

Federal Reserve Bank
Operating Circular 12
Effective June 4, 2009

Multilateral Settlement

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Multilateral Settlement

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1.0 INTRODUCTION

1.1 Scope

This Operating Circular and its Appendices (“Circular”) establish the terms under which the Federal Reserve Banks provide settlement services (the “National Settlement Service”) to the Settlers in a Settlement Arrangement solely for the purpose of settling the Balances arising from the clearing activities of the Settlement Arrangement.¹

1.2 Definitions

The following definitions apply in this Circular:

- (a) “Balance” means the amount listed on a Settlement File that a Settler owes (debit Balance) or is due (credit Balance) as a result of the clearing activities of the Settlement Arrangement.
- (b) “Host Reserve Bank” means, with respect to a particular Settlement Arrangement, the Reserve Bank responsible for originating and maintaining the relationship among the Reserve Banks and the Settlers of that Settlement Arrangement.
- (c) “Master Account” means an account of a Settler with reserve and/or clearing balances on the books of a Reserve Bank.
- (d) “Participant” means a member of the Settlement Arrangement. A Participant may be a Settler or settle through a Settler.
- (e) “Processing Reserve Bank” means the Reserve Bank responsible for accepting the Settlement File from the Settlement Agent and processing it in accordance with this Operating Circular.
- (f) “Settlement Account” means an account on the books of the Settlement Reserve Bank that is used during settlement processing to hold funds temporarily until the settlement process is complete.
- (g) “Settlement Agent” means the entity authorized to act on behalf of the Settlers under this Circular.
- (h) “Settlement Arrangement” means a group whose Participants have designated a Settlement Agent to deliver a Settlement File to the Processing Reserve Bank in order to settle the Balances resulting from the clearing activities of the Participants.

¹ The service is available for multilateral Settlement Arrangements that calculate Balances on either a gross or a net basis.

- (i) “Settlement Day” means a calendar day other than a holiday observed by the Reserve Banks or a Saturday or Sunday. A Settler is responsible for settling its Balance on each Settlement Day even if the Settler observes a holiday on that Settlement Day.
- (j) “Settlement File” means the instructions submitted by a Settlement Agent showing the debit and credit Balances of the Settlers.
- (k) “Settlement Reserve Bank” means a Reserve Bank on whose books Settlement Accounts for Settlement Arrangements are maintained.
- (l) “Settlement Window” means the period during a Settlement Day in which the Processing Reserve Bank accepts and processes Settlement Files. The Settlement Window includes a file submission window and a file processing window. The opening and closing hours of the Settlement Window are published separately by the Reserve Bank.
- (m) “Settler” means an entity that has established an account with a Reserve Bank and settles its own Balances, settles Balances for the account of another Participant, or both.
- (n) “Reserve Bank” or “Bank” means one of the twelve Federal Reserve Banks.

1.3 Roles of the Reserve Banks

Settlement ordinarily involves a number of Reserve Banks. Each of the Reserve Banks has issued an Operating Circular identical to this one and is governed by its terms with respect to each Settlement Arrangement in which it has a role. The Host Reserve Bank works with the Settlement Agent to establish and maintain the service for a particular Settlement Arrangement. The Reserve Bank that is to act as Host Reserve Bank is determined by agreement between the Settlers and the Reserve Bank(s). The Host Reserve Bank is also the central communication point for the Settlement Arrangement, but may designate other Reserve Banks to act for it or to deal with particular matters. The Processing Reserve Bank receives the Settlement File from the Settlement Agent and oversees processing of the file. The Reserve Bank that is to act as Processing Reserve Bank is designated by the Reserve Banks. The Settlement Reserve Bank maintains the Settlement Accounts, the accounts used during settlement processing to hold funds temporarily until the settlement process is complete.

2.0 **ACCOUNTS**

2.1 Multiple Master Accounts

Under certain circumstances a Settler may have a Master Account at more than one Reserve Bank. During any period when a Settler is authorized to maintain multiple Master Accounts, any debit or credit made pursuant to this Circular will

be made to the Master Account associated with the identifying number of the Settler used on the Settlement File.

3.0 SETTLEMENT AGENT

3.1 Designation of Settlement Agent

By designating a Settlement Agent in the Settler Agreements (Appendix A), the Settlers authorize the designated entity to act as Settlement Agent for the Settlement Arrangement in accordance with this Circular. The Settlement Agent may be a Settler in the Settlement Arrangement, but is not required to be a Settler. The Settlement Arrangement may establish a procedure to change the institution designated as Settlement Agent from time to time.

3.2 Selection Of Service Options

The Settlement Agent is authorized, on behalf of the Settlement Arrangement, to notify the Host Reserve Bank of the service options selected for the Settlement Arrangement and to select different service options from time to time. For example, the Settlement Agent may notify the Host Reserve Bank whether to provide immediate notification to the Settlement Agent of a debit Balance that could not be functioned or to delay notification pending a later attempt.

