Introduction

Chapter XI of OCC's Rules, published on this website, authorizes OCC to expeditiously and flexibly deal with clearing member defaults. A general overview of the procedures embodied in these rules is provided below, but this overview is subject to the specific terms of the rules themselves. As used herein, the term "rules" collectively refers to both OCC's By-Laws and Rules, and terms (capitalized or not) have the meaning given to them in the rules unless otherwise defined.¹

Suspension of a Clearing Member

Any clearing member that is unable to meet its obligations, is insolvent or is the subject of a bankruptcy petition or a receivership proceeding or equivalent filing or proceeding is required to immediately provide telephone notice of such event followed promptly by confirming written notice. In addition, any Non-US clearing member that has been expelled or suspended by its regulatory agency or by an exchange of which it is a member must provide immediate notice of such event. See generally Rules 1101 and 1102(b).

A clearing member may be suspended by OCC's Board of Directors ("Board") or a Designated Officer of the Corporation, which includes Chief Executive Officer, Chief Operating Officer, and any officer of the Corporation of the rank of Senior Vice President or higher, in the event the clearing member experiences an event of default. A detailed listing of such default events is found in Rule 1102(a), but generally they include: the suspension or expulsion of the clearing member from another self-regulatory or other regulatory organization; the clearing member's failure to make timely delivery of any cash, securities or property to OCC as provided in the rules; the clearing member's failure (or that of its permitted designated agent) to make timely delivery of funds or securities to another clearing member or the correspondent clearing corporation (i.e., NSCC) as provided for in the rules; and a determination made by the OCC Board or Executive Chairman that the clearing member is in financial or operational difficulty that suspension is necessary for the protection of OCC, other clearing members or the public on notice to one or more designated regulatory authorities. In addition, and as provided for in Rule 707, a clearing member maintaining cross-margining accounts with OCC and a Participating CCO may be suspended if it (or its affiliated clearing member, as applicable) is in default of any payment or other obligation owed in respect of such cross-margining accounts. See generally Rule 1102(a) and Rule 707.

Default Procedures

Margin and Clearing Fund Deposits of a Suspended Clearing Member. OCC may convert deposits of a suspended clearing member to cash (including through a private auction), effect borrowing or other transactions using such deposits in order to obtain funds or defer the conversion of such assets to cash. OCC may convert the clearing fund deposits of the suspended clearing member to cash or effect borrowing or other transactions using such deposit in order to obtain funds. To the extent such deposits are converted to cash, such cash is to be deposited into, as applicable, a Liquidating Settlement Account or Segregated Liquidating Settlement Account. Deposits to and disbursement from one or more liquidating settlement account shall be effected as provided in the Rules. Any proceeds/funds remaining after application of relevant Rule provisions (including provisions providing for reimbursement of expenses associated with liquidating or closing out positions held by the suspended clearing member)

¹ This document provides an overview of OCC's Clearing Member Default Rules and Procedures and is not a rule, interpretation or policy. OCC periodically updates this document; however, its contents may differ from OCC's By-Laws, Rules and Policies. In such event, OCC's By-Laws, Rules and Policies shall control and this document shall have no effect.

will be remitted to the clearing member's representative in bankruptcy. Note OCC may use proceeds remaining in any firm lien account to satisfy obligations arising out of any other account type (including segregated futures) or otherwise owed to OCC. Moreover, nothing in the rules is intended to preclude OCC from effecting transfers of positions and/or assets maintained in respect of a suspended clearing member's segregated funds account as provided in the Rules. Any margin deposits in respect of one or more cross-margining accounts maintained by the suspended clearing member will be treated as provided in Rule 707 and the applicable cross-margining agreement between OCC and a participating CCO. See generally Rule 1104, Rule 707 and Section 5 of Article VIII of the By-Laws.

Pending Transactions. Subject to the rules, OCC has no obligation to accept confirmed trades effected by a suspended clearing member **after** the time the clearing member was suspended. (If a suspended clearing member's confirmed trades are rejected, such transactions are closed out in accordance with relevant provisions of the rules of applicable self-regulatory organizations.) Premiums on closing sales transactions and variation payments for specified futures contracts in respect of particular account types are treated as provided in Rule 1105 (i.e., deposited into a Liquidating Settlement Account or Segregated Liquidated Settlement Account, as applicable). See generally Rule 1105, Rule 707, Rule 2210, Rule 2211, Rule 2210A and Rule 2211A.

