ratio test will be determined by NSCC on a monthly basis using the prior six months of data.

(iii) Securities with Limited Trading History

The third category of the new definition of Illiquid Security would include securities that are listed on a specified securities exchange and, as determined by NSCC on a monthly basis, have fewer than 31 business days of trading history over the past 153 business days on such exchange. NSCC represents that it has historically used such time period to identify initial public offerings ("IPOs") which tend to exhibit illiquid characteristics due to their limited trading history, thereby making it an appropriate time period to use for the purposes of determining a security's liquidity, and IPOs would likely constitute most of the securities that would fall into this category.³²

D. Proposed Haircut-Based Volatility Charge Specifically Applicable to Illiquid Securities and UITs

(i) Haircut-Based Volatility Charge Applicable to Illiquid Securities

As proposed in the Advance Notice, NSCC would expressly exclude Illiquid Securities when calculating the volatility component of a Required Fund Deposit using the VaR model and instead would apply a haircut-based volatility charge specifically to Illiquid Securities. To determine the appropriate volatility charge, NSCC would group Illiquid Securities by price level.³³ NSCC generally would calculate one haircut-based

³² See Notice of Filing, supra note 5, 85 Fed. Reg. at 21042.

³³ The price level groupings would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework. See Notice of Filing, supra note 5, 85 Fed. Reg. at 21043; see also Model Risk Management Framework, supra note 28.

volatility charge for short and long positions together. However, with respect to an Illiquid Security that is a sub-penny security, NSCC would calculate the haircut-based volatility charge for short positions and long positions separately.³⁴

The haircut percentage applicable to each group of Illiquid Securities would be determined at least annually. The applicable percentage, and the decision of how often the applicable percentage is determined, would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework.³⁵ NSCC states that a number of important considerations consistent with the model risk management practices adopted by NSCC could prompt more frequent haircut review, such as material deterioration of a Member's backtesting performance, market events, market structure changes, and model validation findings.³⁶

The haircut percentage would be the highest of the following percentages: (1) 10%, (2) a percent benchmarked to be sufficient to cover the 99.5th percentile of the historical 3-day returns of each group of Illiquid Securities in each Member's portfolio, and (3) a percent benchmarked to be sufficient to cover the 99th percentile of the historical 3-day returns of each group of Illiquid Securities in each Member's portfolio after incorporating a fixed transaction cost equal to one-half of the estimated bid-ask

³⁴ NSCC states that the different treatment for Illiquid Securities that are sub-penny securities is appropriate because short positions in sub-penny securities have unlimited upside market price risk, as the price of a security may increase and could potentially subject NSCC to losses under its trade guaranty. NSCC further states the proposal would allow NSCC to calculate a haircut-based volatility charge that accounts for this risk of such price movements. Further, NSCC states that sub-penny securities are typically issued by companies with low market capitalization, and may be susceptible to market manipulation, enforcement actions, or private litigation. See Notice of Filing, supra note 5, at 85 Fed. Reg. at 21043; Letter from Timothy J. Cuddihy, Managing Director, DTCC Financial Risk Management (September 3, 2020) ("NSCC Letter") at 10.

³⁵ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21042; see also Model Risk Management Framework, supra note 28.

³⁶ See id.

spread.³⁷ The look-back period for purposes of calibrating the applicable percentage would be no less than five years and would initially be five years to be consistent with the historical data set used in model development. The look-back period may be adjusted by NSCC as necessary consistent with the model risk management practices adopted by NSCC to respond to, for example, market events that impact liquidity in the market and Member backtesting deficiencies.³⁸

(ii) Haircut-Based Volatility Charge Applicable to UITs

Similar to its proposed approach to risk managing Illiquid Securities, NSCC would exclude UITs from calculating the volatility component of the Required Fund Deposit using the VaR model, and instead would assign a percentage to be used in the calculation of a haircut-based volatility charge. UITs are less suited to application of the VaR model because they generally have a limited trading history, which does not provide the type of pricing data that allows for application of the VaR model. NSCC would review the percentage used in this calculation at least annually.

The haircut percentage applicable to UITs would be the highest of (1) 2%, and (2) the 99.5th percentile of the historical 3-day returns for the group of UITs within each Member's portfolio using a look-back period of no less than 5 years. The applicable percentage, and the decision of how often the applicable percentage is determined, would

³⁷ If NSCC needs to liquidate a defaulting Member's portfolio, it may incur a transaction cost which represents bid-ask spreads. Bid-ask spreads account for the difference between the observed market price that a buyer is willing to pay for a security and the observed market price for which a seller is willing to sell that security.

³⁸ Adjustments to the look-back period would be subject to NSCC's model risk governance procedures set forth in the Model Risk Management Framework. See Notice of Filing, supra note 5, 85 Fed. Reg. at 21042-43; see also Model Risk Management Framework, supra note 28.

be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework.³⁹

(iii) Revisions to Description of Securities Not Amenable to Generally Accepted Statistical Analysis or Amenable to Statistical Analysis Only in a Complex Manner

NSCC proposes to revise the existing language in its Rules relating to securities that are either less amenable to statistical analysis or amenable to statistical analysis only in a complex manner.⁴⁰ Because Illiquid Securities and UITs would each have specific haircut-based volatility charges pursuant to the Advance Notice, these sections would no longer apply to Illiquid Securities or UITs. Furthermore, NSCC represents that the proposed definition of Illiquid Security would effectively encompass all securities that are currently considered as securities that are less amenable to statistical analysis.⁴¹ However, NSCC believes that it should preserve this category of securities within its Rules because NSCC may find it necessary to calculate margin charges for certain securities that do not constitute Illiquid Securities or UITs and instead would continue to fall under this category.

Further, NSCC represents that certain fixed income securities, such as preferred stocks,⁴² would continue to fall into the category of securities that are amenable to statistical analysis only in a complex manner. Thus, these types of securities would still

³⁹ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21043; see also Model Risk Management Framework, supra note 28.

⁴⁰ NSCC represents that it also would remove the phrase “such as OTC Bulletin Board or Pink Sheet issues or issues trading below a designated dollar threshold (e.g., five dollars)” from the existing language relating to securities that are less amenable to statistical analysis. While this language was intended as an example of these types of securities, NSCC now believes that the example inadequately describes all of the securities that are less amenable to statistical analysis and may be misleading. See Notice of Filing, supra note 5, 85 Fed. Reg. at 21043.

