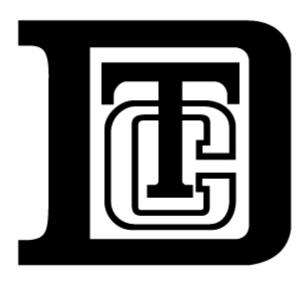
**Bolded, underlined text** indicates added language.

**Bolded, strikethrough text** indicates deleted language.



RULES	
BY-LAWS	

ORGANIZATION CERTIFICATE

THE DEPOSITORY TRUST COMPANY

# RULE 1 DEFINITIONS; GOVERNING LAW

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Section 2. Set forth below are certain other terms defined in these Rules, and the place in these Rules where such other terms are defined and used:

<u>Defined Term</u>	<u>Rule</u>	Section
Additional Participants Fund Deposit	Rule 4	Section 1
Cash	Rule 4(A)	Section 1
Contra Party	Rule 9(B)	Section 1
Corporate Contribution	Rule 4	Section 5
Custodian	Rule 2	Section 1
<b>Declared Non-Default Loss Event</b>	Rule 4	Section 5
Deemed Net Additions	Rule 9(B)	Section 2
Defaulting Participant	Rule 9(B)	Section 2
Default Loss Event	Rule 4	Section 5
End-of-Day Credit Facility	Rule 4	Section 2
Event Period	Rule 4	Section 5
FATCA	Rule 2	Section 9
FATCA Certification	Rule 2	Section 9
FATCA Compliance Date	Rule 2	Section 9
FATCA Compliant	Rule 2	Section 9
FFI Participant	Rule 2	Section 9
Interested Person	Rule 22	Section 1
Loss Allocation Cap	Rule 4	Section 5
- 1 T		
Loss Allocation Notice	Rule 4	Section 5
Loss Allocation Notice  Loss Allocation Termination Notification Period		Section 5 Section 5
Loss Allocation Termination Notification Period MMI Funding Acknowledgment		Section 5 Section 1
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization	Rule 4	Section 5
Loss Allocation Termination Notification Period MMI Funding Acknowledgment	Rule 9(C)	Section 5 Section 1
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization	Rule 4 Rule 9(C) Rule 9(C)	Section 5 Section 1
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance	Rule 4 Rule 9(C) Rule 9(C) Rule 9(D)	Section 5 Section 1
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance	Rule 4 Rule 9(C) Rule 9(C) Rule 9(D) Rule 9(D)	Section 5 Section 1 Section 1
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel	Rule 4 Rule 9(C) Rule 9(C) Rule 9(D) Rule 9(D) Rule 22	Section 5 Section 1 Section 1 Section 3
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default	Rule 4 Rule 9(C) Rule 9(C) Rule 9(D) Rule 9(D) Rule 22 Rule 4	Section 5 Section 1 Section 3 Section 3
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default Participant Representative	Rule 4 Rule 9(C) Rule 9(D) Rule 9(D) Rule 9(D) Rule 22 Rule 4 Rule 7	Section 5 Section 1 Section 3 Section 3 Section 1
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default Participant Representative Participant Termination Date	Rule 4 Rule 9(C) Rule 9(D) Rule 9(D) Rule 9(D) Rule 22 Rule 4 Rule 7 Rule 4	Section 5 Section 1 Section 3 Section 3 Section 1 Section 6
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default Participant Representative Participant Termination Date P&I Cash Advance	Rule 4 Rule 9(C) Rule 9(D) Rule 9(D) Rule 22 Rule 4 Rule 7 Rule 4 Rule 4(A)	Section 5 Section 1 Section 3 Section 3 Section 1 Section 6 Section 3
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default Participant Representative Participant Termination Date P&I Cash Advance P&I Credit Facility	Rule 4  Rule 9(C)  Rule 9(D)  Rule 9(D)  Rule 22  Rule 4  Rule 7  Rule 4  Rule 4(A)  Rule 4(A)	Section 5 Section 1 Section 3 Section 3 Section 1 Section 6 Section 3 Section 3
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default Participant Representative Participant Termination Date P&I Cash Advance P&I Credit Facility P&I Finance Cost	Rule 4 Rule 9(C) Rule 9(D) Rule 9(D) Rule 22 Rule 4 Rule 7 Rule 4 Rule 4(A) Rule 4(A) Rule 4(A)	Section 5 Section 1 Section 3 Section 3 Section 1 Section 6 Section 3 Section 3 Section 3
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default Participant Representative Participant Termination Date P&I Cash Advance P&I Credit Facility P&I Finance Cost P&I Finance Period	Rule 4 Rule 9(C) Rule 9(D) Rule 9(D) Rule 22 Rule 4 Rule 7 Rule 4 Rule 4(A) Rule 4(A) Rule 4(A) Rule 4(A)	Section 5 Section 1 Section 3
Loss Allocation Termination Notification Period MMI Funding Acknowledgment MMI Optimization Net-Net Credit Balance Net-Net Debit Balance Panel Participant Default Participant Representative Participant Termination Date P&I Cash Advance P&I Credit Facility P&I Finance Cost P&I Finance Period P&I Payment Date	Rule 4  Rule 9(C)  Rule 9(D)  Rule 9(D)  Rule 22  Rule 4  Rule 7  Rule 4  Rule 4(A)  Rule 4(A)  Rule 4(A)  Rule 4(A)  Rule 4(A)  Rule 4(A)	Section 5 Section 1 Section 3

