Page 1 of * 85	5	SECURITIES AND EXCHAI WASHINGTON, D Form 19b).C. 20549	File No Amendment No. (req. f	. * SR 2022 - * 006	
Filing by Nation	onal Securities Clearing Corporation	1				
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934						
Initial *	Amendment *	Withdrawal	Section 19(b)(2) *	Section 19(b)(3)(A) *	Section 19(b)(3)(B) *	
Pilot	Extension of Time Period for Commission Action *	Date Expires *		Rule 19b-4(f)(1) 19b-4(f) 19b-4(f)(2) 19b-4(f) 19b-4(f)(3) 19b-4(f))(5)	
Notice of pro	oposed change pursuant to the Pay (e)(1) *	ment, Clearing, and Settlement A Section 806(e)(2) *		Security-Based Swap Submiss Securities Exchange Act of 193 Section 3C(b)(2) *	ion pursuant to the 34	
Exhibit 2 Sent As Paper Document Exhibit 3 Sent As Paper Document Exhibit 3 Sent As Paper Document						
Description Provide a brief description of the action (limit 250 characters, required when Initial is checked *). Amend the Stress Testing Framework and Liquidity Risk Management Framework						
Provide the	RuleFilingAdmin@dtcc.com		staff of the self-regulato	ory organization		
	the requirements of the Securities used this filing to be signed on its b		nto duty authorized.	ration		
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SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

Form 19b-4 Information *					
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Narrative (NSCC) - Stress Testing, Lic					

The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

Exhibit 1 - Notice of Proposed Rule Change *

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Exh 1A (NSCC) - Stress Testing, Liqu

The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 1A - Notice of Proposed Rule Change, Security-Based Swap Submission, or Advanced Notice by Clearing Agencies *

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 2- Notices, Written Comments, Transcripts, Other Communications

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Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

Exhibit Sent As Paper Document

Exhibit Sent As Paper Document

Exhibit 3 - Form, Report, or Questionnaire

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Exh 3 (DTC, NSCC) (Redacted) - Stre

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

Exhibit 4 - Marked Copies

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

Exhibit 5 - Proposed Rule Text

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Exh 5 (DTC, NSCC) (Redacted) - Stre

The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change

Partial Amendment

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

1. Text of Proposed Rule Change

(a) The proposed rule change of National Securities Clearing Corporation ("NSCC") is provided hereto as Exhibit 5 and would amend the Clearing Agency Stress Testing Framework (Market Risk) ("ST Framework") and the Clearing Agency Liquidity Risk Management Framework ("LRM Framework," and, together with the ST Framework, the "Frameworks") of NSCC and its affiliates, The Depository Trust Company ("DTC") and Fixed Income Clearing Corporation ("FICC," and together with NSCC and DTC, the "Clearing Agencies"), as described below.

First, the proposed changes would amend both the ST Framework and the LRM Framework to move descriptions of the Clearing Agencies' liquidity stress testing activities from the LRM Framework to the ST Framework. In connection with this proposed change, the Clearing Agencies are also proposing to recategorize the stress scenarios used for liquidity risk management, such that all such stress scenarios are described as either regulatory or informational scenarios.

Second, the proposed changes would amend the ST Framework to (1) enhance stress testing for the Government Securities Division of FICC ("GSD") to obtain certain data utilized in stress testing from external vendors and implement a back-up stress testing calculation that would be utilized in the event such data is not supplied by its vendors, and amend the ST Framework to reflect these practices for both GSD and the Mortgage-Backed Securities Division of FICC ("MBSD"); (2) reflect that a stress testing team is primarily responsible for the actions described in the ST Framework, and (3) make other revisions to update and clarify the statements in the ST Framework, as further described below.

Third, the proposed changes would amend the LRM Framework to update and clarify the statements in the LRM Framework, as further described below.

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

2. Procedures of the Self-Regulatory Organization

The proposed changes to the ST Framework and the LRM Framework were approved by the Risk Committee of the Clearing Agencies' respective Boards of Directors on June 15, 2021, pursuant to authority delegated from such Boards of Directors. The proposed changes to enhance GSD stress testing were approved by the Risk Committee of the Clearing Agencies' respective Boards of Directors on September 15, 2020, pursuant to authority delegated from such Boards of Directors.

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

(a) <u>Purpose</u>

The Clearing Agencies adopted the ST Framework to set forth the manner in which they identify, measure, monitor, and manage their respective credit exposures to participants and those arising from their respective payment, clearing, and settlement processes by, for example, maintaining sufficient prefunded financial resources to cover its credit exposures to each participant fully with a high degree of confidence and testing the sufficiency of those prefunded financial resources through stress testing. In this way, the ST Framework describes the stress testing activities of each of the Clearing Agencies and how the Clearing Agencies meet the applicable requirements of Rule 17Ad-22(e)(4).

The Clearing Agencies adopted the LRM Framework to set forth the manner in which they measure, monitor and manage the liquidity risks that arise in or are borne by each of the Clearing Agencies by, for example, (1) maintaining sufficient liquid resources to effect same-day settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default of the participant family that would generate the largest aggregate payment obligation for the Clearing Agency in extreme but plausible market conditions, and (2) determining the amount and regularly testing the sufficiency of qualifying liquid resources by conducting stress testing of those resources.³ In this way, the LRM Framework describes the liquidity risk management activities of each of the Clearing Agencies and how the Clearing Agencies meet the applicable requirements of Rule 17Ad-22(e)(7).⁴

The Clearing Agencies currently utilize vendor-supplied data in various aspects of the stress testing program for DTC, NSCC and MBSD. In 2020, in connection with enhancing stress testing for MBSD to utilize vendor-supplied data, FICC adopted changes to the MBSD Clearing Rules to describe the key components of the stress testing program.⁵ These disclosures are

Securities Exchange Act Release No. 82368 (December 19, 2017), 82 FR 61082
 (December 26, 2017) (SR-DTC-2017-005; SR-FICC-2017-009; SR-NSCC-2017-006)
 ("Initial ST Framework Filing").

² 17 CFR 240.17Ad-22(e)(4).

Securities Exchange Act Release Nos. 82377 (December 21, 2017), 82 FR 61617 (December 28, 2017) (File Nos. SR-DTC-2017-004; SR-FICC-2017-008; SR-NSCC-2017-005) ("Initial LRM Framework Filing").

⁴ 17 CFR 240.17Ad-22(e)(7).

See Securities Exchange Act Release No. 88382 (March 13, 2020), 85 FR 15830 (March 19, 2020) (SR-FICC-2020-801) ("MBSD Stress Testing Filing").

redundant of the descriptions of stress testing in the ST Framework and create a potential risk of having inconsistent statements regarding the Clearing Agencies' stress testing program.

The Clearing Agencies are proposing changes to the Frameworks, described below, that would (1) enhance GSD stress testing, (2) reorganize, update and clarify the statements and descriptions already set forth in the Frameworks and (3) move all descriptions of stress testing to the ST Framework. While the proposal would include certain enhancements to the GSD stress testing, the Clearing Agencies are not proposing any material changes to how they conduct stress testing, manage credit exposures and liquidity risks, or otherwise comply with the requirements of Rules 17Ad-22(e)(4) and (7).⁶

First, the proposed rule change would amend both the ST Framework and the LRM Framework to move descriptions of the Clearing Agencies' liquidity stress testing activities, which are designed to comply with the requirements of Rule 17Ad-22(e)(7)(vi),⁷ from the LRM Framework to the ST Framework. In connection with this proposed change, the Clearing Agencies are also proposing to recategorize the liquidity stress scenarios by removing the Level 1, Level 2 and Level 3 labels and instead categorizing all stress scenarios as either regulatory or informational. As described in greater detail below, this proposed change is a change only to the categorization of these stress scenarios and is not a change to how the Clearing Agencies conduct liquidity stress testing or otherwise meet the requirements of Rule 17Ad-22(e)(7)(vi)(A).⁸

Second, the proposed changes would amend the ST Framework to (1) enhance stress testing for GSD to obtain certain data utilized in stress testing from external vendors and implement a back-up stress testing calculation that would be utilized in the event such data is not supplied by its vendors, and amend the ST Framework to reflect these practices for both GSD and MBSD; (2) reflect that a stress testing team is primarily responsible for the actions described in the ST Framework, and (3) make other revisions to update and clarify the statements in the ST Framework, as further described below.