⁴¹ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21043.

⁴² See Notice of Filing, supra note 5, 85 Fed. Reg. at 21044.

be subject to a haircut-based charge. The application of a haircut percentage to any new security, using these categories, would be subject to NSCC's model risk management governance procedures set forth in the Model Risk Management Framework.⁴³

E. Proposed Elimination of the Illiquid Charge

NSCC proposes to eliminate the existing Illiquid Charge (and the corresponding definition of Illiquid Position), which may be imposed as an additional charge in the volatility component that is applied to Illiquid Securities as securities that are less amenable to statistical analysis. NSCC represents that because the current haircut-based volatility charge that is applied to Illiquid Securities uses fixed percentages for all such securities (15% for IPOs and 20% for the rest of Illiquid Securities), the Illiquid Charge was added to cover some of the risks that the current volatility charge did not cover. NSCC also represents that the proposal would address the risks presented by positions in Illiquid Securities more adequately than the Illiquid Charge, and that therefore the Illiquid Charge would no longer be needed.⁴⁴

F. Proposed Conforming Changes

NSCC proposes to make two conforming changes to harmonize the Rules in light of the proposed amendments discussed above. First, the current Rules state that securities less amenable to statistical analysis or amenable to statistical analysis only in a complex manner "other than municipal and corporate bonds" shall be excluded from the VaR Charge.⁴⁵ NSCC believes that this drafting is unclear regarding whether municipal and corporate bonds are excluded from this section of the Rules. Moreover, the reference to municipal and corporate bonds is not necessary in this portion of the Rules because a

⁴³ See id.; see also Model Risk Management Framework, supra note 28.

⁴⁴ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21044.

⁴⁵ Sections I.(A)(1)(a)(ii) and I.(A)(2)(a)(ii) of Procedure XV, supra note 10.

different subsection of the Rules⁴⁶ provides separately for haircut-based volatility charges for municipal and corporate bonds. The proposal would therefore remove this reference to municipal and corporate bonds from this section of the Rules.

Second, the Rules currently provide that Family-Issued Securities are excluded from calculation of the volatility component using the VaR model because the specific haircut-based volatility charge for such securities is provided in a separate subsection. However, the separate subsection only refers to “long Net Unsettled Positions in Family-Issued Securities.”⁴⁷ Based on the current drafting of the Rules, NSCC believes that it is unclear how positions in Family-Issued Securities would be treated.⁴⁸ In practice, NSCC states that currently, short positions in Family-Issued Securities whose volatility is less amenable to statistical analysis are subject to the haircut set forth in Sections I.(A)(1)(a)(ii) and I.(A)(2)(a)(ii) of Procedure XV, and those short positions in Family-Issued Securities that meet particular volume thresholds are subject to the Illiquid Charge.⁴⁹ NSCC proposes to revise the Rules to expressly reference its current practice that long positions in Family-Issued Securities would be excluded from the VaR Charge but subject to the haircut-based volatility charge exclusively applicable to such securities in a separate provision of the Rules. In addition, determination of the appropriate margin for short positions in Family-Issued Securities would continue to be covered by the haircut-based volatility charge in Sections I.(A)(1)(a)(ii) and I.(A)(2)(A)(ii) as securities that are less amenable to statistical analysis.

⁴⁶ Section I.(A)(1)(a)(iii) of Procedure XV, supra note 10.

⁴⁷ Id. In addition, the current Rules exclude “family issued security” from the current definition of Illiquid Security, which is subject to Illiquid Charge, providing that the term is provided in Procedure XV, although Procedure XV does not provide such definition.

⁴⁸ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21041.

⁴⁹ See Notice of Filing, supra note 5, 85 Fed. Reg. at 21042 and 21044 n. 52.

III. Discussion and Commission Findings

Although the Clearing Supervision Act does not specify a standard of review for an advance notice, the stated purpose of the Clearing Supervision Act is instructive: to mitigate systemic risk in the financial system and promote financial stability by, among other things, promoting uniform risk management standards for SIFMUs and strengthening the liquidity of SIFMUs.⁵⁰

Section 805(a)(2) of the Clearing Supervision Act authorizes the Commission to prescribe regulations containing risk management standards for the payment, clearing, and settlement activities of designated clearing entities engaged in designated activities for which the Commission is the supervisory agency.⁵¹ Section 805(b) of the Clearing Supervision Act provides the following objectives and principles for the Commission's risk management standards prescribed under Section 805(a):⁵²

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

Section 805(c) provides, in addition, that the Commission's risk management standards may address such areas as risk management and default policies and procedures, among others areas.⁵³

The Commission has adopted risk management standards under Section 805(a)(2) of the Clearing Supervision Act and Section 17A of the Exchange Act (the "Clearing

⁵⁰ See 12 U.S.C. 5461(b).

⁵¹ 12 U.S.C. 5464(a)(2).

⁵² 12 U.S.C. 5464(b).

⁵³ 12 U.S.C. 5464(c).

Agency Rules”).⁵⁴ The Clearing Agency Rules require, among other things, each covered clearing agency to establish, implement, maintain, and enforce written policies and procedures that are reasonably designed to meet certain minimum requirements for its operations and risk management practices on an ongoing basis.⁵⁵ As such, it is appropriate for the Commission to review advance notices against the Clearing Agency Rules and the objectives and principles of these risk management standards as described in Section 805(b) of the Clearing Supervision Act. As discussed below, the Commission believes the proposal in the Advance Notice is consistent with the objectives and principles described in Section 805(b) of the Clearing Supervision Act,⁵⁶ and in the Clearing Agency Rules, in particular Rule 17Ad-22(e)(4)(i), (e)(6)(i), and (e)(23)(ii).⁵⁷

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

The Commission believes that the Advance Notice is consistent with the stated objectives and principles of Section 805(b) of the Clearing Supervision Act.⁵⁸ Specifically, the Commission believes that the changes proposed in the Advance Notice are consistent with promoting robust risk management, promoting safety and soundness, reducing systemic risks, and supporting the broader financial system.⁵⁹

⁵⁴ 17 CFR 240.17Ad-22. See Securities Exchange Act Release No. 68080 (October 22, 2012), 77 Fed. Reg. 66220 (November 2, 2012) (S7-08-11). See also Securities Exchange Act Release No. 78961 (September 28, 2016), 81 Fed. Reg. 70786 (October 13, 2016) (S7-03-14) (“Standards for Covered Clearing Agencies”). NSCC is a “covered clearing agency” as defined in Rule 17Ad-22(a)(5).