P&I Scheduled Payment	Rule 4(A)	Section 3
P&I Security Interest	Rule 4(A)	Section 3
Pool	Rule 22	Section 3
Preferred Stock Security Interest	Rule 4	Section 2
Section 8 Pro Rata Charge	Rule 4	Section 6
Settlement Charge Cap	Rule 4	Section 4
Settlement Charge Notice	Rule 4	Section 4
<b>Settlement Charge Termination Notification</b>	Rule 4	Section 4
<u>Period</u>		<u> </u>
Period Settling Bank Refusal	Rule 9(D)	
	Rule 9(D) Rule 9(B)	Section 2
Settling Bank Refusal	` ′	Section 2
Settling Bank Refusal Short Charge	Rule 9(B)	Section 2 Section 6
Settling Bank Refusal Short Charge Special Representative	Rule 9(B) Rule 6	
Settling Bank Refusal Short Charge Special Representative Termination Notice	Rule 9(B) Rule 6 Rule 4	Section 6

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#### RULE 4

### PARTICIPANTS FUND AND PARTICIPANTS INVESTMENT

### Section 1. Participants Fund

The Participants Fund shall comprise the Actual Participants Fund Deposits of all Participants, as provided in these Rules and as specified in the Procedures.

### (a) Required Participants Fund Deposits

Each Participant shall be required to make a Required Participants Fund Deposit in accordance with one or more formulas based upon the Participant's use of the facilities of the Corporation; provided, however, that (i) each Participant other than a Limited Participant shall be required to make at least a minimum Required Participants Fund Deposit and (ii) depending upon the services it utilizes, a Limited Participant may or may not be required to make a Required Participants Fund Deposit. The formulas for determining the Required Participants Fund Deposits of Participants and the amount of the minimum Required Participants Fund Deposit shall be fixed by the Corporation and specified in the Procedures so as to assure that the aggregate amount of Required Participants Fund Deposits of Participants will be increased to provide for costs and expenses incurred by it incidental to the voluntary liquidation or wind-down of the Corporation, if any.

The Corporation may from time to time change the formulas for determining the Required Participants Fund Deposits of Participants and the amount of the minimum Required Participants Fund Deposit; provided, however, that notice of such change shall be given to each Participant at least ten Business Days in advance of the effective date thereof. The Corporation may require a Participant to Deposit an additional amount to the Participants Fund pursuant to Section 2 of Rule 9(A). Any such additional amount shall be part of the Required Participants Fund Deposit of such Participant.

(b) The Corporation shall determine on a daily basis for each Participant the amount of its Required Participants Fund Deposit, and the Corporation shall notify each Participant of any change in the amount of its Required Participants Fund Deposit. If the Actual Participants Fund Deposit of a Participant is less than the amount of its Required Participants Fund Deposit, the Participant shall Deposit to the Participants Fund, in the manner specified in the Procedures, the amount needed to eliminate the deficiency. If the Actual Participants Fund Deposit of a Participant is more than the amount of its Required Participants Fund Deposit, the Corporation shall pay to the Participant from the Participants Fund, in the manner specified in the Procedures, the amount of the excess, or such lesser amount as the Participant may request; provided, however, that the Corporation may determine, in its sole discretion, not to return such excess deposit (i) if the Collateral Monitor with respect to any Account Family of the Participant is negative or will be negative as a consequence thereof, (ii) if any Account Family of the Participant will, immediately after the return of such excess deposit, have a negative balance which exceeds the Net Debit Cap for that Account Family, (iii) until any amount which is required to be charged or levied against the Participant or its Required Participants Fund Deposit is paid by the Participant to the Corporation, (iv) if the Corporation determines that the recent use of any service of the Corporation by the Participant is materially different from its prior use of such service and that a higher Required Participants Fund Deposit is thereby justified and (v) until after the amounts, if any, to be charged or levied against the Participant or its Required Participants Fund Deposit on account of transactions which occurred previously have been satisfied. Notwithstanding the foregoing, the Corporation may withhold all or part of any excess deposit of a Participant if the Corporation determines, in its sole discretion, that such action is necessary for the protection of the Corporation, other Participants or Pledgees.

### (b) Additional Participants Fund Deposits

The Corporation may require a Participant to Deposit, on demand, an additional amount to the Participants Fund pursuant to Section 2 of Rule 9(A) (an "Additional Participants Fund Deposit"). Any such Additional Participants Fund Deposit shall be part of the Required Participants Fund Deposit of such Participant.

### (c) Voluntary Participants Fund Deposits

A Participant may make a Voluntary Participants Fund Deposit to the Participants Fund, **asin the manner** specified in the Procedures. A Voluntary Participants Fund Deposit shall not be part of the Required Participants Fund Deposit of the Participant but shall be part of its Actual Participants Fund Deposit.

### (d) <u>Cash Participants Fund</u>

The Required Participants Fund Deposit, any Additional Participants Fund Deposit and any Voluntary Participants Fund Deposit of a Participant shall be in cash. All amounts due to or from a Participant in connection with increases and decreases in its Required Participants Fund Deposit, (pursuant to this Section or Section 2 of Rule 9(A)) and any Additional Participants Fund Deposit, any Voluntary Participants Fund Deposit, and any charge pursuant to Section 5 of this Rule, may be credited to or debited from its Settlement Account.

# (e) Allocation of Participants Fund Deposits Among Account Families

A Participant with more than one Account Family may, in the manner specified in the Procedures, designate the portion of its Actual Participants Fund Deposit to be allocated to each Account Family at the opening of business each Business Day. The Corporation shall not be obligated to make any allocations in accordance with such instructions if the Corporation determines, in its sole discretion, that such action might result in financial loss to the Corporation, other Participants or Pledgees. The Corporation may allocate <u>among Account Families</u>, in the manner specified in the Procedures, any portion of the Actual Participants Fund Deposit of a Participant which is not allocated by the Participant.