Third, the proposed changes would amend the LRM Framework to update and clarify the statements in the LRM Framework, as further described below.

i. <u>Proposed Amendments to Move Activities Related to Stress Testing</u>
<u>Qualifying Liquid Resources from the LRM Framework to the ST</u>
Framework

First, the proposed changes would amend both the ST Framework and the LRM Framework to move descriptions of the Clearing Agencies' liquidity stress testing activities, which are designed to comply with the requirements of Rule 17Ad-22(e)(7)(vi), from the LRM

^{6 17} CFR 240.17Ad-22(e)(4) and (7).

⁷ 17 CFR 240.17Ad-22(e)(7)(vi).

⁸ 17 CFR 240.17Ad-22(e)(7)(vi)(A).

⁹ 17 CFR 240.17Ad-22(e)(7)(vi).

Framework to the ST Framework. These activities are primarily performed by the Stress Testing Team within the Group Chief Risk Office of DTCC ("GCRO"), which includes members of the Market Risk Management and the Liquidity Risk Management groups within the GCRO.¹⁰ The Stress Testing Team, which was previously responsible for stress testing the Clearing Agencies' prefunded financial resources, as part of the market risk management function, took over stress testing of the Clearing Agencies liquidity resources related to liquidity risk management in order to centralize stress testing activities and related responsibilities under one team. By moving the description of the Clearing Agencies' liquidity stress testing activities into the ST Framework, the proposed change would create a clearer, simpler description of the Clearing Agencies' collective stress testing activities in one document and would reflect the consolidation of these activities under the Stress Testing Team.

In order to implement this proposed change, a number of drafting changes are being proposed to both the ST Framework and the LRM Framework. First, Section 1 (Executive Summary) and Section 4 (Liquidity Risk Management Regulatory Requirements) of the LRM Framework would be amended to make clear that compliance with the requirements of Rule 17Ad-22(e)(7)(vi) are not addressed in that document, and are addressed in the ST Framework. Section 2 (Glossary of Key Terms) of the LRM Framework would also be amended to include definitions of "Clearing Agency Stress Testing Framework" and the "Stress Testing Team," and to remove the definition of the Enterprise Stress Testing Council, which is an internal forum that addresses stress testing matters. Finally, Section 6 (Liquidity Risk Management) of the LRM Framework would be amended to describe at a high-level the activities related to stress testing of the Clearing Agencies' qualifying liquid resources and to state that these activities are described in greater detail in the ST Framework.

The proposed change would also require revisions throughout the ST Framework to include descriptions of liquidity stress testing activities that support the Clearing Agencies' compliance with the requirements of Rule 17Ad-22(e)(7)(vi) within the existing sections of the ST Framework. These proposed changes would include revisions to Section 1 (Executive Summary) of the ST Framework to clarify that stress testing related to liquidity risk management is described in this document, and revisions to Section 2 (Glossary of Key Terms) to include definitions related to these activities. These definitions would include the Liquidity Risk Management group within GCRO and a Clearing Agency Liquidity Risk Management Framework. Section 4 of the ST Framework would be renamed "Stress Testing Requirements" and would be amended to make clearer which requirements in Rules 17Ad-22(e)(4) and (7) are addressed in the ST Framework, and to identify the documents where the requirements not addressed in the ST Framework are addressed.

The parent company of the Clearing Agencies is The Depository Trust & Clearing Corporation ("DTCC"). DTCC operates on a shared services model with respect to the Clearing Agencies and its other subsidiaries. Most corporate functions are established and managed on an enterprise-wide basis pursuant to intercompany agreements under which it is generally DTCC that provides a relevant service to a subsidiary, including the Clearing Agencies.

The proposed changes to the ST Framework would create a new Section 6, which would be named "Qualifying Liquid Resources – Liquidity Risk Management," to describe at a highlevel how each of the Clearing Agencies determine the amount and regularly test the sufficiency of their respective qualifying liquid resources. This new section would include language that is substantially identical to language that would be removed from Section 6 (Liquidity Risk Management) of the LRM Framework.

The new Section 7 (Stress Testing Methodologies) (previously numbered Section 6) of the ST Framework would be updated to include descriptions of the methodologies used in liquidity stress testing. Such methodologies would not change substantively, and the language used in the revisions to this section would be substantively identical to language that would be removed from Section 6 (Liquidity Risk Management) of the LRM Framework. As described in greater detail below, the Clearing Agencies are proposing to revise the categorization of the liquidity stress scenarios, and those revisions would be reflected in this Section 7 of the ST Framework.

Finally, the new Section 8 of the ST Framework (previously numbered Section 7), which would be renamed "Stress Testing Governance and Escalation Procedures," would be amended to include matters related to liquidity stress testing. More specifically, the new Section 8.1 would address governance and oversight of stress testing, which is set forth in a number of internal documents, and overseen by a stress testing committee, the Management Risk Committee and the Risk Committee of the Board of Directors of the Clearing Agencies. The new Section 8.2 would describe the daily monitoring for threshold breaches and liquidity shortfalls, and the escalations and actions that would follow those breaches. More specifically, the Clearing Agencies monitor for breaches of a "Cover One Ratio," which is defined as the ratio of a family of affiliated Members' deficiency over the total value of the applicable Clearing Agencies' Clearing Fund or Participants Fund, excluding the sum value of the applicable family's required deposit to the Clearing Fund or Participants Fund, as applicable. With respect to liquidity stress testing, the Clearing Agencies monitor daily for liquidity shortfalls, which trigger a series of escalations and remediation actions, which would be identified in this new Section 8.2.

The new Section 8.3 would address comprehensive analyses of stress scenarios, which occur on at least a monthly basis and are designed to comply with the requirements of Rules 17Ad-22(e)(4)(vi)(B) and (C), and (7)(vi)(B) and (C). These analyses include (1) daily stress testing results, model parameters, model assumptions, and model performance, and (2) each stress scenario set for its comprehensiveness and relevance, including any changes or updates to such scenarios for the period. The new Section 8.4 would address the escalations and reporting of the monthly analyses of stress scenarios, which are designed to comply with the requirements of Rules 17Ad-22(e)(4)(vi)(D) and (7)(vi)(D). Finally, the new Section 8.5 would address the regular escalation of the results of stress testing, including any concerns related to those results, which are also designed to comply with Rules 17Ad-22(e)(4)(vi)(D) and (7)(vi)(D).

Each of these subsections would address stress testing related to market risk, using language that is currently in the ST Framework, and would include language to address liquidity stress testing that would be substantially similar to the language removed from the LRM Framework. Revisions to the language removed from the LRM Framework would be primarily

drafting revisions, as the Clearing Agencies are not proposing changes to how they conduct liquidity stress testing.

ii. <u>Proposed Amendments to Re-categorize the Stress Scenarios Used for</u> Liquidity Stress Testing

In connection with the changes described above, the proposed amendments would also reflect the recategorization of liquidity stress scenarios. Previously, liquidity stress scenarios were categorized as Level 1, 2 and 3 scenarios. Level 1 scenarios described qualifying liquid resources under normal market conditions and were considered "baseline" scenarios. Level 2 scenarios assumed a wide range of foreseeable stress scenarios that included, but were not limited to, the default of the family of affiliated Members that would generate the largest aggregate payment obligation for each Clearing Agency in extreme but plausible market conditions. These scenarios were designed to identify the qualifying liquid resources each Clearing Agency should maintain to meet compliance with Rule 17Ad-22(e)(7)(i). Finally, the Level 3 scenarios were divided into either (1) regulatory scenarios, which were designed to meet the requirements of Rule 17Ad-22(e)(7)(vi)(A), and (2) informational scenarios, which were designed to be performed for informational and monitoring purposes using stress scenarios that exceed the requirements of Rule 17Ad-22(e)(7)(vi)(A).

