

PROCEDURES

OF

CME SECURITIES CLEARING INC.

TABLE OF CONTENTS

	Page
CHAPTER 1. DEFINITIONS	1
Procedure 1-1. Definitions in Corporation’s Rules.....	1
CHAPTER 2. ELIGIBLE SECURITIES TRANSACTIONS.....	2
Procedure 2-1. List of Eligible Securities Transactions.....	2
Procedure 2-2. Monitoring for Compliance with Requirements to Submit Eligible Secondary Market Transactions	2
CHAPTER 3. QUALIFICATION FOR MEMBER OR USER ACCESS	4
Procedure 3-1. Application Process	4
Procedure 3-2. Member and User Status	5
Procedure 3-3. Applicants Eligible to Become Members and Users	6
Procedure 3-4. Periodic Reviews of Members and Users.....	6
Procedure 3-5. Due Diligence Reviews and Requests for Information, Books, and Records.....	6
Procedure 3-6. Member Due Diligence of Users	7
Procedure 3-7. Financial Reporting Requirements	7
Procedure 3-8. Termination of Member or User Status	8
CHAPTER 4. GUARANTY FUND AND DEFAULT MANAGEMENT	10
Procedure 4-1. Guaranty Fund Calculation; Required Contribution.....	10
Procedure 4-2. Deposit of Required Contributions to the Guaranty Fund and Return of Excess Required Contribution Amounts.....	11
Procedure 4-3. RESERVED	12
Procedure 4-4. Default Management Process	12
Procedure 4-5. Default Assessment Powers	15
Procedure 4-6. Cooling Off Period.....	15
Procedure 4-7. Notice of Member or User Default.....	15
Procedure 4-8. Transfer of User Accounts	16
Procedure 4-9. Capped Liquidity Facility.....	16
Procedure 4-10. Substitution of Guaranty Fund Cash	20
Procedure 4-11. Non-Committed Repo Financing Lines.....	21
Procedure 4-12. Committed Repo Financing Lines.....	22
CHAPTER 5. MARGIN AND OUTSTANDING EXPOSURE SETTLEMENT.....	23
Procedure 5-1. Margin and Outstanding Exposure Settlement; Clearing Cycles	23
Procedure 5-2. Calculation of Initial Margin	24
Procedure 5-3. Acceptable Forms of Initial Margin	25
Procedure 5-4. Margin Posting and Withdrawal Procedures	26
CHAPTER 6. CLEARANCE AND SETTLEMENT SERVICES.....	28
Procedure 6-1. Submission of Transaction Data.....	28
Procedure 6-2. Product-Specific Clearance and Settlement Procedures.....	28

CHAPTER 7.	CORPORATION REQUIREMENTS	29
Procedure 7-1.	Member and User Access to Corporation’s Audited Financial Statements	29
Procedure 7-2.	Notice of Proposed Amendments to Rules and Procedures	29
Procedure 7-3.	Release of Clearing Data	29
Procedure 7-4.	Forms, Media and Technical Specifications.....	29
CHAPTER 8.	FEES AND CHARGES	30
Procedure 8-1.	Product-Specific Fees and Charges	30
CHAPTER 9.	CEASING TO ACT	31
Procedure 9-1.	Failure to Comply with Requirements for Member or User Status	31
Procedure 9-2.	Additional Requirements for Members and Users Due to Failure to Comply with Requirements for Member Status	31
Procedure 9-3.	Posting of Bond, Indemnity, or Guaranty in Event of Insolvency.....	32
Procedure 9-4.	Procedure for Ceasing to Act and Restrictions on Access to Services Offered by the Corporation	32
CHAPTER 10.	DISCIPLINARY ACTIONS AND OTHER ADVERSE ACTIONS	34
Procedure 10-1.	Delegation of Board Authority to Impose Sanctions.....	34
CHAPTER 11.	RESERVED	35
CHAPTER 12.	RESERVED	36
CHAPTER 13.	RESERVED	37
CHAPTER 14.	RESERVED	38
CHAPTER 15.	INTEREST RATE SECURITIES CLEARING SERVICE	39
Procedure 15-1.	Eligible Securities Transactions	39
Procedure 15-2.	RESERVED	39
Procedure 15-3.	Submission of Eligible Securities Transactions for Clearing	39
Procedure 15-4.	Functions of the Securities Clearing System	42
Procedure 15-5.	Novation.....	43
Procedure 15-6.	Settlement.....	44
Procedure 15-7.	Netting.....	49
Procedure 15-8.	Settlement Modification	53
Procedure 15-9.	Outstanding Exposure Settlement	55
Procedure 15-10.	Buy-Ins	59
Procedure 15-11.	Acceleration	60
Procedure 15-12.	Offsetting Repo Transactions	60

CHAPTER 1. DEFINITIONS

Procedure 1-1. Definitions in Corporation's Rules

Any term used in these Procedures shall have the same meaning as defined in the Corporation's Rules, except as otherwise indicated.

CHAPTER 2. ELIGIBLE SECURITIES TRANSACTIONS

Procedure 2-1. List of Eligible Securities Transactions

(a) The Corporation shall maintain and make available to a Member or User upon request a master file listing each Eligible Securities Transaction, and may from time to time add to, or remove from, such list of Eligible Securities Transactions. The Corporation shall add an Eligible Securities Transaction only upon a determination by the Corporation that it has the existing operational capability to clear and settle such Eligible Securities Transaction and to continue to successfully to provide its services to Members and Users. The Corporation may, in its discretion, approve proposed Eligible Securities Transactions for clearing and settlement. Eligible Securities Transactions that significantly impact the risk profile of the Corporation shall be reviewed and approved by the Risk Management Committee and referred to the Board for its review and approval upon recommendation of the Risk Management Committee. The Corporation's approval is required in order to add or remove any Eligible Securities Transaction.

(b) The Corporation shall notify Members and Users via an Advisory that it intends to discontinue an Eligible Securities Transaction and state the reasons for such discontinuance.

Procedure 2-2. Monitoring for Compliance with Requirements to Submit Eligible Secondary Market Transactions

(a) The Corporation shall conduct periodic routine reviews of Members to monitor each Member's compliance with its obligation under Rule 202 to submit its Eligible Secondary Market Transactions to the Corporation or to another clearing agency registered with the SEC that is a covered clearing agency. The examinations will be conducted by designated staff in accordance with the review cycle established by such staff from time to time, provided, however, that staff shall schedule a routine examination of a given Member at least once every three years.

(b) The Corporation will monitor Eligible Secondary Market Transactions submitted by a Member to the Corporation. If a transaction is rejected the Corporation will attempt to work with the Member to resubmit the transaction. If the Corporation identifies a pattern in which the Member does not resubmit the nonconforming transaction to the Corporation in the form and by the deadline prescribed in the Procedures for the relevant Clearing Service for the transaction, the Corporation may request the Member to provide information and supporting documentation to demonstrate how the Member has resolved the situation to comply with its obligation under Rule 202 to submit its Eligible Secondary Market Transactions to a covered clearing agency for clearing.

(c) If Corporation staff detects a pattern of potential violations of the Member's obligation under Rule 202, staff shall refer the matter for disciplinary action against the Member. If staff preliminarily determines that a Member may have violated its obligation under Rule 202

as to a single Eligible Secondary Market Transaction or with respect to multiple transactions at a lesser frequency than described in the foregoing sentence, staff in its discretion may issue a reminder letter or warning letter to the Member or refer the matter for disciplinary action against the Member.

(d) A Member must cooperate in any review or inquiry conducted by the Corporation staff described in paragraphs (a) or (b). The Corporation may take disciplinary action against a Member for its failure to cooperate in any such review or inquiry.

(e) When applying for status as a Member, the applicant must inform the Corporation if it is a direct participant of any other clearing agency registered with the SEC that is a covered clearing agency (as the term direct participant is defined in Rule 17ad-22(a) under the Securities Exchange Act) and the name of any each such other clearing agency. Thereafter, a Member must promptly notify the Corporation of any changes to such information.

CHAPTER 3. QUALIFICATION FOR MEMBER OR USER ACCESS

Procedure 3-1. Application Process

Pursuant to Rules 301 and 303, applicants must apply to become Members or Users as follows:

(a) Process. Currently, the Corporation offers the Interest Rate Securities Clearing Service. A person must be approved as a Member or User for the Interest Rate Securities Clearing Service.

(i) An applicant for Member status must submit electronically or via mail to the Corporation its completed Member Application and any additional materials or information required under the Rules, including the Chapter 3 Rules and the Rules for the Chapter governing the relevant Clearing Service(s), as well as any other information requested by Corporation staff during the application process. The Corporation's staff will review Member applications and recommend approval or disapproval to the Corporation's Risk Management Committee, which shall review and approve or disapprove the application. If the Risk Management Committee denies a Member application, the applicant has the right to request a hearing as provided in paragraph (f) of Rule 303.

(ii) An applicant for User status must submit electronically or via mail to the Corporation its completed User Application and any additional materials or information required under the Rules, including Chapter 3 Rules and the Rules for the Chapter governing the relevant Clearing Service(s), as well as any other information requested by Corporation staff during the application process. The Corporation's staff will review User applications and approve or disapprove them. If staff denies a User application, the applicant has the right to request a hearing as provided in paragraph (f) of Rule 303.

(iii) With respect to a Member seeking to nominate and authorize persons as Users, the Corporation may request the Member to provide information and materials demonstrating that such Member (A) has the necessary right, authority, and power to act in such capacity and that its performance of its obligations under the Rules and Procedures in relation to its authorized Users (including Supported Users) is and will be consistent with the laws applicable to it, and/or (B) has any requisite regulatory approval or license that may be required to act in such capacity.

(b) Time for Approval/Disapproval. The Corporation is not subject to any specific timeframe for approving or disapproving an application.

(c) Conditions for Approval. An applicant for Member or User status agrees that the Corporation:

(i) may make inquiries of any nature about the applicant and any person connected or associated with the applicant;

(ii) may ask the applicant to supply additional information and take whatever steps are necessary to verify information;

(iii) may provide or disclose information to a governmental agency, regulatory organization, other authority, or to the Corporation's insurers in connection with any form of insurance, or to any person in accordance with any other statutory requirement, and in accordance with the terms of the Member Agreement or User Agreement; and

(iv) may disclose to any other party the applicant's name, address, and details of any exchange or clearing memberships held or applied for.

(d) Satisfaction of Conditions for Approval. Applicants approved by the Corporation for Member or User status ("Approved Applicants") must fulfill all conditions associated with their approval within the timeframe established by the Corporation. If an Approved Applicant does not fulfill all such conditions within the established timeframe, the Corporation may, at its sole discretion, consider the grant of approval to have lapsed and may notify the prospective Member or User that it will be required to provide further information, following which the application will be submitted for consideration of re-approval.

(e) Limitation of Approval. Member or User status with the Corporation does not confer on the Member or User any "participant" or "member" or comparable status with any Affiliate of the Corporation.

Procedure 3-2. Member and User Status

(a) Terms and Conditions. The terms and conditions binding on each Member and User are set out in the Rules as well as the Member Agreement and the User Agreement, respectively. During the application process, an applicant for Member status or User status must sign (but not date) a Member Agreement or User Agreement, respectively, and return it to the Corporation, along with the other application documentation.

(b) Member or User Agreement. If and when Member status or User status is granted, Approved Applicant will receive a duly executed (and dated) copy of the Member Agreement or User Agreement, as applicable, together with the notification of acceptance and details of any condition(s) attached to its Member status or User status. With respect to User status, the Corporation will send, under separate cover, a copy of the duly executed and dated User Agreement to the Member that nominated and authorized the User.

(c) Guaranty Fund Contribution. Upon approval of a Member's application, Member status is subject to the Approved Applicant satisfying its Required Guaranty Fund Contribution pursuant to the Rules and Procedures.

(d) Other Requirements. Upon approval of a Member's or User's application, Member or User status is subject to the Approved Applicant completing satisfactory operational testing with the Corporation and any other requirements or conditions imposed by the Corporation.

Procedure 3-3. Applicants Eligible to Become Members and Users

The Risk Management Committee may approve categories of persons in addition to those set forth in Rule 302 that may be approved as Members or Users, consistent with the requirements of the Securities Exchange Act.

Procedure 3-4. Periodic Reviews of Members and Users

(a) To ensure compliance with its participation requirements, including the financial responsibility and operational capability requirements set forth in Rule 306 and Rule 307, the Corporation shall conduct periodic reviews of all Members, including financial monitoring, as follows:

(i) review periodic financial reports filed by a Member with the Corporation pursuant to paragraph (b) of Rule 309;

(ii) review material changes for which the Corporation was notified of by Member pursuant paragraph (a) of Rule 311;

(iii) review financial standards warning notices provided by a Member to the Corporation pursuant to paragraph (c) of Rule 311; and

(iv) review financial reports filed by a Member with the Corporation pursuant to Procedure 3-7.

Procedure 3-5. Due Diligence Reviews and Requests for Information, Books, and Records

The Corporation shall be responsible for conducting due diligence reviews of the financial responsibility and operational capability of Members and may require Members to furnish information to the Corporation and to make books and records available pursuant to paragraph (c) of Rule 309.

Procedure 3-6. Member Due Diligence of Users

This Procedure 3-6 applies to each Member that nominates and agrees to authorize an applicant for User status.

(a) Before the first time a Member nominates an applicant for User status, the Member must establish, maintain, and enforce policies and procedures for conducting due diligence of each such person (“User Due Diligence Policies and Procedures”), including such person’s credit and liquidity profile and operational capability. The User Due Diligence Policies and Procedures must reflect that the Member will perform due diligence of each person it nominates and authorizes for User status under each of the factors set forth in paragraphs (c)(iii)(A) through (G) of Rule 306, as applicable, as well as any other factors the Member determines appropriate.

(b) The Member must conduct due diligence of each applicant for User status it nominates before nominating the applicant and is deemed to represent to the Corporation that it has conducted such due diligence as required under paragraph (c) of Rule 306 and the Member’s User Due Diligence Policies and Procedures each time it nominates an applicant to become a User.