### (f) Maintenance, Permitted Use and Investment of Participants Fund

The Actual Participants Fund Deposits of Participants to the Participants Fund shall be held by the Corporation and **shallmay** be **appliedused or invested** as provided in these Rules and as specified in the Procedures.

The Actual Participants Fund shall be limited to the satisfaction of losses or Deposits of Participants may be used (i) to satisfy the obligations of Participants to the Corporation, as provided in Section 3 of this Rule, (ii) to fund settlement among non-defaulting Participants, as provided in Section 4 of this Rule and (iii) to satisfy losses and liabilities of the Corporation incident to the business of the Corporation, as provided in Section 5 of this Rule. For purposes of this SectionRule, the term "business" with respect to the Corporation shall mean the doing of all things in connection with or relating to the Corporation's performance of the services specified in the first and second paragraphs of Rule 6 or the cessation of such services. Notwithstanding anything to the contrary in this Rule, the Participants Fund may be used as provided in any Clearing Agency Agreement.

the Corporation, in its sole discretion, for its account in securities issued or guaranteed as to principal and interest by the United States or agencies or instrumentalities of the United States or repurchase agreements relating to securities issued or guaranteed as to principal and interest by the United States or agencies or instrumentalities of the United States and interest by the United States or agencies or instrumentalities of the United States and to the extent not so invested shall be deposited by the Corporation in its name in a depository or depositories selected by the Corporation. Any securities, repurchase agreements or deposits in accordance with the Clearing Agency Investment Policy adopted by the

<u>Corporation.</u> Any financial assets in which cash in the Participants Fund is invested may be sold by the Corporation or Pledged as security for loans made to the Corporation, as provided in Rule 4(A). The Corporation shall pay interest to a Participant on the cash such Participant has Deposited to the Participants Fund at the rate the Corporation earns on securities and repurchase agreement in which its investment of such cash is invested or as specified in the Procedures.

### (g) Return of Participants Fund Deposits to Participants

(h) — After three months from when a Person has ceased to be a Participant, the Corporation shall return to such Person (or its successor in interest or legal representative) the amount of the Actual Participants Fund Deposit of the former Participant plus accrued and unpaid interest to the date of such payment (including any amount added to the Actual Participants Fund Deposit of the former Participant pursuant to Section 2(he) of this Rule), provided that the Corporation receives such indemnities and guarantees as the Corporation deems satisfactory with respect to the matured and contingent obligations of the former Participant to the Corporation. Otherwise, within fourtwo years after a Person has ceased to be a Participant, the Corporation shall return to such Person (or its successor in interest or legal representative) the amount of the Actual Participants Fund Deposit of the former Participant plus accrued and unpaid interest to the date of such payment, except that the Corporation may offset against such payment the amount of any known loss or liability toof the Corporation arising out of aor related to the obligations of the former Participant to the Corporation.

## Section 2. Participants Investment

The Participants Investment shall comprise the Required Preferred Stock Investments of all Participants, as provided in these Rules and as specified in the Procedures.

### (a) Required Preferred Stock Investments

Each Participant shall be required to make a Required Preferred Stock Investment in accordance with one or more formulas based upon the Participant's use of the facilities of the Corporation; provided, however, that (i) each Participant other than a Limited Participant shall be required to make at least a minimum Required Preferred Stock Investment and (ii) depending upon the services it utilizes, a Limited Participant may or may not be required to make a Required Preferred Stock Investment. The formulas for determining the Required Preferred Stock Investments of Participants and the amount of the minimum Required Preferred Stock Investment shall be fixed by the Corporation and specified in the Procedures. The Corporation may from time to time change the formulas for determining the Required Preferred Stock Investments of Participants and the amount of the minimum Required Preferred Stock Investment; provided, however, that notice of such change shall be given to each Participant at least ten Business Days in advance of the effective date thereof.

(b) The Corporation shall determine on a quarterly basis for each Participant the amount of its Required Preferred Stock Investment, and the Corporation shall notify

each Participant of any change in the amount of its Required Preferred Stock Investment. If the Actual Preferred Stock Investment of a Participant is less than the amount of its Required Preferred Stock Investment, such Participant shall purchase, in the manner specified in the Procedures, the number of outstanding shares of Preferred Stock needed to eliminate the deficiency. If the Actual Preferred Stock Investment of a Participant is more than the amount of its Required Preferred Stock Investment, such Participant shall sell, in the manner specified in the Procedures, the number of its shares of Preferred Stock needed to eliminate the excess. The Corporation, acting as agent and attorney-infact for its Participants, shall effect the foregoing purchases and sales of shares of Preferred Stock on their behalf, so that each Participant shall own the amount of its Required Preferred Stock Investment, as adjusted from time to time in accordance with the provisions of **Paragraph (a) of this Section 2 and** this Paragraph-(b).

(e) A Participant may not purchase from the Corporation or any other Participant any shares of Preferred Stock in excess of the amount of its Required Preferred Stock Investment.

(d) Except as otherwise provided in this Paragraph or Paragraph (if) of this Section, all purchases and sales of Preferred Stock pursuant to these Rules shall be made in cash at a price equal to the aggregate Preferred Stock Par Value of the shares plus accrued and unpaid dividends thereon to the date of such purchase or sale; provided, however, that (i) the portion of the price equal to the aggregate Preferred Stock Par Value of the shares shall be paid on the date of such purchase and sale and (ii) the portion of the price equal to the accrued and unpaid dividends thereon shall be paid on the first Preferred Stock Dividend Date following the date of such purchase and sale if dividends are paid on the Preferred Stock on such Preferred Stock Dividend Date.

