



NOTICE TO MEMBERS

No. 2017 – 022

February 7, 2017

REQUEST FOR COMMENTS

AMENDMENTS TO SECTIONS A-102, A-1A09, RULE A-6 AND DEFAULT MANUAL, AND NEW SECTION A-411 AND NEW RULE A-10 OF THE CANADIAN DERIVATIVES CLEARING CORPORATION ESTABLISHING THE RECOVERY POWERS

Summary

On February 7, the Board of Directors of Canadian Derivatives Clearing Corporation (CDCC) approved amendments to Sections A-102, A-1A09, Rule A-6 as well as to the Default Manual, and approved the adoption of Section A-411 and Rule A-10 of CDCC's Rules. The purpose of the proposed amendments is to introduce and clarify certain notions governing the default management process, clarify the resignation process of a Clearing Member and establish and document the recovery power granted to CDCC in the course of its Default Management process leading to a Recovery Process.

Please find enclosed an analysis document as well as the proposed amendments.

Process for Changes to the Rules

CDCC is recognized as a clearing house under section 12 of the *Derivatives Act* (Québec) by the Autorité des marchés financiers (AMF) and is a recognized clearing agency under section 21.2 of the *Securities Act* (Ontario) by the Ontario Securities Commission (OSC).

The Board of Directors of CDCC has the power to approve the adoption or amendment of Rules and Operations Manual of CDCC. Amendments are submitted to the AMF in accordance with the self-certification process and the Ontario Securities Commission in accordance with the process provided in its Recognition Order.

Canadian Derivatives Clearing Corporation

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Comments on the proposed amendments must be submitted within 30 days following the date of publication of the present notice. Please submit your comments to:

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A copy of these comments shall also be forwarded to the AMF and to the OSC to:

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For any questions or clarification, Clearing Members may contact CDCC's Corporate Operations.

Glenn Goucher
President and Chief Clearing Officer

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A-411 AND NEW RULE A-10 OF THE CANADIAN DERIVATIVES CLEARING CORPORATION

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I. SUMMARY

The Canadian Derivatives Clearing Corporation (“CDCC” or the “Corporation”) is proposing amendments to its Rules, including its Default Manual, to implement, in accordance with its regulatory requirements, certain tools enabling CDCC to ensure the continuity of its critical services if, as a result of the default of a Clearing Member, CDCC were to face financial stress in excess of the capacity of its ordinary default management framework. The amendments are primarily designed to satisfy the requirements under National Instrument 24-102 and the regulatory guidance on recovery planning¹ (“Regulatory Recovery Guidance”), and remain consistent with relevant international standards, including the Principles of Financial Market Infrastructure (“FMI”) developed by the Committee on Payments and Market Infrastructures (“CPMI”) and the International Organization of Securities Commissions (“IOSCO”) (hereinafter referred to as the “PFMIs”) and the CPMI-IOSCO Recovery of Financial Market Infrastructure² (“CPMI-IOSCO Recovery Guidance”).

The proposed amendments primarily:

- (i) introduce and clarify certain notions governing the current default management process, including a new definition of “Default Management Period”, certain clarifications regarding the maximum amount in Clearing Fund deposits that may be used by the Corporation over such period and the limits on the obligation of a Clearing Member to make good of, or “replenish” its Clearing Fund deposits during the same period; (Rule A-411, A-609(5) and A-610.)
- (ii) introduce a new Rule (Rule A-10) governing the Recovery Process, including clear defined triggers (A-1002), process (A-1003) and recovery tools (A-1001 - Recovery Powers) to manage a Clearing Member default and return to a matched book; and
- (iii) clarify the resignation process under which a Clearing Member may withdraw from the clearing house and obtain refund of its Clearing Fund deposit (Rules A-1A09 and A-611).