While the Clearing Agencies continue to maintain a wide range of stress scenarios that are designed to comply with the requirements of Rule 17Ad-22(e)(7), in order to simplify the descriptions of its liquidity stress scenarios and align them with the categorization of market risk stress scenarios, the Clearing Agencies have re-categorized the liquidity stress scenarios and eliminated the Level 1, Level 2 and Level 3 categories. Instead, all stress scenarios would be described in Section 6 of the ST Framework as being either (1) regulatory stress scenarios, which are designed to comply with the requirements of Rules 17Ad-22(e)(4)(i) and (vi)(A), and Rules 17Ad-22(e)(7)(i) and (vi)(A); or (2) informational stress scenarios, which may utilize parameters and assumptions that exceed the requirements of Rules 17Ad-22(e)(4)(vi)(A) and (7)(vi)(A) and are utilized for informational, analytical and/or monitoring purposes only.

iii. Proposed Amendments to the ST Framework

The proposed changes would amend the ST Framework to (1) enhance stress testing for GSD to obtain certain data utilized in stress testing from external vendors and implement a back-up stress testing calculation that would be utilized in the event such data is not supplied by its vendors, and amend the ST Framework to reflect these practices for both GSD and MBSD; (2) reflect that a stress testing team is primarily responsible for the actions described in the ST Framework, and (3) make other revisions to update and clarify the statements in the ST Framework, as further described below.

1. Enhance GSD Stress Testing to Use Vendor-Sourced Data

First, the proposed changes would enhance GSD stress testing to utilize vendor-supplied historical risk factor time series data ("Historical Data") and vendor-supplied security-level risk

sensitivity data ("Security-Level Data") in the stress testing program. This proposed enhancement would be similar to the approach utilized in MBSD stress testing.¹¹

The vendor-sourced Historical Data would include data regarding (1) interest rate, (2) implied inflation rate, (3) agency spread, (4) mortgage option adjusted spread, (5) interest rate volatility, and (6) mortgage basis. The vendor-sourced Security-Level Data would include data regarding (1) sensitivity to interest rates, (2) implied inflation rate, (3) agency spread, (4) convexity, (5) sensitivity to mortgage option adjusted spread, (6) sensitivity to interest rate volatility, and (7) sensitivity to mortgage basis. FICC currently utilizes the Historical Data and Security-Level Data in GSD's value-at-risk ("VaR") model, which calculates the VaR Charge component of GSD's Clearing Fund (referred to in the GSD Rulebook as Required Fund Deposit). FICC would use this same data set in GSD's stress testing program.

As described in greater detail in the ST Framework, ¹³ stress testing involves three key components: (1) risk identification, (2) scenario development, which involves the construction of comprehensive and relevant sets of extreme but plausible historical and hypothetical stress scenarios; and (3) risk measurement and aggregation, in which risk metrics are calculated to estimate the profits and losses in connection with the hypothetical close out of a participant's portfolio in certain stress scenarios.

FICC would utilize the vendor-sourced data in the development of historical stress scenarios and in the risk measurement and aggregation process of the GSD stress testing program. More specifically, the Historical Data would be used to identify the largest historical changes of risk factors that influence the pricing of product cleared by GSD, in connection with the development of stress scenarios. The vendor-sourced Historical Data would identify stress risk exposures under broader and more varied market conditions than the data currently available to FICC.

FICC would utilize both the Historical Data and the Security-Level Data in the risk measurement and aggregation process of stress testing. FICC believes that the vendor-sourced Security-Level Data is more stable and robust than the data currently utilized by FICC for GSD stress testing. Because the stress profits and losses calculation that occur in connection with the risk measurement and aggregation process in stress testing would include Security-Level Data, FICC believes that the calculated results would be improved and would reflect results that are closer to actual price changes for government securities during larger market moves which are typical of stress testing scenarios.

Finally, the proposed changes to enhance GSD stress testing would also implement a back-up calculation that GSD would utilize in the event that the vendor fails to provide such data

See supra note 5.

GSD Rulebook, <u>available at</u> https://www.dtcc.com/~/media/Files/Downloads/legal/rules/ficc_gov_rules.pdf.

These key components of stress testing are also described in the Initial ST Framework Filing. See supra note 1.

to GSD. Specifically, if the vendor fails to provide any data or a significant portion of data in accordance with the timeframes agreed to by FICC and the vendor, FICC would use the most recently available data on the first day that such disruption occurs in its stress testing calculations. Subject to discussions with the vendor, if FICC determines that the vendor would resume providing data within five (5) Business Days, FICC would determine whether the daily stress testing calculation should continue to be calculated by using the most recently available data or whether the back-up calculation (as described below) should be invoked. Subject to discussions with the vendor, if FICC determines that the data disruption would extend beyond five (5) Business Days, the back-up calculation would be employed for daily stress testing, subject to appropriate internal governance.

The proposed back-up calculation would include the following calculations: (1) calculate each Netting Member's portfolio net exposures, (2) calculate the historical stress return, and (3) calculate each Netting Member's stress profits and losses. FICC would use publicly available indices as the data source for the stress return calculations. This calculation would be referred to as the Back-up Stress Testing Calculation in the ST Framework.

The Clearing Agencies would describe the use of vendor-sourced data in stress testing for GSD and MBSD and the Back-up Stress Testing Calculation, as described above, in a new Section 7.1 of the ST Framework.

2. Identify the Stress Testing Team as Responsible for Stress Testing

As described above, stress testing for the Clearing Agencies is primarily performed by the Stress Testing Team, which includes members of both Market Risk Management and Liquidity Risk Management of DTCC within GCRO. The Stress Testing Team took over stress testing responsibilities related to liquidity risk management in late 2019 to centralize stress testing and related responsibilities under one team.

Therefore, the Clearing Agencies are proposing to include a general statement in Section 1 (Executive Summary) of the ST Framework that, unless otherwise specified, actions in the ST Framework related to stress testing are performed by the Stress Testing Team. The proposed changes would also amend Section 3 (Framework Ownership and Change Management) of the ST Framework to make it clear that the Stress Testing Team owns and manages the ST Framework and is responsible for reviewing the ST Framework no less frequently than annually.

In connection with this proposed change, the ST Framework would also be updated to describe actions related to stress testing without specifically identifying the group responsible for those actions. These proposed changes would simplify the descriptions in the ST Framework, while clarifying the team responsible for conducting these actions in a general statement in the ST Framework.

3. *Update and Clarify the ST Framework*

Finally, the proposed changes would also make immaterial revisions to update and clarify the ST Framework. For example, the proposed changes would update the names of certain documents that support the ST Framework to refer to the Clearing Agencies, rather than DTCC, in the document titles. These documents were renamed to conform to internal document naming

conventions. The proposed changes would also amend Section 2 (Glossary of Key Terms) of the ST Framework to clarify and simplify the use of certain key terms. For example, the proposed changes would move the definitions of "Members" and "Participants" from a footnote in Section 4 to this Section 2, and would update the definition of "BRC," which refers to the Risk Committee of the Boards of Directors of the Clearing Agency, to be more descriptive.

The proposed amendments would update Section 4 (Stress Testing Requirements) of the ST Framework to (1) more clearly state which requirements under Rules 17Ad-22(e)(4) and (7) are addressed in the ST Framework, (2) identify the separate documents that describe the requirements that are not addressed in the ST Framework, and (3) identify the requirements that are not applicable to the Clearing Agencies and, therefore, not described in any document.

