

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-97892; File No. SR-NSCC-2023-006)

July 13, 2023

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend the Clearing Agency Model Risk Management Framework

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on June 30, 2023, National Securities Clearing Corporation (“NSCC”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II and III below, which Items have been prepared by the clearing agency. NSCC filed the proposed rule change pursuant to Section 19(b)(3)(A) of the Act<sup>3</sup> and Rule 19b-4(f)(4) thereunder.<sup>4</sup> The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

The proposed rule change consists of amends (*sic*) the Clearing Agency Model Risk Management Framework (“Framework”) of NSCC and its affiliates Fixed Income Clearing Corporation (“FICC,” a central counterparty, and together with NSCC, the “CCPs,” and the CCPs together with The Depository Trust Company (“DTC,”) the

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>4</sup> 17 CFR 240.19b-4(f)(4).

“Clearing Agencies”).<sup>5</sup> The Framework was adopted by the Clearing Agencies to support their compliance with Rule 17Ad-22(e) (the “Covered Clearing Agency Standards”) under the Act,<sup>6</sup> and, in this regard, applies solely to models<sup>7</sup> utilized by the Clearing Agencies that are subject to the model risk management requirements set forth

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<sup>5</sup> The Framework sets forth the model risk management practices that the Clearing Agencies follow to identify, measure, monitor, and manage the risks associated with the design, development, implementation, use, and validation of quantitative models. The Framework is filed as a rule of the Clearing Agencies. See Securities Exchange Act Release Nos. 81485 (August 25, 2017), 82 FR 41433 (August 31, 2017) (SR-DTC-2017-008, SR-FICC-2017-014, SR-NSCC-2017-008) (“2017 Notice”); 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (SR-DTC-2020-008, SR-FICC-2020-004, SR-NSCC-2020-008); 92379 (July 13, 2021), 86 FR 38143 (July 19, 2021) (SR-DTC-2021-013); 92381 (July 13, 2021), 86 FR 38163 (July 19, 2021) (SR-NSCC-2021-008); 92380 (July 13, 2021), 86 FR 38140 (July 19, 2021) (SR-FICC-2021-006); 94273 (February 17, 2022), 87 FR 10395 (February 24, 2022) (SR-DTC-2022-001); 94272 (February 17, 2022), 87 FR 10419 (February 24, 2022) (SR-NSCC-2022-001); and 94271 (February 17, 2022), 87 FR 10411 (February 24, 2022) (SR-FICC-2022-001) (collectively, the “MRMF Filings”).

<sup>6</sup> 17 CFR 240.17Ad-22(e). Each of DTC, NSCC and FICC is a “covered clearing agency” as defined in Rule 17Ad-22(a)(5) under the Act and must comply with Rule 17Ad-22(e).

<sup>7</sup> Pursuant to Section 3.1 (Model Inventory) of the Framework, the Clearing Agencies have adopted the following definition of “model”: “[M]odel” refers to a quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques, and assumptions to process input data into quantitative estimates. A “model” consists of three components: (i) an information input component, which delivers assumptions and data to the model; (ii) a processing component, which transforms inputs into estimates; and (iii) a reporting component, which translates the estimates into useful business information. The definition of model also covers quantitative approaches whose inputs are partially or wholly qualitative or based on expert judgment, provided that the output is quantitative in nature. See 2017 Notice, *supra* note 9. See also Supervisory Guidance on Model Risk Management, SR Letter 11-7 Attachment, dated April 4, 2011, issued by the Board of Governors of the Federal Reserve System and the Office of the Comptroller of the Currency, available at <https://www.federalreserve.gov/supervisionreg/srletters/sr1107a1.pdf>, page 3.

in Rules 17Ad-22(e)(4), (e)(6), and (e)(7) under the Act.<sup>8</sup>, as described in greater detail below.<sup>9</sup>

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

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

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

1. Purpose

The proposed rule change of NSCC amends the Clearing Agency Model Risk Management Framework (“Framework”) of NSCC and its affiliates and Fixed Income Clearing Corporation (“FICC,” a central counterparty, and together with NSCC, the “CCPs,” and the CCPs together with The Depository Trust Company (“DTC”), the “Clearing Agencies”).<sup>10</sup> The Framework was adopted by the Clearing Agencies to

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<sup>8</sup> 17 CFR 240.17Ad-22(e)(4), (e)(6) and (e)(7). References to Rule 17Ad-22(e)(6) and compliance therewith apply to the CCPs only and not to DTC because DTC is not a central counterparty.