II. ANALYSIS

a. Background

As s an FMI designated by the Bank of Canada as systemically important, CDCC must have in place a comprehensive recovery plan which defines, inter alia, the set of actions that it can take to address any uncovered loss, liquidity shortfall or capital inadequacy arising from participant default³. CDCC’s recovery planning exercise was supported by the identification of scenarios that could prevent the Corporation from being able to provide its critical operations and services as a

¹ National Instrument 24-102 Companion Policy which incorporates a Joint Supplementary Guidance on Recovery Planning (Box 3.1: Joint Supplementary Guidance -- Recovery Plans, Selection and Application of Recovery Tools) in supplement of the Principles for Financial Market Infrastructures (PFMIs) issued by the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions (CPMI-IOSCO).

² Recovery of Financial Market Infrastructure, CPMI-IOSCO, October 2014, <http://www.bis.org/cpmi/publ/d121.pdf>. (“CPMI-IOSCO Recovery Guidance”).

³ Ibid.

going concern and the assessment of the effectiveness of a full range of options for recovery. To support this recovery plan, CDCC must now articulate in its rules and procedures, its rights and remedies. This requires the adoption of new—or enhancement of existing— tools to (i) allocate uncovered losses caused by participant default, (ii) address shortfalls, and (iii) replenish financial resources. As per the CPMI-IOSCO Recovery Guidance⁴ and National Instrument 24-102, such tools must be comprehensive, effective, transparent, measurable, manageable and controllable, create appropriate incentives, and minimize negative impact on the Corporation, the Clearing Members and the market.

Consistent with its regulatory requirement and the CPMI-IOSCO Recovery Guidance, CDCC hereby proposes first to modify certain sections of the Rule A-4 (Enforcement) and Rule A-6 (Clearing Fund Deposits) and, second, to adopt new rules governing its recovery process (Rule A-10 Recovery). The first set of rule changes aims primarily at clarifying certain concepts with respect to the default management process so as to ensure that the existing tools meet the standard of effectiveness and transparency defined in the regulatory guidance. Specifically, the proposed clarifications ensure transparency and predictability to Clearing Members as to the amount of their Clearing Fund exposure in a given default management process (and the Corporation Cover 1 obligation), the limit of their funding and “replenishment” obligation with respect to the Clearing Fund and their ability to withdraw from the clearing house services. The second set of rule changes addressing recovery aim at supplementing CDCC’s existing tools and procedures to manage a Clearing Member default under financial stress, in excess of the capacity of CDCC’s ordinary default management framework, and return to a matched book..

b. Description and Analysis of Impacts

The description and analysis of impacts is regrouped under two themes:

- i. Enhancement to current default management rules
- ii. Introduction of a Recovery Process and Recovery Powers

i. Enhancement to Current Default Management Rules

The amendments clarify the amount and the duration of Clearing Members’ potential risk exposure following a default by another Clearing Member. The introduction of Section A-411, which defines a Default Management Period, provides transparency, in combination with Sections A-609 and A-610, as to the level of risk exposure of Clearing Members during the default of one or more other Clearing Members.

Default Management Period (Section A-411)

The Default Management Period is the period starting from the suspension of a Clearing Member and ending upon the completion of the default management, as determined by the Corporation, either as a result of the crystallisation of all payment obligations and losses related to the default management and their successful absorption or the re-establishment of a matched book, or both. Subsection A-411(2) provides that if multiple concomitant Clearing Members’ defaults occur, i.e. if

⁴ Recovery of Financial Market Infrastructure, CPMI-IOSCO, October 2014, <http://www.bis.org/cpmi/publ/d121.pdf>. (“CPMI-IOSCO Recovery Guidance”).

CDCC suspended additional Clearing Members during a Default Management Period, the same period is extended and the Default Management Period ends only upon the successful completion of all the default management processes.

Maximum Clearing Fund Amount Exposed During a Single Default Management Period (Subsection A-609(5)) and the Requirement to Make Good of Charges to Clearing Fund (Section A-610)