Open Positions. Generally speaking, OCC will close-out open positions of the suspended clearing member in the most orderly manner practicable, which may include a private auction. Open long positions, short positions and covered short options positions and open long and short positions in futures may be closed out as provided in Rule 1106, including close-out by offset (netting) and by other permitted transactions or means. Open positions in stock loan (borrow) transactions may be closed out as provided in the Stock Loan/Hedge Program and Market Loan Program rules where closure of stock loan positions will generally be effected through issuance of buy-in or sell-out instructions to non-defaulting Members. In addition and subject to applicable rule, law and/or regulation, OCC may effect certain positions in certain circumstances. The close-out of cross-margining accounts maintained with a Participating CCO will be effected in accordance with the terms of the applicable Rules and cross-margining agreement, which generally require coordinated action between OCC and the Participating CCO. See generally Rule 1106, Rule 707, Rule 2210, Rule 2211, Rule 2210A and 2211A.

OCC may defer effecting any close-out transactions (including liquidating margin and other deposits of the suspended clearing member) as well as may elect to implement protective (hedging) transactions in respect of positions or deposits of the suspended clearing member, subject to the reporting requirements, as applicable, in the rules. Rule 1104(b) provides for an exception to the requirement that margin assets be promptly liquidated if the Executive Chairman or President determines that such liquidation would not be in the best interests of OCC, other Clearing Members, or the general public. Rule 1106(e) similarly provides for an exception under which open positions need not be closed out if the Executive Chairman or President determines that closing out of some or all of the positions would not be in the best interests of OCC, other Clearing Members, or the general public. Such a determination must be reported to OCC's Board. Rule 1106(f) allows for hedging only if such a determination is made or if OCC is unable to promptly close out open positions or liquidate margin deposits.

Exercised or Matured Contracts. The disposition of exercised or matured contracts will occur as provided for in Rule 1107 and other applicable rules, including as provided for in any applicable options exercise (assignment) settlement agreement between OCC and the correspondent clearing corporation. See generally Rule 1107 and Rule 901.

In the event the correspondent clearing corporation has ceased to act for a common member and has not accepted related delivery obligations, OCC will first seek to minimize disruption to non-defaulting members through the use of liquidation agent services, allowing the related activity to continue to settle at NSCC on its original settlement date.

If OCC is unable to utilize its liquidation agents, OCC may instruct non-defaulting Members to settle the delivery obligations on a broker-to-broker basis or to close such obligations through the issuance of buyin or sell-out instructions to non-defaulting Members.

Use of Private Auction. OCC reserves the right to utilize a private auction to liquidate all or any part of a suspended Clearing Member's account. Auction participation will be open to pre-approved Clearing Members and certain non-Clearing Members selected by OCC. Auctions will be conducted in a "sealed bid" manner and OCC will have full discretion to select or reject the best bid based upon the totality of circumstances. See generally Interpretation and Policy .02 following Rule 1104.

Default Management Advisory Committee. The Default Management Advisory Committee ("DMAC") serves in an advisory capacity and assists OCC in determining whether or not OCC should conduct an OTC Options auction of a defaulting clearing member's OTC positions. The DMAC is comprised of OCC senior management and a senior trading representative from each OTC-approved clearing member participant. The main function of the DMAC is to advise OCC senior management and OCC's Risk Committee on the desirability of conducting an auction of a defaulting OTC clearing member's portfolio. If it is determined that such an auction should occur, the DMAC will assist in the structuring, risk management and possible hedging of the portfolio. (Note: There is no volume or open interest in OTC Options currently.)

Notice by OCC of Suspension. OCC will advise the suspended clearing member, other clearing members, and appropriate regulatory authorities (plus applicable self-regulatory organizations) when it has suspended a clearing member. OCC's notice to clearing members will ordinarily provide, in general terms, a description of the treatment of pending transactions, open positions, stock loan (borrow) positions, exercised and matured contracts and other items. Notice of a clearing member suspension may be posted on public and other websites maintained by OCC, which may be the sole means by which OCC provides certain third parties with notice of a suspension. See generally Rule 1103.

Emergency Powers. The Board, Executive Chairman or President of OCC are authorized to extend, to the close of the Federal Reserve Banks' Fedwire Funds Service on a settlement day, any or all times at which the OCC is obligated to pay a settlement amount to Clearing Members as set forth in the Rules or OCC's procedures if a determination is made that an emergency exists. OCC's by-laws, rules, policies and procedures also may be waived in an emergency situation.