(c) The Member must conduct routine periodic due diligence of its authorized Users. The Member’s User Due Diligence Policies and Procedures must address the frequency with which it will conduct such due diligence reviews, provided, however, that the Member must conduct such reviews of Independent Users no less frequently than once per calendar year and Supported Users no less frequently than once per calendar year. The Member’s User Due Diligence Policies and Procedures must also address conducting due diligence of any User more frequently based on Member-prescribed circumstances.

Procedure 3-7. Financial Reporting Requirements

(a) Supplemental Information. In addition to the filings required as set forth in paragraphs (b)(i) through (b)(v) of Rule 309, all Members must submit to the Corporation certain supplemental information, as specified by the Corporation from time to time, on a monthly basis, including:

- (i) funding and liquidity information and changes to liquidity agreements, as requested by the Corporation;
- (ii) subordinated debt maturing within six (6) months; and
- (iii) such other information as requested by the Corporation.

(b) Annual Audited Financial Statements. A Member that is required to prepare annual audited financial statements by its appropriate regulatory agency is required to submit annual audited financial statements to the Corporation. Broker-dealer and futures commission merchant

Members are required to submit annual audited financial statements within sixty (60) days of their fiscal year-end. Other Members covered by this paragraph (b) are required to submit annual audited financial statements within ninety (90) days of their fiscal year-end.

(c) Alternative Equivalent Financial Information for Certain Members. A Member that is not required to prepare annual audited financial statements by any regulatory agency is required to submit equivalent financial information to the Corporation within ninety (90) days of its fiscal year-end. The Corporation will work with such Member to agree upon what constitutes equivalent financial information.

(d) Additional Reports. The Corporation may require any Member at any time to make more frequent capital computations, or to file with the Corporation the above reports on a more frequent basis, or to file such other reports or financial statements in such form or detail as may be prescribed by the Corporation.

Procedure 3-8. Termination of Member or User Status

(a) Voluntary Withdrawal of Member Status. A Member may voluntarily withdraw its Member status by providing at least ten (10) Business Days' written notice of its intended withdrawal to the Corporation ("Member Withdrawal Notice"). The Corporation may, in its sole discretion, confirm such withdrawal within a shorter notice period. The Member's withdrawal will not be effective until confirmed by the Corporation. The Corporation's confirmation of the Member Withdrawal Notice shall be evidenced by a notice to all Members and Users via an Advisory announcing the withdrawal of the Member and the Member Withdrawal Date, as that term is defined in paragraph (a) of Rule 903, and, if applicable, announcing the termination of the Member's authorization of Former Users, as that term is defined in paragraph (a) of Rule 903, with respect to clearing transactions through the Corporation.

(b) Voluntary Withdrawal of User Status. A User may voluntarily withdraw its status as a User by providing at least ten (10) Business Days' written notice of its intended withdrawal to the User's Member and the Corporation ("User Withdrawal Notice"). The Corporation may, in its discretion, confirm such withdrawal within a shorter notice period. The User's withdrawal will not be effective until confirmed by the Corporation. The Corporation's confirmation of the User Withdrawal Notice shall be evidenced by a notice to all Members and Users via an Advisory announcing the withdrawal of the User and the User Withdrawal Date, as that term is defined in paragraph (a) of Rule 903. As of the User Withdrawal Date, the User's Member shall cease to authorize such User with respect to clearing transactions through the Corporation.

(c) Termination of User Authorization. A Member, or a User authorized by the Member, may terminate the Authorization Agreement between them by providing at least ten (10) Business Days' written notice thereof to the Corporation ("Authorization Termination Notice"). The Corporation may, in its sole discretion, confirm such termination within a shorter notice period.

pursuant to paragraph (d) of Rule 311. The Corporation must confirm termination of the Authorization Agreement in writing before such termination is effective. As of the effective date of such termination, the User's Member shall cease to authorize such User with respect to clearing transactions through the Corporation, but the Member remains responsible for meeting the obligations of the User in the event the User Defaults on any Eligible Securities Transaction submitted by the User prior to such termination. If another Member does not authorize the User within a reasonable time as determined by the Corporation, the Corporation will treat the User's status as withdrawn.

CHAPTER 4. GUARANTY FUND AND DEFAULT MANAGEMENT

Procedure 4-1. Guaranty Fund Calculation; Required Contribution

(a) As set forth in Rule 402, the Corporation shall maintain a Guaranty Fund, in an amount determined by the Corporation using its stress testing methodology, at least equal to the largest theoretical loss to the Corporation resulting from the Default of two (2) Member Families, as the term is defined in Rule 101, (the “cover two standard”). To determine the largest theoretical loss to the Corporation resulting from the Default of two (2) Member Families, the Corporation measures the shortfall between the stress loss and collateral on deposit for initial margin (the “largest net debtor amount”) at the Member Family-level, covering (as applicable) Member Accounts and the User Accounts of a predefined number of Users with the largest credit exposures at each Member.

(b) The Corporation may maintain the Guaranty Fund size at an amount larger than the cover two standard (*e.g.*, by including a buffer), based on the Corporation’s assessment of the cover two standard amounts, volatility in the market or other reason, in order to better ensure that the Guaranty Fund meets the cover two standard between official calculations and to prevent significant fluctuations of Required Guaranty Fund Contributions.

(c) The Corporation shall determine each Member’s Required Guaranty Fund Contribution using fair and risk-based measures. A Member’s Required Guaranty Fund Contribution, as adjusted from time to time, shall be equal to the greater of:

(i) ten million dollars (\$10,000,000); or

(ii) the amount a Member is required to contribute to the Guaranty Fund based on the Member’s proportionate share of the aggregate Required Guaranty Fund Contribution. Prior to a Member commencing to use a Clearing Service, its proportionate share of the aggregate Required Guaranty Fund Contribution for such Clearing Service is zero.

(d) The Corporation will calculate amounts pursuant to paragraph (c)(ii) of this Procedure for each Member using a formula that is based on the Member’s relative: (i) largest net debtor amount for the Member Family; and (ii) gross notional outstanding of the Member Family in Eligible Securities Transactions cleared by the Corporation. These amounts shall be calculated based on the aggregate Required Guaranty Fund Contribution less the Corporation’s required contribution available to discharge a Defaulting Member’s losses and liabilities as described in paragraph (a)(iii) of Rule 406.

(e) The Corporation will conduct stress testing of its total financial resources once each day using standard predetermined parameters and assumptions.

(f) The Corporation will conduct a comprehensive analysis on at least a monthly basis, or more frequently as determined necessary by the Corporation, of a rotating subset of existing stress testing scenarios, models, and underlying parameters and assumptions, and consider whether such results warrant modifications to better ensure that the relevant inputs remain appropriate for determining the Corporation's required financial resources in light of current and evolving market conditions. The results of such periodic and ad hoc analyses will be used to evaluate the adequacy of, and adopt appropriate adjustments to, the Corporation's margin methodology, model parameters, models used to generate clearing or Guaranty Fund requirements, and other relevant aspects of the Corporation's risk management policies and procedures. Changes to the methodology for sizing the Guaranty Fund that constitute substantive changes to the Corporation's risk management program are presented to the Risk Management Committee for review and approval; provided that, if the Risk Management Committee determines any such changes will have a significant impact on the Corporation's risk profile, such changes are subject to approval of the Board upon recommendation of the Risk Management Committee.

(g) The Corporation may determine, in its sole discretion, to require Members to satisfy their Required Guaranty Fund Contribution with a minimum amount or proportion of cash.

(h) Pursuant to paragraph (d) of Rule 402, the aggregate Required Guaranty Fund Contributions and each Member's Required Guaranty Fund Contribution shall be recalculated at least monthly. The Corporation may recalculate such requirements more frequently than monthly pursuant to paragraph (d) of Rule 402, including based on the results of the Corporation's daily stress testing results pursuant to paragraph (e) of this Procedure 4-1, as appropriate, for risk management purposes including but not limited to adherence to the cover two standard.

Procedure 4-2. Deposit of Required Contributions to the Guaranty Fund and Return of Excess Required Contribution Amounts

(a) The Corporation must receive a new Member's initial Required Guaranty Fund Contribution before such Member is eligible to commence clearing any Eligible Securities Transactions with the Corporation.

(b) Pursuant to paragraph (d)(i) of Rule 402, the Corporation shall issue a Guaranty Fund Statement following any recalculation of the Guaranty Fund informing each Member of its recalculated Required Guaranty Fund Contribution. This statement shall also detail the Member's maximum Default Assessment.

(c) A Member must pay to the Corporation any additional Required Guaranty Fund Contribution within two (2) Business Days of the delivery of the Guaranty Fund Statement (the "Required Guaranty Fund Contribution Deadline"), unless the Corporation, in its sole discretion, shortens or extends the Required Guaranty Fund Contribution Deadline.

(d) Guaranty Fund contribution amounts posted to the Corporation in excess of a Member's Required Guaranty Fund Contribution shall be repaid upon the request of such Member; provided, however, that the Corporation, in its sole discretion, may withhold such excess if the Member has any unmet or outstanding payment obligation to the Corporation.

(e) The Corporation reserves the right to require Members to deposit additional Required Guaranty Fund Contribution amounts pursuant to paragraph (d)(ii) of Rule 402.

Procedure 4-3. RESERVED

Procedure 4-4. Default Management Process

A Member Default or User Default will be managed in accordance with the Rules and Procedures of the Corporation, including any Rules or Procedures that are specific to a given Clearing Service.

(a) Member Default.

(i) In the event of a Member Default, the Corporation will initiate the close-out process described in the Corporation's Rules and Procedures for the Member Account of a Defaulting Member. Eligible Securities Transactions of the Defaulting Member, inclusive of Cash Treasury Transactions and Repo Transactions, within the Member Account may be aggregated, in the Corporation's sole discretion, for default management purposes.

(ii) The Corporation will apply the financial resources described in paragraph (a) of Rule 406, in the order provided in paragraph (a) of Rule 406, to the Defaulting Member's obligations owed to the Corporation.

(iii) For User Accounts of a Defaulting Member, the Corporation will work with its non-Defaulting Members to attempt to transfer these accounts of non-Defaulting Users, pursuant to Rule 412, as soon as practicable; however, the Corporation may liquidate any open positions of User Accounts of a Defaulting Member, in its sole discretion, pursuant to Rule 412.

(b) User Default.

(i) Pursuant to paragraph (b) of Rule 1507, in the event of a User Default, the Corporation will notify any authorizing Members of such User to provide those Member(s) the opportunity to manage the User Default by satisfying its obligations in full, including by liquidating its portfolio on behalf of the Corporation. The Members so notified should respond to the Corporation within the period prescribed by the Corporation. Any Member that does not respond within the prescribed period would be deemed to have declined to participate in managing the given User Default. If a Member(s) agrees to liquidate the Defaulting User's

portfolio on behalf of the Corporation, such Member(s) will be directly and primarily responsible for meeting the financial and settlement obligations to the Corporation with respect to open positions of the Defaulting User authorized by that Member.

(ii) If the Members (or a subset of those Members) decline, or are deemed to have declined, to participate in managing the User Default, the Corporation will initiate the close-out process described in the Corporation's Rules and Procedures for the User Account of the Defaulting User. Eligible Securities Transactions of the Defaulting User, inclusive of Cash Treasury Transactions and Repo Transactions, across all authorizing Members of a Defaulting User that have elected not to participate in managing the default of such User, may be aggregated, in the Corporation's sole discretion, for default management purposes. For avoidance of doubt, notwithstanding a Member's decision to participate in managing the User Default, the Member's guarantee of the User's financial performance to the Corporation remains in effect until finalization and discharge of all losses associated with the User Default.

(iii) The Corporation will apply the financial resources described in Rule 406(b), in the order provided in paragraph (b) of Rule 406, to the Defaulting User's obligations owed to the Corporation.

(c) Close-out process for the positions of a Defaulting Member or Defaulting User.

(i) If time permits, as soon as reasonably practicable after the Member Default or User Default, the Corporation may, pursuant to paragraph (c) of Rule 1507, identify the contra positions of the non-Defaulting Member and non-Defaulting Users to the positions of the Defaulting Member or Defaulting Users. The Corporation may notify such potentially impacted non-Defaulting Members and/or non-Defaulting Users with open positions that they may submit a close-out request to the Corporation within a period prescribed by the Corporation from the time of notification. Any impacted non-Defaulting Member or non-Defaulting User that does not respond within the prescribed period would be deemed to have declined to close-out such positions. Any Member or User must notify the Corporation of any loss of cost incurred in connection with the close-out and such Member or User must ensure that it takes reasonable efforts to effect the close-out at prevailing market prices.

(ii) With respect to any positions that have not been terminated or closed-out pursuant to paragraphs (b), or (c) of Rule 1507, the Corporation, in its sole discretion, may take the actions pursuant to paragraph (e) of Rule 1507 to manage the Member or User Default, including purchasing or selling Eligible

Securities pursuant to Rule 407 or conducting a competitive auction pursuant to Rule 1508.

- (A) Pursuant to Rule 407, depending on the prevailing facts and circumstances, including, but not limited to, prevailing market liquidity, the size of the portfolio of the portfolio of the Defaulting Member or Defaulting User, and the time when obligations become due with respect to the portfolio of the Defaulting Member or Defaulting User, the Corporation may enter into Paired Transactions, as the term is defined in Rule 407, to deliver or purchase securities on the applicable settlement date, including for the date of the Default or for Business Days following the date of the Default.
- (B) Pursuant to Rule 1508, depending on the prevailing facts and circumstances, including, but not limited to, prevailing market liquidity and the size of the portfolio of the Portfolio of the Defaulting Member or Defaulting User, the time when obligations become due with respect to the portfolio of the Defaulting Member or Defaulting User, and risk capacity of potential Bidders, the Corporation may conduct competitive auction(s), in which it may invite non-Defaulting Members or non-Defaulting Users to participate. Competitive auctions may be conducted in any format determined appropriate by the Corporation, with reference to prevailing facts and circumstances.