Finally, the proposed change would also revise the description of reverse stress testing to more clearly describe the goal and purpose of this testing.¹⁴ Specifically, reverse stress testing is used to identify tail risks by using extreme stress scenarios. In this way, reverse stress testing, which is conducting semi-annually, can be used to inform regular stress testing activities. The proposed changes would provide more transparency into the purpose of reverse stress testing conducted by the Clearing Agencies.

None of these proposed changes would make substantive revisions to the ST Framework or reflect material changes to how the Clearing Agencies conduct the activities described in the ST Framework but would update and clarify those descriptions.

iv. <u>Proposed Amendments to Update and Clarify the LRM Framework</u>

In addition to removing descriptions of stress testing activities from the LRM Framework, the proposed changes would also make immaterial revisions to update and clarify the LRM Framework. For example, the proposed changes would update the name of the team within the GCRO that is responsible for liquidity risk management from the Liquidity Product Risk Unit, or LPRU, to Liquidity Risk Management. This proposed change would reflect a recent organizational change to the name of this group.

Additionally, the proposed changes would update Section 10 (Liquidity Risk Tolerances) of the LRM Framework to state that an officer in Liquidity Risk Management is responsible for reviewing the Liquidity Risk Tolerance Statement.¹⁵ The LRM Framework currently identifies the specific title of the individual who is responsible for reviewing the Liquidity Risk Tolerance Statement on at least an annual basis. The proposed change would provide the Clearing Agencies with flexibility to change the title of the person responsible for this review.

Tail risk generally refers to risks of outcomes that are caused by extreme or rare events.

The Liquidity Risk Tolerance Statement is liquidity risk management control that, among other things, (1) defines liquidity risk and describes how liquidity risk would materialize for each Clearing Agency specifically, (2) sets forth how liquidity risk is monitored by the Clearing Agencies, and (3) describes the various risk tolerance levels and thresholds for each the Clearing Agency.

v. <u>Implementation Timeframe</u>

Subject to approval by the Securities and Exchange Commission ("Commission"), the proposal to enhance GSD stress testing to use vendor-sourced data would be implemented no later than November 30, 2022. The remaining proposals would be implemented upon approval by the Commission.

(b) <u>Statutory Basis</u>

The Clearing Agencies believe that the proposed changes are consistent with the requirements of the Securities Exchange Act of 1934 ("Act") and the rules and regulations thereunder applicable to a registered clearing agency. In particular, the Clearing Agencies believe that the proposed changes are consistent with Section 17A(b)(3)(F) of the Act, ¹⁶ and Rule 17Ad-22(e)(4) under the Act, ¹⁷ for the reasons described below.

Section 17A(b)(3)(F) of the Act requires, in part, that the rules of a registered clearing agency be designed to promote the prompt and accurate clearance and settlement of securities transactions, and 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, for the reasons described below. As described above, the proposed changes would (1) amend both the ST Framework and the LRM Framework to move the descriptions of liquidity stress testing from the LRM Framework to the ST Framework; (2) simplify the categorization of the liquidity stress scenarios; (3) amend the ST Framework to reflect that the Stress Testing Team is primarily responsible for stress testing activities; (4) update and clarify descriptions within the ST Framework; and (5) update and clarify descriptions within the LRM Framework, as described above.

The ST Framework currently describes how each of the Clearing Agencies carry out a market risk management strategy to maintain sufficient prefunded financial resources to cover fully its exposures to each participant fully with a high degree of confidence. As such, the market risk management strategy of the Clearing Agencies addresses their respective market risk exposures and allows them to continue the prompt and accurate clearance and settlement of securities and can continue to assure the safeguarding of securities and funds which are in their custody or control or for which they are responsible notwithstanding those risks.

The LRM Framework describes how each of the Clearing Agencies carry out its liquidity risk management strategy such that, with respect to FICC and NSCC, they maintain liquid resources sufficient to meet the potential amount of funding required to settle outstanding transactions of a defaulting participant or family of affiliated participants in a timely manner, and with respect to DTC, it maintains sufficient available liquid resources to complete system-wide settlement on each business day, with a high degree of confidence and notwithstanding the failure to settle of the participant or affiliated family of participants with the largest settlement

¹⁶ 15 U.S.C. 78q-1(b)(3)(F).

¹⁷ 17 CFR 240.17Ad-22(e)(4).

¹⁸ Id.

obligation. As such, the Clearing Agencies' liquidity risk management strategies address the Clearing Agencies' maintenance of sufficient liquid resources, which allow them to continue the prompt and accurate clearance and settlement of securities and can continue to assure the safeguarding of securities and funds which are in their custody or control or for which they are responsible notwithstanding the default of a participant or family of affiliated participants.

The proposed changes to reorganize the Frameworks, simplify the categorization of stress scenarios, and make other updates to improve the clarity and accuracy of the descriptions within the Frameworks, as described in this filing, would assist the Clearing Agencies in carrying out their stress testing and liquidity risk management functions. Therefore, the Clearing Agencies believe the proposed changes are consistent with the requirements of Section 17A(b)(3)(F) of the Act. ¹⁹

The proposal to enhance the GSD stress testing to utilize vendor-sourced data and implement a back-up stress testing calculation is designed to be consistent with Rule 17Ad-22(e)(4) under the Act, which requires, in part, that a 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. Rule 17Ad-22(e)(4)(i) under the Act requires that a covered clearing agency maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. ²¹

FICC believes that the proposal to utilize Historical Data in the development of historical stress scenarios would incorporate a broad range of risk factors that enables GSD's model to better understand a Member's exposure to these risk factors. FICC also believes that the proposal to utilize Historical Data and Security-Level Data in the calculation of stress profits and losses for Members' portfolios would provide for calculated amounts that are closer to actual price changes for securities cleared at GSD during larger market moves in an effort to test the adequacy of GSD's prefunded resources. Lastly, FICC believes that the proposal to use a back-up calculation would help to ensure that FICC has a methodology in place that allows it to continue to measure the adequacy of GSD's prefunded financial resources in the event that the vendor fails to provide data. For these reasons, FICC believes that the proposed changes to utilize the vendor-sourced Historical Data and Security-Level Data in GSD stress testing would improve GSD's stress testing program, which is used to test the sufficiency of GSD's prefunded resources daily to support compliance with Rule 17Ad-22(e)(4)(i).

Furthermore, the proposal to adopt a back-up stress testing calculation in circumstances when the vendor-sourced data is unavailable would support GSD's stress testing program by ensuring that the program utilizes a predetermined calculation in the event of a disruption to its data source.

^{19 &}lt;u>Id</u>.

²⁰ 17 CFR 240.17Ad-22(e)(4).

²¹ 17 CFR 240.17Ad-22(e)(4)(i).

As such, FICC believes that these proposed changes are designed to be consistent with the requirements of Rule 17Ad-22(e)(4)(i) under the Act.²²

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

The Clearing Agencies do not believe the proposed changes to the Frameworks described above would have any impact, or impose any burden, on competition. As described above, the proposed changes would reorganize the Frameworks to improve the clarity regarding the Clearing Agencies' stress testing activities and would make other updates and enhancements that would improve the clarity and accuracy of the descriptions of the Clearing Agencies' stress testing and liquidity risk management functions. Therefore, the proposed changes are technical and non-material in nature, relating mostly to the operation of the Frameworks rather than the risk management functions described therein.

Further, the proposed changes to enhance GSD stress testing to utilize vendor-sourced data and establish a back-up stress testing calculation would not have any impact, or impose any burden, on competition because this proposal does not affect the respective rights or obligations of Members that utilize GSD's services.

As such, the Clearing Agencies do not believe that the proposed rule changes would have any impact on competition.

5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

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

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

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

The Clearing Agencies reserve the right to not respond to any comments received.

6. Extension of Time Period for Commission Action

The Clearing Agencies do not consent to an extension of the time period specified in Section 19(b)(2) of the Act²³ for Commission action.