<sup>9</sup> Capitalized terms used herein and not defined shall have the meaning assigned to such terms in the NSCC Rules, available at <http://www.dtcc.com/legal/rules-and-procedures.aspx>.

<sup>10</sup> The Framework sets forth the model risk management practices that the Clearing Agencies follow to identify, measure, monitor, and manage the risks associated with the design, development, implementation, use, and validation of quantitative models. The Framework is filed as a rule of the Clearing Agencies. See Securities

support their compliance with Rule 17Ad-22(e) (the “Covered Clearing Agency Standards”) under the Act,<sup>11</sup> and, in this regard, applies solely to models<sup>12</sup> utilized by the Clearing Agencies that are subject to the model risk management requirements set forth in Rules 17Ad-22(e)(4), (e)(6), and (e)(7) under the Act.<sup>13</sup>

The proposed rule change would amend the Framework<sup>14</sup> to account for and implement a new model performance monitoring and reporting tool (i.e., the Model Health Index (“MHI”)), to help the Clearing Agencies assess a model’s overall health between periodic validations, as described below.

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Exchange Act Release Nos. 81485 (August 25, 2017), 82 FR 41433 (August 31, 2017) (SR-DTC-2017-008, SR-FICC-2017-014, SR-NSCC-2017-008) (“2017 Notice”); 88911 (May 20, 2020), 85 FR 31828 (May 27, 2020) (SR-DTC-2020-008, SR-FICC-2020-004, SR-NSCC-2020-008); 92379 (July 13, 2021), 86 FR 38143 (July 19, 2021) (SR-DTC-2021-013); 92381 (July 13, 2021), 86 FR 38163 (July 19, 2021) (SR-NSCC-2021-008); 92380 (July 13, 2021), 86 FR 38140 (July 19, 2021) (SR-FICC-2021-006); 94273 (February 17, 2022), 87 FR 10395 (February 24, 2022) (SR-DTC-2022-001); 94272 (February 17, 2022), 87 FR 10419 (February 24, 2022) (SR-NSCC-2022-001); and 94271 (February 17, 2022), 87 FR 10411 (February 24, 2022) (SR-FICC-2022-001) (collectively, the “MRMF Filings”).

<sup>11</sup> 17 CFR 240.17Ad-22(e).

<sup>12</sup> Supra note 7.

<sup>13</sup> Supra note 8.

<sup>14</sup> Amending the Framework does not require any changes to the Rules, By-Laws and Organization Certificate of DTC (available at [http://www.dtcc.com/~media/Files/Downloads/legal/rules/dtc\\_rules.pdf](http://www.dtcc.com/~media/Files/Downloads/legal/rules/dtc_rules.pdf)) (the “DTC Rules”), the Rulebook of the Government Securities Division of FICC (available at [https://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc\\_gov\\_rules.pdf](https://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc_gov_rules.pdf)) (the “GSD Rules”), the Clearing Rules of the Mortgage-Backed Securities Division of FICC (available at [http://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc\\_mbsd\\_rules.pdf](http://www.dtcc.com/~media/Files/Downloads/legal/rules/ficc_mbsd_rules.pdf)) (the “MBSD Rules”), or the Rules & Procedures of NSCC (available at [http://www.dtcc.com/~media/Files/Downloads/legal/rules/nscc\\_rules.pdf](http://www.dtcc.com/~media/Files/Downloads/legal/rules/nscc_rules.pdf)) (the “NSCC Rules,” and collectively with the DTC Rules, GSD Rules, and MBSD

## Background

The Framework outlines the applicable regulatory requirements mentioned above, describes the risks that the Clearing Agencies' model risk management program are designed to mitigate, and sets forth specific model risk management practices and requirements adopted by the Clearing Agencies to help ensure compliance with the Covered Clearing Agency Standards. These practices and requirements include, among other things, the maintenance of a model inventory ("Model Inventory"), a process for rating model materiality and complexity, processes for performing model validations and resolving findings identified during model validation, and processes for model performance monitoring, including backtesting and sensitivity analyses. The Framework also describes applicable internal ownership and governance requirements.<sup>15</sup>