The modification to Section A-609 – Application of the Clearing Fund – introduces a cap on the Clearing Fund that can be used in the Default Waterfall over a single Default Management Period. While the Rules were previously silent on this notion, the proposed modification (A-609(5)) now provides that CDCC may only use twice the aggregate amount of all Clearing Fund deposits over the course of a single Default Management Period, including if the period covers multiple defaults. While this modification primarily clarifies the maximum Clearing Fund amount exposed over such period – thus providing some control to Clearing Members over the potential use of the Clearing Fund deposits held by the Corporation – this also ensures that CDCC meets its Cover 1 obligation at all times. This modification ensures predictability to the surviving Clearing Member’s exposure. Section A-609(5) specifically limits to twice the amount of the Clearing Fund deposits the amount of Clearing Members’ financial resources that can be exposed to losses under a single Default Management Period. As a way of clarification, it also follows from Section A-609(2) that, if the financial resources that are set aside by the Corporation have been used in their entirety to absorb losses in accordance with the order specifically set out in such subsection, the financial resources of the Corporation are not subject to additional exposure during a single Default Management Period, notwithstanding the occurrence of a second Clearing Member’s suspension.

In complement to the above, the modifications of Section A-610 – Making Good on Charges to Clearing Fund — aim at increasing the cap applicable to a Clearing Member’s obligation to replenish its Clearing Fund contribution by an additional 200%. This percentage is applicable to the amount of Clearing Fund deposit required from such Clearing Member at the beginning of a Default Management Period. Section A-610 provides predictability to Clearing Members over the maximum amount that such Clearing Member can be required to fund during a single Default Management Period. The obligation to make good, or to replenish the Clearing Fund, was previously set up to a maximum of an additional contribution of 100% for each Clearing Member.

The changes intend on clarifying two distinct concepts as follow:

- Total Exposure: Following the suspension of a Clearing Member, no more than 200% of the aggregate amount of the Clearing Fund deposits can be used by CDCC to absorb losses incurred over a single Default Management Period. The potential exposure to each Clearing Member’s Clearing Fund deposits remains unchanged as a result of the modification of Subsection A-609(5) and Section A-610. This is the case, given that previously (under Section A-610), each Clearing Member was required to make good of its Clearing Fund deposits only up to an additional 100%. However, CDCC was not restricted in its use of such additional deposits. Under the proposed modifications, each Clearing Member is now required to make good of its Clearing Fund deposit up to an additional 200% but CDCC is limited in its use of the Clearing Fund deposits. CDCC cannot use more than twice the aggregate amount of Clearing Fund deposits of each Clearing Member. This has been clarified by the addition of Subsection A-609 (5).

- Replenishment: The requirement to “Make Good of Charges to Clearing Fund” or “replenish” is addressed under Rule A-610 and is now capped at an additional 200% of the Clearing Member’s Clearing Fund deposit, as opposed to 100%, currently. While, in the view of the above, this change was required to ensure CDCC maintains a cover 1 status on an ongoing basis, it does not change the exposure of the Clearing Members’ Clearing Fund deposits. In other terms, although CDCC can ask in aggregate for an amount worth 300% of the required Clearing Fund contribution, only 200%, as per Subsection A-609(5) can be used to absorb losses in a single Default Management Period.
- Timing and Process: The current Section A-610 provides that any amount that has been used by CDCC from the Clearing Fund to absorb losses incurred by CDCC must be replenished by the Clearing Members on the following day. This still implies that CDCC does not have to exhaust the whole Clearing Fund before asking its Clearing Members to replenish. In other words, several “calls” can be made on the Clearing Members up to the prescribed maximum. In addition, the amendments to the section now grants CDCC some discretion on the timing of replenishment to account, inter alia, for potential pro-cyclical impacts. This is consistent with regulatory expectations and CPMI-IOSCO Recovery Guidance which provides that “an FMI's rules and procedures should avoid automatic triggers but provide it with the capacity to effect a replenishment as soon as practicable, including by the following business day when that would be the case, along with the capacity and the responsibility to determine the most appropriate pace for replenishment in the light of prevailing circumstances.”⁵

Withdrawal Process (Sections A-1A09 and A-611)

The modifications of Sections A-1A0 - Voluntary Withdrawal and A-611 - Deposit Refund - clarify the resignation process. These modifications do not change the advance notice period required by CDCC for a Clearing member to withdraw from the clearing services. However, the modifications clarify that any withdrawal process initiated before the commencement of a Default Management Period, and which were not completed upon the suspension of a Clearing Member, will be stayed for the duration of the Default Management Period.