All amounts due to or from Participants in connection with purchases and sales of Preferred Stock shall be credited to or debited from their Settlement Accounts, except that any amounts due to a Person which has ceased to be a Participant shall be paid to such account as the former Participant shall designate for this purpose. The Corporation, acting as agent and attorney-in-fact for its Participants, shall effect all payments on their behalf, at the times and in the amounts provided in these Rules and as specified in the Procedures, without any further action or consent required on the part of such Participants, and, without limiting the generality of the foregoing, the Corporation may apply all dividends paid on the Preferred Stock to the payments required to be made to all past and present holders of Preferred Stock pursuant to this Section.

Any determination by the Corporation of a number of shares of Preferred Stock to be purchased or sold pursuant to these Rules shall be made by converting any fraction into a decimal rounded to the nearest one-hundred-thousandth and by rounding to the nearest one-hundred-thousandth the product of any such decimal and any number of shares of Preferred Stock. In order to make the products of all such determinations by the Corporation pursuant to any one provision of these Rules consistent with the total number of shares of Preferred Stock being purchased and sold, the Corporation shall randomly assign to **aor** deduct from the number of shares of Preferred Stock being purchased from

or sold to any Participant the difference between such total number of shares of Preferred Stock and the sum of such products.

## (b) Allocation of Preferred Stock Investments Among Account Families

(e) A Participant with more than one Account Family may, in the manner specified in the Procedures, designate the portion of its Actual Preferred Stock Investment to be allocated to each Account Family at the opening of business each Business Day. The Corporation shall not be obligated to make any allocations in accordance with such instructions if the Corporation determines, in its sole discretion, that such action might result in financial loss to the Corporation, other Participants or Pledgees. The Corporation may allocate <u>among Account Families</u>, in the manner specified in the Procedures, any portion of the Actual Preferred Stock Investment of a Participant which is not allocated by the Participant.

# (c) Security Interest in Preferred Stock Investments of Participants

(f) To secure the obligations of Participants to the Corporation, the Corporation, acting as agent and attorney-in-fact for its Participants, may (i) Pledge the entire right, title and interest of any Participant in and to some or all of its shares of Preferred Stock, together with all distributions thereon, proceeds thereof and replacements or substitutions therefor (a "Preferred Stock Security Interest"), as collateral security for the obligations of the Corporation to its Lenders under any credit facility maintained by the Corporation for the purpose of funding the end-of-day settlement of transactions processed through the facilities of the Corporation (an "End-of-Day Credit Facility") or (ii) sell some or all of the shares of Preferred Stock of any Participant to other Participants (who shall be obligated to purchase such shares pro rata their Required Preferred Stock Investments at the time of such purchase), and apply the proceeds of such sale to the obligations of such Participant to the Corporation. Any such Pledge of a Preferred Stock Security Interest pursuant to this Paragraph—(f), shall be made by appropriate entries on the books of the Corporation (and such entries, together with these Rules, shall be deemed to be a security agreement for purposes of the NYUCC) or by any other means provided in the NYUCC, and each Participant hereby grants to the Corporation an irrevocable power of attorney (coupled with an interest) to execute and deliver, in the name and on behalf of such Participant, any and all additional documents, instruments, agreements and financing statements necessary or desirable as determined by the Corporation, in its sole discretion, to create and perfect the Pledge of the Preferred Stock Security Interest by the Corporation to its Lenders under the End-of-Day Credit Facility. Any such sale of shares of Preferred Stock pursuant to this Paragraph—(f), and any application of the proceeds thereof as provided herein, shall be effected by the Corporation without any further action or consent required on the part of the Participant whose shares of Preferred Stock are sold, and the Settlement Account of such Participant shall be credited with the full amount of such proceeds.

### (d) Dividends on Preferred Stock Investments of Participants

(g)—The Corporation shall pay dividends on the Preferred Stock at a rate fixed by the Board of Directors in accordance with the Organization Certificate of the Corporation.

## (e) Sale of Preferred Stock Investments of Participants

(h) Promptly after a Person has ceased to be a Participant, the Corporation, acting as agent and attorney-in-fact for such Person (or its successor in interest or legal representative), shall sell all of the shares of Preferred Stock of the former Participant to current Participants (who shall be required to purchase such shares pro rata their Required Preferred Stock Investments at the time of such purchase), and add the proceeds thereof to the Actual Participants Fund Deposit of the former Participant for disposition in accordance with Section 1(hg) of this Rule.

## (f) Permitted Transfers of Preferred Stock Investments of Participants

(i)—Shares of Preferred Stock may be transferred from a Participant to another Person, subject to the provisions of **this** Paragraph (f) of this Section 2:

- (1) (A)—if (1A) such Participant gives the Corporation at least twenty Business Days prior written notice of the proposed transfer and (2B) such transfer is effected in the course of or pursuant to (xi) a merger or consolidation of such Participant into or with such Person or (yii) a sale of all or substantially all of the business and assets of such Participant to such Person and (3C) such Person is also a Participant; or
- (2) (B)—if (1A) such Participant (xi) gives the Corporation and all other Participants at least twenty Business Days prior written notice of the proposed transfer and (yii) offers to sell the shares to such other Participants (pro rata their Required Preferred Stock Investments at the time of such offer) at the lower of (1x) the aggregate purchase price that such Person has agreed to pay for the shares or (1x) the aggregate Preferred Stock Par Value of the shares and (2B) the Corporation, acting as agent and attorney-infact for such other Participants, declines on their behalf to purchase the shares on such terms.

No shares of Preferred Stock may be purchased, sold or transferred except in accordance with this Paragraph (i)—or in connection with the quarterly reallocation of shares of Preferred Stock pursuant to Paragraph (ba) of this Section.