NSCC's Model Risk Management ("MRM") group within the DTCC Group Chief Risk Office is responsible for the model risk management program of the Clearing Agencies, including, but not limited to, a periodic Model Validation for each model subject to the Framework that is approved for use in production not less than annually (or more frequently as may be contemplated by such Clearing Agency's established risk management framework), including each credit risk model,<sup>16</sup> each liquidity risk model,<sup>17</sup>

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Rules, the "Rules"), because the Framework is a standalone document. See MRMF Filings, supra note 9.

<sup>15</sup> See MRMF Filings, supra note 9, for additional information on the contents of the Framework.

<sup>16</sup> See 17 CFR 240.17Ad-22(e)(4)(vii).

<sup>17</sup> See 17 CFR 240.17Ad-22(e)(7)(vii).

and each CCP's margin systems and related models,<sup>18</sup> as required by the risk management standards described within the Framework.

In addition to performing model validations, as described above, the Clearing Agencies monitor model performance. Pursuant to Section 3.8 of the Framework model performance monitoring ("MPM") is the process evaluating an active model's ongoing performance. The model owner ("Model Owner")<sup>19</sup> is responsible for composing an MPM plan ("MPM Plan") for each model as part of model development, executing MPM activities according to each model's MPM Plan and reporting MPM results to MRM. MRM is responsible for providing oversight of MPM activities by setting organizational standards and providing critical analysis for identifying model issues and/or limitations, and escalating issues pertaining to MPM to the Management Risk Committee ("MRC") and/or Board Risk Committee ("BRC") as necessary.

While the Clearing Agencies believe that their existing model risk assessment, performance monitoring reports and other metrics continue to be sufficient measures of the Clearing Agencies' model risk, the Clearing Agencies propose to enhance their model performance monitoring processes with the addition of MHI, as described below.

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<sup>18</sup> See 17 CFR 240.17Ad-22(e)(6)(vii).

<sup>19</sup> Pursuant to Section 3.1 (Model Inventory) of the Framework, the person designated by the applicable business area or support function to be responsible for a particular model is recorded as the Model Owner for such model by MRM in the Model Inventory.

### Proposed Rule Change

Pursuant to the proposed rule change, the Clearing Agencies would update the Framework to account for and implement the MHI – a tool to assess a model’s overall health between periodic validations. As would be described in a new section of the Framework, the MHI would evaluate measurable indicators of a model’s overall fitness (e.g., performance monitoring and findings management), assess progress or deterioration over time, and synthesize all metrics into a model health rating (i.e., an MHI score). An MHI score would be calculated in the aggregate for all models in the Model Inventory.

An MHI score would be calculated for each model to facilitate not only an in-depth look into a particular model as needed but also its fitness for purpose (e.g., legal entity, business unit, model use, etc.). Indicators and factors considered in calculating an MHI score may be added or removed by a Clearing Agency, in accordance with its internal procedures, but the parameters and rationale of any additions or removals would be reflected in written procedures established by the applicable Clearing Agency.

Indicators and factors that the Clearing Agencies may use include, but are not limited to:

- A. Model Grade: reflects the updated model grade (“Model Grade”)<sup>20</sup> after quarterly Risk Rating Assessment or after periodic validation/annual review.
- B. Approval Status: applies to models that have not been approved but have been provisionally approved for use (in accordance with Section 3.6 (Model Approval

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<sup>20</sup> As described in Section 3.3 (Model Validation) of the Framework, a Model Grade outlines the overall quality of the model developer’s efforts to develop the model and reflects the extent to which the model developer has effectively reduced model risk during model development.

and Control) of the Framework), or models rejected during their periodic validation process that are still in production but in the process of retirement.