Therefore, a Clearing Member still has to provide the Corporation with a 30-day prior notice of its intention to withdraw its membership and such withdrawal will only become effective upon the expiry of the notice period or any such period determined by CDCC. This implies that until the expiry of the withdrawal period, a Clearing Member remains a member in all respect, including for the purpose of default management and recovery processes. The modifications proposed to A-611 therefore align with the above; once the Clearing Member has ceased to be a Clearing Member, the administrative process of releasing the former member’s Clearing Fund deposits simply follow CDCC internal accounting cycles and will not be impacted by the timing of a Default Management Period.

ii. Introduction of a Recovery Process

The amendments introduce the notion of Recovery Process including clear defined triggers (Declaration), process and recovery tools (Recovery Powers) that may be used by CDCC to manage

⁵ CPMI-IOSCO Recovery Guidance, *ibid*, paragraph 4.4.1

a Clearing Member default and return to a matched book under extreme financial stress in excess of the capacity of its ordinary default management framework.

Declaration of Recovery Process (Section A-1002)

Section A-1002 introduces the notion of Recovery trigger by stipulating that a recovery process can be declared by the Corporation, subject to Board approval, in either of the following situations:

- 1) CDCC reasonably believes that the payments, losses and expenses incurred in connection with the suspension of one or more Clearing Members are or will be in excess of the total value of:
 - (i) The suspended Clearing Member's Margin Deposit (including Margin and Clearing Fund);
 - (ii) The Corporation's own capital resources specifically set aside for such purpose; and
 - (iii) Twice the aggregate value of all Clearing Fund deposits of all the Clearing Members (other than the suspended Clearing Member).
- 2) If, after the suspension of a Non-Conforming Clearing Member and the exercise of the normal default management tools (powers contemplated in Rule A-4), the Corporation is, or will likely be, unable to close-out all the positions of such Clearing Member.

The section grants discretion to the Corporation in its assessment of the point in time where it should declare the start of Recovery Process. While both (1) and (2) link the commencement of the Recovery Process to a Recovery Event which is caused or incurred in connection with the suspension of a Clearing Member, CDCC may, in advance of the materialization of the situation described in the above subsections 1 (anticipated exhaustion of Default Waterfall resources) or 2 (failed auction maintaining an unmatched book) declare the commencement of Recovery Process.

Recovery Process (Section A-1003)

This section introduces the notion of the Recovery Process. While Rule A-10 lays the framework which governs the recovery process, Section A-1003 simply clarifies that the defined term Recovery Process encompasses all the steps, decisions, rights or remedies which are provided under Rule A-10 and the Manual in the appropriate section.

Recovery Powers (Section A-1001 and Sections A-1004 and Subsequent)

Upon the commencement of the Recovery Process, CDCC may apply certain Recovery Powers. For this regulatory submission, CDCC is only proposing to adopt a Recovery Loss Cash Payment (also known as cash calls) as a Recovery Power.

Section A-1001 defines the notion of Recovery Powers and each power will be further defined (trigger, process, use, etc.) under a specific section.

The choice of the suitable Recovery Powers was based on the criteria established in the Regulatory and CPMI-IOSCO Recovery Guidance and ensure that each Power or tool is appropriate and:

- Has strong legal and regulatory basis and is transparent;
- Is reliable and timely in its application;
- Is measurable, manageable, controllable; and
- Creates appropriate incentives, while minimising the negative impacts on participants.

Recovery Loss Cash Payment (Section A-1006)

Section A-1006 introduces a Recovery Power in the form of Recovery Loss Cash Payment, also known as a cash call. Such recovery tool is deemed appropriate to the extent that the exposure it creates to the Clearing Members is fixed and determinable.