⁵⁵ Id.

⁵⁶ 12 U.S.C. 5464(b).

⁵⁷ 17 CFR 240.17Ad-22(e)(4)(i), (e)(6)(i), and (e)(23)(ii).

⁵⁸ 12 U.S.C. 5464(b).

⁵⁹ Several of the issues raised by the commenters are directed at the Proposed Rule Change and will be addressed in that context. These comments generally relate to the proposal’s impact on competition, its consistency with the Exchange Act, and its effect on capital formation. See Letter from Christopher R. Doubek, CEO,

The Commission believes that the proposal is consistent with promoting robust risk management. First, as described in Section II.C above, NSCC proposes to revise the definition of “Illiquid Securities” to broaden the scope of securities that will be considered as Illiquid Securities for assessing margin requirements, including by providing specific objective criteria that would lead to a security being considered an “Illiquid Security.” Revising the definition of Illiquid Securities to specifically include a broader set of these types of securities within the definition of Illiquid Securities would allow NSCC to apply a haircut to determine the volatility component for such securities, thereby avoiding reliance on assumptions employed by the VaR model. As described above in Section II.A., the method that NSCC currently uses to calculate the volatility component of the margin for most securities (i.e., the VaR model) yields a less accurate measure of market risk for securities with illiquid characteristics because the VaR model is a model-based calculation, which generally relies on predictability. More specifically, the VaR model relies on assumptions that are based on historical observations of security prices. Securities that exhibit illiquid characteristics, which generally have low trading

Alpine Securities Corporation (April 21, 2020) (“Alpine Letter”) at 3; Letter from John Busacca, Founder, The Securities Industry Professional Association (April 23, 2020) (“SIPA Letter”) at 5-6; Letter from Charles F. Lek, Lek Securities Corporation (April 30, 2020) (“Lek Letter”) at 1; Letter from Kimberly Unger, The Security Traders Association of New York, Inc. (June 30, 2020) (“STANY Letter”) at 1 (commenting on impact on competition). See Letter from James C. Snow, Chief Compliance Officer, Wilson-Davis & Co., Inc. (July 29, 2020) (“Wilson II Letter”) at 2-7; Letter from Daniel Zinn, General Counsel and Cass Sanford, Associate General Counsel, OTC Markets Group Inc. (June 26, 2020) (“OTC I Letter”) at 4-5 (commenting on the application of Section 17A(b)(3)(F) of the Exchange Act). See Alpine Letter at 3; Wilson II Letter at 2-7; STANY Letter at 1 (commenting on capital formation). The Commission’s evaluation of the Advance Notice is conducted under the Clearing Supervision Act and, as noted above, generally considers whether the proposal will mitigate systemic risk and promote financial stability.

volumes or are not traded frequently, may not provide sufficient price observations for the VaR model to provide an appropriate measure of market risk.

In addition, as described in Section II.D above, NSCC proposes to specifically exclude Illiquid Securities and UITs from application of the VaR model and change the haircut-based volatility component of the Clearing Fund formula that is applicable to positions in Illiquid Securities and UITs. Currently, in order to calculate the volatility component, fixed percentages are applied to two general categories of securities that encompass Illiquid Securities and UITs, i.e., (1) securities that are less amenable to statistical analysis, and (2) securities that are amenable to generally accepted statistical analysis only in a complex manner. The proposal would apply a specific percentage developed for Illiquid Securities and UITs. Moreover, for Illiquid Securities, instead of using the current fixed haircut percentages, the proposal would group such securities by price level and apply a different haircut percentage based on the specific price group. Illiquid Securities that are sub-penny securities would be separately grouped by long or short position to more accurately reflect different levels of risk presented by long and short positions of such securities (i.e., a higher level of risk is associated with the short positions in sub-penny securities). By allowing for the application of a haircut more precisely tailored to Illiquid Securities (grouped by price level and as long or short positions) and UITs, this change should result in margin amounts that are more commensurate with the risk attributes of these types of securities, thereby limiting NSCC's credit exposure to Members holding positions in such securities in a more precise manner.⁶⁰ Also, the proposal's provision that NSCC regularly assess appropriate

⁶⁰ In addition, the proposal would eliminate the existing Illiquid Charge, which would be replaced by the haircut-based charges on Illiquid Securities as described in Section II.E. Because the proposal would address the risks presented by positions in Illiquid Securities more adequately than the Illiquid Charge, the Illiquid Charge would no longer be needed.

haircut percentages to cover its credit risks would require NSCC to take account of changing circumstances and allow NSCC to respond more effectively to such changing circumstances.

NSCC's backtesting results and Member impact studies indicate that Illiquid Securities, particularly low-priced Illiquid Securities, are more likely to have reduced backtesting coverage, which indicates that NSCC does not collect sufficient margin to cover additional risk present in those securities.⁶¹ Specifically, the Commission has considered NSCC's analyses and understands that the proposal's revised definition of Illiquid Securities and the corresponding new haircut methodology for determining the margin for Illiquid Securities would improve its backtesting coverage from 96.2% to 99.5% for the asset group that exhibited the lowest average backtesting coverage percentages (i.e., short positions in sub-penny securities and securities priced between one cent and one dollar), consistent with the high degree of confidence required by the Commission's rules for coverage of exposures to participants.⁶² The Commission believes that this improved backtesting coverage demonstrates that NSCC's proposal would result in margin levels that better reflect the risks and particular attributes of the Member's portfolio.

Accordingly, the Commission believes that these proposed changes for determining what constitutes an Illiquid Security and the adoption of a specific haircut methodology for Illiquid Securities and UITs would be consistent with promoting robust risk management because the proposed methodology would enable NSCC to more precisely manage the relevant risks than the current methodology.