4.0 OBTAINING RESERVE BANK SETTLEMENT SERVICES

4.1 Settlement Agreement

Before settlement may begin, each Settler in a Settlement Arrangement shall execute a settlement agreement in the form provided in Appendix A, "Settler Agreement". In the agreement, the Settler shall designate a Master Account on the books of a Reserve Bank that may be debited or credited for the Settler's Balances and shall designate one or more authorized Settlement Agents.

4.2 Settlement Agent Agreement

Before settlement may begin, the Settlement Agent shall execute a settlement agreement in the form provided in Appendix B-1, "Settlement Agent and Security Agreement". The Settlement Agent shall collect a Settler Agreement from each Settler and forward the Settlement Agent and Security Agreement and all the Settler Agreements to the Host Reserve Bank.

4.3 Commencement of Settlement

When the Host Reserve Bank has received properly completed agreements from each Settler and the Settlement Agent, the Host Reserve Bank will advise the Settlement Agent when it may begin submitting Settlement Files. For each new Settler, the Settlement Agent shall provide a Settler Agreement to the Host Reserve Bank and the Host Reserve Bank shall advise the Settlement Agent when the new Settler may be included in Settlement Files. The Host Reserve

Bank shall identify the persons who are authorized to act for the Host Reserve Bank and the addresses where notices and other communications may be sent.

5.0 SETTLEMENT PROCESSING

5.1 File Submission

The Settlement Agent may submit a Settlement File to the Processing Reserve Bank at any time during the file submission window. If the Settlement Agent does not receive an acknowledgement that the Processing Reserve Bank received the Settlement File, the Settlement Agent should promptly notify the Processing Reserve Bank or should notify the Host Reserve Bank which shall notify the Processing Reserve Bank. The Processing Reserve Bank shall not process, on that Settlement Day, a Settlement File received after the end of the file submission window, unless the window is extended. The Processing Reserve Bank may, in its discretion, notify the Settlement Agent that a late-received Settlement File will not be processed or hold it for the opening of the next file submission window.

5.2 Settlement Files

Settlement Files must meet the following requirements:

- (a) Each Settlement File must have been submitted by a currently-authorized Settlement Agent and contain identifying information for a currently-valid Settlement Arrangement;
- (b) For each Participant listed, the File must contain: the Participant's routing number, its Settler's routing number, and the dollar amount of the debit or credit Balance;
- (c) Each Settler listed on a Settlement File must have executed a currently-valid agreement with respect to the Settlement Agent and the Settlement Arrangement; and
- (d) The sum of the debit Balances on the Settlement File must equal the sum of the credit Balances.

The Processing Reserve Bank shall review each Settlement File to determine whether it satisfies these requirements and other procedural and format requirements. If the Settlement File identifies a Participant or a Settler both by name and by routing number and the name and number identify different institutions, the Processing Reserve Bank may rely on the routing number as the proper identification. The Processing Reserve Bank shall notify the Settlement Agent whether the Settlement File passes these and all other requirements or fails any of them.

5.3 Processing Settlement Files

(a) The Processing Reserve Bank shall process a timely Settlement File once the Settlement File successfully passes the review in Paragraph 5.2. If a Settlement Arrangement submits multiple Settlement Files on a Settlement Day, the Processing Reserve Bank shall process those Settlement Files in the order in which they are received. The Processing Reserve Bank shall not begin processing a later-received Settlement File until it completes the processing of a previously-received Settlement File for that Settlement Arrangement.

(b) The Processing Reserve Bank may elect not to process a Settlement File and the Reserve Bank holding the Settler's Master Account may reject a Settler's debit Balance if: the Settler has failed, been suspended, been closed, or the like; or, in the opinion of the Reserve Bank holding the Settler's Master Account, the Settler does not or will not at the end of the day have in its Master Account a balance of actually and finally collected funds sufficient to cover its debit Balance. If the Processing Reserve Bank elects not to process a Settlement File or the Reserve Bank holding the Settler's Master Account rejects a debit Balance, the Processing Reserve Bank will promptly notify the Settler or the Settlement Agent in accordance with Paragraphs 5.2 and 5.5.

5.4 Posting Debit Balances

The Processing Reserve Bank shall attempt to process each debit Balance to the Master Account of the Settler, in accordance with the guidance of the Reserve Bank holding the Settler's Master Account, prior to processing any credit Balances. The Processing Reserve Bank shall attempt to process debit Balances in the order that the debit Balances are listed on the Settlement File. If a debit Balance passes all edits and is not rejected, the Settler's Master Account shall be debited the full amount of the debit Balance and the Settlement Reserve Bank shall immediately credit the Settlement Account the same amount. A debit made to a Master Account and a credit made to the Settlement Account under this paragraph shall each be final and irrevocable at the time it is made. If a debit Balance is rejected, it shall be handled in accordance with Paragraph 5.5, but the Processing Reserve Bank shall continue to process other debit Balances in that Settlement File.