# Section 3. Application of Participants Fund Deposits and Preferred Stock Investments to Participant Default

If a Participant is obligated to the Corporation, other than for a pro rata charge pursuant to Section 5 of this Rulethese Rules and the Procedures, and fails to satisfy such obligation (a "Participant Default"), including, without limitation, the obligation of the

Participant to reimburse the Corporation for the amount of any payment with respect to such Participant paid by or owing from the Corporation to any other clearing agency pursuant to a Clearing Agency Agreement, the Corporation shall, to the extent necessary to eliminate such obligation, apply some or all of the Actual Participants Fund Deposit of such Participant to such obligation to satisfy the Participant Default.

<u>If any such application of the Actual Participants Fund Deposit of a Participant is insufficient to satisfy such obligation, the Corporation may,</u> in such order and <del>in</del> such amounts as the Corporation shall determine, in its sole discretion, to the extent necessary to <u>eliminatesatisfy</u> such obligation:

# (a) apply some or all of the Actual Participants Fund Deposit of such Participant to such obligation;

- (<u>ba</u>) Pledge some or all of the shares of Preferred Stock of such Participant to its Lenders as collateral security for a loan under the End-of-Day <u>Credit</u> Facility, <u>and apply the proceeds of such loan to satisfy such obligation</u>; and/or
- (eb) sell some or all of the shares of Preferred Stock of such Participant to other Participants (who shall be required to purchase such shares pro rata their Required Preferred Stock Investments at the time of such purchase), and apply the proceeds of such sale to such obligation.

If the Corporation takes any of the foregoing actions, the Participant shall, upon the demand of the Corporation, within such time as the Corporation shall require:

- (a) Deposit to the Participants Fund the amount in cash needed to eliminate any resulting deficiency in its Required Participants Fund Deposit;
- (b) wire to the Corporation an amount in cash sufficient to discharge any loan secured by its shares of Preferred Stock; and/or
  - (c) repurchase any of its shares of Preferred Stock sold to other Participants.

If the Participant shall fail to take any action demanded by the Corporation, the Corporation may take disciplinary action against the Participant pursuant to these Rules. Any disciplinary action which the Corporation takes pursuant to these Rules, or the voluntary or involuntary cessation of participation by the Participant, shall not affect the obligation of the Participant to the Corporation or any remedy to which the Corporation may be entitled under applicable law.

## Section 4. Application of Participants Fund Deposits of Non-Defaulting Participants

If the Corporation incurs a loss or liability which is not satisfied by charging the Participant or Participants responsible for causing the loss or liability pursuant to Section 3 of this Rule, the Corporation shall, in such order and in such amounts as the Corporation shall determine, in its sole discretion, to the extent necessary to satisfy such loss or liability:

(a) apply some or all of the Actual Participants Fund Deposits of all other Participants to such loss or liability, in which case:

- (1) with respect to any loss or liability incurred by the Corporation in connection with any payment required to be made by the Corporation to any other clearing agency pursuant to a Clearing Agency Agreement, the Actual Participants Fund Deposit of each Participant that is concurrently a member of such other clearing agency, excluding the Participant or Participants responsible for causing the loss or liability, shall be applied pro rata (A) its Required Participants Fund Deposit (as such Required Participants Fund Deposit was fixed at the time the loss or liability was discovered) less (B) any portion of such Required Participants Fund Deposit attributable to any additional amount that such Participant was required to Deposit to the Participants Fund pursuant to Section 2 of Rule 9(A); or
- (2) with respect to any other loss or liability incurred by the Corporation, the Actual Participants Fund Deposit of each Participant, excluding the Participant or Participants responsible for causing the loss or liability, shall be applied pro rata (A) its Required Participants Fund Deposit (as such Required Participants Fund Deposit was fixed at the time the loss or liability was discovered) less (B) any portion of such Required Participants Fund Deposit attributable to any additional amount that such Participant was required to Deposit to the Participants Fund pursuant to Section 2 of Rule 9(A); and/or

(b) charge the existing retained earnings and undivided profits of the Corporation.

The Participants Fund shall constitute a liquidity resource which may be applied by the Corporation in such amounts as the Corporation shall determine, in its sole discretion, to fund settlement among non-defaulting Participants in the event of the failure of a Participant to satisfy its settlement obligation on any Business Day. If the amount charged to the Actual Participants Fund Deposit of a Participant pursuant to Section 3 of this Rule is not sufficient to complete settlement among non-defaulting Participants on that Business Day, the Corporation may apply the Actual Participants Fund Deposits of non-defaulting Participants as provided in this Section and/or apply such other liquidity resources as may be available to the Corporation from time to time, including the End-of-Day Credit Facility.

If the Participants Fund is applied to a loss or liabilitycomplete settlement, the Corporation shall promptly after the event notify each Participant and the SEC of the amount applied and the reasons therefor ("Settlement Charge Notice").

Each non-defaulting Participant's pro rata share of such application of the Participants Fund shall be equal to (i) its Required Participants Fund Deposit, as such Required Participants Fund Deposit was fixed on the Business Day of such application less its Additional Participants Fund Deposit, if any, on that day, divided by (ii) the sum of the Required Participants Fund Deposits of all non-defaulting Participants, as such Required Participants Fund Deposits were fixed on that day, less the sum of the Additional Participants Fund Deposits, if any, of such non-defaulting Participants on that day.

A Participant's maximum obligation with respect to its pro rata share of such application of the Participants Fund (each a "pro rata settlement charge") shall be equal to the amount set forth in Section 8(a) of this Rule ("Settlement Charge Cap"). A Participant shall have a period of five Business Days following issuance of a Settlement Charge Notice (such period, a "Settlement Charge Termination Notification Period") to notify the Corporation of its election to terminate its business with the Corporation pursuant to Section 8(a) of this Rule and thereby benefit from its Settlement Charge Cap.