⁶¹ Backtesting refers to an ex-post comparison of actual outcomes, i.e., the actual margin collected, with expected outcomes derived from the use of margin models.

⁶² NSCC also provided additional information regarding the improvements in backtesting coverage for other asset groups in confidential exhibits.

The Commission also believes that the proposal is consistent with the promotion of safety and soundness at NSCC. As summarized above, the proposed changes are designed to allow NSCC to collect sufficient margin amounts that are more precisely tailored to the nature of the risks presented by positions in securities with illiquid characteristics. By doing so, the proposed methodology would help provide NSCC with a more precisely determined level of resources to limit its exposure in the event of a Member default. Such an increase in NSCC's available financial resources would decrease the likelihood that losses arising out of a member default would exceed NSCC's prefunded resources and threaten the safety and soundness of NSCC's ongoing operations. Accordingly, the Commission believes that the proposal would be consistent with promoting safety and soundness at NSCC.⁶³

Finally, the Commission believes that the proposal is consistent with reducing systemic risk and supporting the broader financial system. As discussed above, in a Member default scenario, NSCC would access its Clearing Fund should the defaulted Member's own Required Fund Deposit be insufficient to satisfy losses caused by the liquidation of that Member's portfolio. With the proposed changes, NSCC seeks to collect margin at levels that better reflect the risks presented by positions in securities that exhibit illiquid characteristics. By collecting margin that more accurately reflects the risk characteristics of such securities, NSCC would be in a better position to absorb losses in connection with a Member default, and could thereby reduce the possibility that NSCC would need to mutualize among the non-defaulting Members losses arising out of a

⁶³ The Commission believes that NSCC's proposal to make certain clarifying changes regarding the applicability of particular sections to municipal and corporate bonds and Family-Issued Securities is also consistent with promoting safety and soundness at NSCC because these changes would eliminate potential uncertainty within NSCC's Rules. Such changes should result in clear and coherent Rules, which should help enhance the ability of NSCC and its Members to more effectively plan for and manage their risks.

Member default. Reducing the potential for loss mutualization could, in turn, reduce the potential knock-on effects to non-defaulting Members, their customers, and the broader market arising out of a Member default. The Commission believes, therefore, that the proposal would be consistent with reducing systemic risk and supporting the stability of the broader financial system.

For the reasons stated above, the Commission believes the changes proposed in the Advance Notice are consistent with Section 805(b) of the Clearing Supervision Act.

B. Consistency with Rule 17Ad-22(e)(4)(i)

Rule 17Ad-22(e)(4)(i) under the Exchange Act requires that each covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.⁶⁴

Several commenters question whether NSCC has adequately demonstrated that its proposal is consistent with Rule 17Ad-22(e)(4)(i) under the Exchange Act by showing the insufficiency of NSCC's current margin methodology and whether the increase in margin is necessary.⁶⁵ Two commenters state that NSCC has not demonstrated that its current margin requirements are insufficient to cover credit risks to its Members.⁶⁶

In response, NSCC states that the proposal is designed to provide a more accurate measure of the risks associated with Illiquid Securities and to cover in full the risks

⁶⁴ 17 CFR 240.17Ad-22(e)(4)(i).

⁶⁵ See Lek Letter at 1; STANY Letter at 1; OTC I Letter at 2.

⁶⁶ See STANY Letter at 1; OTC I Letter at 2.

presented by Members to NSCC.⁶⁷ To demonstrate why the proposed revision to its methodology for assessing margin on Illiquid Securities is necessary to address the risk presented by such securities, NSCC relies upon the results of recent backtesting analyses. Specifically, NSCC examines the backtesting coverage for a historical time period under both the current and proposed margin methodologies. Based on this analysis, NSCC represents that the proposal would help NSCC to address the risk presented by Illiquid Securities and that it would improve the lowest average backtesting coverage with respect to Illiquid Securities from 96.2% to 99.5% for the asset group that exhibited the lowest average backtesting coverage percentages (i.e., short positions in sub-penny securities and securities priced between one cent and one dollar).⁶⁸ NSCC further states that its backtesting results and Member impact studies indicate that Illiquid Securities, particularly low-priced Illiquid Securities, are more likely to present additional risk.⁶⁹

NSCC notes that the proposed changes to its methodology produce a more accurate haircut calculation by factoring in price levels, resulting in margin levels that better reflect the risks and particular attributes of Member portfolios.⁷⁰ NSCC represents that the enhanced methodology for identifying Illiquid Securities and the calculation of the haircut-based volatility component applicable to these securities and UITs improve

⁶⁷ See NSCC Letter at 6.

⁶⁸ Id. at 5; 17 CFR 240.17Ad-22(e)(4)(i). NSCC also notes that this improvement in coverage level would allow it to meet the high degree of confidence referenced in Rule 17Ad-22(e)(4)(i). Id. As stated above, the volatility component of the margin collected by NSCC is designed to reflect the amount of money that could be lost on a portfolio over a given period within a 99% confidence level, and NSCC has established a 99% target backtesting confidence level. See, e.g., Procedure XV, Section I.B(3), supra note 10.

⁶⁹ See NSCC Letter at 5.

⁷⁰ See NSCC Letter at 5-6.

the risk-based methodology, which in turn, better manage its credit exposures to Members.⁷¹

The Commission believes that the proposal is consistent with Rule 17Ad-22(e)(4)(i) under the Exchange Act.⁷² Specifically, the proposal to revise the definition of Illiquid Securities would help NSCC to better identify securities that may present credit exposures unique to such securities for purposes of applying an appropriate margin charge. Additionally, the proposal would provide additional criteria that use more objective factors to determine what constitutes an Illiquid Security. These factors consider a security's listing status, trading history, and market capitalization, and would result in a more accurate classification of securities with illiquid characteristics being considered as Illiquid Securities. In addition, the proposal to base the calculation of the haircut-based volatility charge applied to positions in Illiquid Securities and UITs on those securities' price level and risk profile would enable NSCC to collect and maintain sufficient resources to cover its credit exposures to each participant whose portfolio contains positions in Illiquid Securities and/or UITs with a high degree of confidence. The Commission has reviewed and analyzed NSCC's analysis of the improvements in its backtesting coverage, which demonstrate that the proposal would result in better backtesting coverage and, therefore, less credit exposure to its Members. Finally, the proposal requires NSCC to review and determine the haircut percentages at least annually. Accordingly, the Commission believes that the proposal would enable NSCC to better manage its credit risks by allowing it to respond regularly and more effectively to any material deterioration of backtesting performances, market events, market structure changes, or model validation findings.