5.5 Rejected Debit Balance

(a) If a debit Balance is rejected, the Processing Reserve Bank shall promptly notify the Settlement Agent that the debit Balance has been rejected. Once the Processing Reserve Bank notifies the Settlement Agent that a debit Balance has been rejected, the Settlement Agent may elect one or more of the following:

- (1) request the Processing Reserve Bank to try again to process the rejected debit Balance;
- (2) arrange to transfer into the Settlement Account by Fedwire[®] funds transfer sufficient funds to permit settlement to proceed; or

(3) instruct the Processing Reserve Bank to cancel settlement of the original Settlement File. Upon receipt of cancellation instructions, the Settlement Reserve Bank shall debit the Settlement Account the amount of each debit Balance on the original Settlement File that had resulted in a credit to the Settlement Account, and the Master Account of the Settler of the original debit Balance shall be credited the same amount. A debit made to the Settlement Account and a credit made to a Master Account under this paragraph shall each be final and irrevocable at the time it is made. The Processing Reserve Bank shall notify the Settlement Agent when cancellation processing has been completed. Following cancellation, the Settlement Agent may, during the file submission window, submit a revised Settlement File for processing and may instruct the Processing Reserve Bank to arrange to debit any remaining balance in the Settlement Account and arrange to credit that amount to the Master Account of one or more of the Settlers.

(b) The Settlement Agent may, as an alternative to the notification described in Paragraph 5.5(a) (“immediate notice”), request that the Settler alone be notified at the time a debit Balance is first rejected (“delayed notice”). The Settler may arrange to deposit additional funds to its Master Account. After approximately 30 minutes, the Processing Reserve Bank will again attempt to process the debit Balance. If at that time the debit Balance passes all edits and is not rejected, the Master Account of the Settler shall be debited the amount of the debit Balance and the Settlement Reserve Bank shall immediately credit the Settlement Account the same amount. A debit made to a Master Account and a credit made to the Settlement Account under this paragraph shall each be final and irrevocable at the time it is made. If the debit Balance is again rejected, the Reserve Bank holding the Settler’s Master Account shall notify the Settler and the Processing Reserve Bank shall notify the Settlement Agent that the debit Balance has been rejected. Prior to changing the applicable notification option, the Settlement Agent shall notify all Settlers in the Settlement Arrangement of the change. The same notification option, either immediate or delayed, shall apply to each Settler in the Settlement Arrangement.

5.6 Posting Credit Balances

The Settlement Account is fully funded once the balance in the Settlement Account is equal to the sum of all debit Balances in the Settlement File. This would occur when:

(a) all debit Balances have been successfully processed in accordance with Paragraph 5.4; or

(b) if not all debit Balances have been successfully processed, the amounts of all rejected debit Balances have been credited to the Settlement Account from another source in actually and finally collected funds, and the Settlement Agent notifies the Processing Reserve Bank that the Settlement Account has been fully funded.

Once the Settlement Account has been fully funded, the Settlement Reserve Bank shall debit the Settlement Account the amount of each credit Balance, and the Settler's Master Account shall be immediately credited in the same amount. Each such debit to the Settlement Account and credit to a Master Account shall be final and irrevocable at the time it is made. When the amounts of all credit Balances have been credited to the Settlers' Master Accounts, the Processing Reserve Bank shall notify the Settlement Agent that the Settlement File has been fully processed.

5.7 End of the Settlement Window

If, at the end of the Settlement Window, one or more debit Balances have not been completely processed, the Processing Reserve Bank may cancel the settlement. Upon cancellation, the Reserve Banks shall follow the cancellation procedure described in Paragraph 5.5 (a)(3).

5.8 Extension of the Settlement Window

The Processing Reserve Bank may, in its sole discretion, extend the file submission window or the file processing window of the Settlement Window.

6.0 GENERAL TERMS

6.1 Settlement Account

The Settlement Account for a Settlement Arrangement shall be used for the joint benefit of all Settlers of the Settlement Arrangement. The Settlement Account may be used only for the settlement of Balances on a Settlement Day. Except as otherwise provided in this Circular, the Settlement Account shall be governed by the Settlement Reserve Bank's Operating Circular No. 1 "Account Relationships". Balances in the Settlement Account, either during the day or overnight, do not earn interest, earnings credits, or other compensation.