- 7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)
 - (a) Not applicable.
 - (b) Not applicable.
 - (c) Not applicable.
 - (d) Not applicable.

8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission

While the proposed rule changes are not based on the rules of another self-regulatory organization or of the Commission, the Frameworks are applicable to each of the Clearing Agencies, and each of the Clearing Agencies has filed similar proposed rule changes concurrently with this filing.

9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

11. Exhibits

Exhibit 1 - Not applicable.

Exhibit 1A – Notice of proposed rule change for publication in the Federal Register.

Exhibit 2 – Not applicable.

Exhibit 3 – Liquidity Risk Tolerance Statement (sample). *Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 3 being requested pursuant to 17 CFR 240.24b-2.*

²³ 15 U.S.C. 78s(b)(2).

Exhibit 4 – Not applicable.

Exhibit 5a – Clearing Agency Stress Testing Framework (Market Risk) (marked). Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 5a being requested pursuant to 17 CFR 240.24b-2.

Exhibit 5b – Clearing Agency Liquidity Risk Management Framework (marked). Omitted and filed separately with the Commission. Confidential treatment of this Exhibit 5b being requested pursuant to 17 CFR 240.24b-2.

SECURITIES AND EX	CHANGE COMMISSION
(Release No. 34-[]; File No. SR-NSCC-2022-006)
[DATE]	

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing of Proposed Rule Change to Amend the Stress Testing Framework and Liquidity Risk Management Framework

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² notice is hereby given that on May ___, 2022, National Securities Clearing Corporation ("NSCC") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II and III below, which Items have been prepared by the clearing agency. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. <u>Clearing Agency's Statement of the Terms of Substance of the Proposed Rule Change</u>

The proposed rule change consists of amendments to the Clearing Agency Stress

Testing Framework (Market Risk) ("ST Framework") and the Clearing Agency Liquidity

Risk Management Framework ("LRM Framework," and, together with the ST

Framework, the "Frameworks") of NSCC and its affiliates, The Depository Trust

Company ("DTC") and Fixed Income Clearing Corporation ("FICC," and together with

NSCC and DTC, the "Clearing Agencies"), as described below.

¹⁵ U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

First, the proposed changes would amend both the ST Framework and the LRM Framework to move descriptions of the Clearing Agencies' liquidity stress testing activities from the LRM Framework to the ST Framework. In connection with this proposed change, the Clearing Agencies are also proposing to recategorize the stress scenarios used for liquidity risk management, such that all such stress scenarios are described as either regulatory or informational scenarios.

Second, the proposed changes would amend the ST Framework to (1) enhance stress testing for the Government Securities Division of FICC ("GSD") to obtain certain data utilized in stress testing from external vendors and implement a back-up stress testing calculation that would be utilized in the event such data is not supplied by its vendors, and amend the ST Framework to reflect these practices for both GSD and the Mortgage-Backed Securities Division of FICC ("MBSD"); (2) reflect that a stress testing team is primarily responsible for the actions described in the ST Framework, and (3) make other revisions to update and clarify the statements in the ST Framework, as further described below.

Third, the proposed changes would amend the LRM Framework to update and clarify the statements in the LRM Framework, as further described below.

II. <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

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) <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

1. Purpose

The Clearing Agencies adopted the ST Framework to set forth the manner in which they identify, measure, monitor, and manage their respective credit exposures to participants and those arising from their respective payment, clearing, and settlement processes by, for example, maintaining sufficient prefunded financial resources to cover its credit exposures to each participant fully with a high degree of confidence and testing the sufficiency of those prefunded financial resources through stress testing.³ In this way, the ST Framework describes the stress testing activities of each of the Clearing Agencies and how the Clearing Agencies meet the applicable requirements of Rule 17Ad-22(e)(4).⁴

The Clearing Agencies adopted the LRM Framework to set forth the manner in which they measure, monitor and manage the liquidity risks that arise in or are borne by each of the Clearing Agencies by, for example, (1) maintaining sufficient liquid resources to effect same-day settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default of the participant family that would generate the largest aggregate payment

Securities Exchange Act Release No. 82368 (December 19, 2017), 82 FR 61082 (December 26, 2017) (SR-DTC-2017-005; SR-FICC-2017-009; SR-NSCC-2017-006) ("Initial ST Framework Filing").

⁴ 17 CFR 240.17Ad-22(e)(4).

obligation for the Clearing Agency in extreme but plausible market conditions, and (2) determining the amount and regularly testing the sufficiency of qualifying liquid resources by conducting stress testing of those resources.⁵ In this way, the LRM Framework describes the liquidity risk management activities of each of the Clearing Agencies and how the Clearing Agencies meet the applicable requirements of Rule 17Ad-22(e)(7).⁶

The Clearing Agencies currently utilize vendor-supplied data in various aspects of the stress testing program for DTC, NSCC and MBSD. In 2020, in connection with enhancing stress testing for MBSD to utilize vendor-supplied data, FICC adopted changes to the MBSD Clearing Rules to describe the key components of the stress testing program. These disclosures are redundant of the descriptions of stress testing in the ST Framework and create a potential risk of having inconsistent statements regarding the Clearing Agencies' stress testing program.

The Clearing Agencies are proposing changes to the Frameworks, described below, that would (1) enhance GSD stress testing, (2) reorganize, update and clarify the statements and descriptions already set forth in the Frameworks and (3) move all descriptions of stress testing to the ST Framework. While the proposal would include

Securities Exchange Act Release Nos. 82377 (December 21, 2017), 82 FR 61617 (December 28, 2017) (File Nos. SR-DTC-2017-004; SR-FICC-2017-008; SR-NSCC-2017-005) ("Initial LRM Framework Filing").

⁶ 17 CFR 240.17Ad-22(e)(7).

See Securities Exchange Act Release No. 88382 (March 13, 2020), 85 FR 15830 (March 19, 2020) (SR-FICC-2020-801) ("MBSD Stress Testing Filing").

certain enhancements to the GSD stress testing, the Clearing Agencies are not proposing any material changes to how they conduct stress testing, manage credit exposures and liquidity risks, or otherwise comply with the requirements of Rules 17Ad-22(e)(4) and (7).8

First, the proposed rule change would amend both the ST Framework and the LRM Framework to move descriptions of the Clearing Agencies' liquidity stress testing activities, which are designed to comply with the requirements of Rule 17Ad-22(e)(7)(vi), from the LRM Framework to the ST Framework. In connection with this proposed change, the Clearing Agencies are also proposing to recategorize the liquidity stress scenarios by removing the Level 1, Level 2 and Level 3 labels and instead categorizing all stress scenarios as either regulatory or informational. As described in greater detail below, this proposed change is a change only to the categorization of these stress scenarios and is not a change to how the Clearing Agencies conduct liquidity stress testing or otherwise meet the requirements of Rule 17Ad-22(e)(7)(vi)(A). 10

Second, the proposed changes would amend the ST Framework to (1) enhance stress testing for GSD to obtain certain data utilized in stress testing from external vendors and implement a back-up stress testing calculation that would be utilized in the event such data is not supplied by its vendors, and amend the ST Framework to reflect these practices for both GSD and MBSD; (2) reflect that a stress testing team is primarily

⁸ 17 CFR 240.17Ad-22(e)(4) and (7).

⁹ 17 CFR 240.17Ad-22(e)(7)(vi).

¹⁰ 17 CFR 240.17Ad-22(e)(7)(vi)(A).

responsible for the actions described in the ST Framework, and (3) make other revisions to update and clarify the statements in the ST Framework, as further described below.