(d) Managing a Default with Respect to a Specific Clearing Service and Across Clearing Services.

- (i) If a Defaulting Member or Defaulting User has obligations with respect to open Eligible Securities Transactions cleared in more than one Clearing Service, the Corporation may in its discretion treat the Eligible Securities Transactions separately by Clearing Service and/or on a combined portfolio basis for purposes of hedging positions and liquidating open positions including, via any competitive auction.
- (ii) In the event a Default by a User is followed by a Default of the User's authorizing Member, the Corporation may, subject to applicable law, in its discretion treat the Eligible Securities Transactions of the Defaulting Member and the Defaulting User separately and/or on a combined portfolio basis in whole or in part for purposes of hedging positions and liquidating open positions, including via any competitive auction.

- (iii) Additional procedures related to managing a Default of a Member or User may be set forth in the Rules or Procedures specific to a Default affecting Eligible Securities Transactions in a particular Clearing Service.

Procedure 4-5. Default Assessment Powers

(a) As set forth in paragraph (c) of Rule 402, upon a Default of a Member, and after application of funds pursuant to paragraphs (a)(ii) through (iv) of Rule 406, all non-Defaulting Members may be subject to a Default Assessment. If the Corporation's losses and liabilities arising from a Member default exceed 50% of the Corporation's available funds for discharging such losses and liabilities pursuant to paragraphs (a)(ii) through (iv) of Rule 406, the Corporation, in its sole discretion, may issue an advance demand to non-defaulting Members to satisfy Default Assessments up to the amount that would be necessary to discharge such losses and liabilities, subject to the maximum Default Assessment for each member pursuant to paragraph (c) of Rule 402.

(b) Default Assessments shall be applied to each Member pro rata in proportion to its Required Guaranty Fund Contribution. The Default Assessment for each Member shall be calculated by the Corporation and reported to the individual Members in the Guaranty Fund Statement, as set forth in paragraph (b) of Procedure 4-2. During the hours in which the Federal Reserve's wire transfer system ("Fedwire") is in operation, non-Defaulting Members must pay such Default Assessment amount to the Corporation prior to the close of Fedwire on such day; provided, however, that all amounts assessed within one (1) hour prior to the close of Fedwire must be paid to the Corporation no later than one (1) hour after the Fedwire next opens.

(c) Pursuant to paragraph (c) of Rule 402, the total maximum Default Assessment for each Member with respect to each Cooling Off Period will equal two-hundred (200) percent of the Member's Required Guaranty Fund Contribution then in effect at the time of the Member Default.

(d) Any Member that does not satisfy a Default Assessment may be declared to be in Default by the Corporation pursuant to Rule 902.

Procedure 4-6. Cooling Off Period

The Corporation's required contribution to discharge a Defaulting Member's losses and liabilities pursuant to paragraph (a)(iii) of Rule 406 shall be limited to an aggregate maximum of 50 million dollars (\$50,000,000) during the Cooling Off Period.

Procedure 4-7. Notice of Member or User Default

(a) As set out in Rule 905, the Corporation will notify Members and Users, via an Advisory, if it ceases to act for a Member or User, either with respect to specific transactions or more generally.

(b) Following any charges against the Guaranty Fund due to Default by a Member, the Corporation will provide updated Guaranty Fund Statements to Members. During the hours in which the Fedwire is in operation, non-Defaulting Members must deposit the necessary amount to restore its Required Guaranty Fund Contribution pursuant to Procedure 4-5 prior to the close of Fedwire on such day; provided, however, that all amounts required to be deposited within one (1) hour prior to the close of Fedwire must be paid to the Corporation no later than one (1) hour after the Fedwire next opens.

Procedure 4-8. Transfer of User Accounts

Consistent with Rule 412, if a Member with authorized Users is in Default, the Corporation may arrange to transfer the User Account(s) (which includes the transfer of the positions and margin and available funds held in such User Account(s)) to one or more non-Defaulting Members, if such authorized Users are not themselves in Default. Notwithstanding the above, the Corporation shall be entitled to liquidate any open positions of the User on the Corporation's books.

Procedure 4-9. Capped Liquidity Facility

(a) CLF MRA.

(i) Pursuant to Rule 410, each Member is required to enter into a CLF MRA with the Corporation, which will govern all CLF Event Transactions between the Member, as buyer of Eligible Securities, and the Corporation, as seller of Eligible Securities. Eligible Securities in the context of a CLF Event Transaction, under this Procedure 4-9, may include collateralizing such CLF Event Transaction with Qualified Margin Securities pledged by the Defaulting Member or Defaulting User, collateral deposited to the Guaranty Fund, and Eligible Securities the Corporation receives from non-defaulting Members and non-Defaulting Users that had been intended to be delivered to the Defaulting Member or Defaulting User.

(ii) The CLF MRA shall be in the form established by the Corporation, which form may be based on SIFMA Master Repurchase Agreement with modifications, and shall incorporate the following terms:

- (A) Each and all CLF Event Transactions shall only be initiated by the Corporation and shall only be terminable by the Corporation in accordance with this Procedures 4-9 unless otherwise provided in paragraph (F) below;
- (B) On any Business Day prior to the CLF Event Transaction Termination Date, if (x) the Corporation has executed a trade liquidating the financed securities, or (y) the Corporation has obtained liquidity through other available liquid resources, the

Corporation may, by notice to the buyer, partially or fully terminate any CLF Event Transaction, by repurchasing some or all of the Eligible Securities sold by the Corporation to the buyer;

- (C) Each CLF Event Transaction may be rolled daily at the discretion of the Corporation and will remain open until (x) the contractual settlement date of a trade liquidating the financed securities, (y) such time that the Corporation has obtained liquidity through its other available liquid resources, or (z) the occurrence of the CLF Event Transaction Termination Date. CLF Event Transactions can have a term of up to 30 days and the Corporation, at its sole discretion, can extend the CLF Event Transaction by up to an additional 30 days;
- (D) It shall be an “Event of Default” (as defined in the CLF MRA) with respect to the buyer under a CLF MRA if the Corporation ceases to act for such Member pursuant Rule 901 or 902;
- (E) there shall be no “Events of Default” (as defined in the CLF MRA) with respect to the Corporation as the seller other than a Corporation Default within the meaning of Rule 714;
- (F) If (x) a Corporation Default has occurred during the term of a CLF Event Transaction or (y) the Corporation has not repurchased all of the Eligible Securities under a CLF Event Transaction by the CLF Event Transaction Termination Date, the buyer of the CLF Event Transactions may exercise the rights of a “non-defaulting party” under the CLF MRA as if an “Event of Default” with respect to the seller had occurred.

(b) Declaration of a CLF Event.

(i) In the event that the Corporation ceases to act for a Member or User pursuant to Chapter 9 of the Rules and determines, in its sole discretion, that any or all steps set forth in Rules 407 (Asset Purchase and Sale), 408 (Non-Committed Repo Financing Lines) and 409 (Committed Repo Financing Lines) are insufficient or likely to be insufficient to meet the Corporation’s liquidity needs, the Head of the Corporation (or in the event the Head of the Corporation is unavailable, the Head of Risk, or if the Head of Risk is unavailable, a duly authorized delegate) may declare a CLF Event pursuant to Rule 410. Upon such declaration, the following shall occur:

- (A) The Corporation shall notify all Members via an Advisory informing them of the Corporation’s declaration of a CLF Event and that the Corporation may enter into one or more CLF Event

Transactions with one or more non-Defaulting Members on the terms specified in the CLF MRA;

- (B) The Corporation, in its sole discretion, shall determine the non-Defaulting Member(s) with whom it will enter into CLF Event Transactions and the terms of each such transaction;
- (C) The Corporation will notify each such Member of the terms under which the Member will enter into a CLF Event Transaction with Corporation, including the amount, rate, description of the Eligible Securities;
- (D) The Corporation will then initiate one or more CLF Event Transaction(s) with each such Member at an aggregate purchase price up to the maximum amount allocated to such Member (“Allocated Capped CLF Amount”);
- (E) Pursuant to the terms of the CLF MRA, each CLF Event Transaction will remain open until the earlier of (x) such time that the Corporation has executed a trade liquidating the financed securities (“Liquidating Trade”), (y) such time that the Corporation has obtained liquidity through its other available liquid resources and closes the CLF Event Transaction or (z) the CLF Event Transaction Termination Date; and
- (F) Upon the Corporation’s execution of the Liquidating Trade, the Corporation will notify each Member party to a CLF Event Transaction of the Corporation’s termination of the CLF Event Transaction and will instruct each such Member to deliver the related Eligible Securities to the Corporation in order to enable the Corporation to complete settlement of the Liquidating Trade. The Corporation will endeavor to terminate the CLF Event Transactions based on the order that the Corporation enters into Liquidating Trades for the related Eligible Securities and the Corporation’s ability to meet its risk management objectives of minimizing liquidation losses on the applicable Eligible Securities and supporting the stability of the broader financial market.

(ii) Whenever the Corporation determines that it no longer needs the financing provided by CLF Event Transactions, the Corporation may terminate the CLF Event Transactions and notify relevant Members to deliver the Eligible Securities to the Corporation in exchange for cash.

(c) Calculation of Required CLF Size and Allocated Capped CLF Amounts.

(i) The Corporation shall conduct an assessment at least every quarter, or more frequently as the Corporation deems appropriate, to evaluate the hypothetical liquidity need the Corporation may experience in the event of a Default of a Participant Family (“Stress Potential Payment Obligation” or “SPPO”) to which the Corporation would be obligated to make the largest cash payment. The Corporation may consider other factors it deems relevant, such as historical volatility and concentration of SPPO amounts, the historical total amounts of Allocated Capped CLF Amounts, the historical size transactions cleared by the Corporation, and other factors in determining the required size of the CLF (e.g., aggregated Allocated Capped CLF Amounts of all Members).

(ii) The Corporation shall calculate each Member’s Allocated Capped CLF Amount at such time the Corporation performs its assessment referred to in clause (i) above. Each Member’s Allocated Capped CLF Amount will be calculated on a pro rata basis, based on the size of each Member’s SPPO relative to the total aggregate SPPO across all Members. Each Member’s SPPO is calculated by taking the sum of the Member’s largest SPPO plus the largest SPPO of the two Users it authorized, if any, over the lookback period. The Corporation, at its sole discretion, can add a multiplier to a particular Member’s SPPO as part of determining that Member’s Allocated Capped CLF Amount. The Corporation will provide a periodic report to each Member with its individual Allocated Capped CLF Amount. In the event that the Corporation declares a CLF Event, Members shall be required to enter into CLF Event Transactions up to their individual Allocated Capped CLF Amount as calculated by the Corporation.

(d) Required Attestation and Acknowledgment.

(i) On at least an annual basis, an authorized representative, as designated pursuant to Rule 312, of each Member shall satisfactorily complete an attestation declaring the Member understands and acknowledges to be bound, by the Corporation’s Rules with respect to CLF, the Corporation’s use of such Member’s Allocated Capped CLF Amount and associated obligations, and that such Member has suitably incorporated that individual Member’s Allocated Capped CLF Amount into their ongoing liquidity planning in order to be prepared to meet their obligation as may be required. Each Member must complete the aforementioned attestation within the period prescribed by the Corporation.

(ii) From time to time the Corporation may require acknowledgements by Members, including, but not limited to, acknowledgement that they have been informed of a change to their Allocated Capped CLF Amount, a declaration that they are prepared to enter into a CLF Event Transaction up to the full amount of

Allocated Capped CLF Amount if instructed to do so by the Corporation following the declaration of a CLF Event, acknowledgement of the Rules in the event of a change to the authorized representative of the Member, or other acknowledgements as deemed relevant by the Corporation. Each Member must complete the aforementioned acknowledgement within the period prescribed by the Corporation.

(e) Report of Actions. If the Corporation enters into repo transactions involving Eligible Securities under non-committed master repurchase agreement pursuant to Rule 408 or a CLF MRA pursuant to Rule 410, it shall promptly notify the SEC and other relevant regulatory agency(ies) of such action, by the close of business on the day such action is taken where practicable.

(f) Operational Testing. On at least an annual basis, the Corporation shall conduct a CLF MRA test with all Members. The test will be designed to ensure operational capability of the Corporation and its Members to support the operational aspects of entering into one or more CLF Event Transactions in the event the Corporation declares a CLF Event. All Members, upon request by the Corporation, shall participate in a hypothetical CLF Event and a CLF Event Transaction and will be required to demonstrate its operational capability as established by the Corporation. The Corporation may consider any other CLF Event Transaction, actual or test, that has been executed by the Corporation with that Member in satisfaction of this requirement.

Procedure 4-10. Substitution of Guaranty Fund Cash

(a) Procedures for substitution of Guaranty Fund cash pursuant to Rule 411. Consistent with Rule 411, the Corporation may substitute cash deposited by non-Defaulting Members in the Guaranty Fund with U.S. Treasury securities pledged to the Corporation for the Account of a Defaulting Member or a Defaulting User, including securities coming in to the Defaulting Member or Defaulting User in settlement of its Eligible Securities Transactions.

(b) The Corporation shall notify impacted non-Defaulting Members via an Advisory that it is effecting a substitution of Guaranty Fund cash for U.S. Treasury securities pursuant to Rule 411. The Advisory shall state the total amount of the cash substitution and identify the U.S. Treasury securities to be deposited in the Guaranty Fund by CUSIP. U.S. Treasury securities deposited in the Guaranty Fund in substitution of cash therein shall be allocated pro rata to the cash Guaranty Fund contributions of the non-Defaulting Members, and the Corporation shall inform each non-Defaulting Member of the amount of its cash Guaranty Fund contribution that is subject to substitution.

(c) Pursuant to Rule 411, the market value of U.S. Treasury securities deposited in the Guaranty Fund in substitution of cash deposits therein shall be subject to an appropriate haircut established by the Corporation in its discretion. The market value of the U.S. Treasury securities deposited in the Guaranty Fund shall be determined by the Corporation as of the Close of Business

on the Business Day prior to the date of cash substitution. The market value of the U.S. Treasury securities, after application of the haircut, shall equal the value of the cash substituted pursuant to Rule 411.