6.2 Transmission of Files and Instructions

The Settlement Agent shall transmit Settlement Files and instructions to the Processing Reserve Bank using methods and security procedures agreed upon by the Processing Reserve Bank and the Settlement Agent which shall be the method of verifying the authenticity of Settlement Files and instructions received. A Settlement File or instruction received in the name of the Settlement Agent is effective as the order of the Settlement Agent, and the Processing Reserve Bank is entitled to rely on it and will be deemed to have relied on it in good faith and in the exercise of ordinary care, if the Processing Reserve Bank accepts the order in good faith and in compliance with the security procedure. The Processing Reserve Bank is not entitled to rely on a Settlement File or instruction and will be deemed not to have relied on it in the exercise of ordinary care, if the Settlement Agent proves that the order was not caused, directly or indirectly, by a person:

(a) entrusted at any time with duties to act for the Settlement Agent with respect to payment orders, Settlement Files, instructions, or the security procedure, or

(b) who obtained access to transmitting facilities of the Settlement Agent or who obtained, from a source controlled by the Settlement Agent and without authority of the Processing Reserve Bank, information facilitating a breach of the security procedure, regardless of how the information was obtained or whether the Settlement Agent was at fault. Information includes any access device, computer software, or the like.

6.3 Reserve Bank Liability

No Reserve Bank shall incur any liability either in connection with any failure to achieve settlement or in connection with any action or nonaction by the Settlement Agent, any Settler, any Participant, or any other person, except for a loss caused by the Reserve Bank's own lack of good faith or failure to exercise ordinary care. A Reserve Bank's liability for failure to exercise ordinary care or to act in good faith is limited to damages that are attributable directly and immediately to the failure and shall not include damages that are attributable to the consequences or results of the failure, even if such consequences or results were foreseeable. No claim may be made by the Settlement Agent, a Settler or Participant of the Settlement Arrangement, or any other person against a Reserve Bank relating to a Settlement File or this Circular after one year from the date the Settlement File was submitted by the Settlement Agent. By providing services under this Circular, a Reserve Bank does not act as agent or fiduciary of the Settlement Agent, any Settler, any Participant, or any other person.

6.4 Indemnity

(a) In consideration of the settlement services performed under this Circular, each Settler shall indemnify and hold harmless each Reserve Bank from any loss or expense (including attorneys' fees and expenses of litigation) it may incur in connection with the provision of any services under this Circular to the Settler's Settlement Arrangement, excluding only (i) any loss or expense to the extent the loss or expense resulted from a Reserve Bank's lack of good faith or failure to exercise ordinary care and (ii) a direct loss to a Reserve Bank holding a Settler's Master Account resulting from an overdraft in that account caused by a final and irrevocable debit under this Circular.

(b) A claim for indemnity may be made by a Reserve Bank to the Settlers by notice to the Settlement Agent. Payment of a claim is due within fifteen (15) calendar days after the date notice of the claim is given to the Settlement Agent. In the event the claim is not fully paid when due, a Reserve Bank shall recover the unpaid amount of the claim as follows:

(1) Each entity that was a Settler on the date the Reserve Bank incurred the loss or expense shall be liable for that Settler's proportionate share of the unpaid amount of the claim, as determined by the Settlement

Agent. The Reserve Bank may recover the amount of each Settler's proportionate share as determined under this Subparagraph (b)(1) by directing the Reserve Bank holding the Settler's Master Account to debit that account.

(2) If the Reserve Bank is unable to recover the amount of one or more Settler's proportionate shares as determined under Subparagraph (b)(1), each Settler that was a Settler on the date the Reserve Bank incurred the loss or expense (other than the Settlers from which the Reserve Bank was unable to recover) shall be liable for the unrecovered amount as determined by the Settlement Agent in its sole discretion. The Reserve Bank may recover the amounts from those Settlers by directing the Reserve Banks holding the Settlers' Master Accounts to debit those accounts.

(3) If the Reserve Bank is unable to recover the amount of one or more Settlers as determined under Subparagraph (b)(2), each Settler that was a Settler on the date the Reserve Bank incurred the original loss or expense shall be jointly and severally liable for the full amount of the unpaid claim the Reserve Bank is unable to recover pursuant to Subparagraphs (b)(1) and (b)(2). The Reserve Bank may recover the amount from one or more Settlers by directing the Reserve Banks holding the Settlers' Master Accounts to debit those accounts. The Reserve Bank may rely on this Subparagraph (b)(3) if the Settlement Agent fails to make the determinations required in Subparagraphs (b)(1) or (b)(2) or for any other reason the payment is not made within fifteen (15) calendar days of the date notice of the claim is given to the Settlement Agent.

(c) For purposes of this indemnity, the date that a Reserve Bank incurs a loss or expense is the date the Reserve Bank's cause of action accrues. Nothing in this indemnity affects the right of the Settlement Agent or the Settlers, as between themselves and the other Participants of the Settlement Arrangement, to apportion the amount for which each is responsible to the Reserve Bank.