⁷¹ See NSCC Letter at 6.

⁷² 17 CFR 240.17Ad-22(e)(4)(i).

In response to comments that NSCC has not demonstrated that current margin requirements are insufficient to cover credit risks to its Members, the Commission disagrees. In considering these comments, the Commission thoroughly reviewed and considered (i) the Advance Notice, including the supporting exhibits that provided confidential information on the performance of the proposed revision to the definition of an Illiquid Security and the use of a revised haircut-based methodology applicable to both Illiquid Securities and UITs, three rounds of impact analysis, and backtesting coverage results; (ii) the comments received; and (iii) the Commission's own understanding of the performance of the current margin methodology, with which the Commission has experience from its general supervision of NSCC, compared to the proposed margin methodology. Based on its review of these materials, the Commission believes that the proposal would, in fact, better enable NSCC to cover its credit exposure to Members and meet the applicable Commission regulatory requirements. Specifically, the Commission has considered the results of NSCC's backtesting coverage analyses, which indicate that the current margin methodology results in backtesting coverage that does not meet NSCC's targeted confidence level. The analyses also indicate that the proposal would result in improved backtesting coverage that meets NSCC's targeted coverage level. Therefore, the Commission believes that the proposal would provide NSCC with a more precise margin calculation designed to meet the applicable regulatory requirements for margin coverage.

Therefore, for the reasons discussed above, the Commission believes that the changes proposed in the Advance Notice are reasonably designed to enable NSCC to effectively identify, measure, monitor, and manage its credit exposure to Members, consistent with Rule 17Ad-22(e)(4)(i).⁷³

⁷³ 17 CFR 240.17Ad-22(e)(4)(i).

C. Consistency with Rule 17Ad-22(e)(6)(i)

Rule 17Ad-22(e)(6)(i) under the Exchange Act requires that each covered clearing agency that provides central counterparty services 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.⁷⁴

Several commenters suggest that the proposal does not reflect the actual risk attributes of the securities to which it would apply.⁷⁵ For example, two commenters state that treating as Illiquid Securities all securities that are not listed on a “specified securities exchange,” which would be defined as a national securities exchange that has established listing services and is covered by industry pricing and data vendors, is not tailored to accurately capture securities that present the defined liquidation and marketability risks, noting that many large international companies’ securities are traded in the OTC marketplace.⁷⁶ One commenter states that the proposal is unwarranted because the existing margin has always been enough to cover a defaulting Member’s losses, and accordingly, the current margin should be enough to cover the risks presented by Members’ portfolios.⁷⁷ One commenter states that NSCC has not justified a \$300 million market capitalization requirement for all exchange-listed stocks, and that this threshold

⁷⁴ 17 CFR 240.17Ad-22(e)(6)(i).

⁷⁵ See Alpine Letter; OTC I Letter; STANY Letter; and Letter from Daniel Zinn, General Counsel and Cass Sanford, Associate General Counsel, OTC Markets Group Inc. (July 21, 2020) (“OTC II Letter”).

⁷⁶ See OTC II Letter at 5; STANY Letter at 3.

⁷⁷ See Lek Letter at 1. Lek also states that net capital should be considered solely as additional insurance for agency firms, and that NSCC should include the margin that Lek collects from its customers when computing Lek’s capital. Id. However, this issue is beyond the scope of this proposal and is not addressed herein.

does not consider the actual risks facing NSCC.⁷⁸ Another commenter states that ETPs and ADRs, which are products typically offered by large banks and brokerages, are excluded from the definition of an Illiquid Security, and that such exclusion shows a bias against small Members.⁷⁹ In addition, one commenter states that the proposal bears no relationship to a Member's actual credit rating.⁸⁰

In response to comments regarding treating as Illiquid Securities all securities that are not listed on a national securities exchange that has established listing services and is covered by industry pricing and data vendors, NSCC states that securities that trade on a national securities exchange tend to trade with greater frequency in higher volumes than other venues, and national securities exchanges are subject to price and volume reporting regimes that assure greater accuracy of price and volume information.⁸¹ NSCC further states that securities that are not listed on a national securities exchange may trade without being registered with the Commission and have less reliable price and volume information.⁸²

In addition, NSCC explains that it included the second element of the proposed definition's criteria, "covered by industry pricing and data vendors," to ensure that NSCC is able to access and utilize quality third party pricing data to derive returns in order to calculate the appropriate margin.⁸³ NSCC further explains that the commercial availability of reliable information from independent, third party sources is critical to

⁷⁸ See STANY Letter at 3.

⁷⁹ See SIPA Letter.

⁸⁰ See Alpine Letter at 4.

⁸¹ See NSCC Letter at 8.

⁸² See NSCC Letter at 8-9.

⁸³ See id.

ensuring that NSCC can rely on end of day and intraday pricing in order to accurately manage risk positions consistent with its Rules.⁸⁴ Accordingly, NSCC believes that the use of “specified securities exchange” as defined in the proposal is an appropriate basis for determining whether a security is an Illiquid Security.⁸⁵

Regarding the comments that many large international companies’ securities are traded in the OTC marketplace, NSCC acknowledges that the proposed definition of Illiquid Securities would cover the securities of some large, well-capitalized issuers not listed on a specified securities exchange.⁸⁶ However, NSCC states that the proposal is designed to appropriately address risk in part by grouping Illiquid Securities by price level, and sub-penny securities by long or short position.⁸⁷ Accordingly, not all Illiquid Securities would be given the same haircut or have the same margin requirements or result in a higher deposit than would be required under the current Rules.⁸⁸

The Commission understands that, as described above, the proposal as a whole is designed to enable NSCC to more effectively address the risks presented by Members’ positions in securities with illiquid characteristics, including Illiquid Securities and UITs. As such, NSCC seeks to produce margin levels that are more commensurate with the particular risk attributes of these securities, including the risk of increased transaction and market costs to NSCC to liquidate or hedge due to lack of liquidity or marketability of such positions. The Commission believes that the proposal would improve NSCC’s

⁸⁴ See id.