(d) The Corporation shall complete substitution of U.S. Treasury securities for cash Guaranty Fund contributions pursuant to Rule 411 within such time as the Corporation shall determine after the Corporation notifies non-Defaulting Members that it is effecting such substitution.

(e) A non-Defaulting Member whose cash Guaranty Fund contribution has been substituted, in whole or part, with U.S. Treasury securities may, within twenty four (24) hours, request that the Corporation replace the cash for the substituted U.S. Treasury securities, to the extent still on deposit, within twenty nine (29) days of the date of substitution.

(f) Notwithstanding paragraph (e) above, as soon as reasonably practicable, the Corporation shall replace the substituted U.S. Treasury securities in the Guaranty Fund for cash when available.

(g) Procedures for substitution of Guaranty Fund cash pursuant to paragraph (b) of Rule 403. With respect to the Corporation's substitution instruction to a Member to deposit cash in exchange for U.S. Treasury securities on deposit in satisfaction of the Member's Required Guaranty Fund Contribution pursuant to paragraph (b) of Rule 403, such instructions will be made during the hours in which the Federal Reserve's securities wire transfer system is in operation, provided, however that if such directions are given less than sixty (60) minutes prior to the close of the Federal Reserve's securities wire transfer system, the substitution required hereunder shall be made within sixty (60) minutes after the Federal Reserve's securities wire next opens. To the extent that a Member(s) fails to provide U.S. Dollar cash within the deadlines specified above, the Corporation may debit U.S. Dollar cash from that Member's Bank account for its Member Account in the amount of the Member's non-U.S. Dollar cash Required Guaranty Fund Contribution then on deposit with the Corporation.

Procedure 4-11. Non-Committed Repo Financing Lines

(a) Pursuant to paragraph (a)(vii) of Rule 305, all Members must execute a master repurchase agreement with the Corporation, which will govern all non-committed repo transactions between the Corporation and the Member. The Corporation may also, in its sole discretion, sign master repurchase agreements with entities that are not Members for the purposes of establishing additional non-committed repo financing lines.

(b) Pursuant to Rule 408, if the Corporation deems it appropriate, in its sole discretion, it may enter into repo transactions with any market participant so willing, and no Member or User shall take any action to interfere intentionally with such repo transactions.

(c) Transaction terms for non-committed repo transactions will be negotiated and set with the counterparty at the time of the transaction.

(d) Each Member that has entered into such master repurchase agreement shall periodically test repurchase transactions with the Clearing House when requested by the Clearing House.

Procedure 4-12. Committed Repo Financing Lines

(a) Pursuant to Rule 409, the Corporation may enter into master repurchase agreements with an entity or multiple entities, if the Corporation deems it necessary or desirable, in its sole discretion, to obtain and maintain a committed repo financing line. No Member or User shall take any action to interfere intentionally with such repo transactions.

(b) Transaction terms of such committed repo transactions will be established in accordance with the terms of the committed master repurchase agreement.

(c) The Corporation will conduct a test with any committed repo counterparty on at least an annual basis to affirm operational readiness.

CHAPTER 5. MARGIN AND OUTSTANDING EXPOSURE SETTLEMENT

Procedure 5-1. Margin and Outstanding Exposure Settlement; Clearing Cycles

(a) Consistent with Rules 501 and 506, (A) a Member for its Member Account, (B) a Member on behalf of its authorized Supported Users for their Supported User Accounts, and (C) an Independent User for its Independent User Account, must post initial margin and pay Outstanding Exposure Settlement in satisfaction of their requirements under the Rules and Procedures. The Daily Margin Report, as described in this Procedure 5-1 will indicate, among other things specific to the Clearing Service, for each clearing cycle:

(i) the amount of initial margin that a Member must post with respect to its proprietary Eligible Securities Transactions and on behalf of its Supported Users with respect to their Eligible Securities Transactions and that an Independent User must post with respect to its Eligible Securities Transactions; and

(ii) the amount of Outstanding Exposure Settlement that a Member must pay (or is due to receive) with respect to its proprietary Eligible Securities Transaction and on behalf of its Supported Users with respect to their Eligible Securities Transactions and that an Independent User must pay (or is due to receive) with respect to its Eligible Securities Transactions.

(b) Consistent with Rule 508, the Corporation shall make the Daily Margin Report available through the Corporation's clearing system ("Securities Clearing System") and via secure file transfer protocol ("SFTP"), or via such other means determined by the Corporation, to each Member and User following each clearing cycle on each Business Day, at such time as the Corporation shall determine.

(c) During each Business Day, the Corporation shall perform an end-of-day clearing cycle and at least one intraday clearing cycle whereby initial margin requirements are satisfied by and Outstanding Exposure Settlement is paid to or received from Members and Users (as applicable).

(i) End-of-Day. At approximately 8:30 a.m. Eastern Time on the next Business Day after the Business Day for which such initial margin and Outstanding Exposure Settlement requirements were calculated, the Corporation shall collect initial margin and Outstanding Exposure Settlement (as applicable) from each Member and User (as applicable) by debiting the Member Account, Supported User Accounts, and Independent User Accounts at one or more Banks designated pursuant to Rule 507. Subsequently, the Corporation shall pay Outstanding Exposure Settlement to each Member or User (as applicable) by crediting the Member Account, Supported User Account, and Independent User Account, as applicable, at one or more Banks designated pursuant to

Rule 507. The Corporation shall require the Corporation's Bank(s) to confirm to the Corporation via the SWIFT system, or such other system that the Corporation may designate, that the amounts required pursuant to these Rules and Procedures have been received or paid (as applicable). The Corporation will make the Daily Margin Report available following completion of the batch processing cycle at approximately 9:00 p.m. Eastern Time on the Business Day for which such initial margin and Outstanding Exposure Settlement requirements were calculated for the end-of-day clearing cycle referenced in this paragraph (c)(i) of this Procedure 5-1. The Corporation will notify Members and Users of any changes to such times in an Advisory.

(ii) Intraday. At approximately 2:00 p.m. Eastern Time on the same Business Day on which such initial margin and Outstanding Exposure Settlement requirements were calculated, the Corporation shall collect initial margin and Outstanding Exposure Settlement (as applicable) from each Member and User (as applicable) by direct debiting the Member Account, Supported User Account, and Independent User Account, as applicable, at one or more Banks designated pursuant to Rule 507. Subsequently, the Corporation shall pay Outstanding Exposure Settlement to each Member or User (as applicable) by crediting the Member Account, Supported User Account, and Independent User Account, as applicable, at one or more Banks designated pursuant to Rule 507. The Corporation shall require the Corporation's Bank(s) to confirm to the Corporation via the SWIFT system, or such other system that the Corporation may designate, that the amounts required pursuant to these Rules and Procedures have been received or paid (as applicable). The Corporation will make the Daily Margin Report available following completion of the batch processing cycle at approximately 1:00 p.m. Eastern Time on the same Business Day on which such initial margin and Outstanding Exposure Settlement requirements were calculated for the intraday clearing cycle referenced in this paragraph (c)(ii) of this Procedure 5-1. The Corporation will notify Members and Users of any changes to such times in an Advisory.

(d) Pursuant to Rule 509, the Corporation may, in its sole discretion, require additional initial margin be posted by any Member(s) or User(s) in any account by such time and in such amount and form as specified by the Corporation. A Member or User is required to meet such additional margin requirement within one (1) hour of being notified or such other longer period of time specified by the Corporation. The Corporation also may, in its sole discretion, run an additional clearing cycle to facilitate the exchange of Outstanding Exposure Settlement, covering settlement variation and any other components deemed appropriate by the Corporation.

Procedure 5-2. Calculation of Initial Margin

(a) Pursuant to Rule 502, the Corporation calculates initial margin requirements under the Portfolio Margin Collection method. Under the Portfolio Margin Collection method, the

Corporation calculates initial margin requirements for each Member and User using its proprietary margin model and the Corporation may, in its sole discretion, impose additional initial margin requirements on a Member or User. The Corporation's initial margin model includes market, liquidity and concentration risk components.

(b) Detailed information about the Corporation's margin model and calculations is available to a Member or User on a confidential basis from the Corporation upon request and subject to any confidentiality requirements imposed by the Corporation.

Procedure 5-3. Acceptable Forms of Initial Margin

(a) Limitations on Types of Collateral. Pursuant to Rule 502, the Corporation shall specify the forms of collateral acceptable for satisfying initial margin requirements. The Corporation will review the forms of collateral acceptable as satisfying initial margin requirements, on at least a monthly basis, and more frequently as market conditions warrant. The Corporation may modify the forms of collateral that are acceptable to satisfy initial margin requirements at any time as the Corporation, in its sole discretion, deems appropriate. The Corporation may impose collateral limits and/or minimums on acceptable forms of collateral for satisfying initial margin requirements at any time as the Corporation, in its sole discretion, deems appropriate to support the safety of the Corporation. The Corporation will notify Members and Users in advance of imposing any such limitations or minimums, where practicable.

(b) No Liens. Consistent with Rule 504, all collateral posted to the Corporation shall be free of liens or any other encumbrances.

(c) Cash. The Corporation shall accept cash in satisfaction of initial margin requirements.

(d) U.S. Treasury Securities. The Corporation will notify Members and Users via Advisory of the terms regarding its acceptance of U.S. Treasury securities in satisfaction of initial margin requirements.

(i) Limitations. Notwithstanding any limitations imposed by the Corporation pursuant to this Procedure 5-3, U.S. Treasury securities posted in satisfaction of initial margin requirements must be denominated in multiples of one hundred dollars (\$100).

(ii) Valuation of Securities. The value of U.S. Treasury securities posted as initial margin are based on the current market value, less any adjustments required, as set forth in haircut schedules determined by the Corporation, which the Corporation will make available to Members and Users via Advisory. The Corporation may adjust the haircut schedules at any time as the Corporation, in its sole discretion, deems appropriate to support the safety of the Corporation.

(iii) Maturity. When a U.S. Treasury security posted by a Member or User (as applicable) to satisfy its initial margin requirements matures to cash, the posted security will be substituted with the cash proceeds. Maturity proceeds that are in excess of the initial margin requirement may be released by the Corporation upon request pursuant to paragraph (c) of Procedure 5-4. Otherwise, the maturity proceeds will be held as initial margin.

Procedure 5-4. Margin Posting and Withdrawal Procedures

(a) Corporation's System. The Corporation requires all Members, Members on behalf of Supported Users, and Independent Users, or an agent of the preceding, including, but not limited to, prime brokers and asset managers, to utilize the system provided by the Corporation to enter and receive information regarding initial margin and Outstanding Exposure Settlement pursuant to this Procedure 5-4, unless otherwise set forth in the Rules and Procedures applicable to the Clearing Service for the Eligible Securities Transactions.

(b) Deposits. Members, Members on behalf of Supported Users, and Independent Users must enter information regarding posting margin into the Corporation's system by the appropriate deadlines, as set forth in the Rules and Procedures.

(i) Members, Members on behalf of Supported Users, and Independent Users shall post cash and securities for purposes of satisfying initial margin requirements as set forth in the Rules and Procedures.

(iv) The Corporation shall instruct Members, Members on behalf of Supported Users, and Independent Users as to which documentation they must complete and provide and/or file to allow the Corporation to perfect a lien on collateral pledged as margin, if applicable.

The Corporation will auto-debit cash to satisfy initial margin requirements from Members, Members on behalf of Supported Users, and Independent Users after each clearing cycle.

(c) Withdrawals. Pursuant to Rule 510, if the amount of margin posted for the benefit of a Member, Member on behalf of a Supported User, or Independent User is in excess of the amount initial margin required (or a Member, Member on behalf of a Supported User, or Independent User seeks to substitute collateral deposited as margin), the Member, Member on behalf of a Supported User, or Independent User may request the release of such excess collateral (or collateral it seeks to withdraw for substitution purposes) by entering a request into the Corporation's system. The requirements for withdrawing excess margin collateral and substituting margin collateral are set forth in the Rules and Procedures for the Clearing Service for the Eligible Securities Transaction.

(i) Excess. The Corporation may permit withdrawal of such excess amount by directing its Bank to deliver it to the relevant account at the Bank of the Member or Independent User, as applicable. The Corporation shall require the Corporation's Bank(s) releasing the applicable amounts to confirm to the Corporation via the SWIFT system, or such other system that the Corporation may designate, that the appropriate amounts have been released.

(ii) Substitution. The Member or Independent User shall transfer securities from the Member's or Independent User's Bank to a collateral account in the Corporation's name at the Corporation's Bank(s). The Corporation shall require the Corporation's Bank(s) to confirm to the Corporation via the SWIFT system, or such other system that the Corporation may designate, that the transferred securities have been received. Upon confirmation, the Corporation shall require the Corporation's Bank(s) to transfer the excess initial margin in the form of cash to the Member's or Independent User's Bank. Substitution will be effected in accordance with the timelines that the Corporation determines and communicates to Members and Independent Users.

CHAPTER 6. CLEARANCE AND SETTLEMENT SERVICES

Procedure 6-1. Submission of Transaction Data

(a) Pursuant to Rule 602, Members and Users must submit transaction data for Eligible Securities Transactions to the Corporation in the form and at such time as prescribed in the Procedures for the relevant Clearing Service. The Corporation may prescribe further or alternative terms with respect to submission of transaction details in an Advisory.

(b) If the Corporation rejects the initial submission of transaction data for an Eligible Securities Transaction, the relevant Member(s) and/or User(s) may resubmit the transaction data as described in Procedure for the relevant Clearing Service.

(c) The Corporation reserves the right to adopt a schedule of fines that will be imposed summarily on a Member or User that has a pattern of making initial submissions of transaction data to the Corporation that are rejected. The Corporation will set forth any such schedule in an Advisory or in an update to these Procedures.