Third, the proposed changes would amend the LRM Framework to update and clarify the statements in the LRM Framework, as further described below.

i. <u>Proposed Amendments to Move Activities Related to Stress Testing</u>
<u>Qualifying Liquid Resources from the LRM Framework to the ST</u>
Framework

First, the proposed changes would amend both the ST Framework and the LRM Framework to move descriptions of the Clearing Agencies' liquidity stress testing activities, which are designed to comply with the requirements of Rule 17Ad-22(e)(7)(vi),¹¹ from the LRM Framework to the ST Framework. These activities are primarily performed by the Stress Testing Team within the Group Chief Risk Office of DTCC ("GCRO"), which includes members of the Market Risk Management and the Liquidity Risk Management groups within the GCRO.¹² The Stress Testing Team, which was previously responsible for stress testing the Clearing Agencies' prefunded financial resources, as part of the market risk management function, took over stress testing of the Clearing Agencies liquidity resources related to liquidity risk management in order to centralize stress testing activities and related responsibilities under one team. By moving

¹⁷ CFR 240.17Ad-22(e)(7)(vi).

The parent company of the Clearing Agencies is The Depository Trust & Clearing Corporation ("DTCC"). DTCC operates on a shared services model with respect to the Clearing Agencies and its other subsidiaries. Most corporate functions are established and managed on an enterprise-wide basis pursuant to intercompany agreements under which it is generally DTCC that provides a relevant service to a subsidiary, including the Clearing Agencies.

the description of the Clearing Agencies' liquidity stress testing activities into the ST Framework, the proposed change would create a clearer, simpler description of the Clearing Agencies' collective stress testing activities in one document and would reflect the consolidation of these activities under the Stress Testing Team.

In order to implement this proposed change, a number of drafting changes are being proposed to both the ST Framework and the LRM Framework. First, Section 1 (Executive Summary) and Section 4 (Liquidity Risk Management Regulatory Requirements) of the LRM Framework would be amended to make clear that compliance with the requirements of Rule 17Ad-22(e)(7)(vi) are not addressed in that document, and are addressed in the ST Framework. Section 2 (Glossary of Key Terms) of the LRM Framework would also be amended to include definitions of "Clearing Agency Stress Testing Framework" and the "Stress Testing Team," and to remove the definition of the Enterprise Stress Testing Council, which is an internal forum that addresses stress testing matters. Finally, Section 6 (Liquidity Risk Management) of the LRM Framework would be amended to describe at a high-level the activities related to stress testing of the Clearing Agencies' qualifying liquid resources and to state that these activities are described in greater detail in the ST Framework.

The proposed change would also require revisions throughout the ST Framework to include descriptions of liquidity stress testing activities that support the Clearing Agencies' compliance with the requirements of Rule 17Ad-22(e)(7)(vi) within the existing sections of the ST Framework. These proposed changes would include revisions to Section 1 (Executive Summary) of the ST Framework to clarify that stress testing related to liquidity risk management is described in this document, and revisions to

Section 2 (Glossary of Key Terms) to include definitions related to these activities.

These definitions would include the Liquidity Risk Management group within GCRO and a Clearing Agency Liquidity Risk Management Framework. Section 4 of the ST Framework would be renamed "Stress Testing Requirements" and would be amended to make clearer which requirements in Rules 17Ad-22(e)(4) and (7) are addressed in the ST Framework, and to identify the documents where the requirements not addressed in the ST Framework are addressed.

The proposed changes to the ST Framework would create a new Section 6, which would be named "Qualifying Liquid Resources – Liquidity Risk Management," to describe at a high-level how each of the Clearing Agencies determine the amount and regularly test the sufficiency of their respective qualifying liquid resources. This new section would include language that is substantially identical to language that would be removed from Section 6 (Liquidity Risk Management) of the LRM Framework.

The new Section 7 (Stress Testing Methodologies) (previously numbered Section 6) of the ST Framework would be updated to include descriptions of the methodologies used in liquidity stress testing. Such methodologies would not change substantively, and the language used in the revisions to this section would be substantively identical to language that would be removed from Section 6 (Liquidity Risk Management) of the LRM Framework. As described in greater detail below, the Clearing Agencies are proposing to revise the categorization of the liquidity stress scenarios, and those revisions would be reflected in this Section 7 of the ST Framework.

Finally, the new Section 8 of the ST Framework (previously numbered Section 7), which would be renamed "Stress Testing Governance and Escalation Procedures," would

be amended to include matters related to liquidity stress testing. More specifically, the new Section 8.1 would address governance and oversight of stress testing, which is set forth in a number of internal documents, and overseen by a stress testing committee, the Management Risk Committee and the Risk Committee of the Board of Directors of the Clearing Agencies. The new Section 8.2 would describe the daily monitoring for threshold breaches and liquidity shortfalls, and the escalations and actions that would follow those breaches. More specifically, the Clearing Agencies monitor for breaches of a "Cover One Ratio," which is defined as the ratio of a family of affiliated Members' deficiency over the total value of the applicable Clearing Agencies' Clearing Fund or Participants Fund, excluding the sum value of the applicable family's required deposit to the Clearing Fund or Participants Fund, as applicable. With respect to liquidity stress testing, the Clearing Agencies monitor daily for liquidity shortfalls, which trigger a series of escalations and remediation actions, which would be identified in this new Section 8.2.

The new Section 8.3 would address comprehensive analyses of stress scenarios, which occur on at least a monthly basis and are designed to comply with the requirements of Rules 17Ad-22(e)(4)(vi)(B) and (C), and (7)(vi)(B) and (C). These analyses include (1) daily stress testing results, model parameters, model assumptions, and model performance, and (2) each stress scenario set for its comprehensiveness and relevance, including any changes or updates to such scenarios for the period. The new Section 8.4 would address the escalations and reporting of the monthly analyses of stress scenarios, which are designed to comply with the requirements of Rules 17Ad-22(e)(4)(vi)(D) and (7)(vi)(D). Finally, the new Section 8.5 would address the regular escalation of the

results of stress testing, including any concerns related to those results, which are also designed to comply with Rules 17Ad-22(e)(4)(vi)(D) and (7)(vi)(D).

Each of these subsections would address stress testing related to market risk, using language that is currently in the ST Framework, and would include language to address liquidity stress testing that would be substantially similar to the language removed from the LRM Framework. Revisions to the language removed from the LRM Framework would be primarily drafting revisions, as the Clearing Agencies are not proposing changes to how they conduct liquidity stress testing.

ii. <u>Proposed Amendments to Re-categorize the Stress Scenarios Used</u> for Liquidity Stress Testing

In connection with the changes described above, the proposed amendments would also reflect the recategorization of liquidity stress scenarios. Previously, liquidity stress scenarios were categorized as Level 1, 2 and 3 scenarios. Level 1 scenarios described qualifying liquid resources under normal market conditions and were considered "baseline" scenarios. Level 2 scenarios assumed a wide range of foreseeable stress scenarios that included, but were not limited to, the default of the family of affiliated Members that would generate the largest aggregate payment obligation for each Clearing Agency in extreme but plausible market conditions. These scenarios were designed to identify the qualifying liquid resources each Clearing Agency should maintain to meet compliance with Rule 17Ad-22(e)(7)(i). Finally, the Level 3 scenarios were divided into either (1) regulatory scenarios, which were designed to meet the requirements of Rule 17Ad-22(e)(7)(vi)(A), and (2) informational scenarios, which were designed to be

performed for informational and monitoring purposes using stress scenarios that exceed the requirements of Rule 17Ad-22(e)(7)(vi)(A).