6.5 Delays

If, due to interruption of communication facilities, emergency conditions, or other circumstances beyond its reasonable control, a Reserve Bank's action is delayed beyond applicable time limits specified in this Circular, the Reserve Bank's time for acting is extended for the time necessary to complete the action. The Reserve Bank will make reasonable efforts to give prompt notice of such a delay to the Settlement Agent which may include providing notice on a specified public Federal Reserve website.

6.6 Fees

The fees for the establishment of the Settlement Account and providing settlement services are set forth in the Reserve Bank's fee schedules as

amended from time to time. Fees shall be charged to the Master Account of the Settler designated by the Settlement Agent.

6.7 Settler and Settlement Agent Information

When requested by a Reserve Bank, each Settler and the Settlement Agent shall, except as prohibited under applicable law, provide the Reserve Bank with information regarding the transactions and processes giving rise to Balances, which may exclude information identifying customers of Settlers. Each Settler authorizes the Settlement Agent to provide this information to the Reserve Bank and the Reserve Bank to provide this information to the Board of Governors of the Federal Reserve System or as required by applicable law.

6.8 Termination and Suspension

(a) A Settler may terminate its participation in a Settlement Arrangement by sending written notice of termination to the Host Reserve Bank and the Settlement Agent. Unless a longer time is specified in the notice, termination shall be effective on the next Settlement Day following receipt of the notice by the Host Reserve Bank.

(b) A Reserve Bank holding a Settler's Master Account may, in its sole discretion, terminate the participation of the Settler by giving written notice to the Host Reserve Bank, the Settler, and the Settlement Agent no later than the Settlement Day prior to the effective date of the termination.

(c) Settlement for a Settlement Arrangement may be terminated in its entirety:

(1) By the Settlement Agent giving written notice of termination to the Host Reserve Bank, termination to be effective upon the date specified in the notice, which must be at least thirty (30) calendar days after the notice is received by the Host Reserve Bank, or such shorter period as may be agreed upon by the Host Reserve Bank and the Settlement Agent; or

(2) By the Host Reserve Bank giving the Settlement Agent written notice of termination, termination to be effective upon the date specified in the notice, which must be at least thirty (30) calendar days after the notice is given by the Host Reserve Bank, or such shorter period as may be agreed upon by the Host Reserve Bank and the Settlement Agent.

(d) If the Processing Reserve Bank, after consulting with the Reserve Banks holding the Settlers' Master Accounts and the Board of Governors of the Federal Reserve System, determines that the risk to the Reserve Banks or the payments system resulting from this Circular has materially increased as a result of changed circumstances that do not permit giving thirty (30) days' advance written notice, the Processing Reserve Bank may suspend settlement under this Circular for as long as such increased risk continues, by giving written notice to the Settlement Agent not later than the Settlement Day prior to the effective date of the suspension.

(e) The Settlement Agent may terminate the participation of a Settler by sending written notice to the Settler and the Host Reserve Bank that the Settler is no longer a Settler in the Settlement Arrangement. This notice shall be effective on the next Settlement Day following receipt of the notice by the Host Reserve Bank.

(f) No termination or suspension under this Circular shall affect the duties or responsibilities of any party arising out of or relating to any settlement initiated prior to the day on which termination or suspension is effective.

6.9 Amendment

We reserve the right to amend this Circular at any time. Any amendment shall apply only to transactions taking place on or after the effective date of the amendment.

6.10 Applicable Law

This Circular shall be construed in accordance with and governed by Federal law, and, with respect to a particular Settlement Arrangement, the laws of the State in which the head office of the Host Reserve Bank is located, to the extent those laws are not inconsistent with Federal law.

"Fedwire" is a registered service mark of the Federal Reserve Banks.

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Appendix A Settler Agreement

Multilateral Settlement

[To be typed on letterhead stationery of Settler]

[Date]

Federal Reserve Bank of _____

Attention: _____ Department

Host Reserve Bank:

We are a Settler in _____, a Settlement Arrangement, and request that you settle our Balances. [We agree to settle the Balances on a Settlement File for the following institutions:

_____]

We agree to the terms of your Operating Circular No. 12 as revised from time to time, and we authorize the Reserve Bank that holds our Master Account to debit or credit our Master Account as provided by that Operating Circular. We (designate _____ as Settlement Agent) (or, if the active Settlement Agent rotates among a group of entities, list each specific Settlement Agent and when each will be the active Settlement Agent). The Settlement Agent will provide you a list of names of all the current Settlers in this Settlement Arrangement. The Settlement Agent may from time to time inform you of additional Settlers in the Settlement Arrangement or a successor Settlement Agent, and is authorized to otherwise carry out the responsibilities of a Settlement Agent as specified in the Operating Circular.

(Name of Settler)

By: _____

Title: _____

Appendix B

Multilateral Settlement Security Procedures

1.0 GENERAL

1.1 The following Security Procedures are offered by the Processing Reserve Bank to each Settlement Agent that is authorized to send a Settlement File to the Processing Reserve Bank for the purpose of verifying the authenticity of a Settlement File or a communication retrying or canceling a Settlement File (collectively a "Settlement Instruction"). The Security Procedures are not used to detect an error in the transmission or the content of the Settlement Instruction.