Liquidation of Open Positions

General information. Timelines are unique to the circumstances and timing of default. Generally, the suspension declaration, hedging and portfolio splitting will occur on day 1. Liquidation either through the services of an agent or by private auction will generally commence on day 2.

Any outsourcing, through the services of an agent, will be specified in the Close-Out Action Plan approved by the Management Committee. Outsourcing is done strictly on an agency basis with OCC (and ultimately the defaulting firm) responsible for all losses.

Agreements with Liquidating Agents specify the roles and responsibilities of both OCC and the Agent including the execution of hedging transactions, if any.

Auctions. Auction is one of the methods of liquidation available to OCC. Auction participation is voluntary, except that OTC Clearing Members are obligated to participate in a Dutch auction of OTC index options and related positions.

Any Clearing Member (and eligible non-Clearing Members) may be included in the pool of pre-qualified auction bidders by completing required auction documentation in advance. With respect to each particular auction, OCC reviews pre-qualified auction bidders that seek to participate in the auction on an objective basis and takes into consideration criteria, including a bidder's financial strength (and/or, in the case of a non-Clearing-Member bidder, its sponsor Clearing Member's) demonstrated activity in the products being auctioned and qualification to clear transactions in the asset class in which it proposes to submit bids before inviting a bidder to participate in the auction. Such review is intended to ensure that each selected bidder, should it be a winner in the auction, would be financially able to make payment for and assume the obligations of the Collateral and other positions it acquires and be able to manage the risk thereof and/or trade out of such positions without creating unnecessary further risk to OCC. OCC shall have discretion to select the best bid submitted for any portfolio in an auction, based on the totality of the circumstances, and no bid shall be binding on OCC unless accepted by it. Unless OCC determines otherwise with respect to any particular auction, OCC retains the right, in its discretion, to reject any or all bids submitted for any or all portfolios in an auction. Such bids may be rejected if, for example, the bids are unreasonably far from the market values of the Collateral or Open Positions being auctioned as determined by OCC based upon current market data and theoretical pricing models.

Auction portfolios would be constructed first with an emphasis on maintaining economic hedges and second with a regard to currency. The likelihood of multiple currency portfolios is small since the vast majority of clearing member portfolios would only include U.S. dollars from a currency perspective.

OCC has discretion to select the best bid submitted for any portfolio in an auction, based on the totality of the circumstances, and no bid shall be binding on OCC unless accepted by it. In the event of multiple bids at the same price, consideration will be given to any incremental risk to OCC posed by the selection of one bid over another.

Bids are compared vs. the value assigned by OCC. In the voluntary auction structure, consequences are potential non-acceptance by OCC or acceptance of a bid that results in a mutualized charge against the clearing fund. OTC index option members that do not bid aggressively enough to be awarded their required share in a Dutch auction are subject to a priority charge against their clearing fund deposit in the event the auction produces a shortfall.

Tear-Ups. Voluntary tear-ups and partial tear-ups can be used at any time following the suspension or default of a clearing member and after the OCC has attempted one or more auctions pursuant to Rule 1104 or Rule 1106, and after OCC has determined that, notwithstanding the availability of any resources remaining under Rules 707, 1001, 1011, 1104 through 1107, 2210 and 2211, OCC may not have sufficient resources to satisfy its obligations and liabilities as a result of such default.

Replenishment of Financial Resources

Loss allocation. The waterfall for the allocation of losses as a result of a clearing member default is as follows:

- 1. The margin deposits of the suspended firm.
- 2. Clearing fund deposits of the suspended firm.
- 3. OCC's own pre-funded financial resources.
- 4. Clearing fund deposits of non-defaulting firms and EDCP Unvested Balance.
- 5. Clearing fund assessments.

Assessment powers. OCC has the authority to assess each clearing member up to an additional 200% of its required clearing fund contribution during any cooling-off period (cooling-off periods are a minimum of 15 days, rolling to a maximum of 20 days).

A clearing member will not be liable to replenish the clearing fund after the end of a cooling-off period if (i) not later than the last day of the cooling-off period the clearing member notifies OCC in writing that it is terminating its status as a clearing member, (ii) no opening purchase transaction or opening writing transaction is submitted for clearance through any of the clearing member's accounts and (if the clearing member is a Market Loan clearing member or a Hedge clearing member) no Stock Loan is initiated through any of the Clearing Member's accounts after the giving of such notice, and (iii) the clearing member closes out or transfers all of its open positions with OCC not later than the last day of the cooling-off period.

Voluntary Payments. Clearing Members have the ability to make a voluntary payment to the Clearing fund should the Corporation not have sufficient resources to satisfy obligations and liabilities resulting from a default.