⁸⁵ See id.

⁸⁶ See id.

⁸⁷ See id.

⁸⁸ See id.

ability to consider, and produce margin levels commensurate with, the risks and particular attributes of Illiquid Securities and UITs.

First, by expanding and refining the definition of Illiquid Securities, the Commission believes that NSCC should be able to better identify those securities that may exhibit illiquid characteristics. Specifically, the proposal would ensure that three separate categories of securities are included in the definition of an Illiquid Security, and all three categories are calibrated to take into account specific and objective factors that are indicative of a security's liquidity. For example, the second category of the proposed definition of an Illiquid Security would apply an illiquidity ratio to micro-cap securities and ADRs to get a more precise measure of their liquidity. Moreover, consistent with NSCC's current practice for determining the margin for securities in an initial public offering, the third category of the proposed definition would consider the frequency of a security's trading, to take into account that infrequent trading reduces the amount of price and volume information available to measure market risk.

In addition, the Commission believes that the proposed changes to the haircut-based volatility charges to base the calculation on the price level and risk profile of the applicable security would help NSCC to more effectively measure the risks that are particular to Illiquid Securities and UITs. Based on its analysis of the backtesting and impact analyses and its understanding of the proposed definition of an Illiquid Security, the Commission believes that the differentiated haircut percentages are reasonably designed to cover NSCC's exposures to Members more appropriately than the current fixed percentage approach because NSCC designed the variable haircut percentages to reflect specific risks presented by Illiquid Securities by price level and by UITs. The Commission also believes that it is reasonable to separate long and short positions of sub-penny securities in order to reflect the different risk levels presented by such positions.

Taken together, the Commission believes that the proposal should permit NSCC to calculate a haircut-based volatility charge that is more appropriately designed to address the risks presented by the positions in Illiquid Securities and UITs.

In response to the comment questioning whether the proposal is necessary because “the existing margin has always been enough to cover”⁸⁹ a defaulting Member’s losses, the Commission does not agree that the fact that margin has historically been sufficient to cover a defaulting Member’s losses obviates the need for the changes proposed in the Advance Notice. As an initial matter, credit exposures are not measured only by those events that have actually happened, but also include events that could potentially occur in the future. For this reason, a risk-based margin system is required to cover potential future exposure to participants.⁹⁰ Potential future exposure is, in turn, defined as the maximum exposure estimated to occur at a future point in time with an established single-tailed confidence level of at least 99% with respect to the estimated distribution of future exposure.⁹¹ Thus, to be consistent with its regulatory requirements, NSCC must consider potential future exposure, which includes, among other things, losses associated with the liquidation of a defaulted member’s portfolio. As demonstrated by the backtesting analysis discussed above, under its current margin methodology, NSCC is not achieving its 99% targeted confidence level for asset groups that are Illiquid Securities. Based on its review of the Advance Notice, in conjunction with the Commission’s supervisory observations, the Commission believes that the

⁸⁹ See Lek Letter at 1.

⁹⁰ 17 CFR 240.17Ad-22(e)(6)(iii) (requiring a covered clearing agency to 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, calculates margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default).

⁹¹ 17 CFR 240.17Ad-22(a)(13).

proposed changes would better enable NSCC to collect margin commensurate with the different levels of risk that Members pose to NSCC as a result of their particular trading activity in Illiquid Securities and UITs. Further, the Commission believes the amount of margin NSCC would collect under the proposed changes would help NSCC better manage its credit exposures to its Members and those exposures arising from its payment, clearing, and settlement processes.

In response to the comment asserting that a \$300 million market capitalization requirement for all exchange-listed stocks is not justifiable, the Commission disagrees with this interpretation of the proposal. Not all securities that fall under the market capitalization threshold under the proposal would be deemed to be Illiquid Securities or require a higher margin compared to the current Rules. As set forth in the proposal, the determination of whether a micro-cap security is an Illiquid Security does not rely solely on capitalization. By contrast, under the proposal, the initial determination of whether a security is a micro-cap security would employ a \$300 million threshold,⁹² and a micro-cap security would then be subject to the illiquidity ratio test described in Section II.C(ii)3 above to take into account the security's liquidity and determine whether it is an Illiquid Security. Therefore, depending on the liquidity of the issuer, there could be instances where a security with less than \$300 million in market capitalization would not constitute an Illiquid Security.

In response to the comments stating that treating all securities that are not listed on a specified exchange as Illiquid Securities is not tailored to accurately capture securities that present the defined liquidation and marketability risks, the Commission

⁹² NSCC represents that the initial threshold is set at \$300 million because it is based on prevailing thresholds for market capitalization categories in the industry. See NSCC Letter at 9; Notice of Filing, supra note 5, 85 Fed. Reg. at 21040 n. 24 (citing, as an example of the prevailing views, <https://www.sec.gov/reportspubs/investor-publications/investorpubs/microcapstockhtm.html>).

disagrees. This proposal does not change the current treatment of securities that are not listed on a specified securities exchange, because the current Rules define Illiquid Securities to include securities that are not traded on a national securities exchange. Further, the Commission believes that this distinction is appropriate. Securities that are quoted on the OTC market differ from those listed on national securities exchanges.⁹³ In particular, the average OTC security issuer is smaller, and their securities trade less, on average, than securities traded on a national securities exchange.⁹⁴ Moreover, issuers of quoted OTC securities tend to have a lower market capitalization than those with securities listed on a national securities exchange,⁹⁵ and many quoted OTC securities are illiquid.⁹⁶ Quoted OTC securities are characterized by significantly lower dollar trading volumes than listed stocks, even for securities of similar size as measured by market capitalization.⁹⁷

In response to the comment that ETPs and ADRs are exempt from the definition of Illiquid Securities, the Commission disagrees. The Proposed Rule Change would not exclude all ETPs and ADRs by category from the definition of Illiquid Securities. Instead, the proposal would only exclude ETPs and ADRs when calculating the illiquidity ratio threshold for purposes of the second test under the definition of an Illiquid Security (i.e., the median of the illiquidity ratio threshold based on non-micro-cap common stocks). An ETP or an ADR could be determined to be an Illiquid Security, and

⁹³ Publication or Submission of Quotations Without Specified Information, Final Rule; Exchange Act Release No. 89891, at 218 (September 16, 2020), available at <https://www.sec.gov/rules/final/2020/33-10842.pdf>.