1.2 Prior to selecting a Security Procedure, a Settlement Agent may discuss with the Processing Reserve Bank the various options offered by the Processing Reserve Bank to determine which option best satisfies its business needs given the size, type and frequency of Settlement Instructions normally issued by the Settlement Agent to the Processing Reserve Bank.

2.0 ON-LINE SECURITY PROCEDURE

2.1 The Reserve Banks offer one or more On-Line Security Procedures. On-Line Security Procedures are available to a Settlement Agent that issues a Settlement Instruction by means of an encrypted communication between its facilities and the facilities of the Processing Reserve Bank utilizing a hardware/software system specified by a Reserve Bank.

2.2 Each of the On-Line Security Procedures is comprised of the following:

- Security protocols embedded in the hardware and software associated with the equipment used to initiate, transmit and receive a Settlement Instruction;
- Access controls that grant access to the National Settlement Service, such as identification codes, confidential passwords, and digital certificates on tangible media; and
- Encryption of a Settlement Instruction during the transmission process over a private network or virtual private network connection.

In addition, the Settlement Agent must implement its own physical and logical security as well as management controls that appropriately protect the hardware, software, and access controls used in the National Settlement process from unauthorized access and use. A Settlement Agent must also have controls in place to ensure that initiation of a Settlement File can only occur from locations it has authorized and requires action by more than one of its employees.

2.3 The procedures are more specifically described in the security documentation provided by the Reserve Bank and amended from time to time.

For FedLine Direct[®] customers this documentation includes:

- the FedLine Direct[®] Security and Implementation Guide (FSIG),
- Operating Circular 5 to the extent not inconsistent with this Circular;

For FedLine Advantage[®] customers the documentation includes:

- FedLine Advantage[®] Subscriber Guide,
- FedLine Advantage[®] Technical Support Liaison Guide,
- FedLine Advantage[®] EUAC Access Management Guide, and
- Operating Circular 5 to the extent not inconsistent with this Circular, including the Certification Practice Statement and the Password Practice Statement.

The Settlement Agent is responsible for implementing the procedures set forth in the applicable security documentation provided to it by the Reserve Bank as well as any subsequent modification to the procedures that are designed to strengthen the Security Procedures. If the Settlement Agent changes a default setting or fails to implement a “strong recommendation” described in the documentation provided the Reserve Bank, the Settlement Agent has unilaterally altered the security procedure and solely bears any resulting loss.

3.0 OFF-LINE SECURITY PROCEDURE

3.1 The Off-Line Security Procedure is available when a Settlement Agent that normally issues a Settlement Instruction by means of an encrypted communication using one of the On-Line Security Procedures is unable to do so because of an equipment or communications failure or other circumstances.

3.2 In general, when a Settlement Instruction is issued, the Off-Line Security Procedure involves a telephone call initiated by an authorized employee of the Settlement Agent followed by the transmission by e-mail or facsimile of a Settlement Instruction signed (in the case of a facsimile) by an authorized employee of the Settlement Agent or sent from the e-mail address of an authorized employee of the Settlement Agent.

3.3 The names and e-mail addresses of the employees of the Settlement Agent who are authorized to issue a Settlement Instruction must be provided by the Settlement Agent to the Processing Reserve Bank. The list of authorized employees must be in writing and must be signed by an individual vested with authority to conduct business on behalf of the Settlement Agent

“FedLine Advantage” and “FedLine Direct” are registered service marks of the Federal Reserve Banks.

Appendix B-1 Settlement Agent and Security Agreement

Multilateral Settlement

[To be typed on letterhead stationery of Settlement Agent]

Date: _____
Federal Reserve Bank of _____
Attention: _____ Department

Host Reserve Bank:

We have been designated Settlement Agent of _____, a Settlement Arrangement, and accept that designation.

(Describe nature of Settlement Arrangement)

We agree to the terms of your Operating Circular No. 12 and its Appendix B and if applicable C ("Circular") as they may be revised from time to time. Enclosed is a list of the current Participants and Settlers of the Settlement Arrangement and a Settler Agreement from each of the Settlers. We will inform you of any change in Participants or Settlers.

We designate _____ as the Settler whose Master Account may be debited for any fees or charges for the Settlement Account and the services provided by the Reserve Banks.

If we use an encrypted communications line with access controls for the transmission of a Settlement File to the Processing Reserve Bank, we choose one of the On-Line Security Procedures offered as generally described in Appendix B to the Circular. This Security Procedure will be used for the purpose of verifying that a Settlement File or a communication retrying or canceling a Settlement File (collectively a "Settlement Instruction") was issued by us.