Description: CDCC proposes to use Recovery Loss Cash Payment upon a declaration of Recovery Process, if the Corporation believes that the Recovery Event may result in CDCC incurring obligations, payments and losses in excess of the financial resources contemplated in the Default Waterfall and such amount is known or can reasonably be determined. CDCC will determine the amount reasonably required to meet its payment obligations, satisfy or settle any other expenses or obligations, and absorb losses. CDCC will then calculate on a pro-rata basis of each Clearing Member contribution to the Clearing Fund the proportion to be allocated to each Clearing Member. While the conditions of use of Recovery Loss Cash Payment allows for multiple or recurring calls, the aggregate amount required by a Clearing Member over a single Default Management Period shall not exceed the amount of such Clearing Member's contribution to the Clearing Fund at the commencement of the Default Management Period. Finally, the Recovery Loss Cash Payment Call must be met at Settlement Time on the business day following the call.

- **Legal Basis:** The adoption of Recovery Loss Cash Payment as a recovery tool will be implemented through CDCC's Rules. All Recovery Powers affecting Clearing Members are incorporated in CDCC's Rules and constitute an extension of the framework governing the default management. CDCC's Rules, which are public and form part of the binding contract with its Clearing Members, are considered settlement rules under the *Payment Clearing and Settlement Act* and benefit from the paramountcy protection under the Act⁶.
- **Reliability:** The Recovery Loss Cash Payment is reliable and timely in its application. While there is a risk associated with the use of this tool in terms of the Clearing Members' failure to perform, which would leave CDCC unable to obtain the required liquidity on a timely basis, the occurrence, both in terms of probability and frequency of calls, is predictable. Indeed, the order of application of such tool is prescribed under the Rules and the timelines for meeting those calls are known ex ante.
- **Measurability:** A Clearing Member's exposure is measurable as the total amount is capped at the required Clearing Fund contribution of such Clearing Member, before the commencement of the Default Management Period. It is also controllable and fair as the maximum exposure of a Clearing Member to the CCP is directly linked to the level of activities and the relative risks that such Clearing Member brings to the CCP. Moreover, Recovery Loss Cash Payments are affecting all Clearing Members, pro rata of their Clearing Fund Deposits on the total amount of Clearing Fund Deposits.
- **Incentives:** CDCC also believes that the introduction of this tool creates appropriate incentives, while minimizing the negative impacts on participants. Indeed, as cash calls are contemplated by CDCC to absorb losses, if the losses stemming from the auction exceed the Default Waterfall, Clearing Members are incentivized to participate actively in the auction processes so as to limit their losses and avoid having to meet additional calls for financial resources. Moreover, a

⁶ See Sec. 8(1) of the Payment Clearing and Settlement Act, (S.C. 1996, c. 6, Sch.).

failure to meet a call may result in the suspension of the Clearing Member and the seizure of all the suspended Clearing Member collateral.

- **Impact:** The negative impact of this tool is the potential liquidity pressure which it creates on surviving Clearing Members. However, as previously mentioned, this is mitigated by the fact that the call is predictable in amount and time.

Other Tools

While the proposed Rule changes described above are limited in terms of new Recovery Powers, it should be stressed that CDCC can continue to use tools which are already part of the normal default management process. This is particularly relevant for derivatives positions for which the liquidation of unmatched positions is a very reliable and timely tool if the auction was fully or partially unsuccessful. Indeed, CDCC has broker arrangements in place to support the execution of transactions and various orders can be organized in the market. Such can help CDCC to rapidly restore a matched book, thus limiting the need for Recovery Loss Cash Payment.

CDCC is considering implementing other Recovery Powers during the course of 2017, namely:

- Variation Margin Gains Haircutting;
- Recovery Auction; and
- Voluntary Contract Tear-Up.

c. Proposed Amendments

The proposed amendments are presented in Appendix 1.

d. Benchmarking

CDCC has completed a review of the recovery rules of four CCPs, namely LCH Clearnet Ltd, CME, ASX (Futures) and Eurex.

The benchmarking is regrouped under two themes:

- i. Enhancement to Pre-Recovery Default Management Rules
- ii. Introduction of a Recovery Process

i. Enhancement to Pre-Recovery Default Management Rules

Default Management Period

All CCPs reviewed have adopted comparable definitions of a period that is used to define the potential exposure of participants to loss resulting from one or more defaults of other participants.