If a Participant notifies the Corporation of its election to terminate its business with the Corporation pursuant to Section 8(a) of this Rule, it shall comply with the provisions of Section 6 of this Rule. If, after notifying the Corporation of its election to terminate its business with the Corporation pursuant to Section 6 of this Rule, the Participant fails to comply with the provisions of Section 6 of this Rule, its election to terminate its business with the Corporation shall be deemed void and it will remain subject to further pro rata settlement charges as may be charged against it as if it had not given such notice.

Notwithstanding Section 1(a) of this Rule, the Corporation may retain the entire amount of the Actual Participants Fund Deposit of a Participant subject to a pro rata settlement charge, up to the amount of the Participant's Settlement Charge Cap in accordance with Section 8(a) of this Rule.

Section 5. Except as provided in Subject to Section 8 of this Rule, if a pro rata charge is made pursuant to Section 4 of this Rule against the Required the Actual Participants Fund Deposit of a Participant, is applied as provided in this Section and, as a consequence, the Actual Participants Fund Deposit of such Participant is less than its Required Participants Fund Deposit, the Participant shall, upon the demand of the Corporation, within such time as the Corporation shall require, Deposit to the Participants Fund the amount in cash needed to eliminate any resulting deficiency in its Required Participants Fund Deposit. If the Participant shall fail to make such dDeposit to the Participants Fund, the Corporation may take disciplinary action against the Participant pursuant to these Rules. Any disciplinary action which the Corporation takes pursuant to these Rules, or the voluntary or involuntary cessation of participation by the Participant, shall not affect the obligations of the Participant to the Corporation or any remedy to which the Corporation may be entitled under applicable law.

### Section 5. Loss Allocation Waterfall

If the Corporation incurs a loss or liability (i) relating to or arising out of a Participant Default which is not satisfied pursuant to Section 3 of this Rule and the Corporation has ceased to act for such Participant (a "Default Loss Event") or (ii)

otherwise incident to the business of the Corporation, as determined below (a "Declared Non-Default Loss Event"), the Corporation shall address the loss or liability as follows:

Default Loss Events and/or Declared Non-Default Loss Events that occur within a period of ten Business Days (an "Event Period") shall be grouped together for purposes of applying the limits on loss allocations set forth in Section 8 of this Rule. In the case of a Default Loss Event, an Event Period begins on the day that the Corporation notifies Participants that it has ceased to act for a Participant (or the next Business Day, if such day is not a Business Day).

In the case of a Declared Non-Default Loss Event, an Event Period begins on the day that the Corporation notifies Participants of the determination by the Board of Directors that the applicable loss or liability incident to the business of the Corporation may be a significant and substantial loss or liability that may materially impair the ability of the Corporation to provide clearance and settlement services in an orderly manner and will potentially generate losses to be mutualized among Participants in order to ensure that the Corporation may continue to offer clearance and settlement services in an orderly manner, which notification shall be issued promptly following any such determination.

If a subsequent Default Loss Event or Declared Non-Default Loss Event occurs during an Event Period, any losses or liabilities relating to or arising out of any such subsequent event shall be resolved as losses or liabilities that are part of the same Event Period, without extending the duration of such Event Period.

The Corporation shall apply the Corporate Contribution (as defined below) to losses and liabilities that arise out of or relate to one or more Default Loss Events and/or Declared Non-Default Loss Events that occur within an Event Period. If losses and liabilities with respect to such Event Period remain unsatisfied following application of the Corporate Contribution, the Corporation shall allocate such losses and liabilities to Participants, subject to the requirements and limitations below.

In the case of losses and liabilities relating to or arising out of a Declared Non-Default Loss Event, all Participants shall be subject to loss allocation. In the case of losses and liabilities relating to or arising out of a Default Loss Event, only non-defaulting Participants shall be subject to loss allocation. After a first round of loss allocations with respect to an Event Period, only Participants that have not submitted a Termination Notice (as defined below) in accordance with Section 6(b) of this Rule shall be subject to further loss allocation with respect to that Event Period. The Corporation shall notify Participants subject to loss allocation of the amounts being allocated to them ("Loss Allocation Notice") in successive rounds of loss allocations. Notwithstanding Section 1(a) of this Rule, the Corporation may retain the entire Actual Participants Fund Deposit of a Participant subject to loss allocation, up to the Participant's Loss Allocation Cap (as defined below) in accordance with Section 8(b) of this Rule.

A loss allocation "round" means a series of loss allocations relating to an Event Period, the aggregate amount of which is limited by the sum of the Loss Allocation Caps of affected Participants (a "round cap"). When the aggregate amount of losses allocated in a

round equals the round cap, any additional losses relating to the applicable Event Period shall be allocated in one or more subsequent rounds, in each case subject to a round cap for that round. The Corporation may continue the loss allocation process in successive rounds until all losses from the Event Period are allocated among Participants that have not submitted a Termination Notice in accordance with Section 6(b) of this Rule.

Each loss allocation shall be communicated to Participants by the issuance of a Loss Allocation Notice. Each Loss Allocation Notice shall specify the relevant Event Period and the round to which it relates. The first Loss Allocation Notice in any first, second, or subsequent round shall expressly state that such Loss Allocation Notice reflects the beginning of the first, second, or subsequent round, as the case may be, and that each Participant in such round has five Business Days from the issuance of such first Loss Allocation Notice for the round (such period, a "Loss Allocation Termination Notification Period") to notify the Corporation of its election to terminate its business with the Corporation pursuant to Section 8(b) of this Rule, and thereby benefit from its Loss Allocation Cap. Participants shall pay to the Corporation the amount specified in any first round Loss Allocation Notice on the second Business Day after the Corporation issues any such notice. Participants shall pay to the Corporation the amount specified in any subsequent round Loss Allocation Notice on the second Business Day after the Corporation issues such notice, unless the Participant has timely notified (or will timely notify) the Corporation of its election to terminate its business with the Corporation with respect to a prior loss allocation round pursuant to Section 8(b) of this Rule. Each Participant's maximum payment obligation with respect to any loss allocation round shall be equal to the amount set forth in Section 8(b) of this Rule ("Loss Allocation Cap"), subject to Section 8(c) of this Rule.