C. Number and Status of Findings:

- Number of Validation Findings – represents the risk engendered by the severity and number of findings identified during a review; it is more conservative than the validation thresholds and posits that each finding adds a layer of risk to the model.
- Number of Overdue Findings – captures the marginal risk of findings that remain outstanding beyond the remediation timeframe determined during validation.
- Number of Remediated Findings – acknowledges the reduction in findings risk and its positive contribution to alleviating model health.

D. Model Performance Monitoring Result: factors in updated model performance which, if results reflect a rating that may portend deterioration in overall model health and trigger escalation pursuant to a model’s MPM Plan.

E. Compensating Control recognizes the mitigating effect of controls in reducing associated risks.

F. Model Dependencies: captures the deterioration in upstream models that may negatively impact the health of individual and aggregate model risk of downstream models; measured using the upstream model’s most current residual risk rating.



As mentioned above, an aggregate MHI score would also be calculated considering individual MHI scores of all models in the Model Inventory. Such aggregate MHI score would be computed using such methodologies and/or factors as the Clearing Agencies deem appropriate from time to time to reflect aggregate model health.

MHI scores and related information would be reported to members of management and the Board of Directors (“Board”) of the applicable Clearing Agency that perform responsibilities regarding model risk management and compliance with the Framework, including the BRC, MRC and the Model Risk Governance Council (“MRGC”).<sup>21</sup>

To effectuate this proposed change, the Framework would be revised to add a new Section 3.9 (Model Health Index), as noted above, that would provide for the MHI, as described above.

Separately, Section 1 (Executive Summary) of the Framework would be amended to list Section 3.9 as one of the topics that is discussed within the Framework, and section cross-references in the Framework would be updated to accommodate the addition of Section 3.9.

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<sup>21</sup> In accordance with Section 3.2 of the Framework, the MRGC discusses and/or reviews certain model risk related matters which could result in advice and/or recommendation, which is generally directed to the interested party of a given model that brings the matter, as applicable.

## 2. Statutory Basis

The Clearing Agencies believe that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act,<sup>22</sup> as well as Rules 17Ad-22(e)(4), (e)(6) and (e)(7) thereunder,<sup>23</sup> for the reasons described below.

Section 17A(b)(3)(F) of the Act<sup>24</sup> requires, inter alia, that the rules of a clearing agency be designed to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible. As described above, the proposed rule change would revise the Framework to account for and implement the MHI, which would enhance the Clearing Agencies' ability to monitor the usefulness of models between periodic validations and provide applicable reporting and information to management and the applicable Board of the Clearing Agencies that perform responsibilities regarding model risk management and compliance with the Framework. By modifying the Framework in this regard, the proposed rule change supports the Clearing Agencies' performance of their responsibilities under the Framework, including but not limited to assuring that models function as intended. Enhanced monitoring of the models between periodic validations further supports the Clearing Agencies in their safeguarding of securities and funds which are in the custody or control of the Clearing Agencies or for which they are responsible; thus, promoting the ability of the Clearing Agencies to better manage credit exposures and liquidity risk that may impact the safeguarding of those funds and securities.

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<sup>22</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>23</sup> 17 CFR 240.17Ad-22(e)(4), (e)(6) and (e)(7).

<sup>24</sup> 15 U.S.C. 78q-1(b)(3)(F).

Rule 17Ad-22(e)(4) under the Act,<sup>25</sup> requires, inter alia, that a covered clearing agency establish, implement, maintain, and enforce written policies and procedures reasonably designed to manage risks associated with its credit risk management models. As discussed above, the proposed rule change would revise the Framework to provide for the MHI, which would enhance the Clearing Agencies' ability to monitor the usefulness of models and provide applicable reporting and information to management and the applicable Board of the Clearing Agencies that perform responsibilities regarding model risk management and compliance with the Framework, which is designed, among other things, to manage liquidity risks in accordance Rule 17Ad-22(e)(4).<sup>26</sup> By enhancing the Framework in this regard, the proposed rule change supports the Clearing Agencies' performance of their responsibilities under the Framework, including but not limited to assuring that models developed function as intended to support the Clearing Agencies in identifying, measuring, monitoring, and managing their respective credit exposures to cover these risks. Therefore, the Clearing Agencies believe that the proposed changes to the Framework are consistent with Rule 17Ad-22(e)(4).<sup>27</sup>

Rule 17Ad-22(e)(6) under the Act,<sup>28</sup> requires, inter alia, that a covered clearing agency establish, implement, maintain, and enforce written policies and procedures

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<sup>25</sup> 17 CFR 240.17Ad-22(e)(4).

