



**Federal Reserve Banks
Operating Circular No. 4**

AUTOMATED CLEARING HOUSE ITEMS

Effective September 18, 2023

**FEDERAL RESERVE BANKS
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1.0 GENERAL

- 1.1 Operating Circular 4, its appendices, the FedACH Processing Schedule, as amended from time to time, and our fee schedules govern the clearing and settlement of commercial automated clearing house (ACH) credit and debit items (including credit items subject to Article 4A) by the Federal Reserve Banks, sending banks, and receiving banks. Government ACH items are governed by Appendix D to this Circular. Each Reserve Bank has issued a Circular identical to this one.
- 1.2 Operating Circular 4 is issued pursuant to Sections 4, 11A, 13, 16 and 19 of the Federal Reserve Act and related statutes. Except as otherwise provided in paragraph 1.3, Operating Circular 4 is binding on a sending bank that sends items to a Reserve Bank, a receiving bank that receives items from a Reserve Bank, an account holder that has agreed to settle for items under Operating Circular 4, and any other party interested in an item that agrees to Operating Circular 4 or that is otherwise bound by it.
- 1.3 The provisions of Article 4A are incorporated in Operating Circular 4 with respect to credit items subject to Article 4A. In the event of inconsistency between the provisions of Operating Circular 4 and Article 4A with respect to such a credit item, the provisions of this Circular shall control. In regards to credit items subject to Article 4A, Operating Circular 4 is an operating circular as referred to in Section 4A-107 of Article 4A, and is not a funds transfer system rule as defined in Article 4A. Nevertheless, Operating Circular 4 governs the rights and obligations of parties to a funds transfer subject to Article 4A to the same extent as if Operating Circular 4 were a funds transfer system rule. Under Article 4A, Operating Circular 4 is binding on parties to an item besides the sending and receiving banks if the parties have notice that the Reserve Banks' funds transfer system might be used for the transaction and that Operating Circular 4 will apply, unless those other parties have agreed otherwise.
- 1.4 (a) Except as provided in paragraph 1.4(b), the Operating Rules of the National Automated Clearing House Association (Nacha), as amended from time to time, are incorporated in Operating Circular 4 as applicable ACH rules with respect to items, regardless of whether the sending bank or receiving bank is a member of an ACH association.
- (b) Not incorporated in Operating Circular 4 as applicable ACH rules are provisions of the Nacha Rules that:
- (i) conflict with applicable law;
 - (ii) with respect to credit items subject to Article 4A, conflict with provisions of Article 4A that may not be varied;
 - (iii) limit the applicability of the ACH rules to members of an ACH association;
 - (iv) require dues or fees (other than a reasonable fee for copies of the ACH rules and fees collected or distributed by the Reserve Bank as provided in paragraph 1.6 ;
 - (v) require execution of agreements by participating banks (such as

- settlement or indemnity agreements);
- (vi) govern arbitration of disputes among participants; or
- (vii) provide for payment of legal expenses to an ACH association in suits against the association.

Operating Circular 4 preempts or supersedes the applicable ACH rules or other arrangements among parties to ACH items only to the extent that the provisions of those arrangements are inconsistent with Operating Circular 4.

- 1.5** Any ACH item that is sent to the Reserve Bank for processing and settlement is subject to the provisions of this Operating Circular 4. The Reserve Bank processes such items as an ACH operator and does not collect, present, or return such items as a “collecting” or “returning” bank as those terms are used in the Uniform Commercial Code or in Regulation CC. Neither Operating Circular 3 nor Regulation J applies to the Reserve Bank’s processing and settlement of any ACH item.
- 1.6** Any price or fee that is established by the Nacha Operating Rules may be collected and distributed by the Reserve Bank if approved by the Board of Governors of the Federal Reserve System.

2.0 DEFINITIONS

2.1 AS USED IN OPERATING CIRCULAR 4:

- (a) **account** means a Master Account as defined in Operating Circular 1 as amended from time to time.
- (b) **actually and finally collected funds** means cash or any other form of payment that is, or has become, final and irrevocable.
- (c) **Administrative Reserve Bank** means the Reserve Bank in whose District an entity is located, as determined under the procedure described in Regulation D (12 CFR 204.3(b)(2)), even if the entity is not otherwise subject to that section.
- (d) **applicable ACH rules** means the rules and agreements designated in Operating Circular 4 as applicable to designated ACH transactions. See paragraph 1.4.
- (e) **Article 4A** means Article 4A of the Uniform Commercial Code as set forth in Appendix B of Regulation J (12 CFR Part 210, Subpart B). It includes provisions of Article 1 referred to in Article 4A as approved from time to time by the National Conference of Commissioners on Uniform State Laws and the American Law Institute.
- (f) **automated clearing house** or **ACH** means a facility that clears debit and credit items for banks.
- (g) **bank** means (i) a depository institution as defined in Section 19(b)(1.)(A.) of

the Federal Reserve Act (12 U.S.C. 461(b)); (ii) a branch or agency of a foreign bank maintaining reserves under Section 7 of the International Banking Act of 1978 (12 U.S.C. 347d, 3105); (iii) a department, agency, instrumentality, independent establishment, or office of the United States, or a wholly owned or controlled Government corporation; or (iv) another entity for which a Reserve Bank directly provides ACH services.

- (h) **banking day** means the part of a day during which a Reserve Bank, account holder, sending bank or receiving bank is open for the receipt, processing or transmission of items. See Appendix B for the Reserve Banks' ACH banking day. With respect to a credit item subject to Article 4A, banking day means a funds transfer business day.
- (i) **credit item** means an item a sending bank sends to a Reserve Bank for debit to the sending bank's settlement account and for credit to a receiving bank's settlement account. Unless otherwise expressly stated, the term includes a credit item subject to Article 4A.
- (j) **credit item subject to Article 4A** means a credit item that is a payment order as defined in Article 4A. The term does not include an ACH credit transaction any part of which is governed by the Electronic Fund Transfer Act, as amended, an inter-Reserve Bank settlement wire, or a non-dollar message such as a zero dollar return, prenotification, notification of change, or automated enrollment.
- (k) **debit item** means an item a sending bank sends to a Reserve Bank for credit to the sending bank's settlement account and for debit to a receiving bank's settlement account.
- (l) **effective date** means the date for settlement that a sending bank specifies in an item. See paragraph 8.
- (m) **effective date window** means the minimum and maximum period of days after the Reserve Bank processing date within which the effective date must fall to receive desired settlement. See paragraph 8.
- (n) **FedACH Processing Schedule** means the schedule published by the Reserve Banks on the FRBservices.org® website stating (1) the Cut-Off Times and the opening and closing times for each funds-transfer business day and (2) each holiday observed by the Reserve Banks that is not a funds-transfer business day. The Reserve Banks may amend the Funds Schedule from time to time.
- (o) **item** means an instruction for the payment of money that is handled by a Reserve Bank for processing or settlement under this Operating Circular 4. Item does not include: (i) an item or an electronic item as defined in Section 210.2 of Regulation J that is handled under Subpart A governing the collection of checks and other items; (ii) a payment order as defined in Section 210.26 of Regulation J that is handled under Subpart B governing funds transfers through the Fedwire® funds transfer system; (iii) a payment instruction subject to 31 CFR Parts 210 or 370, or other Treasury Department regulations governing Federal payments by the ACH method; or (iv) a wire

transfer of securities by a Reserve Bank. Unless the context otherwise requires, the term includes both a credit item and a debit item.

- (p) **receiving bank** means a bank designated in an item to receive the item from a Reserve Bank. With respect to a credit item subject to Article 4A, the term receiving bank may include a beneficiary as defined in Article 4A.
- (q) **receiving point** means a device that is connected to the Reserve Bank's electronic systems and is designated or used by a bank for the purpose of receiving items from a Reserve Bank.
- (r) **same day item** means a forward or return item that (i) meets the requirements specified in paragraph 3.4 (b) of this Operating Circular and (ii) is received by the Reserve Bank by the applicable same day settlement transmission deadlines specified in the FedACH Processing Schedule.
- (s) **sending bank** means a bank designated in an item as sending the item to a Reserve Bank.
- (t) **sending point** means a device that is connected to the Reserve Bank's electronic systems and is designated or used by a bank for the purpose of sending items to a Reserve Bank.
- (u) **servicing Reserve Bank** means the Reserve Bank that is designated as a sending or receiving bank's primary contact for communications relating to ACH items.
- (v) **settlement account** means the account at a Reserve Bank that the sending bank or receiving bank maintains, or a correspondent bank's account that the sending bank or receiving bank uses to settle items.
- (w) **settlement date** means the date for settlement of an item as provided in Operating Circular 4.
- (x) unless the context otherwise requires, terms not defined in this paragraph but defined in the applicable ACH rules have the meanings given in such rules.

3.0 SENDING CREDIT AND DEBIT ITEMS

- 3.1 A sending bank that maintains or uses a settlement account at a Reserve Bank may send an item to any Reserve Bank, provided the receiving bank maintains or uses a settlement account for ACH items at a Reserve Bank
- 3.2 For purposes of Operating Circular 4 and Article 4A, the sending bank is deemed to have sent an item to its Administrative Reserve Bank, regardless of which Reserve Bank holds the sending bank's settlement account, maintains its electronic connection or receives the item. With respect to any credit item that is subject to Article 4A, no Reserve Bank, other than the sending bank's Administrative Reserve Bank and the receiving bank's Administrative Reserve Bank, is a party to the item or a sender or receiving bank for purposes of Article 4A.

- 3.3** The sending bank's or receiving bank's Administrative Reserve Bank may instruct another Reserve Bank concerning the other Reserve Bank's handling of or settlement for an ACH item for purposes of managing the Administrative Reserve Bank's risk.
- 3.4** (a) An item must be in the media the Reserve Banks prescribe and in the format prescribed by the applicable ACH rules.
- (b) A same day item must specify in the effective entry date field either no value or any value other than a date that is later than the banking day the Reserve Bank receives the item, may use any Standard Entry Class code except IAT or ENR, and must not exceed the dollar amount limit for a same day item specified in the Nacha Operating Rules.
- 3.5** If a sending bank uses any Reserve Bank service that permits or requires the sending bank or the Reserve Bank to take additional steps to release the file for processing, the file will be considered to have been sent to the Reserve Bank for purposes of this Operating Circular 4 at the time the sending bank (or the Reserve Bank, if the Reserve Bank has expressly agreed to do so) has completed all steps that are necessary to release the file for processing by the FedACH® application. Files consisting of ACH items that are transmitted to the Reserve Bank's systems by a bank must be released for processing prior to the end of day deadline, or the files will be rejected or deleted. Files consisting of same day ACH items must be released for processing prior to the final same day deadline for that banking day or the items will be processed as next day items. The Reserve Bank assumes no duty to inform a bank that the bank has transmitted an ACH file but has not released that file for processing.
- 3.6** (a) A sending bank may designate an ACH operator (other than a Reserve Bank) or an entity that owns or operates the sending point as its agent to send items to a Reserve Bank. It is the sending bank's responsibility to ensure that its agent complies with the sending bank's obligations under Operating Circular 4.
- (i) By sending items to the Reserve Bank through an ACH operator other than a Reserve Bank, a sending bank designates the ACH operator as its agent for accessing the Reserve Bank's systems for processing ACH items, authorizes the ACH operator to select which security procedure to use to access the Reserve Bank's systems, and authorizes the ACH operator to execute Appendix A1, "ACH Security Procedure Agreement," on behalf of the sending bank. In acting as agent of the sending bank, the ACH operator (other than a Reserve Bank) is not a sender or receiving bank as defined in Article 4A or a party to the item.
- (ii) By sending items to the Reserve Bank from a sending point that is owned or operated by an entity other than the sending bank itself, a sending bank designates the entity that owns or operates the sending point as its agent for accessing the Reserve Bank's systems for processing ACH items, authorizes such agent to select which security procedure to use to access the Reserve Bank's systems, authorizes such agent to execute Appendix A1, "ACH Security Procedure Agreement," on behalf of the sending bank, and authorizes the

Reserve Banks to act on the instructions of such agent with respect to the handling of items sent to the Reserve Bank by the agent on behalf of the sending bank. In acting as agent of the sending bank, the entity that owns or operates the sending point is not a sender or receiving bank as defined in Article 4A or a party to the item.

- (iii) Prior to sending items to a Reserve Bank through an ACH operator other than a Reserve Bank or from a sending point that is owned or operated by an entity other than the sending bank itself, the sending bank must provide notice to the Reserve Bank in a form specified by the Reserve Bank.
 - (iv) The sending bank's agent's access to the Reserve Bank's electronic systems is governed by Reserve Bank Operating Circular 5, as amended from time to time, and the applicable Certification Practice Statement, as amended from time to time.
- (b) The sending bank authorizes each Reserve Bank to act upon items, information, and instructions sent to a Reserve Bank by the sending bank's agent that the agent identifies as having been authorized by the sending bank.
- (c) The sending bank agrees that:
- (i) its agent will be granted credentials authorizing such agent to access the Federal Reserve Banks' systems for the purposes of the FedACH services;
 - (ii) its agent will use those credentials to act on behalf of the sending bank; and
 - (iii) its agent will use the same credentials to access the Federal Reserve Banks' FedACH systems on behalf of other sending banks that use the same agent to access the Reserve Bank's electronic systems. It is the responsibility of the sending bank and its agent to establish controls sufficient to assure that the agent properly segregates the items, information, and instructions of a sending bank from any items, information, or instructions of other sending banks. The Federal Reserve Banks are not required to take, and will not take, any measures to ensure that the sending bank's work is properly identified or segregated by the agent. The sending bank authorizes each Reserve Bank to rely on the agent's identification of items, information, and instructions as having been originated or authorized by the sending bank.
- (d) The sending bank agrees to be bound by the agent's acts or omissions with respect to items that are handled by a Federal Reserve Bank pursuant to Operating Circular 4.
- (e) The sending bank authorizes its Administrative Reserve Bank to settle for items sent to or received from a Reserve Bank by the sending bank's agent, and to obtain from the sending bank payment as provided in this Operating Circular 4 for any fees owed to a Reserve Bank in connection with items sent to a Reserve Bank or received from a Reserve Bank by the sending bank's agent.

- (f) The sending bank agrees that the Reserve Bank may send items to the sending bank by delivering or transmitting such items to the sending bank's agent.
- (g) The Reserve Banks may rely on a sending bank's designation of an agent until the designation is revoked in writing and the Reserve Banks have had a reasonable amount of time to respond to the revocation.
- (h) Any obligations regarding settlement of items that exist at the time of any termination of the agency appointment shall survive the termination of the agency appointment.
- (i) The sending bank agrees to indemnify, defend, and hold the Reserve Banks harmless against any claim, loss, cost, or expense resulting from (i) the acts or omissions of the sending bank's agent; (ii) a Reserve Bank's acts or omissions in carrying out the instructions of such agent within the scope of the agency appointment; or (iii) the third party access arrangement including, but not limited to, reasonable attorney's fees and expenses of litigation, except, with respect to (i) through (iii), for any claim, loss, cost, or expense arising solely out of a Reserve Bank's failure to exercise ordinary care or to act in good faith.

4.0 SECURITY PROCEDURES

- 4.1** The security procedures a Reserve Bank offers to verify the authenticity of the source of an item are described in Appendix A1 of Operating Circular 4. Before sending an item to a Reserve Bank, a sending bank (or its agent, acting under written authority from the sending bank) must execute an agreement with its servicing Reserve Bank in the form of Appendix A1, copies of which are available from the Reserve Banks. If a sending bank sends an item to a Reserve Bank through an agent, the agent must execute an agreement in substantially the same form. A sending bank agrees to any security procedure used by the sending bank or by its agent in sending an item to a Reserve Bank.
- 4.2** Each sending and receiving bank shall prevent any disclosure of any aspects of the security procedures offered by the Reserve Bank, as provided in Reserve Bank Operating Circular 5. The sending or receiving bank shall notify its servicing Reserve Bank immediately if the confidentiality of these security procedures is compromised, and shall act to prevent the security procedure from being further compromised.

5.0 SENDING BANK'S AGREEMENTS

- 5.1** By sending an item to a Reserve Bank, the sending bank:
 - (a) agrees to comply with the applicable ACH rules and agrees that those rules govern the relationships among the sending bank, the receiving bank and other parties interested in the item and covered by those rules;
 - (b) authorizes the Reserve Banks to process the item in accordance with

Operating Circular 4;

- (c) agrees that the Reserve Banks process the items as ACH operators and do not collect, present, or return the items under Operating Circular 3 or Regulation J as “collecting” or “returning” banks, as those terms are used in the Uniform Commercial Code or Regulation CC;
- (d) authorizes the Reserve Bank holding the sending bank’s settlement account to debit the amount of a credit item, or credit the amount of a debit item, to the sending bank’s settlement account on the settlement date; and
- (e) agrees to indemnify each Reserve Bank processing or settling for the item for any loss or expense (including reasonable attorneys’ fees and expenses of litigation) incurred by the Reserve Bank as a result of any action or lack of action taken with respect to the item by the Reserve Bank in accordance with Operating Circular 4 except, for any claim, loss, cost, or expense arising solely out of a Reserve Bank’s failure to exercise ordinary care or to act in good faith.

5.2 The agreements, authorizations and indemnity in paragraph 5.1 do not limit any other agreement, authorization or indemnity, not inconsistent with paragraph 5.1, made by a sending bank to a receiving bank, a Reserve Bank or any other person.