Maximum Clearing Fund Amount Exposed During a Single Default Management Period vs The Requirement to Make Good of Charges to Clearing Fund (Replenishment)

All CCPs have rules that provide clarity to their participants as to their potential maximum amount exposed to loss following the default of one or more participants during a single Default Management Period. The specific way the cap on exposure is expressed and the level of exposure differ from one CCP to another. While the language used is primarily reflective of a CCP's own rule

structure and jurisdiction, the specific level set by the CCP is linked to the other tools available to such CCP, the type of products cleared, the corporate structure of such CCP and its regulatory requirement.

CDCC proposes Rules set on the maximum Clearing Fund amount exposed to loss during a single Default Management Period and distinctly addresses what is the Clearing Fund replenishment requirement. The level of Clearing Fund which could be exposed to loss in a single default period is limited to twice the amount of Clearing Fund deposit required from each Clearing Member. This is appropriate considering the risk profile of CDCC (Cover 1 status) and it is also confirmed by the scenarios analysis conducted as part of CDCC Recovery plan.

All CCPs distinguish between the requirements to replenish the financial resources (“Clearing Fund Replenishment”) required by the CCP to be cover 2 (or 1) and the potential maximum amount exposed to loss following a default from a Clearing Member. The replenishment requirement is consistently governed by a specific *trigger*, namely the event that prompts a replenishment obligation, a pre-defined *level of replenishment*, setting the value to which a Clearing Member must replenish, and a *payment timeline*, specifying the maximum delay between the replenishment request and the point in time when the replenishment payment must be met.

Similarly to other benchmarked CCPs, CDCC provides clarity under Section A-610 as to the trigger, the level and timeline for replenishment. In order to provide for some flexibility to counter the potential procyclical effect of a one-day payment deadline, CDCC has embedded language in its rules enabling it to propose another deadline if it judges necessary.

Withdrawal Process

All benchmarked CCPs have comparable withdrawal rules which provide for the suspension of any withdrawal process during a Default Management Period.

ii. Introduction of a Recovery Process

Most CCPs reviewed have implemented Recovery Powers in the form of cash call, in addition to tools addressing unfunded obligation to the Clearing Fund described in (i). All CCPs that have adopted additional Recovery Powers specifically prescribe the order of their application.

CDCC is proposing to use a Recovery Loss Cash Payment (cash call) to absorb losses once the financial resources available through the Default Waterfall have been exhausted. For each Clearing Member, the maximum payment will be capped at one (1) time the value of Clearing Fund deposit required from such Clearing Member. In sum, taking into account all powers available to CDCC to manage the suspensions of Clearing Members, a surviving Clearing Member could be exposed to a maximum loss equivalent to three (3) times its required Clearing Fund deposits during a single Default Management Period. Considering CDCC’s Cover 1 requirement, this level is comparable to other CCPs.

In addition, CDCC is contemplating the introduction of VMGH, Recovery Auction and Voluntary Contract Tear-Up as additional Recovery Powers in 2017.

III. PRIMARY MOTIVATION

The primary motivation of the proposed modifications is to ensure ongoing compliance with the regulatory requirements applicable to CDCC, including the PFMI and the CPMI-IOSCO Recovery Guidance.

IV. IMPACTS ON TECHNOLOGICAL SYSTEMS

There are no impacts contemplated on the technological systems.

V. OBJECTIVES OF THE PROPOSED MODIFICATIONS

The proposed amendments will establish appropriate Recovery Powers to enhance the existing tools and procedures to manage a Clearing Member default and return to a matched book.

VI. PUBLIC INTEREST

The amendments are designed to extend and improve CDCC's current risk management framework, therefore increasing CDCC's financial resilience in times of extreme market conditions. Having a stronger and more resilient FMI is a desirable outcome for the Canadian financial markets and ensures that CDCC can fulfill its public interest mandate.

VII. MARKET IMPACTS

The proposed amendments will affect the level of risk currently faced by CDCC Clearing Members in a Recovery Process. However, CDCC believes that these amendments have been appropriately calibrated to take into account the interests of its Clearing Members and to support the stability of the broader financial system.