⁹⁴ See id.

⁹⁵ See id.

⁹⁶ See id. at 220.

⁹⁷ See id. at 218-19.

NSCC would apply a haircut to ETPs and ADRs in the same manner as other Illiquid Securities.

Finally, in response to the comment that the proposal bears no relationship to a Member's actual credit rating, the Commission disagrees that such a relationship is necessary in order to design an accurate and appropriate margin methodology for the securities that a Member holds. Neither the proposal, nor NSCC's margin methodology more broadly, is designed to calculate the volatility component based on a Member's credit rating but rather on the risks presented by each security. Therefore, the Member's credit rating is not relevant to the determination of the appropriate volatility component of the margin for a particular security.⁹⁸

Accordingly, the Commission believes the proposal is consistent with Rule 17Ad-22(e)(6)(i) under the Exchange Act because it 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 exhibit illiquid risk attributes.⁹⁹

D. Consistency with Rule 17Ad-22(e)(23)(ii)

Rule 17Ad-22(e)(23)(ii) under the Exchange Act requires each covered clearing agency to establish, implement, maintain, and enforce written policies and procedures

⁹⁸ The Alpine Letter also questions whether the Credit Risk Rating Matrix ("CRRM") will continue to be used in the margin calculation for Illiquid Securities. See Alpine Letter at 3. NSCC responds that the calculation of the appropriate haircuts for Illiquid Securities, including calculation of the appropriate volume thresholds, does not consider the Member's CRRM rating. The CRRM rating currently is used in determining the Illiquid Position subject to NSCC's Illiquid Charge, which will be eliminated upon implementation of the proposal. See NSCC Letter at 7-8. Going forward, the CRRM would continue to be used in general credit risk monitoring of members, but would not be used for the determination of the volatility component of the margin for a particular security. See Securities Exchange Act Release No. 80734 (May 19, 2017), 82 Fed. Reg. 24177 (May 25, 2017) (order approving proposed rule changes to enhance the CRRM).

⁹⁹ 17 CFR 240.17Ad-22(e)(6)(i).

reasonably designed to provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the covered clearing agency.¹⁰⁰

The majority of commenters express concerns regarding the method for determining the proposed volatility component for Illiquid Securities being confidential. Several commenters express concern that the proposal does not explain how the haircut-based volatility charge will be calculated and that the proposal does not allow Members to review the proposed margin equations, models, and calculations.¹⁰¹ Other commenters state that the proposal does not allow Members to predict the financial consequences and operating impacts of their activities, and the impact on their liquidity needs.¹⁰²

In response, NSCC states that the language of the proposal is reasonably transparent and clear enough to enable Members to determine the Member's Required Fund Deposit.¹⁰³ NSCC states that the proposed parameters are definitive and non-discretionary to enable application on an algorithmic basis.¹⁰⁴ For example, a security

¹⁰⁰ 17 CFR 240.17Ad-22(e)(23)(ii).

¹⁰¹ See Alpine Letter at 2; SIPA Letter at 4-5; OTC I Letter at 2-3; OTC II Letter at 3-4; Wilson II Letter at 7. Wilson II also asserts that NSCC has failed to meet the requirements of Rule 17Ad-22(e)(23)(iii) for failing to quantify the current inadequate market capitalization, median illiquidity ratios, and how those factors would be improved under the proposal. However, Rule 17Ad-22(e)(23)(iii) requires each covered clearing agency to establish, implement, maintain, and enforce written policies and procedures reasonably designed to publicly disclose relevant basic data on transaction volume and values. This rule does not require a covered clearing agency to disclose the specific information that the commenter seeks because the information described by the commenter is not the basic data on transaction volumes and values required by the rule. Moreover, NSCC publicly provides data on transaction volumes and values in its quantitative disclosures, which are available at <https://www.dtcc.com/legal/policy-and-compliance>.

¹⁰² See Letter from James C. Snow, President/CCO, Wilson-Davis & Co., Inc. (May 1, 2020) ("Wilson I Letter") at 2-3; STANY Letter at 2.

¹⁰³ See NSCC Letter at 6.

¹⁰⁴ See id.

that is an ADR or has a micro-capitalization of less than \$300 million would be subject to the illiquidity ratio test, which would be provided in the Rules, to determine whether it is an Illiquid Security. In addition, NSCC states that, because haircuts would be applied according to the price level of the Illiquid Securities, Members should be able to more easily determine the applied margin impact per the current market price of the security.¹⁰⁵

NSCC also represents that it maintains the NSCC Risk Management Reporting application on the Participant Browser Service (“PBS”) and the NSCC Risk Client Portal (“Portal”) to improve transparency of Members’ Clearing Fund requirements.¹⁰⁶ NSCC states that the PBS is a member-accessible website portal for accessing reports and other disclosures. NSCC further states that the Risk Management Reporting application enables a Member to view and download Clearing Fund requirement information and component details, including issue-level Clearing Fund information related to start of day volatility charges and mark-to-market, intraday exposure, and other components.¹⁰⁷ NSCC represents that the application enables a Member to view, for example, a portfolio breakdown by asset type, including the amounts attributable to the parametric VaR model and the amounts associated with Illiquid Securities.¹⁰⁸ NSCC also represents that Members are able to view and download spreadsheets that contain market amounts for current clearing positions and the associated volatility charges.¹⁰⁹

In addition, NSCC represents that the Portal provides members the ability, for information purposes, to view and analyze certain risks relating to their portfolio,

¹⁰⁵ See id.

¹⁰⁶ See id.

¹⁰⁷ See id.

¹⁰⁸ See id.