5.3 PREFUNDING

The Administrative Reserve Bank of a (sending or correspondent) bank that settles for credit item originations may require the bank to prefund in accordance with Appendix C credit item originations that settle through the bank’s account, if the Administrative Reserve Bank has determined to monitor the bank’s account in real time. If credit item originations are not prefunded when required, they may be rejected.¹ In the event of prefunding, a Reserve Bank will substitute itself for the sending or correspondent bank’s settlement obligation with respect to the credit items, and Appendix C shall supersede other provisions of Operating Circular 4 that are inconsistent with Appendix C.

6.0 PROCESSING OF ITEMS

6.1 The Reserve Banks process items in accordance with the applicable ACH rules and Operating Circular 4. A Reserve Bank may reject, or may impose conditions to its processing of, any item for any reason. A Reserve Bank will not act on

¹ In certain circumstances, the Reserve Bank may be unable to determine whether a sending bank is able to prefund its credit item originations. In such circumstances prefunding cannot occur, and any credit item originations settling to the account of a monitored bank may not be processed until the Reserve Bank is able to determine whether the sending bank has sufficient funds available in the designated settlement account. If the Reserve Bank is unable to obtain such information prior to the final same day deadline on a banking day, any batch(es) containing same day items that have been pended may result in same day items being settled next day. If the Reserve Bank is unable to obtain such information prior to the end of day cutoff, any batch(es) that have been pended may be rejected. The Reserve Bank is not liable for any loss or damage that results from delays in processing credit item originations, or from the rejection of credit items, settling to the account of a monitored institution in these circumstances.

instructions in an item other than information required by format specifications in applicable ACH rules. If a Reserve Bank notifies a sending bank of the receipt of a suspected duplicate file or any other problem, the Reserve Bank will not process the file without approval by the sending bank or its agent. Except as expressly provided in Operating Circular 4, a Reserve Bank does not have or assume any responsibility for compliance with applicable ACH rules by a sending bank, receiving bank, or ACH operator (other than a Reserve Bank). A Reserve Bank may record by audio recording device any telephone call relating to an item.

6.2 The Reserve Banks provide an acknowledgment to the sending bank that a Reserve Bank has received ACH files by electronic transmission and has performed limited processing of the files, as provided in applicable ACH rules. An acknowledgment does not mean that a Reserve Bank has accepted, and will not reject, the items contained in the files. The sending bank is responsible for verifying the information in the acknowledgment and notifying the servicing Reserve Bank immediately of any discrepancy, and for notifying the servicing Reserve Bank promptly of nonreceipt of an acknowledgment.

6.3 A sending bank must designate the receiving bank for an item by routing number. A Reserve Bank is not responsible for the accuracy of a routing number contained in and/or verbally supplied from a publication, list or automated file issued or maintained by a Reserve Bank if the routing number becomes inaccurate after the effective date of the publication, list or file. A Reserve Bank may process an item on the basis of a routing number of a receiving bank appearing in any form on the item when received. A Reserve Bank is not responsible for any loss or delay resulting from acting on the number, whether or not the number is consistent with any other designation of the receiving bank on the item, if the Reserve Bank does not know of the inconsistency in designation. For purposes of Article 4A, an identifying number of a branch of a domestic bank is deemed to be the identifying number of the bank.

7.0 DELIVERY OF ITEMS

7.1 By prior arrangement with a receiving bank, a Reserve Bank sends items by electronic means to the receiving bank, or to a receiving point or ACH operator (other than a Reserve Bank) designated by the receiving bank. Alternatively, by prior agreement with a receiving bank, a Reserve Bank may deliver items by making them available on the Reserve Bank's system for the receiving bank or its agent to retrieve. The Reserve Bank has delivered such items when it has placed the items on a Reserve Bank storage device and made the items available for the receiving bank or its agent to retrieve. In emergency circumstances, the Reserve Bank may send items as arranged with the receiving bank. If the receiving bank requests that items be sent to or made available for pickup by another person, that person is the receiving bank's agent and is not a sender or receiving bank as defined in Article 4A or a party to an item in acting as agent of the receiving bank. Items are considered received by a receiving bank in accordance with applicable ACH rules, except as provided in paragraph 7.2. A receiving bank should promptly advise its servicing Reserve Bank by telephone if it does not receive items by the expected date.

- 7.2** A receiving bank must manage its electronic connection so as to permit it to receive items in a timely manner throughout the day. A receiving bank that does not receive items in a timely manner because it fails to so manage its electronic connection or because of emergency circumstances beyond the control of a Reserve Bank is required to settle for the items with a Reserve Bank at the time and day provided by the FedACH Processing Schedule, but is not considered to receive the items for purposes of the deadline for return if the items are available timely for electronic transmission by a Reserve Bank to the receiving bank or for pickup at a Reserve Bank by the receiving bank. The receiving bank may choose next day debit with an explicit charge for float in lieu of settling on the settlement date for debit items.
- 7.3** For purposes of Operating Circular 4 and Article 4A, the receiving bank is deemed to have received an item from its Administrative Reserve Bank, regardless of which Reserve Bank holds the receiving bank's settlement account, maintains its electronic connection, or sends the item to the receiving bank. No Reserve Bank, other than the receiving bank's Administrative Reserve Bank and the sending bank's Administrative Reserve Bank, is a party to the item or a sender or receiving bank under Article 4A.
- 7.4** (a) A receiving bank may designate an ACH operator (other than a Reserve Bank) or an entity that owns or operates the receiving point as its agent to receive items from a Reserve Bank. It is the receiving bank's responsibility to ensure that its agent complies with the receiving bank's obligations under Operating Circular 4.
- (i) By receiving items from the Reserve Bank through an ACH operator other than a Reserve Bank, a receiving bank designates the ACH operator as its agent for accessing the Reserve Bank's systems for processing ACH items, authorizes the ACH operator to select which security procedure to use to access the Reserve Bank's systems, and authorizes the ACH operator to execute Appendix A1, "ACH Security Procedure Agreement," on behalf of the receiving bank.
 - (ii) By receiving items from the Reserve Bank at a receiving point that is owned or operated by an entity other than the receiving bank itself, a receiving bank designates the entity that owns or operates the receiving point as its agent for accessing the Reserve Bank's systems for processing ACH items, authorizes such agent to select which security procedure to use to access the Reserve Bank's systems, authorizes such agent to execute Appendix A1, "ACH Security Procedure Agreement," on behalf of the receiving bank, and authorizes the Reserve Banks to act on the instructions of such agent with respect to the handling of items received from the Reserve Bank by the agent on behalf of the receiving bank.
 - (iii) In acting as agent of the receiving bank, the ACH operator (other than a Reserve Bank) or the entity that owns or operates the receiving point is not a sender or receiving bank as defined in Article 4A, or a party to the item.
 - (iv) Prior to receiving items from a Reserve Bank through an ACH operator other than a Reserve Bank or at a receiving point that is

- owned or operated by an entity other than the receiving bank itself, the receiving bank must provide notice to the Reserve Bank in a form specified by the Reserve Bank.
- (v) The receiving bank's agent's access to the Reserve Bank's electronic systems is governed by Reserve Bank Operating Circular 5, as amended from time to time, and the applicable Certification Practice Statement, as amended from time to time.
- (b) The receiving bank authorizes each Reserve Bank to act upon items, information, and instructions sent to a Reserve Bank by the receiving bank's agent that the agent identifies as having been authorized by the receiving bank.
- (c) The receiving bank agrees that:
- (i) its agent will be granted credentials authorizing such agent to access the Federal Reserve Banks' systems for the purposes of the FedACH services;
 - (ii) its agent will use those credentials to act on behalf of the receiving bank; and
 - (iii) its agent will use the same credentials to access the Federal Reserve Banks' FedACH systems on behalf of other banks that use the same agent to access the Reserve Bank's electronic systems. It is the responsibility of the receiving bank and its agent to establish controls sufficient to ensure that the agent properly segregates the items, information, and instructions of a receiving bank from any items, information, or instructions of other receiving banks. The Federal Reserve Banks are not required to take, and will not take, any measures to assure that the receiving bank's work is properly identified or segregated by the agent.
- (d) The receiving bank agrees to be bound by the agent's acts or omissions with respect to items that are handled by a Federal Reserve Bank pursuant to Operating Circular 4.
- (e) The receiving bank authorizes its Administrative Reserve Bank to settle for items sent to or received from a Reserve Bank by the receiving bank's agent, and to obtain from the receiving bank payment as provided in this Operating Circular 4 for any fees owed to a Reserve Bank in connection with items sent to a Reserve Bank or received from a Reserve Bank by the receiving bank's agent.
- (f) The receiving bank agrees that the Reserve Bank may send items to the receiving bank by delivering or transmitting such items to the receiving bank's agent.
- (g) The Reserve Banks may rely on the receiving bank's designation of an agent until the designation is revoked in writing and the Reserve Banks have had a reasonable amount of time to respond to the revocation.

- (h) Any obligations regarding settlement of items that exist at the time of any termination of the agency appointment shall survive the termination of the agency appointment.
- (i) The receiving bank agrees to indemnify, defend, and hold the Reserve Banks harmless against any claim, loss, cost, or expense resulting from (i) the acts or omissions of the receiving bank's agent; (ii) a Reserve Bank's acts or omissions in carrying out the instructions of such agent within the scope of the agency appointment; or (iii) the third party access arrangement including, but not limited to, reasonable attorneys' fees and expenses of litigation, except, with respect to (i) through (iii), for any claim, loss, cost, or expense arising solely out of a Reserve Bank's failure to exercise ordinary care or to act in good faith.

8.0 TIME SCHEDULES, SETTLEMENT DATES AND EXTENSIONS OF TIME LIMITS

- 8.1** The FedACH Processing Schedule shows the banking days and the deadlines for a Reserve Bank to receive credit and debit items of various classes for same day or future settlement. Appendix B shows the effective date window for classes of items and provisions for settlement for various effective dates.
- 8.2** The Reserve Banks process items in accordance with their processing schedules, and send them to the receiving bank on or before the settlement date. If, because of circumstances beyond a Reserve Bank's control, it is delayed beyond the applicable time limit in acting on an item (other than a credit item subject to Article 4A), the time for acting is extended for the time necessary to complete the action, provided the Reserve Bank exercises such diligence as the circumstances require.

9.0 DESIGNATION OF SETTLEMENT ACCOUNT

- 9.1** Prior to sending an item to (or receiving an item from) a Reserve Bank, a sending bank (and a receiving bank) must designate to its Administrative Reserve Bank a settlement account(s) on a Reserve Bank's books, and identify the transactions to be settled through the account(s). See Operating Circular 1, "Account Relationships." If the bank designates a correspondent bank's account, the correspondent bank must agree to that designation. If the settlement account is on the books of a Reserve Bank other than the sending or receiving bank's Administrative Reserve Bank, the other Reserve Bank must not object to the designation. A correspondent bank whose account is used by a sending or receiving bank for settlement of items, and a Reserve Bank, other than the sending or receiving bank's Administrative Reserve Bank, that holds the settlement account, does not thereby become a sender or receiving bank as defined in Article 4A, or a party to an item. A sending or receiving bank remains responsible under Operating Circular 4 for all transactions, notwithstanding that it has designated a settlement account, including a settlement account maintained by a correspondent bank. A Reserve Bank may, in its discretion, recover the unpaid balance of the sending or receiving bank's obligation with respect to an item from the sending or receiving bank, respectively, without prior notice or

demand.

- 9.2** A Reserve Bank may charge against a sending or receiving bank's designated settlement account the amount of the bank's ACH transactions, unless the Reserve Bank and the sending or receiving bank agree to other arrangements for settlement.
- 9.3** By designating a settlement account, a bank (and its correspondent bank, if any, that maintains the designated settlement account) authorizes the Reserve Bank that holds the settlement account: (1) to debit to the designated account on the settlement date the amount of credit items sent by the bank to a Reserve Bank, the amount of debit items sent to the bank by a Reserve Bank, and the amount of Government ACH debit items sent to the bank by a Reserve Bank; (2) to credit to the designated account on the settlement date the amount of debit items sent by the bank to a Reserve Bank, the amount of credit items sent to the bank by a Reserve Bank, and the amount of Government ACH credit items sent to the bank by a Reserve Bank; and (3) to debit and credit to the designated settlement account the amount of other transactions (including fees, unless otherwise agreed) with respect to ACH Items and Government ACH Items as provided in Operating Circular 4.
- 9.4** The bank (and its correspondent bank, if any, that maintains the designated settlement account) agrees to maintain to its credit in the designated settlement account, consistent with paragraph 10 of Operating Circular 4, a balance of actually and finally collected funds sufficient to cover charges under Operating Circular 4 and all other charges to its account. The Reserve Banks assume no responsibility for any obligations or rights of a bank with respect to its correspondent bank, if any (or of an intermediary correspondent that is not an account holder, if any with respect to its correspondent account holder).
- 9.5** By designating a settlement account, and in consideration of the processing and settlement by the Reserve Banks of items sent to and/or received by the bank and other sending and receiving banks, the bank (and its correspondent bank, if any, that maintains the designated settlement account) agrees to Operating Circular 4 and to the applicable ACH rules, each as amended from time to time, for the benefit of all parties interested in the items.
- 9.6** A settlement designation supersedes all prior inconsistent designations with respect to items. The sending or receiving bank may terminate a settlement designation by written notice to the Reserve Bank that holds the account (and the Reserve Bank may terminate a settlement designation by written notice to the bank) effective five banking days after receipt of the notice or on a subsequent date specified in the notice. A correspondent bank (or an intermediary correspondent that is not an account holder, if any) may terminate a settlement designation by written notice to the Reserve Bank that holds the settlement account, effective only for ACH items to be settled on and after the banking day following the banking day of receipt of the notice or on a later date specified in the notice. A sending or receiving bank must designate another settlement account if its correspondent bank suspends payment or is closed, if the authority to charge the correspondent's account is terminated, or if the correspondent's

Administrative Reserve Bank judges, in its discretion, that there will not be sufficient funds in the account on the settlement date to cover an item.

10.0 SETTLEMENT

10.1 A sending or receiving bank's settlement obligation is owed to its Administrative Reserve Bank, even if it has designated an account on another Reserve Bank's books for settlement. Settlement with the Reserve Bank that holds the settlement account is deemed to be settlement with the sending or receiving bank's Administrative Reserve Bank.

10.2 At the settlement time and date provided in the FedACH Processing Schedule, the Reserve Bank that holds the sending bank's settlement account debits (or credits) that account in the amount of a credit (or debit) item, and the Reserve Bank that holds the receiving bank's settlement account credits (or debits) the receiving bank's account in the amount of the credit (or debit) item.

10.3 SECURITY INTEREST

To secure any obligation, now existing or arising in the future, in connection with an ACH item by a sending or receiving bank (or by a correspondent bank whose account a sending or receiving bank uses for settlement) to a Reserve Bank, the bank grants to the Reserve Bank all the bank's right, title, and interest in property, whether now owned or hereafter acquired, in the possession or control of, or maintained with, any Reserve Bank, including but not limited to the bank's deposit account maintained with any Reserve Bank, items in the process of collection and their proceeds, and any investment property (including securities, security entitlements, and security accounts), but excluding any investment property which the bank may not encumber under applicable law. This security interest is in addition to any other security interest granted to a Reserve Bank by the bank under regulation or agreement. The secured Reserve Bank may take any action authorized by law to recover the amount owed to it by the bank, including but not limited to the exercise of setoff without demand or notice and even if the obligations are contingent or unmatured, the realization on any available collateral, and the exercise of any rights it may have as a creditor under applicable law.

10.4 REFUSAL TO SETTLE

If the Reserve Bank that holds the settlement account judges, in its discretion, that there may not be sufficient funds in the account at the settlement time provided in the FedACH Processing Schedule on the settlement date to cover a debit for a credit item (including a credit item subject to Article 4A) or for a debit item, the Reserve Banks may cease processing the item, batch or file, and may refuse to settle for the item, batch or file. The Reserve Banks may also cease processing and refuse to settle for an item, batch or file if they receive notice of the suspension or closing of the sending or receiving bank (other than the sending bank of a prefunded credit item) prior to the time settlement is final under Operating Circular 4. If the Reserve Banks cease processing or refuse to settle for an item or for the batch or file containing the item, they will promptly notify the

sending bank and a receiving bank to which the item has been sent (or a correspondent bank whose account a bank uses for settlement).

11.0 AVAILABILITY OF CREDIT

11.1 DEBIT ITEMS

(a) Credit given for a debit item by the Reserve Bank that holds the sending bank's settlement account is available for use and may qualify as reserve for purposes of Regulation D (12 CFR Part 204) on the settlement date, subject to paragraph 10.4. this paragraph, and other provisions of Operating Circular 4. The Reserve Bank may refuse to permit the use of credit given for a debit item if it judges that there may not be sufficient funds in the sending bank's settlement account to cover chargeback or return of the item.

(b) If by 12:00 p.m. ET on a banking day a Reserve Bank has not received actually and finally collected funds for all debit items that had settled on the immediately prior banking day, then by no later than 5:30 p.m. ET the Reserve Banks that hold the sending and receiving banks' settlement accounts may reverse the debits and credits made for all debit items. If the Reserve Banks reverse the credits and debits for any debit item in accordance with this paragraph, they will reverse the credits and debits for all debit items that settled at the same settlement window. If the Reserve Banks take action to reverse debits and credits in accordance with this paragraph, they will notify the sending and receiving banks (or a correspondent bank whose account a bank uses for settlement) of their action by no later than 4:00 p.m. ET on the day they take such action.

11.2 CREDIT ITEMS

Credit given by the Reserve Bank that holds the receiving bank's settlement account for a credit item (including a credit item subject to Article 4A) is final and available for use and may qualify as reserve for purposes of Regulation D (12 CFR Part 204) at the settlement time provided in the FedACH Processing Schedule on the settlement date.