Member-Specific Issues

Portability. Subject to the determination that such action is in the interest of OCC, OCC allows the transfer of non-defaulting customer positions of a defaulting member to other clearing members.

From a legal standpoint, OCC is under the jurisdiction of the U.S. Securities and Exchange Commission (SEC) and the U.S. Commodity Futures Trading Commission (CFTC). The SEC customer protection rules contain a number of provisions that limit the extent to which a U.S. registered broker-dealer is permitted to pledge or "hypothecate" securities that it holds for the account of customers. SEC Rule 15c3-3(b) requires a broker-dealer to "promptly obtain" and "thereafter maintain the physical possession or control of all fully-paid securities and excess margin securities carried by a broker or dealer for the account of customers," and that requirement generally prohibits the broker-dealer from pledging or lending such securities to third parties, including any pledge or encumbrance of such securities to OCC.

Section 4d(a)(2) of the Commodity Exchange Act requires that, "a futures commission merchant (that effects transactions for customers in contracts traded on a CFTC-designated contract market) . . . treat and deal with all money, securities and property received by such person to margin, guarantee or secure the trades or contracts of any customer of such person, or accruing to such customer, as the result of such trades or contracts, as belonging to such customer. Such money, securities, and property shall be separately accounted for and shall not be commingled with the funds of such commission merchant or be used to margin or guarantee the trades or contracts, or to secure or extend the credit, of any customer or person other than the one for whom the same are held." Paragraph (b) of Section 4d states that "[i]t shall be unlawful for any person, including but not limited to any clearing agency of a contract market . . . that has received any money, securities or other property for deposit in a separate account as provided in paragraph (a)(2) of this section, to hold, dispose of, or use any such money, securities or property as belonging to the depositing futures commission merchant or any person other than the customers of such futures commission merchant."

The insolvency of a U.S. clearing member that is a registered securities broker-dealer typically would be governed by the Securities Investment Protection Act of 1970 (SIPA), while the insolvency of a U.S. clearing member that is a commodity broker would be governed by the U.S. Bankruptcy Code (Bankruptcy Code). Both SIPA and the Bankruptcy Code generally protect OCC's rights to complete the liquidation and netting process in accordance with OCC's Rules and do not cause OCC, a non-debtor, to alter the manner in which it holds the clearing member property while OCC completes the process. The insolvency of a clearing member thus does not affect the segregation arrangements established by OCC's Rules. Following the liquidation and netting process, OCC's Rules provide that, if the proceeds from closing out positions in a customer or other account and the proceeds from liquidation of margin in such account exceed OCC's lien in respect of such account, the excess amount shall be remitted to the clearing member "for distribution to the persons entitled thereto in accordance with applicable law." OCC's Rules thus defer to applicable law with respect to how assets in the insolvent clearing member's accounts are treated after OCC exercises its liquidation and netting rights. Both SIPA and the Bankruptcy Code contain rules that provide for the ratable distribution of customer property to customers of insolvent securities broker-dealers or commodity brokers, as applicable, and prevent such customer property from being distributed to the insolvent entity's general unsecured creditors until all customer claims are paid in full.

Segregation is not required with respect to securities' accounts and positions in securities accounts are cleared on an omnibus basis with no segregation. Segregated Futures accounts are also cleared on an omnibus basis but margined under a Customer Gross Margin Methodology. In either case, OCC does not identify collateral as being deposited with respect to the account of a particular customer.

Prior to a bankruptcy court order being entered with respect to a defaulting clearing member, and as soon as reasonably practicable, OCC may transfer positions, cash, securities or other property carried in a segregated futures account at the direction of or with the consent of the defaulting clearing member's representative in accordance with authorization from OCC.

Pursuant to CFTC Regulation Section 190.02(a)(2), as soon as possible, but in no event later than the close of business on third calendar day after a bankruptcy court order related to the defaulting clearing member has been entered, OCC must notify the CFTC if it intends to transfer or to apply to transfer open commodity contracts on behalf of the defaulting clearing member.

Default Management Testing

A firm wide default management test occurs on an annual basis. In addition, OCC performs smaller, limited scope, default management tests throughout the year that cover a wide range of targeted scenarios. Internal departments, clearing members, non-clearing members ("NCMs"), liquidation agents, banks and other clearing organizations may be designated to participate in the testing, and/or simulations, which vary based upon the pre-determined testing scope. To the extent that a particular test involves a simulated auction of a defaulting clearing member's portfolio, the simulated portfolios are intended to be representative of the products and account types supported by OCC. Details of each test are prepared for OCC's Management Committee, with a summary of all test activity provided to the Risk Committee of the Board, annually.