If we use the telephone, facsimile or e-mail to transmit a Settlement Instruction to the Processing Reserve Bank, we reject the On-Line Security Procedures offered by the Processing Reserve Bank and choose the Off-Line Security Procedure generally described in Appendix B to the Circular. This Security Procedure will be used for the purpose of verifying that a Settlement Instruction was issued by us.

Whenever we chose to use one of your Security Procedures we reject the other Security Procedures. The Settlement Arrangement agrees to be bound by any Settlement Instruction, whether or not authorized, if it was issued in our name and accepted by the Processing Reserve Bank in compliance with the Security Procedure we selected.

We understand that the On-Line and Off-Line Security Procedures will not be used to detect an error in the transmission or content of a Settlement Instruction.

We also understand and agree that the Security Procedures established by this Agreement may be changed only by an amendment to Appendix B, which may be published on the Reserve Bank's website, or other written agreement. This Agreement may not be changed by an oral agreement or by a course of dealing or custom.

(Name of Settlement Agent)

By: _____

Title: _____

Appendix C

FedPayments[®] Manager for the National Settlement Service

1.0 GENERAL

- 1.1 FedPayments[®] Manager is an application running on Reserve Bank servers that a Settlement Agent uses to create and send a Settlement File to the Processing Reserve Bank or an instruction retrying or canceling a Settlement File and to receive National Settlement Service notices. The Reserve Banks own and operate FedPayments[®] Manager. A Settlement Agent using FedPayments[®] Manager has only those rights of use expressly provided herein.
- 1.2 In no event shall a Settlement Agent or its officers, employees, agents, or contractors:
 - 1.2.1 modify, add to, translate, reverse assemble, reverse compile, decompile or otherwise attempt to derive the source code for FedPayments[®] Manager;
 - 1.2.2 introduce malicious code or other information (e.g., virus, trojan horse, worm) which could adversely impact the performance of the FedPayments[®] Manager; or
 - 1.2.3 attempt to interfere with the normal operation of a Reserve Bank server or of the network over which FedPayments[®] Manager is provided.
- 1.3 A Settlement Agent accessing the National Settlement Service through the FedLine Advantage[®] or FedLine Direct[®] access channel uses FedPayments[®] Manager when sending a Settlement Instruction.
- 1.4 A Settlement Agent may use FedPayments[®] Manager to format or send Settlement Instructions to be submitted to the National Settlement Service and to receive notices related to the processing status of a Settlement Instruction. A Settlement Agent that uses FedPayments[®] Manager to send a Settlement Instruction or receive notices agrees to the terms and conditions in this Appendix C.
- 1.5 Unless otherwise stated in this Appendix C, a term defined in Operating Circular 12 has the same meaning in this Appendix. In addition, for purposes of this Appendix C, the term "Settlement Instruction" means a Settlement File or an instruction retrying or canceling a Settlement File.

2.0 MESSAGE STATUS

- 2.1 A Settlement File entered into FedPayments[®] Manager may be deleted by the Settlement Agent at any time prior to the release of the Settlement File to the National Settlement Service.
- 2.2 A Settlement Instruction entered into FedPayments[®] Manager does not give rise to any obligation on the part of a Reserve Bank to act with respect to the Settlement Instruction unless and until the Settlement Instruction is received by the National Settlement Service.
- 2.3 A Settlement Instruction is received by the National Settlement Service when the National Settlement Service acknowledges the Settlement Instruction. Once received by the National Settlement Service, Operating Circular 12 governs the processing of the Settlement Instruction by the Reserve Banks.
- 2.4 A Settlement File entered into FedPayments[®] Manager that shows a status of “awaiting service availability” is released by the FedPayments Managersm to the National Settlement Service when the National Settlement Service opens.
- 2.5 A Settlement File that has been released by the FedPayments[®] Manager to the National Settlement Service for processing that has a status of “submitted for processing” at the end of the Settlement Window shall be cancelled.
- 2.6 A Settlement File that has been released by FedPayments[®] Manager to the National Settlement Service will not necessarily be accepted by the National Settlement Service.

3.0 NOTICES

- 3.1 A Settlement Agent that uses FedLine Advantage[®] designates FedPayments[®] Manager as the proper place for sending notices.
- 3.2 A notice to the Settlement Agent that a Settlement File has been accepted for processing is reflected in FedPayments[®] Manager as a Settlement File under Today's Files the status of which is “submitted for processing” with the additional information column showing “accepted for processing”.
- 3.3 A notice to a Settlement Agent that a Settlement File has been rejected for processing is reflected in the FedPayments[®] Manager as a Settlement File under Today's Files the status of which is “rejected”.