12.0 RECEIVING BANK'S AGREEMENTS

12.1 A receiving bank, by maintaining or using an account with a Reserve Bank for settlement of items or by accepting an item from a Reserve Bank:

- (a) agrees to comply with the applicable ACH rules and agrees that those rules govern the relationships among the sending bank, the receiving bank and other parties interested in the item and covered by those rules;
- (b) agrees to process the item in accordance with Operating Circular 4;
- (c) agrees that the Reserve Banks process the item as ACH operators and do not collect, present, or return the items under Operating Circular 3 or Regulation J as "collecting" or "returning" banks, as those terms are defined in the Uniform Commercial Code or Regulation CC;

- (d) authorizes the Reserve Bank holding the receiving bank's settlement account to credit the amount of a credit item, or debit the amount of a debit item, to the receiving bank's settlement account on the settlement date; and
- (e) agrees to indemnify each Reserve Bank processing or settling for the item for any loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred as a result of a breach of the foregoing agreements or of any action or lack of action taken by the Reserve Bank in accordance with Operating Circular 4 except, for any claim, loss, liability, or expense arising solely out of a Reserve Bank's failure to exercise ordinary care or to act in good faith.

12.2 The agreements, authorization and indemnity in paragraph 12.1 do not limit any other agreement, authorization or indemnity not inconsistent with paragraph 12.1, made by a receiving bank to a sending bank, a Reserve Bank or any other person.

13.0 REVOCATION OF ITEMS

13.1 A sending bank or prior party may not amend or revoke an item after it has been sent to a Reserve Bank, except as provided in applicable ACH rules.

13.2 A Reserve Bank may cancel items by initiating a reversing batch of items in accordance with applicable ACH rules if it discovers that a Reserve Bank sent a duplicate or erroneous batch of items. The Reserve Bank will notify the sending bank accordingly. Nothing in Operating Circular 4 constitutes a waiver by any Reserve Bank of a right of recovery under the applicable law of mistake and restitution.

14.0 RETURN OF ITEMS AND FUNDS

14.1 A receiving bank may return a debit or credit item to any Reserve Bank in accordance with the applicable ACH rules and by the deadline set forth in the ACH time schedule. The receiving bank is accountable for the amount of a debit item if the returned item is not received by that deadline.

14.2 The Reserve Banks process a returned item they receive from a receiving bank and send it or make it available to the sending bank in accordance with the provisions of Operating Circular 4 governing the processing of items. On the settlement date, the Reserve Bank that holds the sending bank's settlement account debits or credits that account in the amount of a returned debit or credit item, and the Reserve Bank that holds the receiving bank's settlement account credits or debits that account in the amount of the returned debit or credit item at the time provided in the FedACH Processing Schedule, subject to the provisions of Operating Circular 4 governing the settlement for items.

- 14.3** A receiving bank may return a same day item on the day the receiving bank received the item. If the Reserve Bank receives the return prior to the 4 p.m. ET return transmission deadline specified in the FedACH Processing Schedule, the return item will settle same day. Same day items that are returned after the 4 p.m. ET return transmission deadline will settle the next business day.
- 14.4** A receiving bank must keep records that permit it to identify the source of receipt of items. By sending a returned debit item to a Reserve Bank, a receiving bank:
- (a) agrees on request to provide records showing whether it received the debit item from a Reserve Bank, and
 - (b) if it did not receive the debit item from a Reserve Bank, agrees to indemnify the Reserve Banks for loss resulting from a Reserve Bank's failure to receive the amount of the returned debit item from the sending bank.
- 14.5** If a receiving bank sends an adjustment entry for an unauthorized debit item to a Reserve Bank in accordance with applicable ACH rules, the receiving bank agrees to indemnify the Reserve Banks for loss resulting from a Reserve Bank's failure to receive the amount of the adjustment from the sending bank, whether or not the receiving bank received the debit item from a Reserve Bank.
- 14.6** The Reserve Bank may agree to offer an exception process for sending returns in paper form subject to terms and conditions acceptable to the Reserve Bank. Items returned in paper form are not subject to the FedACH Processing Schedule.

15.0 DISPUTED RETURNS

- 15.1** If a sending bank disputes the propriety of a returned item one time in accordance with applicable ACH rules, the Reserve Bank(s) that holds the sending bank's and the receiving bank's settlement accounts will provisionally settle for the disputed return, subject to receipt of funds from the receiving bank. If the receiving bank disputes the sending bank's claim in accordance with applicable ACH rules, the Reserve Bank(s) will reverse the provisional settlement for the disputed return, subject to receipt of funds from the sending bank.

16.0 ADVICES OF CREDIT AND DEBIT; REPORTING OF ERRORS

- 16.1** A Reserve Bank provides advices of credit and debit to an account holder for items for which the account holder has agreed to settle. An advice of credit indicates that credit has been given, subject to the provisions of Operating Circular 4. A Reserve Bank also, on request, provides advices to a person other than the bank or its correspondent, as the bank's agent, in accordance with paragraph 7 of Operating Circular 4.
- 16.2** A Reserve Bank properly executes a credit item subject to Article 4A if it sends an advice of credit as requested by the receiving bank. A sending or receiving bank (and a correspondent bank, if any) agree that a reasonable time to notify its servicing Reserve Bank concerning an unauthorized or erroneously executed item is within thirty calendar days after the bank (or correspondent) receives an

advice of debit. Notice after that time may constitute the failure to exercise ordinary care, precluding the recovery by the bank of interest (with respect to a credit item subject to Article 4A) and other damages (with respect to other items).

- 16.3** In addition to the requirement for reasonable notice under paragraph 16.2. and Sections 4A-204 and 4A-304 of Article 4A, a sending or receiving bank (or a correspondent account holder, if any) shall notify its servicing Reserve Bank immediately if it learns of or discovers, from any source other than an advice of debit from the Reserve Bank, the possibility of error or lack of authority in the transmission or processing of an item. See also paragraph 4.

17.0 RECORDS

- 17.1** Each sending and receiving bank must keep records that permit it to resolve questions that arise concerning the handling of items, and to resend items if a Reserve Bank notifies it that the items have been lost because of a computer outage or other reason. A Reserve Bank keeps records of items processed for only one year after the settlement date.

18.0 FEES

- 18.1** The FedACH Services Fee Schedule shows the charges imposed for processing and settlement of items. A Reserve Bank may make the charge to the sending or receiving bank's account, as otherwise agreed with the sending or receiving bank, or to the account designated by the sending or receiving point or ACH operator (other than a Reserve Bank), as applicable.
- 18.2** The Reserve Banks collect the Nacha Network Administration Fees by charging those fees to sending and receiving banks. An Administrative Reserve Bank will credit a bank's account for any claimed overcharge of the Nacha Network Administration Fees if the request for credit is received within the time frame provided in Operating Circular 1 for reporting errors in a Statement of Service Charges. Except as specifically provided in the preceding sentence, the Reserve Banks offer no procedure for resolving any dispute between a bank and Nacha regarding the Nacha Network Administration Fees.
- 18.3** The Reserve Banks collect the ACH Quality Fees by charging those fees to the sending bank and crediting the receiving bank. The Reserve Banks offer no procedure for resolving any dispute between a bank and another bank or Nacha regarding the Nacha ACH Quality Fees.
- 18.4** The Reserve Banks collect the Same Day Entry Fees by charging those fees to the sending bank and crediting the receiving bank. The Reserve Banks offer no procedure for resolving any dispute between a bank and another bank or Nacha regarding the Nacha Same Day Entry Fees.

19.0 ZERO-VALUE MESSAGES

- 19.1** The Reserve Banks handle a message that has a value of zero, such as a prenotification or notification of change, in the same manner as an item except

that no funds are transferred. A Reserve Bank's liability for damage caused by its failure to exercise ordinary care, or by its own or its employees' willful misconduct, in processing a zero-value message may not exceed the amount of any fee paid to a Reserve Bank for the message.

20.0 RESERVE BANK LIABILITY; ITEM OTHER THAN CREDIT ITEMS SUBJECT TO ARTICLE 4A

20.1 LIMITATIONS ON LIABILITY

With respect to an item other than a credit item subject to Article 4A:

- (a) a Reserve Bank is responsible or liable only to a sending bank, a receiving bank or another Reserve Bank, and only for its own failure to exercise ordinary care, or for its own or its employees' willful misconduct;
- (b) a Reserve Bank does not act as the agent or subagent of another bank or person and is not liable for the insolvency, neglect, misconduct, mistake or default of another bank or person;
- (c) a Reserve Bank does not make any warranty with respect to an item it processes or settles for under Operating Circular 4; and
- (d) no person may make a claim against a Reserve Bank for loss resulting from the Reserve Bank's processing of or settling for an item, or the collection or distribution of any fee, after one year from the settlement date of the item. If a bank (or correspondent bank, if any) does not send written objection to an advice of debit to its servicing Reserve Bank within thirty calendar days after receipt of the advice, it is deemed to approve the debit on its own behalf (and on behalf of a sending or receiving bank using the account for settlement, if any).

20.2 MEASURE OF DAMAGES

The measure of damages for a Reserve Bank's failure to exercise ordinary care, or for its own or its employees' willful misconduct, is as follows:

- (a) For a credit item (including a returned credit item but excluding a credit item subject to Article 4A), its liability is limited to damages that are attributable directly and immediately to the failure to exercise ordinary care or to the willful misconduct, and does not include damages that are attributable to the consequences of such conduct, even if such consequences were foreseeable at the time of such conduct.
- (b) For a debit item (including a returned debit item), its liability for its failure to exercise ordinary care is limited to the amount of the item reduced by an amount that could not have been realized by the use of ordinary care. Where there is willful misconduct with respect to a debit item, the measure of damages includes other damages that are attributable directly and immediately to the willful misconduct, but does not include damages that are

attributable to the consequences of such misconduct, even if such consequences were foreseeable at the time of such misconduct.

- (c) With respect to any fee that the Reserve Bank collected, the amount of damages is limited to the amount of the fee. With respect to any portion of the fee that the Reserve Bank distributed, the amount of damages is limited to the amount that the Reserve Bank failed to distribute.

21.0 RESERVE BANK LIABILITY; CREDIT ITEM SUBJECT TO ARTICLE 4A

21.1 LIABILITY

A Reserve Bank's liability with respect to a credit item subject to Article 4A is governed by Article 4A, except as otherwise provided in Operating Circular 4. A Reserve Bank is not liable with respect to a credit item subject to Article 4A for any damages other than those payable under Article 4A. A Reserve Bank shall not agree to be liable for consequential damages with respect to a credit item subject to Article 4A under Section 4A-305(d) of Article 4A.

21.2 COMPENSATION AND ADJUSTMENTS

A Reserve Bank satisfies its or another Reserve Bank's obligation to pay compensation in the form of interest under Article 4A by crediting the account of a sending bank, a receiving bank, or another party to the item that is entitled to such payment, in an amount calculated in accordance with Section 4A-506 of Article 4A.

21.3 PASS THROUGH TO PARTY ENTITLED TO COMPENSATION

If a sending bank or a receiving bank that receives an adjustment in the form of a credit, or an interest payment, is not the party entitled to compensation, the bank shall pass through the benefit of the adjustment or payment by making a payment to the party entitled to compensation. The payment that is made to the party entitled to compensation shall not be less than the value of the adjustment or payment that was made by the Reserve Bank to the sending bank or receiving bank. The party entitled to compensation may agree to accept compensation in a form other than a direct payment if the alternative form of compensation is not less than the value of the payment that otherwise would be made.

22.0 FORUM FOR ACTION

- 22.1** Any action against a Reserve Bank for that Reserve Bank's acts or omissions relating to the clearing of or settlement for an ACH item, or to the collection or payment of fees, must be brought in the United States District Court and Division where the office or branch of the Reserve Bank that committed the alleged act or omission is located.

23.0 RECOVERY BY RESERVE BANK

- 23.1** If an action or proceeding is brought against a Reserve Bank based on:
- (a) an alleged breach of (or an alleged failure to have the authority to make) any of the authorizations and agreements referred to in paragraphs 5.1 and 12.1 of Operating Circular 4 by the sending or receiving bank, or an alleged breach of the applicable ACH rules by the sending bank, the receiving bank or another Reserve Bank; or
 - (b) any action by the Reserve Bank in accordance with its Operating Circular 4 the Reserve Bank may recover from the sending bank, the receiving bank or the other Reserve Bank, as the case may be, any amount the Reserve Bank is required to pay under a final judgment or decree, together with interest, and the amount of attorneys' fees and other expenses of litigation incurred.
- 23.2** The Reserve Bank may recover the amount stated in paragraph 23.1 by charging the sending or receiving bank's account (or if the item was received from, sent to, or settled through another Reserve Bank, by charging the other Reserve Bank), if:
- (a) the Reserve Bank has made timely written demand on the sending bank, receiving bank, or other Reserve Bank to assume defense of the action or proceeding; and
 - (b) no other arrangement for payment acceptable to the Reserve Bank has been made.

A Reserve Bank that has been charged under this paragraph may recover from the sending or receiving bank in the manner and under the circumstances set forth in this paragraph. A Reserve Bank's failure to avail itself of the remedy provided in this paragraph does not prejudice its enforcement in any other manner of the indemnity agreements referred to in paragraphs 5.1 and 12.1.

24.0 RIGHT TO AMEND

- 24.1** The Reserve Banks reserve the right to amend Operating Circular 4 at any time without prior notice.

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APPENDIX A: ACH SECURITY PROCEDURES

1.0 GENERAL

- 1.1 The Reserve Banks offer the following security procedures to each sending bank that is authorized to send ACH items to a Reserve Bank, for the purpose of verifying the authenticity of the source of the ACH items. The security procedures are not used to detect an error in the transmission or the content of the ACH items.
- 1.2 Prior to selecting any Security Procedure, a sending bank should consider the degree to which the various options satisfy the sending bank's business needs given the size, type and frequency of ACH items sent to a Reserve Bank.
- 1.3 The Reserve Banks offer the following security procedures to each receiving bank that is authorized to receive ACH items from a Reserve Bank, for the purposes of verifying the authenticity of a request to retrieve ACH items and of maintaining the integrity and security of the Reserve Banks' data systems.

2.0 LEVEL ONE SECURITY PROCEDURES

- 2.1 The Reserve Banks offer one or more Level One Security Procedures. Level One Security Procedures are available to any bank that sends or receives ACH items by means of an encrypted communication connection between its facilities (or those of the bank's agent) and a Reserve Bank's facilities utilizing a hardware/software system specified by a Reserve Bank. A sending or receiving bank is responsible for ascertaining that its hardware and software systems (or those of its agent) comply with the Reserve Bank's specifications.
- 2.2 Each of the Level One Security Procedures is comprised of the following: security protocols embedded in the hardware and software associated with the equipment used to initiate, transmit, or receive ACH items; access controls that grant access to the FedACH® systems, such as identification codes, confidential passwords, and in some cases digital certificates; and encryption of ACH items during the transmission process. All of the Level One Security Procedures require the bank to implement physical security as well as management controls that protect the hardware and software from unauthorized use.
- 2.3 The primary differences between the various Level One Security Procedures relate to the strength of the encryption algorithm, the type of software used to access a Reserve Bank's network, and the nature of the connection that a bank uses to access the Reserve Bank's systems.
- 2.4 The portions of the security procedures that are the responsibility of the bank are more specifically described in security documentation provided by the Reserve Bank. For FedLine Advantage® customers, the documentation includes the "*FedLine Advantage® Security and Control Procedures*," the "*FedLine Advantage® Monitoring and Control Guidelines*," the "*FedLine Advantage® EUAC Access Management Guide*," the "*FedLine Advantage® Subscriber Guide*," and Operating Circular 5, including the Certification Practice Statement. For FedLine Direct® customers, this documentation includes the

“FedLine Direct® Security and Implementation Guide,” the “FedLine Direct Security and Control Procedures,” the “FedLine Direct Monitoring and Control Guidelines,” and Operating Circular 5, including the Certification Practice Statement. For FedLine Command® customers, this documentation includes the “FedLine Command Security and Implementation Guide,” the “FedLine Command Security and Control Procedures,” the “FedLine Command Monitoring and Control Guidelines,” and Operating Circular 5, including the Certification Practice Statement. For FedLine Web® customers, this documentation includes the “FedLine Web Security and Control Procedures,” and the “FedLine Web Subscriber Guide.” The bank 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.

- 2.5** If a bank uses a sending point (and/or a receiving point) that is owned or operated by an entity other than the bank, the bank designates such entity as its agent for the purposes described in paragraphs 3.6 and 7.4 of Operating Circular 4. The designation of such an agent shall in no way affect or diminish any obligation or duty of the bank under this appendix or the security documentation listed in paragraph 2.4 of this appendix. It is the bank’s responsibility to ensure that its agent complies with the bank’s obligations under this appendix and the security documentation listed in paragraph 2.4 of this appendix.

3.0 LEVEL TWO SECURITY PROCEDURE

- 3.1** The Level Two Security Procedure is available to any bank that sends ACH items to a Reserve Bank by electronic transmission that does not include both encryption and access controls. It is also used when a bank that normally sends ACH items under one of the Level One Security Procedures defined above is unable to do so because of an equipment or communications failure or other circumstances.
- 3.2** In the case of electronic transmission of ACH items, the Level Two Security Procedure is incorporated in the transmission process and, in general, includes either access controls or encryption. When ACH items are sent by either physical storage media supported by the Reserve Bank or through electronic transmission that does not include either encryption or access controls, the Level Two Security Procedure includes a procedure whereby the sending bank or its agent provides file control information i.e., file ID, debit and credit dollar amounts, and entry/addenda count to a Reserve Bank and then the Reserve Bank compares that information against the file(s) it actually receives. The control information may be provided by a transmittal register or a telephone call. When the control information is provided by this means, it will be verified by a call back from the Reserve Bank.