Procedure 6-2. Product-Specific Clearance and Settlement Procedures

The Procedures related to clearance and settlement of an Eligible Securities Transaction are set forth in the Procedures for the relevant Clearing Service for the Eligible Securities Transaction.

CHAPTER 7. CORPORATION REQUIREMENTS

Procedure 7-1. Member and User Access to Corporation's Audited Financial Statements

(a) The Corporation's audited annual financial statement will include a report from the Corporation's public accounting firm that complies with paragraphs (a) through (d) of Rule 210.2-02 under the Securities Exchange Act.

(b) Pursuant to paragraph (b) of Rule 701, the Corporation will post to its website within sixty (60) days following the close of the Corporation's fiscal year its audited annual financial statements.

Procedure 7-2. Notice of Proposed Amendments to Rules and Procedures

Pursuant to Rule 706, the Corporation will notify all Members and Users when it has filed a proposed rule change, and any amendments thereto, by publishing any such proposed changes or amendments on the Corporation's website within two (2) Business Days of filing such proposed changes or amendments with the SEC.

Procedure 7-3. Release of Clearing Data

(a) Pursuant to Rule 709, Members and Users may request Clearing Data relating to their particular clearing activity, and a Member may request Clearing Data about a User that it authorizes, by submitting a written request to the Corporation's staff.

(b) The Corporation will post to its website basic data with respect to the volume and values of Eligible Securities Transactions cleared through the Corporation.

Procedure 7-4. Forms, Media and Technical Specifications

From time to time the Corporation may specify various forms which Members and Users must use to submit instructions and data to the Corporation and which the Corporation uses to report transactions and information to Members and Users. The information called for by such forms may be submitted or received in such form and format as the Corporation shall from time to time permit. Submission of such information in other media shall be made in accordance with specifications determined from time to time by the Corporation.

CHAPTER 8. FEES AND CHARGES

Procedure 8-1. Product-Specific Fees and Charges

The fees and charges arising from the provision of the Corporation's services will be set out in a Schedule of Fees specific to each Eligible Securities Transaction, which the Corporation will publish on its website.

CHAPTER 9. CEASING TO ACT

Procedure 9-1. Failure to Comply with Requirements for Member or User Status

(a) In the event that a Member or User becomes aware that it is no longer in compliance with one or more of the applicable requirements for Member or User status set forth in the Rules or Procedures, the Member or User, as applicable, must promptly notify the Corporation of such noncompliance. Such notice must be provided via e-mail or such other system as the Corporation may designate, to the Corporation no later than the same calendar day as the day on which the Member or User first becomes aware of its noncompliance.

(b) If the Corporation determines that a Member or User fails to satisfy any of the applicable requirements and/or obligations for Member or User status set forth in the Rules, the Corporation may cease to act for the Member or User pursuant to Rule 902. Such cessation may include termination of the Member's or User's status as Member or User with the Corporation.

(c) The Corporation may choose not to cease to act for a Member or User pursuant to paragraph (b) of this Procedure 9-1 if the Corporation determines that, depending upon the specific circumstances and the record of the Member or User, it is appropriate instead to establish for such Member or User a time period (the "Noncompliance Time Period") during which the Member or User must use every effort to come back into compliance with the applicable requirements for Member or User status.

(d) At the end of the Noncompliance Time Period, the Corporation shall determine whether the Member or User is in compliance with the applicable requirements for Member or User status set forth in the Rules, including Chapter 3 of the Rules. In the event the Member or User is not in compliance with such requirements by the end of the Noncompliance Time Period, the Corporation shall cease to act for such Member or User pursuant to Rule 902. Such cessation to act shall occur within such time period as the Corporation shall determine.

(e) Notwithstanding anything to the contrary set forth in this Procedure 9-1, if the Corporation, in its sole discretion, determines that a Member's financial or operational condition or User's operational condition has significantly deteriorated during a Noncompliance Time Period, the Corporation may cease to act for the Member or User pursuant to Rule 902.

(f) The Head of the Corporation or his or her designee shall have the authority to take the actions set forth in this Procedure 9-1.

Procedure 9-2. Additional Requirements for Members and Users Due to Failure to Comply with Requirements for Member Status

If a Member or User ceases to comply with any of the applicable requirements for Member status or User status set forth in applicable Rules, the Corporation may, for a period beginning

with and including on the date on which the Member's or User's failure commenced and until a date determined by the Corporation, in its sole discretion, subject such Member or User to: (i) one or more fines pursuant to Chapter 10 of the Rules; and/or (ii) additional requirements or restrictions pursuant to paragraph (d) of Rule 307.

Procedure 9-3. Posting of Bond, Indemnity, or Guaranty in Event of Insolvency

Pursuant to subparagraph (b)(i) of Rule 901, the Corporation may determine not to cease to act for a Member or User that is insolvent if, after providing notice to the Corporation pursuant to Rule 901, such Member or User provides or posts a bond, indemnity, or guaranty from a third party that is satisfactory to the Corporation, in its sole discretion. The Member or User must provide or post such bond, indemnity, or guaranty within the timeframe determined by the Corporation in its sole discretion.

Procedure 9-4. Procedure for Ceasing to Act and Restrictions on Access to Services Offered by the Corporation

(a) In prohibiting or limiting a Member's or User's access to Clearing Services under Rule 907, the Corporation may:

(i) limit a Member or User from submitting additional transactions to the Corporation for clearing, including placing limits on the proprietary transactions of a Member and the transactions of Users authorized by such Member;

(ii) suspend a Member or User from submitting additional transactions to the Corporation for clearing generally or in a specific Clearing Service; and

(iii) if a Member is suspended from submitting additional transactions to the Corporation for clearing, require such Member to transfer its authorization of any User, along with such User Account, to another Member.

(b) If the Corporation ceases to act for a Member or User with respect to transactions generally or in a specific Clearing Service:

(i) within such time period as the Corporation shall determine, all transactions and open positions of the Member or User must be completed or closed, or, with the approval of the Corporation, another Member or User must be substituted thereon; and

(ii) when a Member's or User's status as Member or User with the Corporation is terminated, the Corporation will return (x) any contributions to the Guaranty Fund of the Member pursuant to and within the time allotted in Rule 415, so long as the Member does not have any unmet or outstanding obligations to the Corporation, and (y) within such time

period as the Corporation shall determine, any margin deposited by the Member or User that is owed to the Member or User.

(c) If the Corporation ceases to act for the Member or User, including by terminating the Member or User's status with the Corporation, the Member or User remains responsible for discharging any obligations it incurred prior to such cessation-to-act, including any obligations resulting in such cessation-to-act.

(d) In determining whether to cease to act for a Member or User pursuant to Rule 902, or to prohibit or limit the access of a Member or User to services offered by the Corporation pursuant to Rule 907, the Head of the Corporation or his or her designee may consider all information available to them, including, without limitation: reports submitted by Members and Users or information gathered pursuant to Chapter 3 of the Rules or the Rules for the relevant Clearing Service(s); the Corporation's periodic reviews of Members and Users pursuant to Procedure 3-4; and information gathered by, and determinations made by, the Corporation's staff relating to internal assessments of Members and Users.

CHAPTER 10. DISCIPLINARY ACTIONS AND OTHER ADVERSE ACTIONS

Procedure 10-1. Delegation of Board Authority to Impose Sanctions

The Board may appoint a Hearing Panel of the Corporation to impose appropriate sanctions applicable to Members and Users, including censure, fine, suspension or termination; limitation of activities, functions, and operations of a Member or User; or any other fitting sanction.

CHAPTER 11. RESERVED

CHAPTER 12. RESERVED

CHAPTER 13. RESERVED

CHAPTER 14. RESERVED

CHAPTER 15. INTEREST RATE SECURITIES CLEARING SERVICE

Procedure 15-1. Eligible Securities Transactions

(a) Within the Interest Rate Securities Clearing Service, the Corporation shall clear Repo Transactions that are repo transactions in Eligible Securities that are U.S. Treasury securities and Cash Treasury Transactions that are purchases and/or sale transactions of Eligible Securities that are U.S. Treasury securities. From time to time, the Corporation shall make available to Members and Users via an Advisory: (i) a description of the terms of Repo Transactions that the Corporation will accept for clearing, including the maturities of such Repo Transactions and the maturities of U.S. Treasury securities that are Eligible Securities for purposes of such Repo Transactions; and (ii) a list of U.S. Treasury securities that are Eligible Securities for the purposes of Cash Treasury Transactions.

(b) The original parties to a Clear to Hold Transaction may only deliver collateral to settle the Repo Transaction that meets the requirements of a General Collateral Bucket as defined in Rule 101. The original parties to a Cash Treasury Transaction or a Clear to Deliver Transaction may only deliver collateral to settle the applicable Cash Treasury Transaction or Repo Transaction that meets the requirements of eligible collateral set out by the Corporation.

(c) From time to time, the Corporation shall make available to Members and Users via an Advisory a description of the General Collateral Bucket and Eligible Securities that the Corporation will accept as collateral underlying a Cash Treasury Transaction or a Repo Transaction submitted to the Corporation for clearing.

Procedure 15-2. RESERVED

Procedure 15-3. Submission of Eligible Securities Transactions for Clearing

(a) Members and Users shall submit Cash Treasury Transactions and Repo Transactions for clearing to the Securities Clearing System. Access to such system(s) shall be in accordance with specifications established and provided by the Corporation.

(i) Clear to Deliver Transactions and Cash Treasury Transactions shall be submitted to the Securities Clearing System (x) as a matched Repo Transaction or Cash Treasury Transaction from an Eligible Platform, (y) as a single-sided Repo Transaction or single-sided Cash Treasury Transaction submitted from an Eligible Platform to be matched in the Corporation's clearing system, or (z) a transaction entered by one Participant via the Corporation's interface and alleged to another Participant to claim or decline. The term "single-sided Repo Transaction" refers to either the leg of a Repo Transaction in which the securities seller agrees to transfer Eligible Securities to the securities buyer against the transfer of funds by the securities buyer, or to the leg of a Repo Transaction in which the

securities buyer agrees to the transfer of funds to the securities seller against the transfer of Eligible Securities by the securities seller. The term “single-sided Cash Treasury Transaction” refers to either the leg of a Cash Treasury Transaction in which the seller agrees to transfer Eligible Securities to the buyer against the transfer of funds by the buyer, or to the leg of a Cash Treasury Transaction in which the buyer agrees to the transfer of funds to the seller against the transfer of Eligible Securities by the seller.

(A) Clear to Deliver Transactions and Cash Treasury Transactions must be sent through secure connections from an Eligible Platform or from Members or Users and must be formatted in accordance with the Corporation’s messaging specifications. The Corporation will respond with a confirmation message if the submission is valid. Any transaction messages rejected for invalid message formatting may be corrected and resubmitted for clearing. Members or Users may also enter a single-sided Repo Transaction or single-sided Cash Treasury Transaction, or claim or decline a transaction that has been alleged to them by another Member or User using the Corporation’s trade submission user interface.

(B) The Corporation will match two single-sided Clear to Deliver Transactions representing the securities purchase and securities sale legs of the same Repo Transaction submitted from an Eligible Platform or entered directly into the Securities Clearing System by identifying the Member(s) and/or User(s) that were the parties to the original Repo Transaction based on the information required to be submitted to the Corporation for each Repo Transaction as set out in paragraph (b) of this Procedure 15-3. Any pending, unmatched single-sided Repo Transactions or unclaimed alleged trades will be rejected by the Corporation at the end of the Business Day. An unmatched single-sided Repo Transaction is either (c) the securities purchase leg of a Repo Transaction for which a contra securities sale leg has not been submitted to the Corporation for matching, or (d) the securities sale leg of a Repo Transaction for which a contra securities purchase leg has not been submitted to the Corporation for matching. An unclaimed alleged trade is a trade that has been submitted in the clearing system and alleged to a counterparty and has not been accepted or rejected by the counterparty.

(C) The Corporation will match two single-sided Cash Treasury Transactions representing the buy and sale legs of the same Cash Treasury Transaction submitted from an Eligible Platform or entered directly into the Securities Clearing System by identifying the Member(s) and/or User(s) that were the parties to the original Cash Treasury Transaction based on the information required to be submitted to the Corporation for each Cash Treasury Transaction as set out in paragraph (c) of this Procedure 15-3. Any pending, unmatched single-sided Cash Treasury Transactions or unclaimed alleged trades will be rejected by the Corporation at the end of the Business

Day. An unmatched single-sided Cash Treasury Transaction is either (a) the purchase leg of a Cash Treasury Transaction for which a contra sale leg has not been submitted to the Corporation for matching, or (b) the sale leg of a Cash Treasury Transaction for which a contra purchase leg has not been submitted to the Corporation for matching. An unclaimed alleged trade is a trade that has been submitted in the clearing system and alleged to a counterparty and has not been accepted or rejected by the counterparty.

(D) With respect to a Cash Treasury Transaction submitted on a “When Issued” basis, the Corporation shall close the novated When Issued Cash Treasury Transaction and automatically create a new Cash Treasury Transaction on the instrument following completion of the applicable primary auction.

(ii) Clear to Hold Transactions shall be submitted to the tri-party trade entry system of the Corporation’s Securities Settlement Bank(s) through acceptable means as set forth by the Corporation’s Securities Settlement Bank(s), which will subsequently transmit matched Repo Transactions to the Securities Clearing System.

(b) Both parties to a Repo Transaction must agree to the following information about the transaction, and one or both of such parties must provide the information to the Corporation when submitting the Repo Transaction to the Corporation for clearing:

(i) the full legal names of the Member(s) and/or User(s) that are the parties to the transaction, or such identifier as the Corporation may assign Members and Users;

(ii) identification of the Repo Transaction as a Clear to Deliver Transaction or a Clear to Hold Transaction;

(iii) the notional amount of the Repo Transaction;

(iv) the CUSIP or General Collateral Bucket of the securities to be provided as collateral for the Repo Transaction, as applicable;

(v) identification of which party is the cash borrower and which is the cash lender;

(vi) the start date and end date of the Repo Transaction;

(vii) the start cash and end cash of the Repo Transaction; and

(viii) the repo rate.