- 3.4 A notice to a Settlement Agent that a debit Balance has been rejected is reflected in the FedPayments[®] Manager as a Settlement File under Today's Files the status of which is "submitted for processing" with the additional information column showing "entry(s) rejected for insufficient funds".
- 3.5 A notice to a Settlement Agent that a Settlement File has been cancelled is reflected in the FedPayments[®] Manager as a Settlement File under Today's Files the status of which is "completed" with the additional information column showing "cancelled".
- 3.6 A notice to a Settlement Agent that a Settlement File has been fully processed is reflected in the FedPayments[®] Manager as a Settlement File under Today's Files the status of which is "completed".
- 3.7 A Settlement Agent using the FedLine Advantage[®] access channel is deemed to have received a notice sent by a Reserve Bank at the time that the notice is made available to the Settlement Agent in FedPayments[®] Manager if FedPayments[®] Manager is open, or, if FedPayments[®] Manager is not open, at the time that FedPayments[®] Manager reopens with the posted notice. It is the responsibility of a Settlement Agent using the FedLine Advantage[®] access channel to monitor FedPayments[®] Manager for incoming notices and to manage its communications connection (including its browser) to permit the Settlement Agent to access FedPayments[®] Manager throughout a Settlement Day.

4.0 TREATMENT OF INFORMATION

- 4.1 Information created or received in FedPayments[®] Manager is treated as confidential information of the Settlement Agent and the Settlers and will be used by the Reserve Banks only as provided in Paragraph 4.2 below.
- 4.2 The Reserve Banks may create access and use information in FedPayments[®] Manager:
 - 4.2.1 To respond to a request of the Settlement Agent that entered the information into FedPayments[®] Manager;
 - 4.2.2 To provide Off-line processing support;
 - 4.2.3 To perform routine backup and maintenance;
 - 4.2.4 For reconciliation purposes during a National Settlement Service or FedPayments[®] Manager contingency;
 - 4.2.5 To resolve the status of a Settlement Instruction that has been released to the National Settlement Service but, after a reasonable

period of time, has not been accepted or rejected by the National Settlement Service;

4.2.6 As required by law; or

4.2.7 As permitted by law if such use is also consistent with the Reserve Banks' information access policy.

4.3 A Settlement Agent may view in FedPayments[®] Manager and print a Settlement File in FedPayments[®] Manager only during the current cycle date and the preceding 15 months. Certain audit trail information is also available for viewing and printing in FedPayments[®] Manager for this period. All information in FedPayments[®] Manager is removed if it is more than 15 months old.

4.4 All Settlement Instructions in FedPayments[®] Manager on a cycle date are moved from the Today's Files page to the Past Files page at the end of that Settlement Day, including Settlement Files that are not closed during the Settlement Day. A Settlement File is closed when it is reflected in FedPayments[®] Manager as "deleted", "rejected" or "completed."

4.5 Any information backed-up from FedPayments[®] Manager is also subject to the limitations in Paragraph 4.2.

5.0 HOURS OF OPERATION

5.1 FedPayments[®] Manager is available from 7 p.m. ET each day that precedes a Settlement Day until 6 p.m. ET the next day. The Reserve Banks may decide, in their sole discretion, to open or close FedPayments[®] Manager at an earlier time to facilitate special market needs. The Reserve Banks may also elect, in their sole discretion, to open FedPayments[®] Manager for the convenience of a customer outside of FedPayments[®] Manager's normal operating hours. Files submitted for processing during those hours will have a status of "awaiting service availability" and will be processed when NSS opens for business on the next settlement day.

5.2 If there is an extension of the National Settlement Service operating hours, FedPayments[®] Manager may also be extended. The reopening of FedPayments[®] Manager may also be affected if there is a National Settlement Service extension.

5.3 The Reserve Banks reserve the right to restrict access to FedPayments[®] Manager at any time the Reserve Banks have reason to believe access poses a risk to the security or proper functioning of FedPayments[®] Manager or the National Settlement Service.

6.0 LIABILITY

- 6.1 The Reserve Banks are not liable for loss or damage resulting from a problem beyond their reasonable control. This includes, but is not limited to, loss or damage resulting from any delay, error or omission in the transmission of any Settlement Instruction to or notices from FedPayments[®] Manager or resulting from the services provided by an internet service provider. Reserve Banks are not liable for any loss or damage resulting from FedPayments[®] Manager being unavailable. Additionally, Reserve Banks are not liable for loss or damage resulting from acts of war, riots, civil unrest, strikes, labor disputes, acts of terrorism, acts of God or acts of nature.
- 6.2 Nothing in this Circular shall be deemed to relieve a Reserve Bank from responsibility for its own failure to exercise ordinary care or to act in good faith. However, a Reserve Bank's liability is strictly limited to damages that are attributable directly and immediately to the failure and shall not include lost profits, claims by third parties, or consequential or incidental damages, even if the Reserve Bank has been informed of the possibility of such damages.

"FedPayments," "FedLine Advantage," and "FedLine Direct" are registered service marks of the Federal Reserve Banks.