APPENDIX A1: ACH SECURITY PROCEDURE AGREEMENT

Date: _____
To: Federal Reserve Bank of _____ Office

Attention: Manager: ACH Operations

We agree to the provisions of the Federal Reserve Banks' Operating Circular 4, entitled "*Automated Clearing House Items*" and its appendices ("Circular"), as amended from time to time, and to the Reserve Bank's Operating Circular 5 entitled "*Electronic Access*" and the Certification Practice Statement incorporated in Operating Circular 5, as amended from time to time.

If we use an encrypted communications line with access controls for the transmission of ACH Items to a Reserve Bank, we will choose one of the Level One Security Procedures as generally described in Appendix A to the Circular, as such security procedure may be modified from time to time by the Reserve Banks. If you offer more than one Level One Security Procedure, when we use one of the Level One Security Procedures, we reject the other Level One Security Procedure(s) offered by you. We also agree that this procedure will be used if we receive ACH items by means of an encrypted electronic communications line with access controls. The chosen Level One Security Procedure will be used for the purpose of verifying that ACH items were sent or received by us.

If we use a method other than an encrypted communications line with access controls for the transmission of ACH items, we reject the Level One Security Procedures and choose the Level Two Security Procedure generally described in Appendix A to the Circular, as such security procedure may be modified from time to time by the Reserve Banks. This security procedure will be used for the purpose of verifying that ACH items were sent or received by us.

We understand that the Level Two Security Procedure as well as any of the Level One Security Procedures may be deemed commercially reasonable pursuant to Section 4A-202(c) of Article 4A of the Uniform Commercial Code.

Whenever we choose to use one of the Level One Security Procedures or the Level Two Security Procedure, we agree to be bound by any ACH item, whether or not authorized, sent in our name and accepted by a Reserve Bank in compliance with such procedure.

We understand that the Level One and Level Two Security Procedures will not be used to detect any error in the transmission or content of ACH items.

We also understand and agree that the security procedures established by this Agreement may be changed only by an amendment to Appendix A or other written agreement. The Agreement may not be changed by an oral agreement or by a course of dealing or custom.

Name of Bank _____

Authorized Signature _____

APPENDIX B: ACH ITEMS TIME SCHEDULE

1.0 BANKING DAY; DEADLINES; SETTLEMENT TIMES

1.1 DEADLINES AND SETTLEMENT TIMES

The Reserve Banks publish a FedACH Processing Schedule, which we amend from time to time, which establishes multiple deadlines within each FedACH banking day for receipt of ACH files. Based on the date and time when an item is received by a Reserve Bank and certain defined characteristics of the item, the Reserve Bank will process and settle for that item on the date and time specified in the FedACH Processing Schedule.

1.2 BANKING DAY

The Reserve Banks' banking day for receipt of ACH items is from 3:00 a.m. ET to 2:59 a.m., ET on the next calendar day.²

1.3 DELIVERY TIMES AND EXTRA DELIVERIES

The Reserve Bank delivers items electronically, as described in paragraph 7 of Operating Circular 4, at five scheduled times each banking day.³ Upon prior request from a receiving bank the Reserve Bank may, in its sole discretion, provide one or more additional electronic deliveries each banking day to a receiving bank. If the Reserve Bank has agreed to provide extra deliveries, it will utilize best efforts to do so but makes no warranties that such deliveries will be made and shall have no liability to a receiving bank for providing or failing to provide the extra deliveries.

2.0 EFFECTIVE DATE WINDOWS

2.1 Items (other than returns and notifications of change (NOCs)) should specify an effective date within the following effective date windows, computed from the Reserve Banks' banking day of receipt.

<u>Class</u>	<u>Effective Date Window</u>
Credit Items	One or Two Banking Days
Debit Items	One Banking Day Only

Items received with an effective date later than the effective date window will be returned to the sender.

2.2 Same day items must specify in the effective entry date field no value or any

² Reserve Banks process and transmit files up until 6:00 a.m., ET on the calendar day on which the banking day ends. Certain other times apply before and after weekends and holidays. All times listed are Eastern Time.

³ The scheduled delivery times are made available by the Reserve Bank on FRBservices.org.

value other than a date that is later than the banking day the Reserve Bank receives the item.⁴

3.0 SETTLEMENT DATES

- 3.1** Items with an effective date of one banking day are settled on the Reserve Banks' banking day following the banking day of receipt. Items with an effective date of two banking days are settled on the second banking day following receipt. Forward items and NACS (National Association of Check Safekeeping) items with an effective date the same as, or earlier than, the Reserve Banks' banking day of receipt that are eligible for Same Day settlement and return items that we receive electronically will be settled on the day the Reserve Bank receives the items if the items are received prior to the last cutoff for submission of items for same day settlement set forth in the FedACH Processing Schedule.
- 3.2** If an item qualified for same day settlement does not specify an effective date, that item will settle on the Reserve Bank's banking day of receipt. If an item not qualified for same day settlement does not specify an effective date or specifies an effective date the same as or earlier than the Reserve Banks' banking day of receipt, the settlement date is the banking day following receipt. If an item specifies a settlement date that is a standard Reserve Bank holiday, the settlement date is the next banking day for the Reserve Banks.
- 3.3** If an item specifies a settlement date that is not a banking day for the sending bank or the receiving bank, settlement is effected, with respect to that party, as follows:

Debit Items:

Sending bank closed: Credit sending bank's account on settlement date.

Receiving bank closed: Debit receiving bank's account on settlement date, or receiving bank may choose next day debit with an explicit charge for float.

Credit Items:

Sending bank closed: Debit sending bank's account on settlement date.

Receiving bank closed: Credit receiving bank's account on settlement date.

The receiving bank is not considered to receive an item made available to it on the day it is closed until its next banking day for purposes of determining the deadline for return.

⁴ It is intended that a sending bank will specify in the effective date field a value that is the current banking day. But a blank field or a field that contains any value other than a date that is later than the current banking date will result in same day settlement for any eligible items.

4.0 STANDARD HOLIDAYS

4.1 The Reserve Banks' banking days include all days except the following standard holidays:

All Saturdays,
All Sundays,
New Year's Day (January 1),
Martin Luther King Day (third Monday in January),
Presidents' Day (third Monday in February),
Memorial Day (last Monday in May),
Independence Day (July 4),
Labor Day (first Monday in September),
Columbus Day (second Monday in October),
Veterans Day (November 11),
Thanksgiving Day (fourth Thursday in November), and
Christmas Day (December 25).

If January 1, July 4, November 11, or December 25 falls on a Sunday, the next following Monday is a standard Reserve Bank holiday.

APPENDIX C: PREFUNDING OF ACH CREDIT ORIGINATIONS BY SENDING OR CORRESPONDENT BANK

1.0 GENERAL

- 1.1 In order to reduce the risk of loss to Reserve Banks resulting from the finality of credit items, the Administrative Reserve Bank of a (sending or correspondent) bank that settles for credit item originations and whose account the Reserve Bank monitors in real time may notify the bank to prefund in accordance with this Appendix credit items that settle through the bank's account at the time a Reserve Bank processes the items.

A sending bank, by sending credit items, and a correspondent bank, by agreeing to settle for items, agree as follows:

2.0 DEFINITIONS

- 2.1 For purposes of this Appendix:

Settling Bank means a sending bank that originates credit items, or the correspondent bank whose account the sending bank uses for settlement, that has been notified by its Administrative Reserve Bank that it must prefund the credit item originations that settle through its account.

Prefund means to pay, in actually and finally collected funds, to the Settling Bank's Administrative Reserve Bank, the total amount of all ACH credit item originations, including credit items originated through an ACH operator (other than a Reserve Bank), at the time a Reserve Bank processes the items.

3.0 PREFUNDING OF ACH CREDIT ITEMS

- 3.1 The Settling Bank's Administrative Reserve Bank may in its discretion, by notice to the Settling Bank, require that the Settling Bank irrevocably make available to the Administrative Reserve Bank, in actually and finally collected funds, the total amount of all ACH credit item originations at the time a Reserve Bank processes the items (to Prefund). The Settling Bank authorizes its Administrative Reserve Bank, at the time a Reserve Bank processes the items, to deduct from the Settling Bank's account the amount needed to Prefund the credit items.
- 3.2 If the Settling Bank fails or refuses to Prefund the full amount of ACH credit items originated, the Reserve Banks may, in their discretion, refuse to process any batch containing credit item originations (including a batch with both credit items and debit items) that has not been Prefunded. If the Settling Bank only partially Prefunds the total amount of ACH credit item originations, the Reserve Banks may, in their sole discretion, determine which batch of credit items shall be considered to have been Prefunded, or may refuse to settle for all the items, and will notify the sending (and a settling correspondent) bank.

- 3.3** If the Settling Bank Prefunds the ACH credit items originated, its obligation to settle in respect of the Prefunded ACH credit items originated up to the amount of the Prefunding shall be automatically satisfied and discharged and replaced by an irrevocable obligation of a Reserve Bank to settle for the Prefunded items on the settlement date.
- 3.4** A Reserve Bank shall have no obligation to the Settling Bank for interest or other compensation or adjustment for the Prefunded amount between the date of Prefunding and the settlement date.

4.0 MISCELLANEOUS

- 4.1** The Reserve Banks reserve the right to defer the availability of some or all of the credit arising from ACH debit items originated by the sending bank.
- 4.2** The Reserve Banks shall have no responsibility for any rights or obligations between a sending bank and its correspondent relating to this Appendix.
- 4.3** To the extent of any inconsistency between this Appendix and Operating Circular 4, the provisions of this Appendix shall govern.
- 4.4** The Reserve Banks reserve the right to amend this Appendix at any time without prior notice.

APPENDIX D: GOVERNMENT ACH ITEMS

1. The Reserve Banks handle ACH items for which an agency of the Federal Government is the sending bank or the receiving bank (Government ACH items) as fiscal agents of the United States under Treasury Department regulations, including 31 CFR Parts 210, 203, and 370, and Treasury procedures. As to matters those regulations and procedures do not cover, Operating Circular 4, including its appendices, applies. The rules and procedures may differ as between commercial and Government ACH items, and as between Government ACH items of different classes.
2. A Reserve Bank makes the amount of all Government credit items sent to a receiving bank available for withdrawal or other use by the receiving bank at the settlement time for such items specified in the FedACH Processing Schedule. A Reserve Bank may cease acting on a Government ACH item at any time upon direction of the Treasury Department and, if so, will so notify the bank.
3. Unless expressly authorized in writing by the Treasury Department, a sending bank shall not, under any circumstances, send a debit item designating the Government as receiving bank.
4. A Reserve Bank shall not have or assume any responsibility or liability to any person other than the Treasury Department with respect to Government ACH items.

APPENDIX E: FEDACH RISK® ORIGINATION MONITORING

1.0 GENERAL

- 1.1 The Reserve Banks offer a FedACH Risk Origination Monitoring Service (Service) to sending banks that enables a sending bank to select specific criteria for monitoring batches of forward ACH items that the sending bank sends to a ReserveBank. This Appendix further describes the available criteria offered under this Service and provides the terms and conditions under which the Reserve Banks offer the Service.
- 1.2 Fees for the Service are determined by a fee schedule that the Reserve Banks publish from time to time.

2.0 DEFINITIONS

- 2.1 **Banking Day** has the meaning set forth in Appendix B of Operating Circular 4.
- 2.2 **Customer** means a sending bank that has signed up for the Service, following procedures established by the Reserve Banks, as amended from time to time.
- 2.3 **Company Identification**, with respect to a batch, means the data contained in the 10 character “company identification” field (or “originator identification” field for IAT batches) in the batch’s batch header record, as described in the “ACH record format specifications” in the Nacha Operating Rules, as amended from time to time.
- 2.4 **Company Identification Inclusive** means a Customer is using Monitor Companies and has elected to pend any batches associated with an **Unmonitored Company**.
- 2.5 **Company Identification Select** means a Customer is using **Monitor Companies** and has elected not to pend any batches associated with an **Unmonitored Company**.
- 2.6 **Credit Cap** means a dollar amount of forward credit items contained in certain batches sent by a Customer to a Reserve Bank.
- 2.7 **Debit Cap** means a dollar amount of forward debit items contained in certain batches sent by a Customer to a Reserve Bank.
- 2.8 **End of Day Default** means a preestablished instruction from a Customer to the Reserve Bank either to process or to reject at the end of a Banking Day any batch that has pended under the Service and that a Customer has not yet released or rejected.
- 2.9 **Exposure Days** refers to the monitoring of all the forward credit items sent by a Customer and received by the Reserve Bank during the current Banking day plus two previous Banking Days and to all the forward debit items sent by a Customer and received by the Reserve Bank during the current Banking Day plus three previous Banking Days.

- 2.10 Managed Batch** means a batch of forward ACH items that a Customer sends to the Reserve Bank that is identified in the batch header record by a Monitored Routing Transit Number.
- 2.11 Managed Company Identification** means a Company Identification that a Customer has designated, as provided in sections 6.0 and 7.0 of this Appendix. **Managed Company Identification** are associated with a **Managed Routing Transit Number**.
- 2.12 Managed Routing Transit Number** means a Bank Routing Transit Number that has been issued to a Customer by Accuity and that a Customer has designated, as provided in sections 6.0 and 7.0 of this Appendix.
- 2.13 Monitor Companies** means a Customer is monitoring one or more **Managed Company Identification(s)**, as provided in sections 3.0 of this Appendix.
- 2.14 Monitor Routing Transit Number** means a Customer is monitoring a **Managed Routing Transit Number**, as provided in section 3.0 of this Appendix.
- 2.15 Process Day** refers to the monitoring of all the forward credit or debit items sent by a Customer and received by the Reserve Bank during the Banking Day.
- 2.16 Same Day Default** means a pre-established instruction from a Customer to the Reserve Bank to process at the last Same Day deadline any batch that contains Same Day entries which has pended under the Service and that a Customer has not yet released or rejected.
- 2.17 Unmonitored Company** means a **Company Identification** that is associated with a **Managed Routing Transit Number** but which has not been defined as a **Managed Company Identification(s)**.

2.18 Terms not defined in this Appendix will have the same meaning as such terms are defined in Operating Circular 4.

3.0 SERVICE VERSIONS AND SELECTIONS

3.1 A Customer chooses either the **Monitor Routing Transit Number or the Monitor Companies** version of the Service.

(a) Under the **Monitor Routing Transit Number** version a Customer designates only a **Managed Routing Transit Number** to identify the batches that are subject to the Service. Under this version:

- (i) When the Reserve Bank receives a Managed Batch the Reserve Bank will handle the batch as provided below in sections 4.0 of this Appendix.
- (ii) All batches that the Reserve Bank receives from a Customer that are not identified by a Managed Routing Transit Number will not be subject to this Appendix but will be processed in accordance with Operating Circular 4.

(b) Under the **Monitor Companies** version, a Customer designates a Managed Routing Transit Number and also designates one or more Managed Company Identification(s) that are used to identify the batches that are subject to the Service. A Customer can further classify the monitoring as being either **Company Identification Select** or **Company Identification Inclusive** by how an **Unmonitored Company** should be handled.

- (i) If a Customer selects to pend batches for an **Unmonitored Company** then the Customer is monitoring under **Company Identification Inclusive**:
 - When the Reserve Bank receives a Managed Batch identified by a Managed Routing Transit Number and an associated Managed Company Identification the Reserve Bank will handle the batch as provided below in section 4.0 of this Appendix.
 - When the Reserve Bank receives a Managed Batch from a Customer that is identified by a Managed Routing Transit Number and a Company Identification that is not an associated Managed Company Identification, the Reserve Bank will pend the batch and handle the batch as provided in sections 4.0 of this Appendix.
 - All batches that the Reserve Bank receives from a Customer that are not identified by a Managed Routing Transit Number will not be subject to this Appendix but will be processed in accordance with Operating Circular 4.

(ii) If a Customer selects not to pend batches for an **Unmonitored Company** then the Customer is monitoring under **Company Identification**

Select::

- When the Reserve Bank receives a Managed Batch identified by a Managed Routing Transit Number and an associated Managed Company Identification the Reserve Bank will handle the batch as provided in sections 4.0 of this Appendix.
- All batches that the Reserve Bank receives from a Customer that (i) are not identified by a Managed Routing Transit Number, or (ii) identified by a Managed Routing Transit Number and a Company Identification that is not an associated Managed Company Identification will not be subject to this Appendix but will be processed in accordance with Operating Circular 4.

3.2 A Customer may establish a Credit Cap and/ or Debit Cap for

- (a) each Managed Routing Transit Number it has designated under the Monitor Routing Transit Number version of the Service, or
- (b) each Managed Routing Transit Number and associated Managed Company Identification under the Monitor Companies version of the Service.

3.3 A Customer selects a **Process Day** or **Exposure Days** method for each Credit Cap and/ or Debit Cap it has established.

- (a) Under the **Process Day** method a Credit Cap or Debit Cap applies to all the forward credit or debit items sent by a Customer and received by the Reserve Bank during the Banking Day.
- (b) Under the **Exposure Days** method a Credit Cap applies to all the forward credit items sent by a Customer and received by the Reserve Bank during the current Banking day plus two previous Banking Days and a Debit Cap applies to all the forward debit items sent by a Customer and received by the Reserve Bank during the current Banking Day plus three previous Banking Days.

3.4 A Customer must select an **End of Day Default** and optionally select a **Same Day Default** for

- (a) each Managed Routing Transit Number it has designated under the **Monitor Routing Transit Number** version of the Service, or
- (b) each Managed Company Identification it has selected under the **Monitor Companies** version of the service.