(c) Both parties to the Cash Treasury Transaction must agree to the following information about the transaction, and one or both of such parties must provide the information to the Corporation when submitting the Cash Treasury Transaction to the Corporation for clearing:

- (i) the full legal names of the Member(s) and/or User(s) that are the parties to the transaction, or such identifier as the Corporation may assign Members and Users;
- (ii) the notional amount of the Cash Treasury Transaction;
- (iii) the cash amount of the Cash Treasury Transaction;
- (iv) the CUSIP of the U.S. Treasury security or securities that are subject to the Cash Treasury Transaction
- (v) the settlement date of the Cash Treasury Transaction; and
- (vi) The identity of which party is the buyer of the U.S. Treasury security or securities and which party is the seller of the U.S. Treasury security or securities.

Procedure 15-4. Functions of the Securities Clearing System

The following functions are performed within the Corporation's Securities Clearing System:

(a) The Corporation will provide confirmation via a report ("Clearing Confirmation") through the Securities Clearing System user interface, as well as through the system's messaging service, to each Member and User that is a party to a Repo Transaction or a Cash Treasury Transaction and any relevant Eligible Platform and/or Securities Settlement Bank identified to the Corporation with respect to the trade submission. The Clearing Confirmation shall state that the Repo Transaction or Cash Treasury Transaction has been submitted for clearing and that novation is pending, provided that all of the information set forth in paragraph (b) of Procedure 15-3 is submitted. The Corporation will distribute the Clearing Confirmation within such period as the Corporation shall determine.

(b) The Clearing Confirmation issued by the Corporation through the Clearing System to each Member and/or User that is a party to a Cash Treasury Transaction, Clear to Deliver Transaction, or Clear to Hold Transaction shall serve to confirm that the relevant transaction is submitted in the manner and with all necessary information prescribed by the Corporation, complies with any applicable credit controls, and that the Corporation has not ceased to act on behalf of either such party pursuant to Chapter 9 of the Rules.

(c) The Corporation will provide notice of the rejection of a Repo Transaction or a Cash Treasury Transaction within the Securities Clearing System via a Clearing Confirmation, if:

(x) any of the information set forth in paragraph (b) or (c) of Procedure 15-3, as applicable, is missing or inaccurate; (y) if a Repo Transaction or Cash Treasury Transaction that a User submits is does not comply with credit controls that its authorizing Member sets; or (z) if the Corporation has ceased to act on behalf of such User or Member. The Clearing Confirmation will identify the reasons for such rejection. The Corporation will provide notice of such rejection at the time the Repo Transaction or Cash Treasury Transaction has been rejected or, if rejected due to a deadline, by the following times on the date of submission of the Repo Transaction to the Corporation for clearing: 2:55 p.m. Eastern Time for Repo Transactions submitted for T+0 settlement and 8:00 PM Eastern Time for Cash Treasury Transactions and Repo Transactions submitted for T+1 settlement. Rejected trades are subject to the requirements of paragraph (b) of Rule 202 and paragraph (d) of Rule 602.

(i) If a Repo Transaction or Cash Treasury Transaction is rejected because any of the information set forth in paragraph (b) or (c) of Procedure 15-3 is missing or inaccurate, the transaction information may be corrected and resubmitted to the Corporation.

(ii) If a Repo Transaction or a Cash Treasury Transaction that a User submits is rejected because it does not comply with credit controls set by its authorizing Member, the User may contact the Member to amend the credit control and resubmit the transaction to the Corporation. If the Member is not willing to amend or adjust the relevant credit control, the User may resubmit the transaction to the Corporation through another authorizing Member.

(iii) If a Repo Transaction or a Cash Treasury Transaction is rejected because the Corporation has ceased to act on behalf of a User or Member that is a counterparty on such transaction, the transaction may not be resubmitted.

(d) With respect to a Repo Transaction or a Cash Treasury Transaction to which a User is a counterparty, the Member authorizing the User must confirm its authorization of such transaction to the Corporation through the Securities Clearing System by using credit controls hosted in the Securities Clearing System, a pre-approval indicator sent by an Eligible Platform to the Securities Clearing System indicating that the Member has pre-approved its authorization of the transaction, or explicitly claiming or rejecting a trade via electronic message to the Securities Clearing System.

Procedure 15-5. Novation

(a) Upon completion of the confirmations set forth in Procedure 15-4, the Corporation shall novate the Repo Transaction or Cash Treasury Transaction pursuant to Rule 1503.

(b) The Corporation shall provide each Member and/or User that was party to the original Repo Transaction or Cash Treasury Transaction, as well as the Eligible Platform and

Securities Settlement Bank system, as applicable, with a Clearing Confirmation. The Clearing Confirmation shall:

- (i) State that the original Repo Transaction or Cash Treasury Transaction has been novated as of the time of the Clearing Confirmation, with a trade status of “Cleared”, which confirms the creation of the Repo Transaction or Cash Treasury Transaction, as applicable, between the Corporation and the Member or User;
- (ii) Serve as confirmation that the Corporation has become either (x) the cash borrower or cash lender in the Repo Transaction, or (y) the securities seller or securities buyer in the Cash Treasury Transaction. The status of the Member or User as cash lender or cash borrower under the novated transaction shall not change relative to the original Cash Treasury or Repo Transaction, but such status shall be indicated in the Clearing Confirmation;
- (iii) Set out the terms of the Repo Transaction or Cash Treasury Transaction, which shall match the terms of the original Repo Transaction or Cash Treasury Transaction, as applicable, submitted to the Corporation for clearing; and
- (iv) Serves as indication that the novated Repo Transaction or Cash Treasury Transaction is eligible for settlement pursuant to Procedure 15-6.

Procedure 15-6. Settlement

(a) The Corporation shall issue standing settlement instructions to the Corporation’s Securities Settlement Bank(s) to settle Clear to Deliver Transactions submitted for T+0 settlement in real-time on a gross basis. The Corporation will instruct the Corporation’s Securities Settlement Bank(s) to effect the movement of collateral against cash upon receipt of securities from the Member’s or User’s Securities Settlement Bank, designated pursuant to paragraph (b) of Rule 604. The Corporation will instruct the Corporation’s Securities Settlement Bank(s) to notify the Corporation upon the settlement of any Clear to Deliver Transaction. The Corporation’s Securities Settlement Bank(s) shall issue a settlement confirmation of each Clear to Deliver Transaction in real-time to the Member and/or User that is the original counterparty on the transaction.

(b) The Corporation shall calculate settlement obligations on Clear to Deliver Transactions and Cash Treasury Transactions submitted for T+1 settlement on a net basis pursuant to Procedure 15-7. The Corporation shall issue settlement instructions to the Corporation’s Securities Settlement Bank(s) for netted Clear to Deliver Transactions and Cash Treasury Transactions scheduled for delivery on the next eligible settlement date following the deadline to submit Clear to Deliver Transactions for T+1 settlement, as permitted by the schedule of the Corporation’s Securities Settlement Bank(s). The Corporation will instruct the Corporation’s Securities Settlement Bank(s) to effect the movement of collateral against cash upon receipt of

securities from the Member's or User's Securities Settlement Bank, designated pursuant to paragraph (b) of Rule 604. The Corporation will require its Securities Settlement Bank(s) to notify the Corporation upon the settlement of any netted Clear to Deliver Transaction.

(c) The Corporation shall calculate settlement obligations on Clear to Hold Transactions on a net basis pursuant to Procedure 15-7. The Corporation shall issue settlement instructions to its Securities Settlement Bank(s) for Clear to Hold Transactions submitted for T+0 settlement following the deadline to submit Clear to Hold Transactions for T+0 settlement. The Corporation shall issue settlement instructions to its Securities Settlement Bank(s) for Clear to Hold Transactions submitted for T+1 settlement on a net basis on the next eligible settlement date following the schedule for T+0 settlement on that date. The Corporation will instruct its Securities Settlement Bank(s) to move securities against cash once Members and Users have funded their cash and security obligations in their settlement accounts at the Corporation's Securities Settlement Bank(s).

(d) The Corporation shall provide Members and Users with instructions for transferring cash and securities to, and receiving cash and securities from, the Corporation's settlement account at its Securities Settlement Bank(s).

(e) Deadlines.

(i) The Securities Clearing System will open each week for submission of Cash Treasury Transactions and Repo Transactions Sunday at 5:00 p.m. Eastern Time and will remain open for submission until 8 p.m. Eastern Time Friday.

(ii) The submission window for T+0 Clear to Deliver Repo Transactions opens at 5:00 p.m. Eastern Time Sunday until 2:55 p.m. Eastern Time on Monday. The Securities Clearing System will reopen for T+0 submission at 8:00 p.m. Eastern Time and after the date has rolled in the Securities Clearing System. The Securities Clearing System will reopen for T+0 trade submission each Business Day after the system date has rolled.

(iii) The submission window for T+0 Clear to Hold Repo Transactions opens at 5:00 p.m. Eastern Time Sunday to 1:00 p.m. Eastern Time on a Monday. The Securities Clearing System will reopen for T+0 submission at 8:00 p.m. Eastern Time and after the date has rolled in the Securities Clearing System. The Securities Clearing System will reopen for T+0 trade submission each Business Day after the system date has rolled.

(iv) The submission window for T+1 Cash Treasury Transactions, Clear to Deliver Transactions, and Clear to Hold Repo Transactions opens at 5:00 p.m. Eastern Time Sunday to 8:00 p.m. Eastern Time on a Monday. The Securities Clearing System will reopen for T+1 submission at 8:00 p.m. Eastern Time and after the date has rolled in the

system. The Securities Clearing System will reopen for T+1 trade submission each Business Day after the system date has rolled.

(v) At approximately 2:00 p.m. Eastern Time, the Corporation shall calculate net Clear to Hold Transaction settlement requirements for each Member and User that has submitted a Clear to Hold Transaction for T+0 settlement.

(vi) The Corporation shall issue a Daily Settlement Report to each Member and User via the Securities Clearing System with respect to netted Clear to Hold Transaction settlement obligations and netted Clear to Deliver Transaction and Cash Treasury settlement obligations on each Business Day by such time(s) as the Corporation shall determine in its sole discretion. A Member's or User's settlement obligations shall include both its Repo Transaction Start Leg and Off Leg and Cash Treasury settlement obligations.

(vii) Members and Users must ensure that Clear to Deliver Transactions submitted for T+0 settlement, and settlement obligations for T+1 Cash Treasury Transactions and Clear to Deliver Transactions from the previous Business Day, settle by 3:00 p.m. Eastern Time. Consequently, Members and Users must comply with the settlement requirements of subparagraph (g)(i)(B) of this Procedure 15-6 by such time. Following settlement, the Corporation will issue a settlement confirmation to the Member or User counterparty to such transaction via the Securities Clearing System and/or through such other means as the Corporation shall determine in its sole discretion. If a Member or User fails to deliver cash or securities to the Corporation's account at the Corporation's Securities Settlement Bank(s) by the deadline, the Corporation shall issue a failure notice to such Member or User identifying the details of such failure via the Securities Clearing System.

(viii) Members and Users must ensure that Clear to Hold Transactions submitted for T+0 settlement settle by 6:30 p.m. Eastern Time. Consequently, Members and Users must comply with the settlement requirements of subparagraph (g)(i)(A) of this Procedure 15-6 by such time. Following settlement, the Corporation will issue a settlement confirmation to the Member or User counterparty to such transaction via the Securities Clearing System and/or through such other means as the Corporation shall determine in its sole discretion. If a Member or User fails to deliver cash or securities to the Corporation's account at the Corporation's Settlement Bank by the deadline, the Corporation shall issue a failure notice to such Member or User identifying the details of such failure via the Securities Clearing System.

(ix) The Corporation shall work to resolve fails to deliver for Cash Treasury and Clear to Deliver Transactions from 3:00 p.m. Eastern Time to approximately 3:30 p.m. Eastern Time. The Corporation shall work to resolve fails to deliver for Clear to Hold Transactions for T+0 settlement from 6:30 Eastern Time to approximately 7:00 p.m.

Eastern Time. The Corporation shall contact, via such means as the Corporation deems appropriate, Members and Users that have failed to deliver as such to determine the reasons for such failure and to assist in resolving such failure. The Corporation will coordinate with Securities Settlement Banks and other stakeholders, as necessary, to resolve the failure to deliver, including by assessing whether operational issues exist that can be resolved to allow the delivery of cash or securities.

(x) If fails to deliver cash are not resolved by the time periods set forth in subparagraphs (c)(vii) and (c)(viii) of this Procedure 15-6, the Corporation, in its sole discretion, may act in accordance with its Rules and Procedures for ceasing to act for a Member of User.

(xi) At approximately 8:00 p.m. Eastern Time, the Corporation shall calculate settlement obligations for netted Clear to Deliver Transactions and Cash Treasury Transactions submitted for T+1 settlement. The Corporation shall provide updated Daily Settlement Reports at such time(s) as the Corporation shall determine. The Corporation will notify Members and Users of such time(s) via an Advisory.

(xii) The Corporation's deadlines may be modified on certain holidays and non-Business Days. The Corporation will notify Members and Users of the holiday calendar and any modified deadlines via an Advisory or on the Corporation's website.

(f) Confirmations. The Corporation's Securities Settlement Bank(s) shall provide confirmation to the Corporation immediately upon settlement of any Repo Transaction, Cash Treasury Transaction, or netted settlement obligation. The Corporation shall make confirmations available to each Member and User that is counterparty to a Repo Transaction and Clearing Treasury Transaction through the Securities Clearing System and/or through such other means as the Corporation shall determine. The Corporation shall provide such confirmations as soon as reasonably practicable upon settlement of the Repo Transaction or Cash Treasury Transaction and shall include such information as the Corporation shall determine from time to time.

(g) Transfers of Cash and Securities Upon Settlement.