The recent firm-wide default management test conducted in May of 2023 simulated the default scenario of a Clearing Member with diverse selection of equity option positions, risk factors, index options, government security deposits, and was active in Stock Loan. For this exercise, the scenario also assumed the Clearing Member had an excess credit at NSCC the morning of the default and thus NSCC guaranteed the settlement of exercises and assignments. Liquidation of option positions was simulated through a single auction portfolio where interested bidders were solicited for hypothetical bids. The firm-wide exercise included a single draw on a liquidity resource to maintain orderly clearing operations throughout the event. Additional simulated activities included liquidation of government securities through a broker, issuance of buy-in/sell-out notices and/or re-matching of stock loan positions, and subsequent transfer of auctioned positions.

In October 2020, international regulatory authorities coordinated a multiple CCP default drill based on the default of a large hypothetical common clearing member. The purpose was to identify issues that could arise during the hedging and auctioning processes when multiple CCPs manage the default of a common clearing member. The simulation assumed that shared resources (i.e. Clearing Members) capacities would be stressed when dealing with multiple CCPs simultaneously auctioning portfolios and feedback was sought from participants post mortem to identify gaps. Overall, OCC successfully demonstrated full liquidation of the portfolio within the Margin Period of Risk ("MPOR") with active auction participation from selected Clearing Members. For results of the full exercise, please see the Multi-CCP Firedrill Letter (link).

Liquidity Management

Forecasted and realized liquidity demands are monitored daily and are reviewed monthly. Per OCC's Liquidity Risk Management Framework and Financial Resources Sufficiency Monitoring Procedure, on a daily basis, staff reviews forecasted liquidity demands projected over a rolling two-day period over the next thirty business days. Any rolling two-day forecast for a Clearing Member Organization and/or related CMO Group exceeding prescribed thresholds may subject the clearing member to a requirement to maintain additional cash margins deposits to mitigate liquidity risk.

OCC also performs an assessment of its liquidity resources for adequacy on at least an annual basis and presents its findings and any recommended changes to the Risk Committee. This analysis covers a review of the historically largest liquidity demands, potential liquidity demands over the most recent year and any significant trends noted. This analysis also reviews the liquidity resources that OCC maintains in order to meet potential liquidity demands and any recommended changes to the Liquidity Risk Management program, subject to approval by the Risk Committee and the Board.

OCC maintains a Clearing Fund which is comprised of U.S. government securities, which provide a pool of collateral to pledge to OCC's committed liquidity facilities, and a minimum \$5 billion in cash, which serves as a liquidity resource.

OCC maintains a 364-day syndicated committed credit facility totaling \$2.5 billion. Credit facility borrowings can be secured by clearing fund government securities (both U.S. and Canadian), as well as any government securities or equity securities a defaulting clearing member has as margin. The credit facility may be increased to up to \$3.5 billion before the revolving credit termination date to the extent sufficient commitments are received and accepted.

OCC maintains committed repurchase agreements totaling \$1.0 billion as a source of liquidity. These repo facilities provide immediately available funds by utilizing clearing fund government securities as margin to secure necessary cash.

Liquidity under these facilities may only be accessed for:

Suspension Obligation – borrowings are permitted to meet obligations arising out of the default or suspension of a clearing member or any action taken in connection therewith; if used for this purpose, the clearing member must in fact be in default or have been suspended.

Failure to perform – borrowings are permitted to meet obligations arising from the failure of a bank, other securities or commodity clearing organization, or investment counterparty to meet an obligation owing to OCC.

Liquidity Needs – borrowings are permitted to obtain funds projected to be required by OCC in anticipation of a potential default by, or suspension of, a Clearing Member (subject to amendments in OCC Rules).

Test Draw – borrowings are permitted to test the operational aspects of the facility. Funds must be delivered back to the facility the following business day.

• OCC has placed concentration limits on participation designed to ensure the facility is diversified and consists of banks that meet operation performance requirements. No clearing members may participate in the credit facility.

Collateral posted to the clearing fund by non-defaulting members may be used to collateralize a draw on the liquidity facilities. With respect to non-defaulting clearing members, only their clearing fund contributions may be used to collateralize a draw on the liquidity facilities. The margin of non-defaulting clearing members may not be used to collateralize a draw on any of the facilities.