3.5 In addition, a Customer who selects to perform **Company Identification Inclusive** monitoring must also establish an End of Day Default and optionally a Same Day Default that applies to each Managed Routing Transit Number in the event that the Reserve Bank sends a batch under the circumstances described in 3.1(b)(i) of this Appendix.

4.0 SERVICE

- 4.1** When a Customer sends a Managed Batch to the Reserve Bank, the Reserve Bank will perform the Service as described in this paragraph 4.
- 4.2** With respect to batches described in sections 3.1(a)(i), and 3.1(b)(i) of this Appendix, the Reserve Bank will determine whether the value of the forward items contained in these batches would exceed a Credit Cap or Debit Cap.
- (a) If a batch does not exceed a Credit Cap or Debit Cap, the Reserve Bank will release the batch for processing and the Reserve Bank will thereafter handle the items in the batch in accordance with Operating Circular 4.
- (b) If a batch does exceed a Credit Cap or Debit Cap, the Reserve Bank will pend the Managed Batch.
- 4.3** When a Managed Batch has been pended pursuant to the terms of this Appendix, the Reserve Bank will send an email notification to email addresses that the Customer has designated.
- (a) The email from the Reserve Bank will notify the recipient that the Reserve Bank has pended a batch or batches and will request the Customer to release or reject the pended batch or batches.
- (b) A Customer contact who has authority to release or reject the pended batch may thereafter release or reject the pended batch or batches, using procedures established by the Reserve Bank, as amended from time to time, specifically for the purposes of the Service.
- 4.4** At the final Same Day deadline on the Banking Day on which the Reserve Bank has pended a Managed Batch that contains Same Day eligible entries, the Reserve Bank will release the batch in accordance with a Customer's Same Day Default that applies to the batch.
- 4.5** If no authorized Customer contact releases a Managed Batch or a Managed Batch is not released by default action as described in 4.4 of this Appendix, Managed Batches that contain same day items prior to the final deadline for receipt of items for same day settlement set forth in the FedACH Processing Schedule on the Banking Day on which the Reserve Bank has pended a Managed Batch, the same day items will not settle on that day.
- 4.6** If no authorized Customer contact releases or rejects a Managed Batch or no action to release a Managed Batch by Same Day Default as described in 4.4 of this Appendix, prior to the end of day deadline on the Banking Day on which the Reserve Bank has pended a Managed Batch, the Reserve Bank will either release or reject the batch in accordance with a Customer's End of Day Default that applies to the batch.
- 4.7** The Reserve Bank will also apply the End of Day Default and Same Day Default in contingency situations in which a batch has pended under the Service and a Customer is unable to release or reject, as applicable, a Managed Batch using

procedures established by the Reserve Bank specifically for the purposes of the Service.

5.0 RELATION TO OPERATING CIRCULAR 4 AND SECURITY PROCEDURES

With respect to an ACH item, the Service is a preprocessing service, separate and distinct from the ACH services offered by the Reserve Bank under Operating Circular 4. If an item is in a Managed Batch, a Customer has not sent that item to the Reserve Bank for purposes of Operating Circular 4 or Article 4A of the Uniform Commercial Code until the Service has been completed with respect to that item and the item has been released for processing.

The Service does not vary the Reserve Bank's security procedures, described in Appendix A of Operating Circular 4, or a Customer's ACH Security Procedure Agreement with the Reserve Bank. Further, the Service does not constitute a written agreement or instruction, as described in section 4A-202(b) of the Uniform Commercial Code, that restricts the Reserve Bank's acceptance of a payment order.

6.0 CUSTOMER DUTIES

6.1 Following procedures established by the Reserve Bank, as amended from time to time, specifically for the purposes of the Service, before the Reserve Bank will activate the Service, a Customer must:

- (a) Designate Managed Routing Transit Numbers;
- (b) Select one of the two versions of the Service for each Managed Routing Transit Number; as provided in section 3.0 of this Appendix;
- (c) Designate any Managed Company Identifications associated with each Managed Routing Transit Number;
- (d) Establish Credit Caps and/or Debit Caps as appropriate;
- (e) Choose a **Process Day** or **Exposure Days** method for each Credit Cap and Debit Cap;
- (f) Establish an End of Day Default or Defaults as appropriate;
- (g) If a Customer has chosen the **Company Identification Inclusive** monitoring, establish an End of Day and Same Day Default that applies under the circumstances described in section 3.1(b)(i) of this Appendix; and
- (h) Identify email addresses to receive email notifications regarding batches pending under this Appendix.

6.2 Following procedures established by the Reserve Bank, as amended from time to time, specifically for the purposes of the Service, before the Reserve Bank will activate the Service, a Customer must, at a minimum, designate one or more contacts who individually or in conjunction with other contacts have the following

authority regarding the Service:

- (a) To set and edit the Service criteria listed in section 3.0 of this Appendix, and/or
- (b) To view batches pended under the Service, and/or
- (c) To reject or release for processing batches pended under the Service.

6.3 A Customer must manage its operations so as to permit it to receive notices, messages, and information in a timely manner throughout the day and night. If a Customer is unable to receive notices, messages, or information when the Reserve Bank attempts to send a notice, message, or information, the Reserve Bank:

- (a) shall be deemed to have sent the notice, message or information when the Reserve Bank attempted to transmit the notice, message, or information, and
- (b) shall have no duty to attempt to resend the notice, message, or information.

6.4 A Customer shall indemnify, hold harmless, and defend a Reserve Bank against any claim, loss, liability, or expense (including reasonable attorneys' fees and expenses of litigation) incurred by the Reserve Bank in connection with its performance of the Service, except for any claim, loss, liability, or expense arising solely from the Reserve Bank's failure to exercise ordinary care or to act in good faith.

7.0 PROCEDURES

7.1 A Customer agrees to use the Service by having an individual who is designated on a Customer's Official Authorization List complete and execute an agreement in a form provided by the Reserve Bank.

7.2 An individual who is designated on a Customer's Official Authorization List must designate an End User Authorization Contact (EUAC), following the practices and procedures of the Reserve Banks' Certification Practice Statement. An EUAC must designate, following the practices and procedures of the Certification Practice Statement, all individuals who will have authority to:

- (a) designate and edit the Service criteria listed in section 3.0 of this Appendix, and/or
- (b) view batches that have pended under this Appendix, and/ or
- (c) release or reject batches that have pended under this Appendix.

The Reserve Bank shall have no liability for any loss resulting from Customer's failure to designate, following the practices and procedures of the Certification Practice Statement, an EUAC or individuals with the authority described in this section.

- 7.3** A properly designated Customer Contact may exercise any of the authorities listed in section 7.2 of this Appendix by using electronic access to FedACH Information Services.

8.0 RESERVE BANK DISCLAIMERS

8.1 VARIANT COMPANY IDENTIFICATIONS OR BANK ROUTING NUMBERS

The Reserve Bank has no means of verifying that an originator or third party processor uses a Company Identification that a Customer has assigned to the originator or processor and specified as a Managed Company Identification.

Originators or third party processors who create their own batch header records control the data in the company identification field. Variation of the Company Identification in a batch header record may permit an originator or processor to circumvent the Debit Cap or Credit Cap set by a Customer that uses the Company Identification Select version.

- 8.2** If a Customer has more than one valid routing number, an originator or third party processor who creates their own batch header records may use a routing number other than a Managed Routing Transit Number that a Customer expects the originator to use. Such a variation of the routing number in a batch header record may permit an originator or processor to circumvent the Debit Cap or Credit Cap set by a Customer.

- 8.3** The Service only tracks forward items sent by a Customer. Returned debit and credit items will not be subject to this Appendix. This means that return items contained in batches that are identified by a Managed Routing Transit Number or a Managed Routing Transit Number and associated Managed Company Identification will continue to process even though forward items in Managed Batches identified by the same Managed Routing Transit Number or Managed Routing Transit Number and associated Managed Company Identification are pending under the Service. Return items will also not be subtracted from forward aggregate credit and debit totals.

- 8.4** Some originators balance their batches by including in a batch an offsetting debit or credit item equal to the batch's total amount of credit or debit items. The Service will not screen for or prevent originators from balancing their batches. Further, the Service will not net debits and credits from the forward aggregate credit and debit totals. This means that offsetting entries will count towards a Customer's Credit Cap or Debit Cap and may prevent straight through processing of batches.

- 8.5** The Service will not prevent fraud or risky behavior by ACH participants. The Service supplements but does not replace a Customer's other ACH risk management tools.

8.6 NOT A REAL TIME SERVICE

Certain aspects of the Service are provided manually and thus do not occur in

real time. Specifically:

- (a) When a Customer instructs the Reserve Bank to release or reject a pending batch via FedACH Information Services, the Reserve Bank will execute the instruction within a reasonable period of time but not instantaneously. It is possible that a Customer's Same Day Default or End of Day Default may override an instruction to release or reject a batch, if the Reserve Bank is unable to execute the instruction before the final same day or end of day deadline.; and
- (b) The email notifications regarding pending batches that the Reserve Bank sends to specified email addresses will not be sent immediately after a batch pending.

8.7 RELEASE OF PENDING BATCHES IN CERTAIN CONTINGENCY SITUATIONS

If the Reserve Bank experiences a failure with the Service application, its own servers, or other aspects of its internal technological environment, it may elect in its sole discretion to release all batches that have been pending under the Service. The Reserve Bank may or may not be able to add the value of such released batches into Customer's applicable aggregate credit and debt totals. The Reserve Bank will have no liability for loss or harm resulting from a problem with such releases of pending batches beyond its reasonable control.

9.0 LIABILITY

The Reserve Bank shall have no liability with respect to the Service to any party other than a Customer. The Service is not an insurance policy against all loss or harm that may result from ACH originations. The Reserve Bank will be liable only for the Reserve Bank's negligent acts or omissions or lack of good faith in performing the Service. The amount of the Reserve Bank's liability to a Customer for any claim, loss, liability or expense caused by the Reserve Bank's own negligence or lack of good faith in providing the Service will be limited to the FedLine Web[®] monthly access fee plus any fees charged for the Service during the one month immediately preceding the transaction or occurrence which gives rise to the liability. Any legal action against a Reserve Bank with respect to the Service must be initiated by a Customer within one year from the date of the transaction or occurrence that gives rise to the claim.

10.0 FORCE MAJEURE

If the Reserve Bank or a Customer is unable to perform its duties under this appendix because of interruption of communication or computer facilities, emergency conditions, failure of equipment, or other circumstances beyond its control, such nonperformance is excused so long as the party exercises such due diligence as the circumstances require.

11.0 TERMINATION

The Reserve Bank or a Customer may terminate the services provided under this Appendix by giving not less than ten calendar days prior written notice to the other party.

APPENDIX F: FEDACH[®] INFORMATION SERVICES

1.0 GENERAL

- 1.1 The Reserve Banks provide certain information services that are based on data contained in or information related to items but that are separate and distinct from the clearing and settlement services described in Operating Circular 4. All of the particular services described in this Appendix F and Appendices F1, F2, and F3 are, collectively, the FedACH Information Services. Terms and conditions that apply to all FedACH Information Services are set forth in this Appendix F. Terms and conditions that apply specifically to the FedPayments[®] Reporter Service are set forth in Appendix F1. Terms and conditions that apply specifically to the RDFI Alert Service are set forth in Appendix F2. Terms and conditions that apply specifically to the FedACH Information File Service are set forth in Appendix F3. To the extent that this Appendix F or Appendix F1, F2, or F3 differs from Operating Circular 4, the terms of Appendices F, F1, F2 and F3 shall govern.
- 1.2 Banks agree to receive FedACH Information Services using procedures established by the Reserve Banks, as they may be amended from time to time.

2.0 DEFINITIONS

- 2.1 **Customer** means, with respect to a particular FedACH Information Service, a sending bank or receiving bank, as applicable, that has signed up for that service using procedures established by the Reserve Banks from time to time.
- 2.2 **Nonpayment File** means an electronic file that
- (a) is identified by the sender of the file, in accordance with technical specifications defined by the Reserve Banks, as a file containing information related to ACH transactions that is being sent only for informational purposes, as described in this Appendix F or Appendix F1, F2 or F3, and not for clearing and settlement; and,
 - (b) is transmitted from a bank or bank's agent to a Reserve Bank, or from a Reserve Bank to a bank or bank's agent, using any Electronic Access service provided by a Reserve Bank.
- 2.3 **Information Point** means a device that is connected to a Reserve Bank's electronic systems and is designated or used by a bank to send Nonpayment Files to a Reserve Bank or receive Nonpayment Files from a Reserve Bank.
- 2.4 **Service Participation Point** means a device that is connected to the Reserve Banks' electronic systems and that is designated or used by a bank for purposes of accessing and administering FedACH Information Services pursuant to Appendix F, F1, F2 or F3 but that is not used to send or receive Nonpayment Files.

3.0 FEDACH INFORMATION SERVICES

- 3.1** A bank that accesses FedACH Information Services through its own electronic connection may access and use the Reserve Banks' electronic systems to obtain and view such information or reports related to the bank's use of the FedACH Information Services as the Reserve Banks may choose to make available from time to time. Not every form of electronic access to the Reserve Banks' systems for processing items may be used to obtain access to FedACH Information Services.
- 3.2** The Reserve Banks routinely delete from their systems information that is no longer current. The Reserve Banks do not offer access to information or reports that have been deleted from the Reserve Banks' systems in the ordinary course of business.
- 3.3** Fees for FedACH Information Services are determined by a fee schedule that the Reserve Banks publish from time to time. Because fees that are charged to a bank that uses a FedACH Information Service will be billed to a settlement account, a bank that uses a FedACH Information Service must maintain a settlement account directly with a Reserve Bank or, as detailed further in paragraph 9.1 of this Operating Circular 4, indirectly through a correspondent.
- 3.4** By using the FedACH Information Services, a bank agrees to the terms of Operating Circular 5 and Operating Circular 1, as each may be amended from time to time.

4.0 SERVICE PARTICIPATION POINT FOR FEDACH INFORMATION SERVICES

- 4.1** A bank may designate a Service Participation Point for FedACH Information Services offered by the Reserve Banks pursuant to this Appendix F. A bank may use its Service Participation Point to access and administer FedACH Information Services for one or more of the bank's routing numbers. A bank may also use an electronic connection that is owned or operated by an entity other than the bank itself as its Service Participation Point. By designating a Service Participation Point that is operated by another entity, a bank thereby designates the entity as its Service Participation Point manager.
- 4.2** A bank designates a Service Participation Point and, when applicable, a Service Participation Point manager by following procedures established by the Reserve Banks, as they may be amended from time to time.
- 4.3** By designating a Service Participation Point manager for one or more a FedACH Information Services, a bank authorizes the Service Participation Point manager to act as the bank's agent with respect to that service. The bank authorizes its Service Participation Point manager to do anything the bank may do with respect to the setup and ongoing administration of the service.

- 4.4 A Service Participation Point manager is a Service Provider for purposes of Operating Circular 5 and the Service Participation Point manager's access to the FedACH Information Services via the FedLine Web[®] access channel is governed by Operating Circular 5 and the Certification Practice Statement, as they each may be amended from time to time.
- 4.5 A bank agrees that its Service Participation Point manager may be granted credentials authorizing such agent to access the Reserve Banks' systems for purposes of administering the FedACH Information Services for which the bank has designated it the Service Participation Point manager.
- 4.6 A bank agrees to be bound by its Service Participation Point manager's acts or omissions with respect to the FedACH Information Services for which the Service Participation Point manager was designated.
- 4.7 The Reserve Banks may rely on a bank's agency appointment of a Service Participation Point manager until the appointment is revoked or amended in writing and the Reserve Banks have reasonable time to respond to such revocation or amendment.

5.0 SENDING AND RECEIVING NONPAYMENT FILES

- 5.1 For some FedACH Information Services, a Reserve Bank will receive Nonpayment Files from a bank or send Nonpayment Files to a bank. For such services, a bank may designate an Information Point by following procedures established by the Reserve Banks, as they may be amended from time to time.
- 5.2 When a bank sends files to a Reserve Bank for purposes of a FedACH Information Service, the bank is solely responsible for identifying the files, in accordance with technical specifications defined by the Reserve Bank, as Nonpayment Files. Any NACHA formatted files sent to a Reserve Bank that are not identified as Nonpayment Files are payment files subject to clearing and settlement under Operating Circular 4. A bank that sends such a payment file in error to a Reserve Bank, whether directly or through an agent:
 - (a) is a sending bank under Operating Circular 4 and undertakes all the legal responsibilities and liabilities of a sending bank under Operating Circular 4; and
 - (b) agrees to indemnify the Reserve Banks from any claim, loss, or harm (including reasonable attorney's fees and expenses of litigation) that results from the Reserve Bank's receipt or subsequent clearing and settlement of the file except, for any claim, loss, liability, or expense arising solely out of the Reserve Bank's failure to exercise ordinary care or to act in good faith.
- 5.3 By sending Nonpayment Files to a Reserve Bank or receiving Nonpayment Files from a Reserve Bank using an Information Point that is owned or operated by an entity other than the bank itself, a bank designates the entity that owns or operates the Information Point as the bank's Information Point agent for sending or receiving Nonpayment Files.