While the Clearing Agencies continue to maintain a wide range of stress scenarios that are designed to comply with the requirements of Rule 17Ad-22(e)(7), in order to simplify the descriptions of its liquidity stress scenarios and align them with the categorization of market risk stress scenarios, the Clearing Agencies have re-categorized the liquidity stress scenarios and eliminated the Level 1, Level 2 and Level 3 categories. Instead, all stress scenarios would be described in Section 6 of the ST Framework as being either (1) regulatory stress scenarios, which are designed to comply with the requirements of Rules 17Ad-22(e)(4)(i) and (vi)(A), and Rules 17Ad-22(e)(7)(i) and (vi)(A); or (2) informational stress scenarios, which may utilize parameters and assumptions that exceed the requirements of Rules 17Ad-22(e)(4)(vi)(A) and (7)(vi)(A) and are utilized for informational, analytical and/or monitoring purposes only.

iii. <u>Proposed Amendments to the ST Framework</u>

The proposed changes would amend the ST Framework to (1) enhance stress testing for GSD to obtain certain data utilized in stress testing from external vendors and implement a back-up stress testing calculation that would be utilized in the event such data is not supplied by its vendors, and amend the ST Framework to reflect these practices for both GSD and MBSD; (2) reflect that a stress testing team is primarily responsible for the actions described in the ST Framework, and (3) make other revisions to update and clarify the statements in the ST Framework, as further described below.

1. Enhance GSD Stress Testing to Use Vendor-Sourced Data

First, the proposed changes would enhance GSD stress testing to utilize vendor-supplied historical risk factor time series data ("Historical Data") and vendor-supplied security-level risk sensitivity data ("Security-Level Data") in the stress testing program. This proposed enhancement would be similar to the approach utilized in MBSD stress testing.¹³

The vendor-sourced Historical Data would include data regarding (1) interest rate, (2) implied inflation rate, (3) agency spread, (4) mortgage option adjusted spread, (5) interest rate volatility, and (6) mortgage basis. The vendor-sourced Security-Level Data would include data regarding (1) sensitivity to interest rates, (2) implied inflation rate, (3) agency spread, (4) convexity, (5) sensitivity to mortgage option adjusted spread, (6) sensitivity to interest rate volatility, and (7) sensitivity to mortgage basis. FICC currently utilizes the Historical Data and Security-Level Data in GSD's value-at-risk ("VaR") model, which calculates the VaR Charge component of GSD's Clearing Fund (referred to in the GSD Rulebook as Required Fund Deposit). FICC would use this same data set in GSD's stress testing program.

As described in greater detail in the ST Framework, 15 stress testing involves three key components: (1) risk identification, (2) scenario development, which involves the

See supra note 7.

GSD Rulebook, <u>available at</u> https://www.dtcc.com/~/media/Files/Downloads/legal/rules/ficc_gov_rules.pdf.

These key components of stress testing are also described in the Initial ST Framework Filing. See supra note 3.

construction of comprehensive and relevant sets of extreme but plausible historical and hypothetical stress scenarios; and (3) risk measurement and aggregation, in which risk metrics are calculated to estimate the profits and losses in connection with the hypothetical close out of a participant's portfolio in certain stress scenarios.

FICC would utilize the vendor-sourced data in the development of historical stress scenarios and in the risk measurement and aggregation process of the GSD stress testing program. More specifically, the Historical Data would be used to identify the largest historical changes of risk factors that influence the pricing of product cleared by GSD, in connection with the development of stress scenarios. The vendor-sourced Historical Data would identify stress risk exposures under broader and more varied market conditions than the data currently available to FICC.

FICC would utilize both the Historical Data and the Security-Level Data in the risk measurement and aggregation process of stress testing. FICC believes that the vendor-sourced Security-Level Data is more stable and robust than the data currently utilized by FICC for GSD stress testing. Because the stress profits and losses calculation that occur in connection with the risk measurement and aggregation process in stress testing would include Security-Level Data, FICC believes that the calculated results would be improved and would reflect results that are closer to actual price changes for government securities during larger market moves which are typical of stress testing scenarios.

Finally, the proposed changes to enhance GSD stress testing would also implement a back-up calculation that GSD would utilize in the event that the vendor fails to provide such data to GSD. Specifically, if the vendor fails to provide any data or a

significant portion of data in accordance with the timeframes agreed to by FICC and the vendor, FICC would use the most recently available data on the first day that such disruption occurs in its stress testing calculations. Subject to discussions with the vendor, if FICC determines that the vendor would resume providing data within five (5) Business Days, FICC would determine whether the daily stress testing calculation should continue to be calculated by using the most recently available data or whether the back-up calculation (as described below) should be invoked. Subject to discussions with the vendor, if FICC determines that the data disruption would extend beyond five (5) Business Days, the back-up calculation would be employed for daily stress testing, subject to appropriate internal governance.

The proposed back-up calculation would include the following calculations:

(1) calculate each Netting Member's portfolio net exposures, (2) calculate the historical stress return, and (3) calculate each Netting Member's stress profits and losses. FICC would use publicly available indices as the data source for the stress return calculations.

This calculation would be referred to as the Back-up Stress Testing Calculation in the ST Framework.

The Clearing Agencies would describe the use of vendor-sourced data in stress testing for GSD and MBSD and the Back-up Stress Testing Calculation, as described above, in a new Section 7.1 of the ST Framework.

2. Identify the Stress Testing Team as Responsible for Stress Testing

As described above, stress testing for the Clearing Agencies is primarily performed by the Stress Testing Team, which includes members of both Market Risk

Management and Liquidity Risk Management of DTCC within GCRO. The Stress

Testing Team took over stress testing responsibilities related to liquidity risk

management in late 2019 to centralize stress testing and related responsibilities under one team.

Therefore, the Clearing Agencies are proposing to include a general statement in Section 1 (Executive Summary) of the ST Framework that, unless otherwise specified, actions in the ST Framework related to stress testing are performed by the Stress Testing Team. The proposed changes would also amend Section 3 (Framework Ownership and Change Management) of the ST Framework to make it clear that the Stress Testing Team owns and manages the ST Framework and is responsible for reviewing the ST Framework no less frequently than annually.

In connection with this proposed change, the ST Framework would also be updated to describe actions related to stress testing without specifically identifying the group responsible for those actions. These proposed changes would simplify the descriptions in the ST Framework, while clarifying the team responsible for conducting these actions in a general statement in the ST Framework.

3. *Update and Clarify the ST Framework*

Finally, the proposed changes would also make immaterial revisions to update and clarify the ST Framework. For example, the proposed changes would update the names of certain documents that support the ST Framework to refer to the Clearing Agencies, rather than DTCC, in the document titles. These documents were renamed to conform to internal document naming conventions. The proposed changes would also amend Section 2 (Glossary of Key Terms) of the ST Framework to clarify and simplify

the use of certain key terms. For example, the proposed changes would move the definitions of "Members" and "Participants" from a footnote in Section 4 to this Section 2, and would update the definition of "BRC," which refers to the Risk Committee of the Boards of Directors of the Clearing Agency, to be more descriptive.

The proposed amendments would update Section 4 (Stress Testing Requirements) of the ST Framework to (1) more clearly state which requirements under Rules 17Ad-22(e)(4) and (7) are addressed in the ST Framework, (2) identify the separate documents that describe the requirements that are not addressed in the ST Framework, and (3) identify the requirements that are not applicable to the Clearing Agencies and, therefore, not described in any document.

Finally, the proposed change would also revise the description of reverse stress testing to more clearly describe the goal and purpose of this testing. ¹⁶ Specifically, reverse stress testing is used to identify tail risks by using extreme stress scenarios. In this way, reverse stress testing, which is conducting semi-annually, can be used to inform regular stress testing activities. The proposed changes would provide more transparency into the purpose of reverse stress testing conducted by the Clearing Agencies.

None of these proposed changes would make substantive revisions to the ST Framework or reflect material changes to how the Clearing Agencies conduct the activities described in the ST Framework but would update and clarify those descriptions.

Tail risk generally refers to risks of outcomes that are caused by extreme or rare events.

iv. Proposed Amendments to Update and Clarify the LRM Framework

In addition to removing descriptions of stress testing activities from the LRM Framework, the proposed changes would also make immaterial revisions to update and clarify the LRM Framework. For example, the proposed changes would update the name of the team within the GCRO that is responsible for liquidity risk management from the Liquidity Product Risk Unit, or LPRU, to Liquidity Risk Management. This proposed change would reflect a recent organizational change to the name of this group.