(i) By the settlement deadline set forth in this Procedure 15-6, a Member or User shall comply with the following settlement obligations:

(A) For Clear to Hold Transactions, the Member or User will ensure that sufficient securities and/or cash equal to its net settlement obligations are deposited in the Member's or User's account at the Corporation's Securities Settlement Bank(s). By the settlement deadline set forth in paragraph (e)(viii) of this Procedure 15-6, the Member or User must instruct the Corporation's Securities Settlement Bank(s) to deliver securities and/or cash equal to its net settlement obligation from its account at

the Corporation's Securities Settlement Bank(s) to the Corporation's account at the Corporation's Securities Settlement Bank.

(B) For each Clear to Deliver Transaction, Cash Treasury Transaction, or netted settlement obligation, the Member or User will ensure that sufficient securities and/or cash equal to its settlement obligations are deposited in the Member's or User's account at the Member's or User's Securities Settlement Bank(s). Upon notification of novation and by the settlement deadline set forth in subparagraph (e)(vii) of this Procedure 15-6, the Member or User must instruct the Member's or User's Securities Settlement Bank(s) to deliver securities or cash Delivery Versus Payment ("DvP") or Receipt Versus Payment ("RvP") to/from its account at its Securities Settlement Bank(s) to/from the Corporation's account at the Corporation's Securities Settlement Bank(s), as applicable.

(ii) By the settlement deadlines set forth in this Procedure 15-6, the Corporation shall instruct the Corporation's Securities Settlement Bank(s) to transfer cash from its account, in such amount as required to meet its cash delivery obligations as set out in the Daily Settlement Report, to:

(A) the Member's or User's account at the Corporation's Securities Settlement Bank(s), for Clear to Hold Transactions, if such Member or User has a cash receipt entitlement; or

(B) the Member's or User's account at such Member's or User's Securities Settlement Bank(s) for Cash Treasury Transactions or Clear to Deliver Transactions, if such Member or User has a cash receipt entitlement.

(iii) By the settlement deadline set forth in this Procedure 15-6, the Corporation shall transfer or cause to be transferred securities, in such amount as required to meet its settlement obligations as set out in the Daily Settlement Report, to:

(A) the Member's or User's account at the Corporation's Securities Settlement Bank(s), for Clear to Hold Transactions, if such Member or User has a securities receipt entitlement. Such account shall be maintained in the name of, and for the exclusive benefit of, the Member or User that is a party to the Clear to Hold Transaction with the Corporation; or

(B) the Member's or User's account at such Member's or User's Securities Settlement Bank(s), for Clear to Deliver Transactions, if such Member or User has a securities receipt entitlement.

(h) Additional Clear to Deliver Settlement Procedures. With respect to Clear to Deliver Transactions settling on a real-time gross basis:

(i) The Corporation will send RvP and DvP instructions to the Corporation's Securities Settlement Bank(s) along with a binding instruction to facilitate automated settlement. The Member or User shall settle its obligations with the Corporation only after it has received confirmation that the Repo Transaction has been novated by the Corporation.

(ii) The Corporation will require the Corporation's Securities Settlement Bank(s) to reject collateral sent to the Corporation's account if the collateral does not match the binding instructions sent to the Corporation's Securities Settlement Bank(s). Upon such rejection, the Corporation may follow up with the Member or User to resolve the issue.

(iii) If a Member or User cannot satisfy its entire collateral settlement obligation and intends to provide only a portion of the collateral obligation, it must immediately contact the Corporation. The Corporation will only permit partial deliveries that comply with the Corporation's Rules and the rules, policies, procedures, and practices of the relevant Securities Settlement Bank(s) used to settle such obligations, such as by satisfying one or more exact expected delivery amounts of a total larger delivery obligation, as dictated by the Daily Settlement Report. If the other party accepts this partial offer, and at the discretion of the Corporation, the Corporation's staff may update the Corporation's settlement instructions to process the applicable transaction(s) partially, leaving the outstanding portion(s) open and to be settled when final delivery is made.

(i) Charges for Fails to Deliver. The Corporation shall determine any fail charge imposed by the Corporation for failure to deliver securities pursuant to Rule 1506, communicate such charges to Members and Users and collect such charges on a monthly basis.

Procedure 15-7. Netting

(a) Netting of Clear to Hold Transaction Settlement Obligations, Generally. The Corporation shall separately net cash borrower and cash lender settlement obligations each Business Day for each Member and each User for all Clear to Hold Transactions. The Corporation shall net Start Leg and Off Leg collateral settlement obligations of those transactions only where the Member or User is acting in the same capacity (either as a cash borrower or cash lender). The Corporation shall not net cash settlement obligations against collateral settlement obligations.

(b) Cash Netting – Clear to Hold Transactions.

(i) The Corporation shall separately net a Member's or User's cash delivery obligations and receipt entitlements for those Repo Transactions in which the Member or User is either acting as a cash borrower or a cash lender.

(ii) For those Repo Transactions in which a Member or User is acting as a cash borrower, the Corporation determines the Member's or User's cash delivery obligations and receipt entitlements by:

(A) determining the amount of cash, if any, a Member or User is entitled to receive as a cash borrower with respect to the Start Leg of all Clear to Hold Transactions which begin on a given Business Day.

(B) determining the amount of cash, if any, a Member or User is obligated to return as a cash borrower with respect to the Off Leg of all Clear to Hold Transactions terminating on that same Business Day; and

(C) netting the amounts in subparagraphs (b)(ii)(A) and (b)(ii)(B) of this Procedure 15-7 to determine a net cash settlement delivery obligation or receipt entitlement with respect to those Repo Transactions in which the Member or User is acting as a cash borrower.

(iii) For those Repo Transactions in which a Member or User is acting as a cash lender, the Corporation determines the Member's or User's cash delivery obligations and receipt entitlements by:

(A) determining the amount of cash, if any, a Member or User is obligated to deliver as a cash lender with respect to the Start Leg of all Clear to Hold Transactions which begin on a given Business Day;

(B) determining the amount of cash, if any, a Member or User is entitled to receive as a cash lender with respect to the Off Leg of all Clear to Hold Transactions terminating on that same Business Day; and

(C) netting the amounts in subparagraphs (b)(iii)(A) and (b)(iii)(B) of this Procedure 15-7 to determine a net cash settlement delivery obligation or receipt entitlement with respect to those Repo Transactions in which the Member or User is acting as a cash lender.

(c) Securities Netting – Clear to Hold Transactions.

(i) The Corporation shall separately net a Member's or User's collateral delivery obligations and receipt entitlements for those Repo Transactions in which the Member or User is either acting as a cash borrower or a cash lender.

(ii) For those Repo Transactions in which a Member or User is acting as a cash borrower, the Corporation determines the Member's or User's collateral delivery obligations and receipt entitlements by:

(A) determining the amount of securities, if any, a Member or User is obligated to deliver as a cash borrower with respect to the Start Leg of all Clear to Hold Transactions which begin on a given Business Day.

(B) determining the amount of securities, if any, a Member or User is entitled to receive as a cash borrower with respect to the Off Leg of all Clear to Hold Transactions terminating on that same Business Day; and

(C) netting the amounts in subparagraphs (c)(ii)(A) and (c)(ii)(B) of this Procedure 15-7 on a General-Collateral-Bucket basis to determine a net collateral settlement delivery obligation or receipt entitlement with respect to those Repo Transactions in which the Member or User is acting as a cash borrower. Netting on a "General-Collateral-Bucket basis" shall mean that securities delivery obligations involving securities in a General Collateral Bucket are netted against securities receipt entitlements involving securities in the same General Collateral Bucket.

(iii) For those Repo Transactions in which a Member or User is acting as a cash lender, the Corporation determines the Member's or User's collateral delivery obligations and receipt entitlements by:

(A) determining the amount of securities, if any, a Member or User is entitled to receive as a cash lender with respect to the Start Leg of all Clear to Hold Transactions which begin on a given Business Day;

(B) determining the amount of securities, if any, a Member or User is obligated to return as a cash lender with respect to the Off Leg of all Clear to Hold Transactions terminating on that same Business Day; and

(C) netting the amounts in subparagraphs (c)(iii)(A) and (c)(iii)(B) of this Procedure 15-7 on a General-Collateral-Bucket basis to determine a net collateral settlement delivery obligation or receipt entitlement with respect to those Repo Transactions in which the Member or User is acting as a cash lender.

(d) Netting of Cash Treasury Transactions and Clear to Deliver Transaction Settlement Obligations.

(i) With respect to Clear to Deliver Transactions and Cash Treasury Transactions submitted for settlement on or after T+1, the Corporation shall net a Member's or User's cash and securities settlement obligations each Business Day for obligations to be settled on the next eligible Settlement Date. The Corporation shall net Clear to Deliver Start Leg, Clear to Deliver Off Leg, and Cash Treasury collateral settlement obligations for the same CUSIP. The Corporation determines the Member's or User's netted collateral delivery obligations and receipt entitlements (the settlement obligation) per CUSIP for each clearing account by:

(A) determining the amount of securities, if any, a Member or User is obligated to deliver as a seller with respect to the Start Leg of all Clear to Deliver Transactions, the End Leg of all Clear to Deliver Transactions, and Cash Treasury Transactions, including failed settlement obligations from a prior settlement day to be attempted for re-delivery, which are scheduled for settlement on a given Business Day.

(B) determining the amount of securities, if any, a Member or User is obligated to receive as a buyer with respect to the Start Leg of all Clear to Deliver Transactions, the End Leg of all Clear to Deliver Transactions, and Cash Treasury Transactions, including failed-against settlement obligations from a prior settlement day to be attempted for re-receipt, which are scheduled for settlement on a given Business Day; and

(C) netting the amounts in subparagraphs (d)(i)(A) and (d)(i)(B) of this Procedure 15-7 on a CUSIP basis to determine a net collateral settlement delivery obligation or receipt entitlement with respect to those transactions in which the Member or User has an obligation.

(D) The netted settlement obligation per CUSIP will be instructed to be delivered or received against a cash settlement, based on a single market price per CUSIP, the settlement Price, as determined by the Corporation.

(E) The cash settlement value for each settlement obligation will equal the collateral par amount of securities multiplied by the Corporation's settlement price to determine the settlement value cash amount to be received on each collateral delivery obligation or paid on each collateral receipt entitlement.

(e) For purposes of this Procedure 15-7, a Repo Transaction is considered to "begin on a given Business Day" if the settlement of the Start Leg of such Repo Transaction is to occur on such Business Day.

Procedure 15-8. Settlement Modification

(a) Settlement Modification of Cleared Repo Transactions by Original Counterparties.

(i) Pursuant to paragraph (d) of Rule 1503, the Member(s) and/or User(s) that were the two counterparties to an original Repo Transaction submitted to the Corporation for clearing may, at any time prior to the submission deadline for the Business Day on which such Repo Transaction is settling or at such later time as approved by the Corporation, mutually agree to modify the Repo Transaction pursuant to these settlement modification procedures under this Procedure 15-8. If a Repo Transaction is modified pursuant to this Procedure 15-8, the Corporation's Rules and Procedures for failures and ceasing to act for a Member or User do not apply to the original Repo Transaction. If, however, the counterparties fail to notify the Corporation about modification of a Repo Transaction submitted for clearing before delivery of securities is due relating to such transaction, the Corporation may impose fail charges pursuant to Rule 1506 for failure to deliver such securities or may take action in accordance with its Rules and Procedures for ceasing to act for a Member or User.

(ii) At the discretion of the Corporation, the Member(s) and/or User(s) that were the two counterparties to an original Repo Transaction submitted to the Corporation for clearing may also mutually agree to terminate a Repo Transaction after settlement of the Start Leg of the Repo Transaction, but before the end-of-cycle on the Business Date prior to the settlement date of the Off Leg of the Repo Transaction, pursuant to this Procedure 15-8(a).

(b) **Settlement Modification of Cash Treasury Transactions by Original Counterparties.** Pursuant to paragraph (d) of Rule 1503, the Member(s) and/or User(s) that were the two counterparties to an original Cash Treasury Transaction submitted to the Corporation for clearing may, at any time prior to the submission deadline for the Business Day on which such Cash Treasury Transaction is settling or at such later time as approved by the Corporation, mutually agree to modify the Cash Treasury Transaction pursuant to these settlement modification procedures under this Procedure 15-8. If a Cash Treasury Transaction is modified pursuant to this Procedure 15-8, the Corporation's Rules and Procedures for failures and ceasing to act for a Member or User do not apply to the original Cash Treasury Transaction. If, however, the counterparties fail to notify the Corporation about modification of a Cash Treasury Transaction submitted for clearing before delivery of securities is due relating to such transaction, the Corporation may impose fail charges pursuant to Rule 1506 for failure to deliver such securities and/or may take action in accordance with its Rules and Procedures for ceasing to act for a Member or User.

(c) **Previously Executed Settlement Modification Agreement.** To modify a Cash Treasury Transaction or Repo Transaction previously submitted for clearing, the original

counterparties thereto must have executed a settlement modification agreement, stating that the original counterparties may modify Cash Treasury Transactions or Repo Transactions submitted for clearing pursuant to this Procedure 15-8.

(d) Notification to the Corporation. If the original counterparties to a Repo Transaction or Cash Treasury Transaction agree to modify the transaction, the original counterparties must notify the Corporation as follows:

(i) A Member or User that is a counterparty to the original Repo Transaction or Cash Treasury Transaction must notify the Corporation, by email or through such a system as the Corporation shall designate, by the applicable deadlines described in paragraphs (a) and (b) of this Procedure 15-8.

(ii) Such notification must include the identification number for the original Repo Transaction or Cash Treasury Transaction and the terms of the modifications to which the counterparties to the original Repo Transaction or Cash Treasury Transaction have agreed.