¹⁰⁹ See id.

including calculators to assess the risk and clearing fund impact of certain activities and to compare their portfolio to historical and average values. For example, it allows Members to review both hourly and 15-minute intra-day snapshots to monitor fluctuations in the volatility and exposure in their portfolios to help Members to anticipate potential intra-day margin calls. The intervals are available through 7:00 p.m. to provide additional reports that may help Members to forecast next-day margin requirements.¹¹⁰

NSCC further represents that it maintains the NSCC Client Calculator on the Portal that provides functionality to Members to enter ‘what-if’ position data and to recalculate their volatility charges to determine margin impact pre-trade.¹¹¹ NSCC specifically states that this calculator allows Members to see the impact to the volatility charge if specific transactions are executed, or to anticipate the impact of an increase or decrease to a current clearing position.¹¹² NSCC represents that the Client Calculator portfolio detail can be downloaded to modify a current margin portfolio, and then allow Members to upload the portfolio to run a margin calculation, and permit Members to view position level outputs in order to make informed risk management and execution decisions.¹¹³

Finally, NSCC states that it conducted member outreach in connection with the proposal described in the Advance Notice. NSCC represents that, in 2019 and 2020, NSCC distributed three rounds of impact studies to Members impacted by the change to communicate revisions to the methodology and discuss specific portfolio impacts by

¹¹⁰ See NSCC Letter at 7.

¹¹¹ See id.

¹¹² See id.

¹¹³ See id.

reviewing charts and quantitative results.¹¹⁴ NSCC further represents that it has performed outreach to Members with details for this proposal for the past two years, which allowed Members to understand and ask questions about the proposal.¹¹⁵

NSCC states that it has also posted an NSCC Risk Margin Component Guide (“Guide”) on the Portal which provides descriptions of some of the components used in NSCC’s current risk-based methodology, including the volatility charges, mark-to-market charges, fail charges for CNS transactions, a charge for Family-Issued Securities to mitigate wrong way risk, a charge for Illiquid Positions, a charge to mitigate day over day margin differentials, a coverage component and a backtesting charge.¹¹⁶ NSCC represents that the Guide will be updated to reflect the changes in methodology set forth in the proposal.¹¹⁷

The Commission believes that the proposal is consistent with Rule 17Ad-22(e)(23)(ii) and is designed to provide sufficient information to enable Members to identify and evaluate the risks and other material costs they incur by participating in NSCC. The changes described in the proposal would be reflected in NSCC’s Rules and therefore publicly available to NSCC’s Members and prospective members for application to their own portfolios. Specifically, the proposed rule text would reflect the two sets of changes in the proposal. First, the proposed rule text would define the types of securities that would constitute “Illiquid Securities” as three particular categories of securities, as described in Section II.C(i), (ii), and (iii). By reviewing the definitions of an Illiquid Security, NSCC’s members should be able to understand the types of factors

¹¹⁴ See id.

¹¹⁵ See id.

¹¹⁶ See id.

¹¹⁷ See id.

that would cause a security to be considered an Illiquid Security, all of which are ascertainable, such as its trading history (including whether it is traded on an exchange or not and, if so, on which exchange), its market capitalization, and the type of security (i.e., whether it is an ADR). The specific parameters of the illiquidity ratio test would also be reflected in NSCC's Rules, thereby enabling a Member to determine whether a security that is an ADR or has a micro-capitalization of less than \$300 million would be an Illiquid Security.

Second, the proposed rule text would provide that NSCC would apply a haircut to Illiquid Securities to determine the appropriate volatility component, with Illiquid Securities grouped by price level to determine the appropriate haircut to apply to a particular security. The proposed rule text would further specify that the haircut percentage would be the highest of the three percentages as provided in Section II.D(i), and would be determined at least annually. Additionally, if a Member had questions with respect to a particular security, it could use the various client-facing tools described above to determine whether a security would be considered an Illiquid Security. Taken together, the Division believes that the proposal, which would be reflected in NSCC's Rules, in conjunction with the various client-facing tools, provides sufficient information to Members to understand the operation of the haircut-based volatility charges and how such charges would apply to particular transactions. The Commission further believes that NSCC provided sufficient information to Members to identify and evaluate the risks and other material costs they would incur due to securities with illiquid characteristics under the proposal.

For these reasons, the Commission disagrees with the comments stating that the proposal lacks details and does not explain how the haircut-based volatility charge will be calculated, and that the proposal does not allow Members to predict the impact on their activities. The Commission acknowledges that, as some commenters have noted, the

proposal does not provide or specify the actual models or calculations that NSCC would use to determine the appropriate haircut or what constitutes an Illiquid Security. However, when adopting the CCA Standards, the Commission declined to adopt a commenter's view that a covered clearing agency should be required to provide, at least quarterly, its methodology for determining initial margin requirements at a level of detail adequate to enable participants to replicate the covered clearing agency's calculations, or, in the alternative, that the covered clearing agency should be required to provide a computational method with the ability to determine the initial margin associated with changes to each respective participant's portfolio or hypothetical portfolio, participant defaults and other relevant information. The Commission stated that "[m]andating disclosure of this frequency and granularity would be inconsistent with the principles-based approach the Commission is taking in Rule 17Ad-22(e)."¹¹⁸ Consistent with that approach, the Commission does not believe that Rule 17Ad-22(e)(23)(ii) would require NSCC to disclose its actual margin methodology, so long as NSCC has provided sufficient information for its Members to understand the potential costs and risks associated with participating in NSCC for clearing Illiquid Securities.

For the reasons discussed above, the Commission believes that the proposals in the Advance Notice would enable NSCC to establish, implement, maintain, and enforce written policies and procedures reasonably designed to provide sufficient information to enable Members to identify and evaluate the risks, fees, and other material costs they incur as NSCC's Members, consistent with Rule 17Ad-22(e)(23)(ii).¹¹⁹

¹¹⁸ See Standards for Covered Clearing Agencies, supra note 54, 81 Fed. Reg. at 70845.

¹¹⁹ 17 CFR 240.17Ad-22(e)(23)(ii).

IV. Conclusion

IT IS THEREFORE NOTICED, pursuant to Section 806(e)(1)(I) of the Clearing Supervision Act, that the Commission DOES NOT OBJECT to Advance Notice (SR-NSCC-2020-802) and that NSCC is AUTHORIZED to implement the proposal as of the date of this notice or the date of an order by the Commission approving proposed rule change SR-NSCC-2020-003, whichever is later.

By the Commission.

J. Matthew DeLesDernier,

Assistant Secretary.

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