Each Participant's pro rata share of losses and liabilities to be allocated in any round shall be equal to (i) its Required Participants Fund Deposit, as such Required Participants Fund Deposit was fixed on the first day of the applicable Event Period, less its Additional Participants Fund Deposit, if any, on such day, divided by (ii) the sum of the Required Participants Fund Deposits of all Participants subject to loss allocation in such round, as such Required Participants Fund Deposits were fixed on such day, less the sum of any Additional Participants Fund Deposits, if any, of all Participants subject to loss allocation in such round on such day.

If a Participant fails to make payment to the Corporation in respect of a Loss Allocation Notice by the time such payment is due, the Corporation shall have the right to proceed against such Participant as a Participant that has failed to satisfy an obligation in accordance with Section 3 of this Rule.

If a Participant notifies the Corporation of its election to terminate its business with the Corporation pursuant to Section 8(b) of this Rule, the Participant shall comply with the provisions of Section 6 of this Rule. If, after notifying the Corporation of its election to terminate its business with the Corporation pursuant to Section 8(b) of this Rule, the Participant fails to comply with the provisions of Section 6 of this Rule, its election to terminate its business with the Corporation shall be deemed void and any further losses

resulting from the applicable Event Period may be allocated against it as if it had not given such notice.

For any loss allocation pursuant to this Section 5, whether arising out of or relating to a Default Loss Event or a Declared Non-Default Loss Event, the Corporation's corporate contribution to losses or liabilities that are incurred by the Corporation with respect to an Event Period ("Corporate Contribution") shall be an amount that is equal to fifty percent (50%) of the amount calculated by the Corporation in respect of its General Business Risk Capital Requirement as of the end of the calendar quarter immediately preceding the Event Period. The Corporation's General Business Risk Capital Requirement, as defined in its Clearing Agency Policy on Capital Requirements, is, at a minimum, equal to the regulatory capital that the Corporation is required to maintain in compliance with Rule 17Ad-22(e)(15) under the Exchange Act. If the Corporate Contribution is applied by the Corporation against a loss or liability relating to an Event Period, the Corporate Contribution for any subsequent Event Periods occurring during the two hundred fifty (250) Business Days thereafter shall be reduced to the remaining unused portion of the Corporate Contribution amount that applied for the first Event Period. The Corporation shall notify Participants of any such reduction to the Corporate Contribution.

Nothing in these Rules shall prevent the Corporation from voluntarily applying amounts greater than the Corporate Contribution against any loss or liability of the Corporation, whether a Default Loss Event or a Declared Non-Default Loss Event, if the Board of Directors, in its sole discretion, believes such to be appropriate under the factual situation existing at the time.

### Section 6. Obligations of Participant Upon Termination

Whenever a Participant ceases to be such, it shall continue to be obligated (a) to satisfy any deficiency in the amount of its Required Participants Fund Deposit and/or Required Preferred Stock Investment that it did not satisfy prior to such time, including (i) any deficiency resulting from a pro rata charge with respect to which the Participant has given notice to the Corporation of its election to terminate its business with the Corporation pursuant to Section 8 of this Rule (a "Section 8 Pro Rata Charge") and (ii) any deficiency the Participant is required to satisfy pursuant to Section 3 or 5 of this Rule (other than any deficiency referred to in the preceding clause (i) or, subject to Section 8 of this Rule, any pro rata charge under Section 5 of this Rule arising after the Section 8 Pro Rata Charge) and (b) to discharge any liability of the Participant to the Corporation resulting from the transactions of the Participant open at the time it ceases to be a Participant or on account of transactions occurring while it was a Participant; provided, however, that, subject to Section 8 of this Rule, the aggregate liability of the Participant for any Section 8 Pro Rata Charge shall not exceed the amount of its Aggregate Required Deposit and Investment, as fixed immediately prior to the time of such charge, plus 100% of the amount thereof.

### (a) Upon Any Termination

Subject to Section 8 of this Rule, whenever a Participant ceases to be such, it shall continue to be obligated (i) to satisfy any deficiency in the amounts of its

Required Participants Fund Deposit and/or Required Preferred Stock Investment that it did not satisfy prior to such time, including any deficiency the Participant is required to satisfy pursuant to Sections 3 or 4 of this Rule, and (ii) to discharge any liability of the Participant to the Corporation resulting from the transactions of the Participant open at the time it ceases to be a Participant or on account of transactions occurring while it was a Participant.

### (b) Upon Termination Following Settlement Charge or Loss Allocation

If a Participant timely notifies the Corporation of its election to terminate its business with the Corporation in respect of a settlement charge as set forth in Section 4 of this Rule or a loss allocation as set forth in Section 5 of this Rule ("Termination Notice"), the Participant shall:

- (1) specify in the Termination Notice an effective date of termination ("Participant Termination Date"), which date shall be no later than ten Business Days following the last day of the applicable Settlement Charge Termination Notification Period or Loss Allocation Termination Notification Period;
- (2) cease all activity that would result in transactions being submitted to the Corporation for clearance and settlement after the Participant Termination Date; and
- (3) ensure that all activities and use of Corporation services for which such Participant may have any obligation to the Corporation cease prior to the Participant Termination Date.