(e) Cancellation of Original Repo Transaction or Cash Treasury Transaction and New Repo Transaction or Cash Treasury Transaction. If the Corporation receives a valid notification to modify or terminate a Repo Transaction or Cash Treasury Transaction pursuant to this Procedure 15-8 from both counterparties to the original Repo Transaction or Cash Treasury Transaction, the Corporation will cancel the original Repo Transaction or Cash Treasury Transaction. The Corporation will cancel all settlement instructions with respect to the canceled transaction, including Cash Treasury or Off Leg settlement instructions in the case of the Off Leg of a terminated Repo Transaction, and the Corporation will no longer have any clearing obligations with respect to that transaction. If the counterparties to the original Repo Transaction or Cash Treasury Transaction agree to a new Repo Transaction or Cash Treasury Transaction to replace the original Repo Transaction or Cash Treasury Transaction, the counterparties must submit a new Repo Transaction or Cash Treasury Transaction for clearing to the Corporation. The Corporation may impose fees on Members and Users for modification and termination of Repo Transactions or Cash Treasury Transactions in such amounts as the Corporation may determine from time to time.

(f) Notification to Original Repo and Cash Treasury Counterparties. The Corporation will notify the counterparties to the original Repo Transaction or Cash Treasury Transaction that the Corporation has canceled the transaction and, if applicable, cleared a new Repo Transaction or Cash Treasury Transaction.

Procedure 15-9. Outstanding Exposure Settlement

(a) Outstanding Exposure Settlement for Eligible Securities Transactions. The Corporation shall collect any net deficit (debit), and pay any net gain (credit), in relation to Outstanding Exposure Settlement, as determined pursuant to Rule 1505 and this Procedure 15-9, for the novated Eligible Securities Transactions of each Member or User (as applicable) in such amount as indicated in the Daily Margin Report. For such purposes, a negative amount will be considered a debit from the relevant Account due to the Corporation, and a positive amount will be considered a credit due from the Corporation to the relevant Account.

(b) Outstanding Exposure Settlement for Clear to Deliver and Cash Treasury Transactions. For Clear to Deliver and Cash Treasury Transactions, Outstanding Exposure Settlement shall include the components determined pursuant to paragraph (b) and subparagraphs of this Procedure 15-9. For Clear to Deliver and Cash Treasury Transactions, Outstanding Exposure Settlement obligations must be met in cash, unless otherwise permitted by the Corporation.

(i) Settlement Variation for Clear to Deliver Transactions.

(A) The settlement variation for each Clear to Deliver Transaction will be calculated as the difference between the settlement price for the preceding clearing cycle, multiplied by the par amount of the securities. For the first clearing cycle after novation of a Clear to Deliver Transaction, the settlement variation amount shall be represented by the difference between the settlement price versus the price at which the Start Leg was purchased or sold, multiplied by the par amount of the securities. For Clear to Deliver Transactions, the settlement price will include accrued coupon interest for the Business Day on which the settlement variation is calculated.

(B) Where a Clear to Deliver Transaction is netted against another obligation, settlement variation will be calculated based on the delivery settlement obligation, and any subsequent settlement variation calculations will use the settlement price for the delivery settlement obligation as the starting price.

(C) For Clear to Deliver Transactions for which additional purchased securities in the form of Haircut Collateral are held by the purchaser of the transaction, as indicated on the original transaction, the Haircut Collateral amount will be subtracted from the settlement value (i.e., settlement price multiplied by the par amount of the securities) for each calculation of the settlement variation.

(ii) Settlement Variation for Cash Treasury Transactions.

(A) The settlement variation for each Cash Treasury Transaction will be calculated as the difference between the settlement price versus the settlement price for the preceding clearing cycle, multiplied by the par amount of the securities. For the first clearing cycle after novation of a Cash Treasury Transaction, the settlement variation amount shall be represented by the difference between the settlement price versus the price at which the Cash Treasury Transaction was purchased or sold. For Cash Treasury Transactions, the settlement price will be inclusive of accrued coupon interest to the settlement date of the Cash Treasury Transaction.

(B) Where a Cash Treasury Transaction is netted against another obligation, settlement variation will be calculated based on the delivery settlement obligation, and any subsequent settlement variation calculations will use the settlement price for the delivery settlement obligation as the starting price.

(iii) Repo Rate Accrual. Outstanding Exposure Settlement for Clear to Deliver Transactions includes the repo rate accrual. The Corporation shall collect the daily repo rate accrual from a Member or User that is a funds borrower, and pay the daily repo rate accrual to a Member or User that is a funds lender, or in the event of negative repo rates, collect the daily repo rate accrual from a Member or User that is a funds lender, and pay the daily repo rate accrual to a Member or User that is a funds borrower.

(A) The daily repo rate accrual will be calculated by the Corporation as the original Start Cash submitted on the Repo Transaction, multiplied by the repo rate submitted on such Repo Transaction, for each calendar day beginning with the prior Business Day on which the daily repo rate accrual had been processed and following the day count convention standard for the relevant Eligible Securities.

(iv) Price Alignment Amount. The Outstanding Exposure Settlement for Clear to Deliver and Cash Treasury Transactions includes a Price Alignment Amount component.

(A) Price Alignment Amount will be calculated as (x) a debit on transactions that were the receivers (a credit) in respect of the sum of settlement variation and repo rate accrual since the novation of the transaction to the Corporation and held from one Business Day to the next, and (y) a credit on transactions that were the payers (a debit) of the sum of settlement variation and repo rate accrual since novation.

(B) The Price Alignment Amount will be calculated by the Corporation as the sum of the settlement variation and repo rate accrual since novation of the transaction to the Corporation, multiplied by the applicable overnight investment rate

as determined by the Corporation, and calculated for each calendar day from the prior Business Day on which the Price Alignment Amount had been processed.

(C) The calculations for the Price Alignment Amount will be reset when a transaction is netted against another obligation for settlement, and any subsequent Price Alignment Amount calculations will only include settlement variation received or paid related to the delivery settlement obligation.

(v) Coupon Payments. The Outstanding Exposure Settlement for Clear to Deliver and Cash Treasury Transactions includes a collateral coupon component.

(A) For Clear to Deliver Transactions, where a coupon payment is made on collateral deposited as the securities leg of a Repo Transaction, the Corporation shall debit the amount of any coupon payment from the relevant Account that is the funds lender for the respective Repo Transactions, and credit the amount of any coupon payment to the relevant Account that is the funds borrower for the respective Repo Transactions.

(B) For delivery settlement obligations of Clear to Deliver and Cash Treasury Transactions, if a failure has occurred on a collateral delivery scheduled on or before the date of record for a Coupon Payment Date, where a coupon payment is made on collateral yet to be delivered by the Member or User who has failed to deliver the collateral, the Corporation shall debit the amount of any coupon payment from the relevant Account that has failed to deliver the collateral, and credit the amount of any coupon payment to the Account that was failed against in the delivery of the collateral, as determined by the Corporation.

(vi) Maturity Adjustment. Outstanding Exposure Settlement for Clear to Deliver and Cash Treasury Transactions includes a maturity adjustment component. For Clear to Deliver and Cash Treasury Transactions, if collateral is held to maturity before it can be delivered, which results in the redemption of the securities upon maturity, a maturity adjustment will be made. The maturity adjustment will be calculated as the difference between the scheduled settlement value of the securities to be delivered to the Account that is the scheduled purchaser of the securities, and the amount of the redemption of the securities paid to the Account that is scheduled to deliver the securities.

(vii) Haircut Collateral Collection or Return. Outstanding Exposure Settlement for Clear to Deliver Transactions may include collection or return of Haircut Collateral where a haircut amount is specified on the original transaction submitted for clearing.

(A) Collection of Haircut Collateral will be facilitated through Outstanding Exposure Settlement for T+1 settlement, where the Haircut Collateral cannot be collected through gross settlement as would be the case for T+0 settlement.

Collection of Haircut Collateral will be reflected as a debit of the Haircut Collateral cash submitted on the transaction for the funds borrower and a credit for the funds lender.

(B) Return of Haircut Collateral will be facilitated through Outstanding Exposure Settlement on the date of the Off Leg. Return of Haircut Collateral will be reflected as a debit of the Haircut Collateral cash submitted on the transaction for the funds lender and a credit for the funds borrower.

(viii) Transfer Cash. Outstanding Exposure Settlement for Clear to Deliver and Cash Treasury Transactions may include a transfer cash component. The transfer cash can originate on transfers or other atypical transactions, such as those originating from managing a Default. The transfer cash may also be inclusive of other miscellaneous cash adjustment amounts.

(b) Outstanding Exposure Settlement for Clear to Hold Transactions. For Clear to Hold Transactions, Outstanding Exposure Settlement shall include the components determined pursuant to the procedures of the relevant Securities Settlement Bank(s) that operates the service for Clear to Hold Transactions, including those listed in paragraphs (b)(i), (ii), and (iii) of this Procedure 15-9, and shall be calculated in the manner established by such Securities Settlement Bank(s). For Clear to Hold Transactions, Eligible Securities or cash may be delivered as Outstanding Exposure Settlement, and Eligible Securities that are of a different maturity from the Eligible Securities initially delivered to settle such transactions may be delivered as long as they comply with the specifications of the General Collateral Bucket as indicated on the original transaction.

(i) For Clear to Hold Transactions for which Haircut Collateral is delivered, the Haircut Collateral amount will be used in the calculation of Outstanding Exposure Settlement to determine any deficit.

(ii) The Outstanding Exposure Settlement for Clear to Hold Transactions includes the repo rate accrual. The daily repo rate accrual is collected from a Member or User that is a funds borrower, and the daily repo rate accrual is paid to a Member or User that is a funds lender, or in the event of negative repo rates, the daily repo rate accrual is collected from a Member or User that is a funds lender, and the daily repo rate accrual is paid to a Member or User that is a funds borrower.

(iii) The Outstanding Exposure Settlement for Clear to Hold Transactions includes coupon payments. Where a coupon payment is made on collateral deposited as the securities leg of a Clear to Hold Transaction, any such coupon payment from the relevant Account of the funds lender is transferred to the relevant Account of the funds borrower.

(c) Intraday Clearing Cycle. During the intraday clearing cycle on each Business Day as described in paragraph (c) of Procedure 5-1:

(i) For Clearing to Deliver Transactions and Cash Treasury Transactions, Outstanding Exposure Settlement will be exchanged and will only be inclusive of the settlement variation calculation as detailed in this Procedure 15-9;

(ii) For Clear to Hold Transactions, Outstanding Exposure Settlement, including transfers of securities, will follow the Outstanding Exposure Settlement procedures for the Securities Settlement Bank(s) as indicated in paragraph (b) of this Procedure 15-9.

Procedure 15-10. Buy-Ins

(a) The Corporation, pursuant to paragraph (h) of Rule 1506, may buy in a failing Member or User. The Corporation will issue a notice to the failing Member or User (“Notice of Buy-In”). The Notice of Buy-In shall state that the Corporation is purchasing collateral to satisfy its settlement obligations. After purchasing the collateral, the Corporation will pay to the failing Member or User cash equal to the amount by which the market value of the collateral purchased, plus any reasonable transaction fees incurred in making such purchase, were less than the amount of cash transferred to the Corporation. If the market value of the collateral purchased in effecting the buy-in, plus any reasonable transaction fees incurred in making such purchase, is greater than the amount of cash loaned to the Corporation, the failing Member or User shall settle the buy-in by paying such difference to the Corporation in cash.

(b) After being allocated a fail, and pursuant to Rule 1506, a Member or User may issue a notice to the Corporation of its intention to buy-in the failed securities delivery (“Notice of Intention of Buy-In”).

(c) The Notice of Intention to Buy-In shall state that the Member or User is purchasing collateral and must represent that it shall effect the buy-in at prevailing market prices.

(d) The Corporation shall transmit its acceptance or rejection of the Notice of Intention to Buy-In to the submitting Member or User. The Corporation shall have the sole discretion to accept or reject the Notice of Intention to Buy-In.

(e) If the Corporation accepts the Notice of Intention to Buy-In, the Corporation shall settle such buy-in no later than the next Business Day after such acceptance. The Corporation shall settle the buy-in of a Member or User by delivering to the Member’s or User’s settlement account at the Member’s or User’s Settlement Bank cash equal to the amount by which the market value of the collateral purchased, plus any reasonable transaction fees incurred in making such purchase, exceed the amount of cash borrowed from the Corporation. If the market value of the

collateral purchased in effecting the buy-in, plus any reasonable transaction fees incurred in making such purchase, is less than the amount of cash borrowed from the Corporation, the Member or User that was the cash borrower shall settle the buy-in by delivering such difference in cash to the Corporation's settlement account at the Corporation's Securities Settlement Bank(s).

Procedure 15-11. Acceleration

(a) Pursuant to Rule 1507, should the Corporation be unable to borrow the necessary securities or cash to complete any Paired Transactions pursuant to paragraph (c) of Rule 407, the Corporation may exercise its acceleration rights with respect to non-Defaulting Members and non-Defaulting Users such that their delivery obligations under outstanding Repo Transactions with a Defaulting Member or Defaulting User and with remaining maturities of at least two (2) Business Days become due on dates earlier than the original maturity dates of such Repo Transactions.

(b) The Corporation will notify each non-Defaulting Member or non-Defaulting User that it is impacted by the exercise of the Corporation's acceleration rights and specify the terms of the accelerated transaction, including the accelerated Off Leg settlement date. The accelerated non-Defaulting Member or non-Defaulting User may submit a replacement Repo Transaction for clearing. In the event the accelerated non-Defaulting Member or non-Defaulting User submits a replacement Repo Transaction that is accepted for clearing, the Corporation will compensate such Member or User in an amount equal to the reasonable costs of entering into a replacement Repo Transaction, including any decrease in interest earned under the replacement Repo Transaction as compared to the original Repo Transaction. In the event the accelerated non-Defaulting Member or non-Defaulting User does not submit a replacement Repo Transaction for clearing, the Corporation will compensate such Member or User in an amount equal to the cost of such acceleration, as determined by the Corporation in its sole discretion.

Procedure 15-12. Offsetting Repo Transactions

Pursuant to Rule 1509, if the Corporation deems it appropriate, it may in its sole discretion enter into an offsetting repo transaction with a non-Defaulting Member or non-Defaulting User that has the effect of extending outstanding settlement obligations for Repo Transactions or Cash Treasury Transactions. The terms of such offsetting repo transactions will be determined based on current market values.