- 5.4** By designating an Information Point agent, a bank:
- (a) agrees that the Reserve Banks have received a file from the bank when the agent sends the file to the Reserve Banks;
 - (b) agrees that the Reserve Banks have delivered a file to the bank when the Reserve Banks (i) transmit the file to the agent or (ii) make the file available to the agent for retrieval on a Reserve Bank storage device;
 - (c) authorizes the Reserve Banks to act upon the instructions of the agent with respect to handling files sent to or received by the agent on behalf of the bank;
 - (d) authorizes the Reserve Banks to act upon the information sent to a Reserve Bank by the agent;
 - (e) agrees to be bound by the agent's acts or omissions with respect to Nonpayment Files; and
 - (f) authorizes the Reserve Bank holding its settlement account to debit such account for fees owed to a Reserve Bank in connection with Nonpayment Files sent to a Reserve Bank or received from a Reserve Bank by the agent.
- 5.5** The access of the bank's Information Point agent to the Reserve Banks' electronic systems is governed by Reserve Bank Operating Circular 5, as amended from time to time, and the applicable Certification Practice Statement, as amended from time to time.
- 5.6** The Reserve Banks may rely on a bank's designation of an Information Point agent until the designation is revoked in writing and the Reserve Banks have had a reasonable amount of time to respond to the revocation.
- 5.7** A bank agrees to indemnify, defend, and hold the Reserve Banks harmless against any claim, loss, cost, or expense (including reasonable attorneys' fees and expenses of litigation) resulting from (i) the acts or omissions of the bank's agent; (ii) a Reserve Bank's acts or omissions in carrying out the instructions of such agent within the scope of the agency appointment; (iii) a Reserve Bank's actions upon information sent to a Reserve Bank by a bank's agent; or (iv) the third party access arrangement, except, with respect to (i) through (iv), for any claim, loss, cost, or expense arising solely out of a Reserve Bank's failure to exercise ordinary care or to act in good faith.

6.0 LIABILITY

- 6.1** With respect to any use that a bank makes of a FedACH Information Service, a Reserve Bank shall be liable only:
- (a) to the bank, and not to any third party;

- (b) for loss or damage proximately caused by the Reserve Bank's failure to exercise ordinary care or by its own or its employees' willful misconduct; and
- (c) up to the amount of: (i) any fee the bank paid to the Reserve Banks specifically for the FedACH Information Service during the one month period preceding the transaction or occurrence giving rise to the loss or damage; or (ii) if the bank paid no fee to the Reserve Banks specifically for the FedACH Information Service during the one month period preceding the transaction or occurrence giving rise to the loss or damage, the amount of the access fee paid by the bank to the Reserve Banks for the bank's electronic connection to the Reserve Banks' FedACH Information Service during the one month period preceding the transaction or occurrence giving rise to the loss or damage.

In no event shall the Reserve Banks be liable for any special or consequential damages.

- 6.2** Any legal action against a Reserve Bank with respect to a FedACH Information Service must be initiated by a bank within one year from the date of the transaction or occurrence that gives rise to the claim.

7.0 TERMINATION

The Reserve Banks or a bank that has signed up for a FedACH Information Service may terminate such service by giving not less than ten calendar days' prior written notice to the other party.

"FedACH" and "FedLine Web" are registered service marks of the Federal Reserve Banks. A complete list of marks owned by the Federal Reserve Banks is available at FRBservices.org.

APPENDIX F1: FEDPAYMENTS® REPORTER SERVICE

1.0 GENERAL

1.1 The Reserve Banks offer a FedPayments Reporter Service (Service) that presents information contained in certain ACH files as human readable reports and machine readable files. The Service makes the reports available in electronic form to Customers via the electronic channels specified below. This Appendix F1 and applicable sections of Appendix F provide the terms and conditions under which the Reserve Banks offer the Service.

2.0 DEFINITIONS

2.1 **On Demand Report** means a Report that a Customer generates at any time by accessing FedACH® Information Services via the FedLine Web® access channel and requesting that a Report be created based upon criteria that Customer has provided using procedures established by the Reserve Banks, specifically for the purposes of the Service.

2.2 **Report** means an electronic record of information that (i) was extracted from information contained in a payment file that was sent (or received) by Customer to (or from) a Reserve Bank under Operating Circular 4, and/or from information in a Nonpayment File that was sent by Customer to a Reserve Bank under Appendix F; (ii) is related to one or more ACH items, originators, or receivers; and (iii) is available for access in different electronic formats.

2.3 **Scheduled Report** means a Report that the Service periodically generates based upon criteria that a Customer has provided using procedures established by the Reserve Banks, specifically for the purposes of the Service.

3.0 THE SERVICE

3.1 In carrying out the Service the Reserve Banks will create and make available Reports requested by Customer using procedures established by the Reserve Banks specifically for the purposes of the Service.

3.2 Pursuant to Appendix F, a Customer may send Nonpayment Files to the Reserve Banks so that the Service may include information from those files in the Reports that the Service creates and makes available to Customer. Only certain Reports are available for information sent to the Reserve Banks in Nonpayment Files.

3.3 The Service makes Scheduled Reports available to Customer in three ways.

(a) Customer may access, download, and print Scheduled Reports from the FedACH Information Services website via the FedLine Web access channel;

(b) Customer may instruct the Reserve Banks using procedures established by the Reserve Banks specifically for the purposes of the Service, to make certain Scheduled Reports available to designated email addresses via an

encrypted email channel that the Reserve Bank has selected and Customer has agreed to use⁵; or

- (c) Customer may instruct the Reserve Banks using procedures established by the Reserve Banks specifically for the purposes of the Service, to send Scheduled Reports to Customer's sending point, receiving point, or Information Point via the Reserve Banks' ACH file delivery channels.

Scheduled Reports will remain on the FedACH Information Services website available through the FedLine Web access channel for Customers for at least 10 banking days from the date that the Service generates the reports.

- 3.4** From the FedACH Information Services website available through the FedLine Web access channel, Customer may request On Demand Reports, which the Service will generate and display in a temporary browser window. Customer may download or print an On Demand Report from the temporary browser window. The Service will not retain an On Demand Report once the temporary browser window is closed, though Customer may request that the Service regenerate the Report. Customer will pay a fee for each request for an On Demand Report.

4.0 CUSTOMER RESPONSIBILITIES

- 4.1** Following procedures established by the Reserve Banks specifically for the purposes of the Service, Customer will:
 - (a) select from a menu of available options the type(s) of Scheduled Report(s) that the Service will generate for Customer;
 - (b) for each Scheduled Report, select options or provide information necessary for the Service to create the Report;
 - (c) for Scheduled Reports that contain information related to a specific receiver, provide the receiver's account number and a name for the receiver's account; and
 - (d) for Scheduled Reports that contain information related to a specific originator, provide the code that is used in the company identification field of an entry's batch header record to identify the originator.
- 4.2** If Customer sends Nonpayment Files to the Reserve Banks for this Service, in addition to the identification requirements of Appendix F, the Reserve Banks may require that the files identify, in accordance with technical specifications defined by the Reserve Banks, whether Customer was the sending bank or receiving bank for the ACH items contained in the Nonpayment File.

⁵ This encrypted email delivery is subject to the terms and conditions required by the service provider for the encrypted email channel.

5.0 SERVICE PARTICIPATION POINT

- 5.1** If Customer designates a Service Participation Point manager for the Service in accordance with Appendix F, only the Service Participation Point manager will be able to perform the Report setup actions described in section 4 of this Appendix; Customer will not be able to perform such Report setup actions. However, if Customer has its own FedLine Web connection, Customer will be able to access its Scheduled Reports and request On Demand Reports, even if it has designated a Service Participation Point manager.
- 5.2** By designating a Service Participation Point manager for the Service, Customer authorizes the Service Participation Point manager to act as Customer's agent with respect to the Service. Specifically, Customer authorizes its Service Participation Point manager to do anything Customer may do with respect to the setup and ongoing administration of the Service, including, but not limited to:
- (a) starting or stopping the creation of Reports at any time;
 - (b) inputting and changing certain Service level setup information on FedACH Information Services on FedLine Web;
 - (c) performing the Report set up actions listed in section 4 of this Appendix;
 - (d) accessing, downloading, and printing Customer's Scheduled Reports; and
 - (e) generating, downloading, and printing On Demand Reports.

6.0 ENCRYPTED EMAIL DELIVERY

- 6.1** By designating email addresses to which Scheduled Reports will be sent, Customer or its authorized agent is instructing the Reserve Banks to send information, which may contain personally identifiable financial information or other sensitive information, via an encrypted email channel to a person who or an entity that can access the email accounts associated with the designated email addresses. Customer agrees for itself and its authorized agent, if any, not to designate an email address of a person or entity other than
- (a) Customer's employee,
 - (b) Customer's authorized agent, or
 - (c) Customer's account holder who is the receiver or originator of an ACH item or entry from which a Scheduled Report is generated.

The Reserve Banks have no responsibility to ensure that the email addresses that Customer or its authorized agent designates belong to any of these parties.

- 6.2** Customer will indemnify, defend, and hold the Reserve Banks harmless against any claim, loss, harm, or cost (including reasonable attorneys' fees and expenses of litigation) resulting from the Reserve Bank's acts or omissions in

carrying out the instructions of the Customer or its agent to send Reports to designated email addresses under this Appendix except, for any claim, loss, cost, or expense arising solely out of a Reserve Bank's failure to exercise ordinary care or to act in good faith.

"FedPayments Reporter" and "FedLine Web" and "FedACH" are registered service marks of the Federal Reserve Banks. A complete list of marks owned by the Federal Reserve Banks is available at [FRBservices.org](https://www.frb-services.org).

APPENDIX F2: RDFI ALERT SERVICE

1.0 GENERAL

- 1.1 The Reserve Banks offer a RDFI Alert Service (Service) to receiving banks that provides an email notice to a receiving bank or its receiver when certain ACH files, batches, or items match criteria selected by the receiving bank. A receiving bank may select criteria in three different ways. A receiving bank may select the criteria on its own, allow the Reserve Bank to select the criteria on its behalf, or establish the criteria by varying, to the extent permitted, the criteria selected by the Reserve Bank on its behalf. For the purposes of this Appendix F2, all three methods will constitute criteria selected by the Customer. This Appendix F2 and applicable sections of Appendix F provide the terms and conditions under which the Reserve Banks offer the Service.
- 1.2 The Reserve Banks may amend the procedures used to sign up for and administer the Service from time to time.

2.0 DEFINITIONS

- 2.1 **Amount Rule** means a rule, selected by Customer, in accordance with section 4 below, that applies to a Debit Amount or Credit Amount that is part of a Batch Criteria Set or Item Criteria Set.
- 2.2 **Batch Criteria Set** means a set of criteria, selected by Customer that applies to Customer Batches. The set includes one or any combination of the following: Debit Amount together with its Amount Rule, Credit Amount together with its Amount Rule, Item and Addenda Count Amount, Field Value(s), and Settlement Time.
- 2.3 **Credit Amount** means a dollar amount, selected by Customer, that applies to either (i) all forward or return credit items that are Customer Items and contained in an Outbound File or Customer Batch, or (ii) a single Customer Item.
- 2.4 **Customer Batch** means an ACH batch that contains Customer Items and is contained in an Outbound File.
- 2.5 **Customer Item** means a forward or return ACH item that contains a Customer RTN in Field 3, "Receiving DFI Identification," of the item's entry detail record.
- 2.6 **Customer RTN** means a routing number that has been issued to Customer and that Customer has designated to participate in the Service.
- 2.7 **Debit Amount** means a dollar amount, selected by Customer, that applies to either (i) all forward or return debit items that are Customer Items and contained in an Outbound File or Customer Batch, or (ii) a single Customer Item.
- 2.8 **Field Value** means a value, selected by Customer, that corresponds to one of the batch header or batch control record fields that the Service offers as a criterion for notification.

- 2.9 File Criteria Set** means a set of criteria, selected by Customer that applies to Outbound Files. The set includes one or any combination of the following: Debit Amount, Credit Amount, and Item and Addenda Count Amount.
- 2.10 Item and Addenda Count Amount** means a numerical amount, selected by Customer that applies to all Entry Detail Records and Addenda Records that are contained in an Outbound File or Customer Batch.
- 2.11 Item Criteria Set** means a set of criteria, selected by Customer that applies to Customer Items. The set includes one or any combination of the following: a Debit Amount together with its Amount Rule or Credit Amount together with its Amount Rule, Field Value(s), and Settlement Time.
- 2.12 Outbound File** means an ACH file that (i) the Reserve Bank creates for delivery to Customer or Customer's receiving point and (ii) contains Customer Items.
- 2.13 Settlement Time** means a settlement time, selected by Customer that corresponds to one of the Reserve Bank's ACH settlement times, provided in the FedACH Processing Schedule, that the Service offers as a criterion for notification.

3.0 THE SERVICE

- 3.1** If Customer selects one or more File Criteria Set(s), for each Outbound File, the Service will aggregate the total debit amount, credit amount, and/or item and addenda count from all Customer Items that are within the file. If the aggregate debit amount, credit amount, or item and addenda count from such items exceeds a Debit Amount, Credit Amount, or Item and Addenda Count Amount for a File Criteria Set, the Service will send an email notice of that event to the email address(es) that Customer has designated for the applicable File Criteria Set.
- 3.2** If Customer selects one or more Batch Criteria Set(s), for each Customer Batch, the Service will
- (a) Aggregate the total debit amount and credit amount for all Customer Items that are within the batch and apply the applicable Amount Rule to the aggregate amount, if a Batch Criteria Set contains a Debit Amount or Credit Amount;
 - (b) Aggregate the total item and addenda count for all Customer Items that are within the batch and determine if the aggregate amount exceeds the Item and Addenda Count Amount, if a Batch Criteria Set contains an Item and Addenda Count Amount;
 - (c) Determine whether the values within applicable batch header and batch control record fields match any Field Values, if a Batch Criteria Set contains one or more Field Values; and
 - (d) Determine whether the settlement time that the Reserve Bank assigns to the batch matches the Settlement Time, if a Batch Criteria Set contains a Settlement Time.

If all the notification criteria for a Batch Criteria Set are met, the Service will send an email notice of that event to the email address(es) that Customer has designated for the applicable Batch Criteria Set.

3.3 If Customer selects one or more Item Criteria Sets, for each Customer Item, the Service will

- (a) Apply the Amount Rule to the item's debit or credit amount, if an Item Criteria Set contains a Debit Amount or Credit Amount;
- (b) Compare the values within applicable batch header record and entry detail record fields with Field Values, if an Item Criteria Set contains one or more Field Values; and
- (c) Compare the settlement time that the Reserve Bank assigns to the batch that contains the item with the Settlement Time, if an Item Criteria Set contains a Settlement Time.

If all the notification criteria for an Item Criteria Set are met, the Service will send an email notice of that event to the email address(es) that Customer has designated for the applicable Item Criteria Set.

3.4 The Service will only send an email notice if all the notification criteria for a Batch Criteria Set or Item Criteria Set are met. If Customer has multiple criteria but wants to receive notice when any one of the criterion is met, Customer will need to create multiple Batch Criteria Sets or Item Criteria Sets that each contain only a single criterion.

3.5 When an Outbound File, Customer Batch, or Customer Item meets the notification criteria of a File Criteria Set, Batch Criteria Set, or Item Criteria Set, respectively, the Reserve Banks will provide the email notices set forth in this paragraph 3. **The Service will not pend or stop any Outbound Files, Customer Batches, or Customer Items.**

4.0 SERVICE SETUP

4.1 Customer performs the Service setup described in this section using procedures established by the Reserve Bank, as they may be amended from time to time.

4.2 Customer may select

- (a) one or more File Criteria Sets;
- (b) one or more Batch Criteria Sets; and
- (c) one or more Item Criteria Sets.

4.3 If Customer has selected a Debit Amount or Credit Amount as part of a Batch Criteria Set then for each such Debit Amount or Credit Amount Customer must select one of the following Amount Rules:

The notification criterion related to the Debit Amount or Credit Amount is met if

- (a) the aggregate debits or credits in the batch equal or exceed the Debit Amount or Credit Amount;
- (b) the aggregate debits or credits in the batch equal the Debit Amount or Credit Amount; or
- (c) the aggregate debits or credits in the batch equal or are less than the Debit Amount or Credit Amount.

- 4.4** If Customer has selected a Debit Amount or Credit Amount as part of an Item Criteria Set then for each such Debit Amount or Credit Amount Customer must select one of the following Amount Rules:

The notification criterion related to the Debit Amount or Credit Amount is met if

- (a) the item's debit or credit amount equals or exceeds the Debit Amount (or Credit Amount);
- (b) the item's debit or credit amount equals the Debit Amount or Credit Amount; or
- (c) the item's debit or credit amount equals or is less than the Debit Amount or Credit Amount,

- 4.5** Customer must provide at least one email address to receive email notices for each File Criteria Set, Batch Criteria Set, and Item Criteria Set that Customer selects.

5.0 SERVICE PARTICIPATION POINT

- 5.1** If Customer designates a Service Participation Point manager for the Service in accordance with Appendix F, only the Service Participation Point manager will be able to perform the Service setup actions described in section 4 of this Appendix; Customer will not be able to perform such Report setup actions.

- 5.2** By designating a Service Participation Point manager for the Service, Customer authorizes the Service Participation Point manager to act as Customer's agent with respect to the Service. Specifically, Customer authorizes its Service Participation Point manager to do anything Customer may do with respect to the setup and ongoing administration of the Service, including, but not limited to:

5.2.1 Selecting any number of File Criteria Sets, Batch Criteria Sets, or Item Criteria Sets;

5.2.2 Setting Debit Amounts and Credit Amounts for File Criteria Sets, Batch Criteria Sets, or Item Criteria Sets; and

5.2.3 Designating email addresses to which notifications will be sent.

APPENDIX F3: FEDACH® INFORMATION FILE SERVICE

1.0 FEDACH INFORMATION FILE SERVICE

- 1.1** The Reserve Banks offer a FedACH Information File Service (Service) that sends to a bank a daily information file, called a FedACH Information File, which is a copy of the ACH transaction detail information that was previously sent to the bank for posting.
- 1.2** The Reserve Banks identify a FedACH Information File as a Nonpayment File. A Customer that receives a Nonpayment File is solely responsible for ensuring that the receipt of the Nonpayment File does not result in double posting to its customer accounts. By receiving any Nonpayment Files from a Reserve Bank, the Customer agrees to indemnify, hold harmless, and defend a Reserve Bank against any claim, loss, liability, or expense (including reasonable attorneys' fees and expenses of litigation) incurred by the Reserve Bank in connection with its performance of the Service, except for any claim, loss, liability, or expense arising solely from the Reserve Bank's failure to exercise ordinary care or to act in good faith.
- 1.3** The bank may instruct the Reserve Banks using procedures established by the Reserve Banks specifically for the purposes of the Service, to send the FedACH Information File to Customer's sending point, receiving point, or Information Point via the Reserve Banks' ACH file delivery channels.