Additionally, the proposed changes would update Section 10 (Liquidity Risk Tolerances) of the LRM Framework to state that an officer in Liquidity Risk Management is responsible for reviewing the Liquidity Risk Tolerance Statement.¹⁷ The LRM Framework currently identifies the specific title of the individual who is responsible for reviewing the Liquidity Risk Tolerance Statement on at least an annual basis. The proposed change would provide the Clearing Agencies with flexibility to change the title of the person responsible for this review.

v. <u>Implementation Timeframe</u>

Subject to approval by the Commission, the proposal to enhance GSD stress testing to use vendor-sourced data would be implemented no later than November 30, 2022. The remaining proposals would be implemented upon approval by the Commission.

The Liquidity Risk Tolerance Statement is liquidity risk management control that, among other things, (1) defines liquidity risk and describes how liquidity risk would materialize for each Clearing Agency specifically, (2) sets forth how liquidity risk is monitored by the Clearing Agencies, and (3) describes the various risk tolerance levels and thresholds for each the Clearing Agency.

2. Statutory Basis

The Clearing Agencies believe that the proposed changes are consistent with the requirements of the Act and the rules and regulations thereunder applicable to a registered clearing agency. In particular, the Clearing Agencies believe that the proposed changes are consistent with Section 17A(b)(3)(F) of the Act, ¹⁸ and Rule 17Ad-22(e)(4) under the Act, ¹⁹ for the reasons described below.

Section 17A(b)(3)(F) of the Act requires, in part, that the rules of a registered clearing agency be designed to promote the prompt and accurate clearance and settlement of securities transactions, and 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, for the reasons described below.²⁰ As described above, the proposed changes would (1) amend both the ST Framework and the LRM Framework to move the descriptions of liquidity stress testing from the LRM Framework to the ST Framework; (2) simplify the categorization of the liquidity stress scenarios; (3) amend the ST Framework to reflect that the Stress Testing Team is primarily responsible for stress testing activities; (4) update and clarify descriptions within the ST Framework; and (5) update and clarify descriptions within the LRM Framework, as described above.

The ST Framework currently describes how each of the Clearing Agencies carry out a market risk management strategy to maintain sufficient prefunded financial

¹⁸ 15 U.S.C. 78q-1(b)(3)(F).

¹⁹ 17 CFR 240.17Ad-22(e)(4).

²⁰ <u>Id</u>.

resources to cover fully its exposures to each participant fully with a high degree of confidence. As such, the market risk management strategy of the Clearing Agencies addresses their respective market risk exposures and allows them to continue the prompt and accurate clearance and settlement of securities and can continue to assure the safeguarding of securities and funds which are in their custody or control or for which they are responsible notwithstanding those risks.

The LRM Framework describes how each of the Clearing Agencies carry out its liquidity risk management strategy such that, with respect to FICC and NSCC, they maintain liquid resources sufficient to meet the potential amount of funding required to settle outstanding transactions of a defaulting participant or family of affiliated participants in a timely manner, and with respect to DTC, it maintains sufficient available liquid resources to complete system-wide settlement on each business day, with a high degree of confidence and notwithstanding the failure to settle of the participant or affiliated family of participants with the largest settlement obligation. As such, the Clearing Agencies' liquidity risk management strategies address the Clearing Agencies' maintenance of sufficient liquid resources, which allow them to continue the prompt and accurate clearance and settlement of securities and can continue to assure the safeguarding of securities and funds which are in their custody or control or for which they are responsible notwithstanding the default of a participant or family of affiliated participants.

The proposed changes to reorganize the Frameworks, simplify the categorization of stress scenarios, and make other updates to improve the clarity and accuracy of the descriptions within the Frameworks, as described in this filing, would assist the Clearing

Agencies in carrying out their stress testing and liquidity risk management functions. Therefore, the Clearing Agencies believe the proposed changes are consistent with the requirements of Section 17A(b)(3)(F) of the Act.²¹

The proposal to enhance the GSD stress testing to utilize vendor-sourced data and implement a back-up stress testing calculation is designed to be consistent with Rule 17Ad-22(e)(4) under the Act, which requires, in part, that a 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.²² Rule 17Ad-22(e)(4)(i) under the Act requires that a covered clearing agency maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.²³

FICC believes that the proposal to utilize Historical Data in the development of historical stress scenarios would incorporate a broad range of risk factors that enables GSD's model to better understand a Member's exposure to these risk factors. FICC also believes that the proposal to utilize Historical Data and Security-Level Data in the calculation of stress profits and losses for Members' portfolios would provide for calculated amounts that are closer to actual price changes for securities cleared at GSD during larger market moves in an effort to test the adequacy of GSD's prefunded

²¹ Id.

²² 17 CFR 240.17Ad-22(e)(4).

²³ 17 CFR 240.17Ad-22(e)(4)(i).

resources. Lastly, FICC believes that the proposal to use a back-up calculation would help to ensure that FICC has a methodology in place that allows it to continue to measure the adequacy of GSD's prefunded financial resources in the event that the vendor fails to provide data. For these reasons, FICC believes that the proposed changes to utilize the vendor-sourced Historical Data and Security-Level Data in GSD stress testing would improve GSD's stress testing program, which is used to test the sufficiency of GSD's prefunded resources daily to support compliance with Rule 17Ad-22(e)(4)(i).

Furthermore, the proposal to adopt a back-up stress testing calculation in circumstances when the vendor-sourced data is unavailable would support GSD's stress testing program by ensuring that the program utilizes a predetermined calculation in the event of a disruption to its data source.

As such, FICC believes that these proposed changes are designed to be consistent with the requirements of Rule 17Ad-22(e)(4)(i) under the Act.²⁴

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

The Clearing Agencies do not believe the proposed changes to the Frameworks described above would have any impact, or impose any burden, on competition. As described above, the proposed changes would reorganize the Frameworks to improve the clarity regarding the Clearing Agencies' stress testing activities and would make other updates and enhancements that would improve the clarity and accuracy of the descriptions of the Clearing Agencies' stress testing and liquidity risk management functions. Therefore, the proposed changes are technical and non-material in nature,

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relating mostly to the operation of the Frameworks rather than the risk management functions described therein.

Further, the proposed changes to enhance GSD stress testing to utilize vendor-sourced data and establish a back-up stress testing calculation would not have any impact, or impose any burden, on competition because this proposal does not affect the respective rights or obligations of Members that utilize GSD's services.

As such, the Clearing Agencies do not believe that the proposed rule changes would have any impact on competition.

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

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

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

All prospective commenters should follow the Commission's instructions on how to submit comments, <u>available at https://www.sec.gov/regulatory-actions/how-to-submit-comments</u>. General questions regarding the rule filing process or logistical questions

regarding this filing should be directed to the Main Office of the SEC's Division of Trading and Markets at tradingandmarkets@sec.gov or 202-551-5777.

The Clearing Agencies reserve the right to not respond to any comments received.

III. <u>Date of Effectiveness of the Proposed Rule Change, and Timing for Commission Action</u>

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

- (A) by order approve or disapprove such proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

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

Electronic Comments:

- Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number
 SR-NSCC-2022-006 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-2022-006. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of NSCC and on DTCC's website (http://dtcc.com/legal/sec-rulefilings.aspx). All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NSCC-2022-006 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.²⁵

Secretary

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EXHIBIT 3

Liquidity Risk Tolerance Statement

REMAINDER OF PAGE REDACTED IN ITS ENTIRETY

EXHIBIT 5a	
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Bold and underlined text indicates proposed added language.

Bold and strikethrough text indicates proposed deleted language.

Clearing Agency Stress Testing Framework (Market Risk)

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Bold and strikethrough text indicates proposed deleted language.

Clearing Agency Liquidity Risk Management Framework

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