<sup>26</sup> Id.

<sup>27</sup> Id.

<sup>28</sup> 17 CFR 240.17Ad-22(e)(6). References to Rule 17Ad-22(e)(6) and compliance therewith apply to the CCPs only and not to DTC because DTC is not a central counterparty.

reasonably designed to manage risks associated with its margin risk management models. As discussed above, the proposed rule change would revise the Framework to provide for the MHI, which would enhance the Clearing Agencies' ability to monitor the usefulness of models and provide applicable reporting and information to management and the applicable Board of the Clearing Agencies that perform responsibilities regarding model risk management and compliance with the Framework, which is designed, among other things, to manage margin model risks in accordance Rule 17Ad-22(e)(6).<sup>29</sup> By enhancing the Framework in this regard, the proposed rule change supports the Clearing Agencies' performance of their responsibilities under the Framework, including but not limited to assuring that models developed function as intended to support the Clearing Agencies in identifying, measuring, monitoring, and managing their respective margin model risks to cover these risks. Therefore, the Clearing Agencies believe that the proposed changes to the Framework are consistent with Rule 17Ad-22(e)(6).<sup>30</sup>

Rule 17Ad-22 (e)(7) under the Act<sup>31</sup> requires, inter alia, that a covered clearing agency establish, implement, maintain, and enforce written policies and procedures reasonably designed to manage risks associated with its liquidity risk management models. As discussed above, the proposed rule change would revise the Framework to provide for the MHI, which would to enhance the Clearing Agencies' ability to monitor the usefulness of models and provide applicable reporting and information to management and the applicable Board of the Clearing Agencies that perform

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<sup>29</sup> Id.

<sup>30</sup> Id.

<sup>31</sup> 17 CFR 240.17Ad-22(e)(7).

responsibilities regarding model risk management and compliance with the Framework, which is designed, among other things, to manage liquidity risks in accordance Rule 17Ad-22(e)(7).<sup>32</sup> By enhancing the Framework in this regard, the proposed rule change supports the Clearing Agencies' performance of their responsibilities under the Framework, including but not limited to assuring that models developed function as intended to support the Clearing Agencies in identifying, measuring, monitoring, and managing their respective liquidity risks to cover these risks. Therefore, the Clearing Agencies believe that the proposed changes to the Framework are consistent with Rule 17Ad-22(e)(7).<sup>33</sup>

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

The Clearing Agencies do not believe that the proposed rule change would have any impact, or impose any burden, on competition because the proposed rule change simply modifies the Framework governing the management of model risk by the Clearing Agencies to add a new model risk reporting tool, as described above, and (a) would not effectuate any changes to the Clearing Agencies' model risk management tools as they apply to their respective Members or Participants and (b) would not have an effect with respect to the obligations of participants utilizing Clearing Agency services.

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<sup>32</sup> Id.

<sup>33</sup> Id.

(C) Clearing Agency's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

NSCC has not received or solicited any written comments relating to this proposal. If any written comments are received, they would be publicly filed as an Exhibit 2 to this filing, as required by Form 19b-4 and the General Instructions thereto.

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

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

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

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

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)<sup>34</sup> of the Act and paragraph (f)<sup>35</sup> of Rule 19b-4 thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily

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<sup>34</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>35</sup> 17 CFR 240.19b-4(f).

suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

#### IV. Solicitation of Comments

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

##### Electronic Comments:

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include file number SR-NSCC-2023-006 on the subject line.

##### Paper Comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549.

All submissions should refer to file number SR-NSCC-2023-006. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld

from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549 on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of NSCC and on DTCC's website (<http://dtcc.com/legal/sec-rule-filings.aspx>). Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to File Number SR-NSCC-2023-006 and should be submitted on or before [INSERT DATE 21 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>36</sup>

**J. Matthew DeLesDernier,**

*Deputy Secretary.*

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<sup>36</sup> 17 CFR 200.30-3(a)(12).