APPENDIX G: CROSS-BORDER ITEMS

1. GENERAL

- a) The Reserve Banks process cross-border ACH items that are sent to the Reserve Bank as a part of the FedGlobal® ACH Payments Service in accordance with this Appendix, agreements between a Reserve Bank gateway operator and a foreign gateway operator, and the FedGlobal ACH Service Origination Manual issued by the Reserve Banks as applicable to specified foreign countries, as amended from time to time. These rules, agreements, and guidebooks generally do not supersede the laws and rules that apply to the handling of items in foreign payment systems. The application of foreign law and payment system rules to a cross-border ACH item may produce outcomes different from the outcomes that would result from handling of the same item under domestic rules. Such differences include, but are not limited to, the following: the time for return of cross-border items may be different; returned items may not be able to be dishonored; cross-border items may not be reversible; prenotes, and items to be settled on a foreign holiday, may not be acceptable; the receiver may not receive credit on the settlement date; and special fees may apply. Sending and receiving banks are responsible for understanding the rules applicable to cross-border payments in a foreign country, and the limitations on types of cross-border payment transactions that are accepted by Reserve Banks.
- b) In addition to sending outbound cross-border ACH items through a foreign gateway operator to foreign banks for credit, and in limited circumstances, for debit to receivers' accounts, the Reserve Bank may send outbound cross-border ACH items through a foreign gateway operator to non-bank participants in a foreign clearing system that disburse payments to receivers.
- c) The terms and conditions of Operating Circular 4 apply to cross-border items processed by the Reserve Bank, except to the extent that this Appendix expressly specifies terms and conditions that differ from those set forth in Operating Circular 4. Certain country specific technical details, such as formatting requirements, and return codes that are provided in the FedGlobal ACH Service Origination Manual also apply to cross-border items to the extent such technical details do not conflict with Operating Circular 4 and this Appendix.

2. ORIGINATING GATEWAY OPERATOR WARRANTIES

Notwithstanding paragraph 20.1(c) of Operating Circular 4, a Reserve Bank acting as a gateway operator for an outbound cross-border item warrants to the sending bank that it will:

- a) Process and settle cross-border items in accordance with Operating Circular 4, the applicable agreement between the Reserve Bank gateway operator and a foreign gateway operator, and applicable domestic laws and payment systems rules;
- b) Upon receiving written notice from the sending bank of a Third-Party Error, make reasonable efforts to assist the sending bank in resolving the Third-Party Error, including coordinating with and seeking to recover funds from its foreign

counterparties (e.g., by requesting the foreign counterparty to process a return), and will pass through to the sending bank any funds received, less any costs incurred by the Reserve Bank, in resolving the Third-Party Error.

For purposes of this paragraph 2, “Third-Party Error” means the late delivery, non-delivery, misdirected delivery, or partial delivery of a cross-border item resulting from fraud, error, or delay in the processing of a cross-border item by a party other than the sending bank but for which the sending bank is or could be liable to the originator.

3. RECEIVING GATEWAY OPERATOR WARRANTIES

Notwithstanding paragraph 20.1(c) of Operating Circular 4, a Reserve Bank acting as gateway operator for an inbound cross-border item warrants to the receiving bank only that the item is received from the foreign gateway operator and is in compliance with the requirements of this Appendix.

4. GATEWAY OPERATOR LIABILITY

A Reserve Bank gateway operator’s liability for breach of warranty under paragraphs 2 and 3 of this Appendix is limited to the amount of the item and interest, and does not include damages that are attributable to the consequences of the breach, even if the consequences were foreseeable at the time of the breach. Any legal action against a Reserve Bank with respect to cross-border items under this Appendix must be initiated by a sending bank or receiving bank within one year from the date of the transaction or occurrence that gives rise to the claim.

5. RISKS AND RESPONSIBILITIES OF SENDING AND RECEIVING BANKS

- a) The Reserve Bank is responsible to a sending bank for the proper calculation of foreign exchange by the foreign gateway operator, in accordance with the applicable exchange rate published by the Reserve Bank. Otherwise, the Reserve Bank does not guarantee exchange rates. Exchange rates are set and foreign exchange is performed by the foreign gateway operator for a specified country. The sending bank bears all risk of exchange rate fluctuation with respect to a returned cross-border item.
- b) The sending bank bears all risk associated with the identification of the currency in which (i) a foreign receiver’s account is denominated or (ii) a non-bank participant in a foreign clearing system disburses payments. The Reserve Bank assumes no responsibility or liability to the sending bank or any other person with respect to a return of a cross-border item, or an exchange rate applied to a cross-border item, or any fees levied with respect to a cross-border item that result from the difference between the currency in which a cross-border item is denominated for credit to the receiver or the receiver’s account and the currency in which the foreign receiver’s account is actually denominated.

- c) The sending bank bears all risk, subject to paragraph 5(a), associated with the return of a cross border item including any fees charged for processing and/or returning exception items, whether or not such items are returned in accordance with the laws or payment system rules of the receiving country.
- d) The sending bank bears all risk, subject to paragraph 5(a), associated with the return of a cross border item including any fees charged for processing and/or returning exception items, whether or not such items are returned in accordance with the laws or payment system rules of the receiving country.
- e) The sending bank bears all risk associated with the misuse of information, such as the alteration of disclosures, provided by the Reserve Bank or the use of information from sources other than the Reserve Bank in connection with the processing and settlement of cross border items.
- f) Notwithstanding any contrary provision of the Nacha Operating Rules, the sending bank warrants that authorization of a cross-border debit item complies with the laws and payments system rules of the receiving country where such laws and payments system rules require authorization with respect to a cross-border debit item. For cross-border credit items, the sending bank warrants only that the payment is authorized by the originator.
- g) The Reserve Bank assumes no responsibility or liability to the sending bank or receiving bank with respect to the sending bank's or receiving bank's compliance or risk management obligations, including those relating to the Bank Secrecy Act or other U.S. laws, regulations, and bank supervisory guidance regarding anti-money laundering, anti-terrorism financing, fraud, customer identification programs, data security and data privacy, Office of Foreign Assets Control requirements, and mandatory consumer protections.
- h) On a periodic basis, as requested by the Reserve Bank, each sending or receiving bank will provide the Reserve Bank with information to assist the Reserve Bank in assessing, monitoring, and managing its compliance risk related to the FedGlobal ACH Service. Such information may include responses to questionnaires, or answers to questions related to the Reserve Bank's monitoring for suspicious activity, or such other information as the Reserve Bank may request from time to time for the purposes of assessing, monitoring, or managing its compliance risk. The Reserve Bank will not request any bank to provide Confidential Supervisory Information ("CSI") as defined by each sending or receiving banks' regulatory authorities⁶ for the purposes of this Appendix, and a bank may not provide CSI to the Reserve Bank in response to a request made by the Reserve bank pursuant to this Appendix. The Reserve Bank is collecting this information as an ACH operator and not in its supervisory capacity, therefore any information submitted to the Reserve Bank in accordance with this Appendix G will not constitute CSI by virtue of the fact it

⁶ See 12 CFR 4.32(b), 261.2(c), and 309.5(g)(8).

is provided to the Reserve Bank. When a Participation Agreement is provided to the Reserve Bank, any other requested documentation to support the Reserve Bank's compliance program shall be included.

- i) The Reserve Bank may restrict or terminate a bank's access to the FedGlobal® ACH Payments Service if the bank's participation in the service poses a compliance risk that is unacceptable to the Reserve Bank. If a sending or receiving bank fails to provide information as required by this Appendix, the Reserve Bank may restrict or terminate such bank's access to the FedGlobal ACH Service.
- j) A sending or receiving bank that becomes subject to a public enforcement action that addresses, in whole or in part: (i) an alleged failure to comply with BSA, AML or OFAC laws, regulations or guidance; (ii) any actions or activities relating to or involving FedGlobal ACH Payments; or (iii) any other actions or activities relating to or involving cross-border payments; must notify the Reserve Bank within thirty (30) days after the effective date of any such action.
- k) The Reserve Bank, in its sole discretion, may refuse to handle cross-border items originating from any bank or designated for receipt by any bank.
- l) The Reserve Bank may identify additional risks and responsibilities that are not inconsistent with Operating Circular 4, for the sending bank and receiving bank in the FedGlobal ACH Service Origination Manual.

APPENDIX G1: FIXED TO FIXED FOREIGN EXCHANGE SERVICE

1.0 GENERAL

- 1.1 The Reserve Banks offer a Fixed to Fixed Foreign Exchange Service (“F3X Service”) that enables Customers to send zero-value messages in ACH format to the Reserve Banks for delivery to a Foreign Gateway Bank that has an agreement with the Reserve Banks for the handling of such messages. The messages are a component of a forward credit transaction, denominated in a foreign currency, for the benefit of a receiver in a foreign country. The other components of such a credit transaction are governed by other legal agreements to which the Reserve Banks are not parties.
- 1.2 The F3X Service is provided in accordance with the terms of this Appendix G1.
- 1.3 Fees for the F3X Service are determined by a fee schedule that the Reserve Banks publish from time to time. The Customer authorizes the Reserve Bank to collect such fees from the Customer’s designated settlement account.

2.0 DEFINITIONS

- 2.1 **Customer** means a bank that has signed up for the F3X service, following procedures established by the Reserve Bank, as amended from time to time.
- 2.2 **F3X Message** means a zero-value message sent to a Reserve Bank that is formatted as a zero-dollar ACH item according to the specifications set forth in the FedGlobal® ACH Service Origination Manual.
- 2.3 **FedGlobal ACH Service Origination Manual** means the Reserve Banks’ publication that specifies the procedural and technical requirements of the F3X Service, as amended from time to time.
- 2.4 **Foreign Gateway Bank** means a foreign financial institution that has entered into an agreement with the Reserve Bank to handle F3X Messages as set forth in section 4.1 of this Appendix.
- 2.5 **Customer’s Foreign Correspondent** means a foreign financial institution with which the Customer has made arrangements to fund a payment transaction associated with an F3X Message, as specified in section 7.1 of this Appendix.
- 2.6 **Foreign Receiving Institution** means an institution that the Customer identifies in an F3X message as the institution that should receive a payment instruction from the Foreign Gateway Bank for credit to the receiver designated by the originator of the payment.

3.0 F3X SERVICE

- 3.1** The F3X Service provided by the Reserve Banks is a zero-value messaging service only. A Customer is responsible for making funding and settlement arrangements with its Foreign Correspondent, as detailed in section 7.1 of this Appendix, for the Customer's payment transaction associated with an F3X Message.
- 3.2** The F3X Service is available into those countries specified in the FedGlobal ACH Service Origination Manual. The processing deadlines for transmission of F3X Messages to the Reserve Bank are specified in the FedGlobal ACH Service Origination Manual.
- 3.3** The Reserve Bank will accept properly formatted F3X Messages from Customers for delivery only to Foreign Gateway Banks identified in the FedGlobal ACH Service Origination Manual.
- 3.4** Upon receipt of a properly formatted F3X Message, the Reserve Bank will edit the F3X Message according to the FedGlobal ACH Service Origination Manual and translate it, if necessary, into the appropriate format for delivery to the Foreign Gateway Bank.
- 3.5** The Reserve Bank will provide usual file receipt acknowledgments to the Customer for files containing F3X Messages that the Reserve Bank has received.
- 3.6** The Reserve Bank sends F3X Messages to the Foreign Gateway Bank in accordance with the FedACH processing schedule.

4.0 FOREIGN GATEWAY BANK ROLE

- 4.1** Upon receipt of a properly formatted F3X Message, the Foreign Gateway Bank shall (i) create a payment instruction, denominated in the foreign currency specified in the F3X Message, by matching the F3X Message with amounts received from Customer's Foreign Correspondent (ii) send the credit instruction in the applicable foreign payment format to the Foreign Receiving Institution, and (iii) settle with the Foreign Receiving Institution for the amount of the payment instruction.
- 4.2** If the Foreign Gateway Bank rejects an F3X Message, as provided in section 5.3 of this Appendix, receives a returned payment instruction associated with an F3X Message from the Foreign Receiving Institution, as provided in section 6.1 of this Appendix, or in any other way fails to handle a F3X Message in accordance with Section 4.1 of this Appendix the Foreign Gateway Bank shall be solely responsible for returning any settlement associated with the F3X Message to Customer's Foreign Correspondent pursuant to foreign law, payment system

rules or contracts between the Foreign Gateway Bank and Customer's Foreign Correspondent.

5.0 REJECTS

- 5.1 Generally.** The Reserve Bank or a Foreign Gateway Bank can reject an F3X Message when it is unable to process the message because the message does not meet its established record or file formatting, editing, or conversion criteria. A Foreign Gateway Bank will also reject an F3X Message that cannot be matched with funds within the timeframes specified in the FedGlobal ACH Service Origination Manual.
- 5.2 Reserve Bank Rejects.** If a Reserve Bank rejects an F3X Message or a file or batch containing F3X Messages, the Reserve Bank will handle such rejects according to normal ACH procedures for rejected items, files, and batches.
- 5.3 Foreign Gateway Bank Rejects.** If a Foreign Gateway Bank rejects an F3X Message, the Foreign Gateway Bank will send the F3X Message back to the Reserve Bank. The Reserve Bank will send rejected F3X Messages received from a Foreign Gateway Bank to the Customer as ACH return items according to normal ACH procedures and time schedules set forth in Operating Circular 4, excluding any settlement requirement. If a Foreign Gateway Bank rejects a file or batch containing F3X Messages, the Foreign Gateway Bank will notify the Reserve Bank. The Reserve Bank will attempt to repair and resend the file or batch rejected by the Foreign Gateway Bank. If the Reserve Bank is unable to repair the file or batch, the Reserve Bank will notify the Customer.

6.0 RETURNS

- 6.1** A Foreign Gateway Bank will return an F3X Message that is associated with a payment instruction that has been returned by the Foreign Receiving Institution. If a Foreign Gateway Bank returns an F3X Message it will send the returned F3X Message to the Reserve Bank. The Reserve Bank will send return F3X Messages received from a Foreign Gateway Bank to the Customer as ACH return items according to normal ACH procedures and time schedules set forth in Operating Circular 4, excluding any settlement requirement.

7.0 CUSTOMER RESPONSIBILITIES

- 7.1** In order for a Foreign Gateway Bank to create a payment instruction based on information contained within a F3X Message, the Foreign Gateway Bank must receive value for the payment. The Customer is responsible for making arrangements with its Foreign Correspondent to (i) send (and, in the case of returns, receive) value in a foreign currency to (or from) a Foreign Gateway Bank along with information that will identify the F3X Message(s) that the value should

be paired with, and (ii) settle with the Customer for the value sent (or received) in the foreign currency.

7.2 The Customer is responsible for handling any settlement disputes for forward or returned payment instructions associated with F3X Messages.

7.3 The Customer is responsible for understanding applicable foreign laws, regulations and payment system rules.

8.0 APPLICABLE LEGAL TERMS

8.1 The following parts of Operating Circular 4 are incorporated into this Appendix:

- (a) Paragraph 2 (Definitions); paragraph 17 (Records); paragraph 19 (Zero-value Messages); and Paragraph 22 (Forum for Action). Paragraphs 3 (Sending Credit and Debit Items) and 6.1 and 6.2 (Processing) are also incorporated herein but the term “item(s)” is replaced with “F3X Message(s).”
- (b) To the extent a Customer is a receiving bank with respect to F3X Message returns or rejects, paragraphs 7.1, 7.2, and 7.4 (Delivery of Items) are also incorporated herein but the term “item(s)” is replaced with “F3X Message(s).”
- (c) The disclaimer of compliance responsibility and liability under paragraph 5(c) and the right to refuse to handle cross-border items under paragraph 5(d) of Appendix G to Operating Circular 4 are also incorporated herein and are effective with respect to Customers originating F3X Messages, but the term “cross-border item(s)” is replaced with “F3X Message(s).” Such disclaimer applies both to a Customer’s F3X Messages and the settlement for such messages.

All other parts of Operating Circular 4 are not incorporated into this Appendix.

8.2 To the extent this Appendix G1 conflicts with any of the incorporated parts of Operating Circular 4, this Appendix controls.

8.3 The application of foreign law and payment system rules to an F3X Message may produce outcomes different from the outcomes that would result from handling the same message under domestic rules.

9.0 LIABILITY

9.1 A Reserve Bank shall have no liability with respect to the F3X Service to any party other than a Customer. A Reserve Bank will be liable to the Customer only for damage caused by the Reserve Bank’s failure to exercise ordinary care, or by its own or its employees’ willful misconduct, in processing an F3X Message, or any files or batches containing F3X Messages. The liability for such damage

shall not exceed the amount of any fee paid to the Reserve Bank for the F3X Message.