If the Participant fails to comply with the requirements of this Paragraph (b), its Termination Notice will be deemed void, and the Participant will remain subject to further pro rata settlement charges pursuant to Section 4 of this Rule or loss allocations pursuant to Section 5 of this Rule as if it had not given such Termination Notice.

### Section 7. Increased Participants Fund Deposits and Preferred Stock Investments

Except for any increase in the amount of the Required Additional Participants Fund Deposits of a Participant pursuant to Section 2, which shall be Deposited on demand as provided in Section 1(b) of this Rule 9(A), the Corporation shall give a Participant at least ten Business Days prior notice of any proposed increase in its Required Participants Fund Deposit or Required Preferred Stock Investment.

### (a) Required Participants Fund Deposits

If a Participant does not, within the time allowed, give the Corporation notice (in the manner specified in Section 4 of Rule 2) of its election to terminate its business with the Corporation, the Participant shall be required to Deposit the amount needed to satisfy any such increase in its Required Participants Fund Deposit, and the obligation of the

Participant to make such deposit shall not be affected by any subsequent voluntary or involuntary cessation of participation of the Participant. From and after the time such increase becomes effective, the obligations of the Participant to the Corporation shall be determined in accordance with such increased Required Participants Fund Deposit of the Participant whether or not the appropriate amount has been Deposited in the Participants Fund. For purposes of this Section, an increase in the Required Participants Fund Deposit of a Participant shall include an increase resulting from the application of the formulas provided for in Section 1(a) of this Rule and shall also include an increase resulting from a change in such formulas.

### (b) Required Preferred Stock Investments

If a Participant does not, within the time allowed, give the Corporation notice (in the manner specified in Section 4 of Rule 2) of its election to terminate its business with the Corporation, the Participant shall be required to purchase the number of shares of Preferred Stock needed to satisfy any such increase in its Required Preferred Stock Investment, and the obligation of the Participant to make such purchase shall not be affected by any subsequent voluntary or involuntary cessation of participation of the Participant. From and after the time such increase becomes effective, the obligations of the Participant to the Corporation shall be determined in accordance with such increased Required Preferred Stock Investment of the Participant whether or not the appropriate number of shares of Preferred Stock have been purchased. For purposes of this Section, an increase in the Required Preferred Stock Investment of a Participant shall include an increase resulting from the application of the formulas provided for in Section 2(a) of this Rule and shall also include any increase resulting from a change in such formulas.

# Section 8. <u>Termination; Obligation for Pro Rata Settlement Charges and Loss</u> Allocations

## (a) Settlement Charges

If a Participant, within tenfive Business Days after receipt the issuance of notice of a pro rata charge for a loss or liability incurred by the Corporationa Settlement Charge Notice pursuant to Section 4 of this Rule, gives notice to the Corporation of its election to terminate its business with the Corporation, the Participant shall nevertheless remain obligated for such pro rata charge. The Corporation may also make additional pro rata charges(i) its pro rata settlement charge related to such Settlement Charge Notice and (ii) all other pro rata settlement charges until the Participant Termination Date. attributable to the same loss or liability. In that event, notwithstanding the limitation set forth in Section 6 of this Rule, tThe obligation of a Participant which elects to terminate its business with the Corporation pursuant to this SectionParagraph shall be limited to the greater of (a) the amount of its Aggregate Required Deposit and Investment, as fixed immediately prior toon the timeday of the first pro rata settlement charge that was the subject of the Settlement Charge Notice, plus 100% of the amount thereof, or (b) the amount of all prior pro rata charges attributable to the same loss or liability with respect to which the

Participant has not timely exercised its right to limit its obligation as provided above.

## (b) Loss Allocations

If a Participant, within five Business Days after the issuance of a first Loss Allocation Notice for any round pursuant to Section 5 of this Rule gives notice to the Corporation of its election to terminate its business with the Corporation, the Participant shall nevertheless remain liable for (i) the loss allocation that was the subject of such Loss Allocation Notice and (ii) all other loss allocations made by the Corporation with respect to the same Event Period. The obligation of a Participant which elects to terminate its business with the Corporation pursuant to this Paragraph shall be limited to the amount of its Aggregate Required Deposit and Investment, as fixed on the first day of the Event Period, plus 100% of the amount thereof.

# (c) Maximum Obligation

Notwithstanding anything to the contrary, under no circumstances shall the aggregate obligation of a Participant to the Corporation pursuant to both Paragraph (a) and Paragraph (b) of this Section 8 exceed the amount of its Aggregate Required Deposit and Investment, as fixed on the earlier of the day specified in the last sentence of Paragraph (a) or the day specified in the last sentence of Paragraph (b), plus 100% of the amount thereof.

### (d) Obligation to Replenish Deposit

If the amount of the Actual Participants Fund Deposit of a Participant is insufficient to satisfy a pro rata <u>settlement</u> charge, as <u>limited by pursuant to Section 64</u> of this Rule and <u>Paragraph (a) of this Section or a loss allocation pursuant to Section 5 of this Rule and <u>Paragraph (b) of</u> this Section, the Participant shall be obligated to Deposit the amount of any such deficiency to the Participants Fund notwithstanding the fact that the Participant subsequently ceases to be a Participant.</u>

### Section 9. Recovery and Repayment

If a lossany amount is charged pro rata pursuant to Section 4 of this Rule or pursuant to Section 5 of this Rule and such amount is afterward recovered by the Corporation, in whole or in part, the net amount of the recovery shall be eredited repaid ratably (on the same basis that it was originally charged or allocated) to the Persons against whom which the lossamount was originally charged in proportion to the amounts charged against them by (a) crediting the appropriate amounts to the Actual Participants Fund Deposits of Persons which are still Participants and (b) paying the appropriate amounts in cash to Persons which are not still Participants.

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