- 9.2** Except as provided in 9.1, in no event shall a Reserve Bank be liable
- (a) for reconciliation of F3X Messages with amounts that are sent by the Customer's Foreign Correspondent to the Foreign Gateway Bank for purposes of funding payment instructions associated with the F3X Messages;
 - (b) for forward or return settlement of payment instructions associated with F3X Messages;
 - (c) if the Foreign Receiving Institution rejects or assesses fees against a payment instruction associated with an F3X Message because the payment instruction is in a currency that is incompatible with the receiver's account;
 - (d) for any delay or misrouting of, or failure to process F3X Messages, payment instructions associated with F3X Messages, or returns or rejects of F3X Messages; or
 - (e) for fraud relating to F3X Messages, payment instructions associated with F3X Messages, or returns or rejects of F3X Messages.
- 9.3** The Customer agrees to indemnify the Reserve Bank for any loss or expense (including reasonable attorney's fees and expenses of litigation) incurred by the Reserve Bank as a result of any action or lack of action taken with respect to a F3X Message in accordance with this Appendix, except for any loss or expense arising solely from the Reserve Bank's failure to exercise ordinary care or to act in good faith.

APPENDIX H: EXCEPTION RESOLUTION SERVICE

This appendix sets forth the terms under which the Reserve Banks provide the Exception Resolution Service (“Service”).

1.0 GENERAL

The Service is provided by the Reserve Banks through an application that permits participating depository institutions who have agreed to the terms of Operating Circular No. 4 to exchange information to aid in handling certain kinds of ACH exceptions that arise with respect to ACH items of those depository institutions. The application permits a Requesting Bank to initiate an ACH Exception Use Case and a Responding Bank to receive, read, and respond to that ACH Exception Case, in each case as set forth in the ACH Exception Resolution Service Quick Reference Guide (the “ERS QRG”). The Reserve Banks provide the Service by hosting the underlying application and by providing a Participating Bank access to the Service online through an Electronic Connection or offline as described in paragraph 6.0 below.

2.0 DEFINITIONS

Unless otherwise stated in this appendix, a term defined in the body of this Operating Circular No. 4 has the same meaning in this appendix. For purposes of this appendix:

2.1 ACH Exception Use Case means a permitted reason for sending a message through the Service as set forth in the ERS QRG, such as requests by an ODFI to an RDFI seeking a return of an ACH entry, information about the status of a payment, or a written statement of unauthorized debit; requests from an RDFI to an ODFI seeking a copy of a converted check, Originator contact information, proof of authorization, or acceptance of a late return; and general messages between Participating Banks.

2.2 Electronic Connection has the meaning assigned to it in the Reserve Banks’ Operating Circular No. 5.

2.3 FedACH Origination and Receipt means the services provided by the Reserve Banks under Operating Circular No. 4 through which a depository institution may send or receive ACH items to the Reserve Banks without designating another ACH operator as its agent for these activities.

2.4 Full Service Participant means a depository institution that agrees to become a Participating Bank, as provided for in paragraph 4.0. A Full Service Participant can act as a Requesting Bank or Responding Bank.

2.5 Offline Service Participant means a depository institution enrolled in FedACH Origination and Receipt that agrees to become a Participant using the offline service, as provided for in paragraph 6.0.

2.6 Participating Bank means a Partial Service Participant or a Full Service Participant. With respect to any ACH Exception Use Case, a Participating Bank is either a Requesting Bank or a Responding Bank.

2.7 Partial Service Participant means a depository institution that agrees to become a Participating Bank, as provided for in paragraph 4.0. A Partial Service Participant can act only as a Responding Bank.

2.8 Requesting Bank means a Participating Bank that initiates an ACH Exception Use Case.

2.9 Responding Bank means a Participating Bank that receives an ACH Exception Use

Case.

3.0 THE STRUCTURE AND OPERATION OF THE SERVICE

3.1 The Exception Resolution Service Application

The Reserve Bank makes the Service application accessible to a Participating Bank through an Electronic Connection. A Participating Bank agrees that the Reserve Banks may receive, store, and transmit information related to each ACH Exception Use Case involving a Participating Bank. Such information may include personally identifiable financial information or other sensitive information provided by the Participating Bank.

3.2 The Exception Resolution Service Data Repository

The Reserve Bank manages an ERS data repository that contains all information related to each ACH Exception Use Case for a period of not less than 13 months beginning on the day the ACH Exception Use Case is properly initiated according to paragraph 3.4. A Participating Bank may view and retrieve information from the ERS data repository related to ACH Exception Use Cases for which the Participating Bank was the Requesting Bank or the Responding Bank.

3.3 Exception Resolution Service Reporting

The Reserve Bank may provide reporting services to Participating Banks with respect to the Service, as prescribed in the ERS QRG.

3.4 Processing of ACH Exception Use Cases

3.4.1 Initiation by the Requesting Bank

To create an ACH Exception Use Case, the Requesting Bank must select a specific ACH Exception Use Case type that it wishes to initiate and provide the required/optional information for the ACH Exception Use Case. The ERS QRG specifies the type of cases that Reserve Banks handle and the information requirements for submitting each.

3.4.2 Validations Performed by the Reserve Bank

- (a) When transactional information is being exchanged:
 - (i) If the Requesting Bank is identifying a FedACH entry sent or received by the Requesting Bank through FedACH Origination and Receipt, the Requesting Bank should search its FedACH transactions through the Service where available and select the appropriate FedACH entry for that ACH Exception Use Case; and
 - (ii) if the Requesting Bank is identifying any other ACH entry, the Requesting Bank is responsible for providing information from the entry that will be included as part of the ACH Exception Use Case.
- (b) The Reserve Bank will validate that the Requesting Bank and Responding Bank identified in the ACH Exception Use Case are Participating Banks, and the required fields associated with the ACH Exception Use Case contain data.

If the Reserve Bank is unable to validate the information or the ACH Exception use case was otherwise improperly initiated, the Reserve Bank will close the ACH Exception Use Case and send a cancellation message, including the reason for cancellation, to the Requesting Bank.
- (c) After an ACH Exception Use Case is properly initiated and the Reserve Bank has

completed all validations, the Reserve Bank will open an ACH Exception Use Case and notify the Responding Bank.

- (d) The Reserve Bank will maintain the ACH Exception Use Case in active status until the case is resolved, closed, or canceled, in accordance with the ERS QRG. The Reserve Bank will send a message indicating the resolution, cancellation, or closure to the Requesting Bank.
- (e) If the Reserve Bank does not receive a response to the ACH Exception Use Case within the time period time specified in the ERS QRG, the Reserve Bank will close or cancel it.
- (f) The Reserve Bank will maintain a record of each ACH Exception Use Case and any related files in the ERS Data Repository for not less than 13 months from the date on which the ACH Exception Use Case was properly initiated.

3.4.3 Responding Bank's Role

- (a) Each Participating Bank must exercise due diligence when maintaining, using, and granting access to the Service, as well as when opening and reviewing ACH Exception Use Case notifications.
- (b) The Responding Bank is responsible for exercising due diligence and complying with any obligation it may have to respond to specific types of ACH Exception Use Cases as required by the Nacha Rules regardless of whether it chooses to respond to the ACH Exception Use Case using the Service.
- (c) A Responding Bank may attach files, as appropriate, in response to an ACH Exception Use Case.

3.4.4 Requesting Bank's Action to an ACH Exception Use Case

- (a) Once a Requesting Bank receives a response to an ACH Exception Use Case, the Requesting Bank can view the response, including any accompanying attachments, and may respond as follows:
 - (i) The Requesting Bank may reply to request additional information from the Responding Bank without initiating a new ACH Exception Use case.
 - (ii) The Requesting Bank may resolve the ACH Exception Use Case if it is satisfied with the Responding Bank's reply and no further action, information, etc. is needed;
 - (iii) The Requesting Bank may choose to take no action within the Service within the specified period of time under the ERS QRG, the ACH Exception Use Case will close.
- (b) Only a Requesting Bank can resolve an ACH Exception Use Case by sending a message indicating the ACH Exception Use Case is resolved. Once the message is received, the ERS Application will close the ACH Exception Use Case and remove it from any status report.

3.4.5 Cancelling an ACH Exception Use Case

- (a) Only a Requesting Bank or the Reserve Bank can cancel an ACH Exception Use Case.
- (b) If a Requesting Bank determines an ACH Exception Use Case was initiated in error,

the Requesting Bank must send a cancellation message.

- (c) The Reserve Bank will forward the cancellation message to the Responding Bank.
- (d) If the Reserve Bank cancels an ACH Exception Use Case, the Reserve Bank will send a cancellation message to the Requesting Bank and to the Responding Bank if the ACH Exception Use Case had previously been sent to them.

3.4.6 ACH Exception Use Case Reports

In providing the Service, the Reserve Bank will create and make available certain reports in the ERS Application. Refer to the ERS QRG for specifics on what information is available on the reports regarding the Service.

4.0 ENROLLMENT IN AND TERMINATING THE SERVICE

4.2 Enrollment of Participants

A depository institution may become a Full Service, Partial Service, or Offline Service Participant by completing the Reserve Bank's enrollment procedures, including executing a participation agreement and establishing access to the Service.

4.3 Termination

4.3.1 A Participating Bank may terminate the Service by following the Reserve Bank's designated procedures for terminating the Service. Within ten business days after receipt of written request to terminate, the Reserve Bank will notify the Participating Bank in writing that it is no longer participating in the Service.

4.3.2 The Reserve Bank may terminate a Participating Bank's access to the Service provided under this Appendix by giving not less than ten days prior written notice to the Participating Bank.

5.0 DESIGNATION OF AUTHORIZED USERS & EMAIL DELIVERY

5.1 Generally

A Participating Bank must designate, as applicable, an Electronic Connection, authorized users, and email addresses to use the Service by completing a written agreement in a form prescribed by the Reserve Bank.

5.2 Designating Agents

5.2.1 A Participating Bank may designate an agent, including an ACH operator (other than a Reserve Bank), to access and use the Service through an Electronic Connection or offline. Such appointment must be in a form provided by the Reserve Bank and must be executed by the Participating Bank, its agent, and the Reserve Bank. The Participating Bank authorizes its agent to take any action that the Participating Bank might take regarding electronic access to and use of the Service, including but not limited to: (i) selecting which security procedure to use to access the Service; or (ii) executing on behalf of the Participating Bank any security procedure agreement that the Reserve Bank may require from time to time. The Participating Bank's agent's use of an Electronic Connection is governed by Operating Circular No. 5 and the Certification Practice Statement, each as amended from time to time.

5.2.2 The Participating Bank authorizes each of the Federal Reserve Banks to receive information related to the Services and to act upon such information and/or instructions sent to a Reserve Bank by the Participating Bank's agent. The Participating Bank and its agent

warrant to each Reserve Bank that information related to the Services transmitted to a Reserve Bank by the Participating Bank's agent is substantially accurate, and the agent is acting within the scope of its authority.

5.2.3 The Participating Bank agrees that its agent: (i) will be granted credentials authorizing the agent to access the Service for the purpose of facilitating the exchange of ACH Exception Use Case information; (ii) will use those credentials to act on behalf of the Participating Bank; and (iii) may use the same credentials to access the Federal Reserve Banks' FedLine connection on behalf of other Participating Banks that use the same agent to access the Reserve Bank's electronic systems.

5.2.4 The Reserve Bank is not responsible for connectivity, security, or communication between the Participating Bank and its agent. It is the responsibility of the Participating Bank and its agent to establish security and controls sufficient to assure that the agent properly identifies and handles the items, information, and instructions of a Participating Bank and segregates them from any items, information, or instructions of another Participating Banks. The Reserve Banks are not required to take, and will not take, any measures to assure that the Participating Bank's work is properly identified, handled, or segregated by the agent. The Participating Bank authorizes each Reserve Bank to rely on the agent's identification of items, information, and instructions as having been originated or authorized by the Participating Bank.

5.2.5 The Participating Bank agrees to be bound by any acts or omissions of its agent with respect to the Services that are handled by a Reserve Bank. The Reserve Banks may rely on the agency appointment until it is revoked in writing and the written revocation is received by the Reserve Bank and the Reserve Banks have had a reasonable time to act on it.

6.0 THE OFFLINE SERVICE

6.1 A depository institution enrolled in FedACH Origination and Receipt may enroll in the Service as an Offline Service Participant by designating the Reserve Bank to access and use the functionality of the application on behalf of the Offline Service Participant.

6.2 Following procedures established by the Reserve Bank, the Offline Service Participant or its designated agent must designate individuals who are authorized to act for the Offline Service Participant with respect to the Service and authorize the Reserve Bank to act upon any information or instruction received from such individuals with respect to the Service. The Offline Service Participant must also follow procedures established by the Reserve Bank to designate an email address that will be used by the Offline Service Participant or its designated agent and the Reserve Bank to send and receive secure messages and files when accessing the Service offline.

6.3 An Offline Service Participant may take any action that a Requesting Bank may take under paragraph 3.4 of this Appendix by sending an instruction to take such an action in a secure email, in accordance with the Reserve Bank's procedures, to the Reserve Bank at a designated address between 8:30am ET and 5:00pm ET, Monday to Friday on a Reserve Bank Banking Day.

6.4 An Offline Service Participant must follow instructions and restrictions set forth in the ERS QRG. If the Reserve Bank receives a properly initiated offline instruction by 3:00 pm ET on a Banking Day, the Reserve Bank will enter the appropriate message case into the ERS application and send it to the Responding Bank the same business day, subject to Reserve Bank resource availability.

6.5 If the Responding Bank with respect to a case is an Offline Service Participant, the

Reserve Bank will transmit a secure email message to the Offline Service Participant's designated email address, notifying the Responding Bank of the case.

6.6 Each Offline Service Participant must exercise due diligence to check its secure mailbox and to respond timely and appropriately to cases delivered to that mailbox. An Offline Participant may take any of the actions that a Responding Bank may take under paragraph 3.4 of this Appendix by sending an instruction to take such action in a secure email in accordance with the Reserve Bank's procedures.

6.7 If the Reserve Bank receives an instruction from an Offline Service Participant to respond to a case by 3:00 pm ET on a Banking Day, the Reserve Bank will enter the response into the ERS application and send it to the Requesting Bank the same Banking Day, subject to Reserve Bank resource availability. To comply with a deadline for replying to an exception case under applicable rules, a Responding Bank that is an Offline Service Participant must allow two days for the Reserve Bank to process a response from the Responding Bank and deliver the response to a Requesting Bank.

6.8 The number of ACH Exception Use Cases that an Offline Service Participant may have open within a specific period of time is limited, as provided in the ERS QRG. The Reserve Bank will not process additional offline cases if an Offline Service Participant exceeds its limit for a specified period. Each Offline Service Participant should exercise due diligence with respect to its use of the Service and the limit on the number of offline cases that the Reserve Bank will process.

6.9 Accessing the Service offline includes manual processes that are performed by the Reserve Bank, and thus may not occur in real time. The Reserve Banks provide access to the Service on a best efforts basis, subject to Reserve Bank resource availability.

7.0 LIMITATIONS ON THE RESERVE BANK'S LIABILITY

7.1 In providing the Service, whether online or offline, the Reserve Bank will make reasonable efforts to provide the Service as set forth in this Appendix. In the event that the Service is disrupted for any reason, the Reserve Bank will make reasonable efforts to restore the Service expeditiously.

7.2 The Reserve Bank is not responsible for the content of information submitted by a Participating Bank with respect to an ACH Exception Use Case or contained in any file(s) attached to such ACH Exception Use Case, or ensuring that a Participating Bank complies with timing requirements that may be applicable to an ACH Exception Use Case. In each case, this includes when the Reserve Bank acts as an authorized user.

7.3 The Reserve Bank is not liable for losses or damages resulting from its provision of providing any aspect of the Service, including validations performed by the Reserve Bank, except for a loss or damage caused by the Reserve Bank's failure to act in good faith or exercise ordinary care. A Reserve Bank's liability for such loss or damage shall be only to a Participating Bank and to no other person or entity.

7.4 The amount of the Reserve Bank's liability shall not exceed the greater of (i) the amount of any financial loss to the Participating Bank that resulted directly from the Reserve Bank's failure to act with ordinary care or to act in good faith, or (ii) the fees paid to the Reserve Bank by the Participating Bank for the Service during the month in which the transaction or occurrence giving rise to the liability is alleged to have occurred. In no event shall the Reserve Bank be liable for special, incidental, or consequential damages, even if such damages were foreseeable at the time of the Reserve Bank's failure to exercise ordinary care or act in good faith.

7.5 The Participating Bank agrees to indemnify, defend, and hold the Reserve Banks harmless against any claim, loss, cost, or expense resulting from the acts or omissions of the Participating Bank, or a Reserve Bank's acts or omissions in carrying out the instructions of the Participating Bank or its agent within the scope of the agency appointment, including but not limited to attorney's fees and expenses of litigation, except for any claim, loss, cost, or expense arising solely out of a Reserve Bank's failure to exercise ordinary care or to act in good faith.

8.0 LIMITATIONS ON USE AND DISCLOSURE OF INFORMATION

8.1 Each Participating Bank is responsible for protecting the security, integrity, and confidentiality of nonpublic personal information contained in using the Service or any report related to the Service.

8.2 Each Participating Bank may use the information contained in an ACH Exception Use Case only for the purpose of the Service and may disclose the information only to persons directly interested in the ACH item underlying the ACH Exception Use Case. Any information contained in or appended to an ACH Exception Use Case or a report may not be used in any way that violates applicable laws regarding the disclosure of confidential nonpublic personal information.

9.0 FEES

9.1 The Reserve Bank may charge fees for the Service, as provided in our published fee schedules, as amended from time to time.

9.2 Notwithstanding the foregoing, the Reserve Bank will not charge any fees to a Partial Service Participant with respect to its access to the Service, or any responses that it makes to an ACH Exception Use Case.