VIII. PROCESS

The proposed amendments are submitted for approval to the CDCC Board. Once the approval has been obtained, the proposed amendments, including this analysis, will be transmitted to the Autorité des marchés financiers in accordance with the self-certification process, and to the Ontario Securities Commission in accordance with the "Rule Change Requiring Approval in Ontario" process. The proposed amendments and analysis will also be submitted for approval to the Bank of Canada in accordance with the Regulatory Oversight Agreement.

IX. EFFECTIVE DATE

Subject to public comments and regulatory approval, the proposed rule amendments will take effect immediately thereafter.

X. ATTACHED DOCUMENTS

- Appendix 1: Rules (Blackline)
- Appendix 2: Rules (Clean)
- Appendix 3: Default Manual (Blackline)

Appendix 4: Default Manual (Clean)

APPENDIX 1

(BLACKLINE)

SECTIONS A-102, A-1A09, A-411, RULE A-6 AND NEW RULE A-10

SECTION A-102 DEFINITIONS

“Default Management Period” has the meaning attributed thereto in Section A-411.

“Default Management Period End Date” has the meaning attributed thereto in Section A-411.

“Recovery Event” has the meaning attributed thereto in Section A-1002.

“Recovery Losses” has the meaning attributed thereto in Section A-1004.

“Recovery Loss Cash Payment” has the meaning attributed thereto in Section A-1006.

“Recovery Power” has the meaning attributed thereto in Section A-1001.

“Recovery Process” has the meaning attributed thereto in Section A-1003.

(...)

SECTION A-1A09 VOLUNTARY WITHDRAWAL

- 1) A Clearing Member may at any time notify CDCC that it wishes to withdraw its Membership, by giving a minimum of 30 days’ prior written notice. The Clearing Member shall cease to be a Clearing Member at the later of the expiry of such notice period or the time determined CDCC at which all of the Clearing Member’s obligations have been satisfied and any requirements for withdrawal have been met. ~~CDCC shall promptly give notice to other Clearing Members that the Clearing Member has given notice of its intention to withdraw its Membership.~~ including obligations related to the winding down of all the Clearing Member’s activities. The withdrawal of any Clearing Member which has given a notice of withdrawal but whose withdrawal has not been completed at the commencement of a Default Management Period shall be stayed for the duration of the Default Management Period.
- 2) CDCC shall give notice to all Clearing Members that the Clearing Member has given notice of its intention to withdraw its Membership.
- 3) ~~The~~ If the withdrawal notice is given by a Non-Conforming Clearing Member, the Corporation shall promptly notify the Board, the other Clearing Members, the Exchanges, the suspended Non-Conforming such Clearing Member’s applicable self-regulatory organization or regulatory agency, the any regulatory agency of having oversight over the Corporation and such other Entities as the Corporation may consider appropriate, that it has received notice of the Clearing Member’s withdrawal from membership in the Corporation and the effective withdrawal date.

RULE A-4 ENFORCEMENT

(...)

SECTION A-411-DEFAULT MANAGEMENT PERIOD

- 1) A Default Management Period means the period
 - (i) commencing on the day that CDCC declares the suspension of a Clearing Member,
and
 - (ii) concluding on the Default Management End Date.

provided however, that if CDCC declares the suspension of a Clearing Member when a Default Management Period is ongoing due to the prior suspension of another Clearing Member, multiple Clearing Members' suspensions will be processed in a single Default Management Period.
- 2) The Default Management Period End Date shall occur on the Business Day following the declaration by CDCC that:
 - (i) the obligations, losses or expenses incurred or sustained by the Corporation in connection with the suspension(s) of Non-Conforming Member(s) are known or can reasonably be determined and have been satisfied or otherwise settled; or
 - (ii) any of the actions, rights or remedies available to CDCC with respect to the suspension of any Clearing Member that were deemed necessary by CDCC have been taken; and
 - (iii) the Default Management Period with respect to the suspended Clearing Member(s) has been completed.

RULE A-6 CLEARING FUND DEPOSITS

SECTION A-601 CLEARING FUND MAINTENANCE AND PURPOSE

- 1) The Corporation shall establish a Clearing Fund relating to all Transactions cleared by the Corporation. Each Clearing Member admitted to clear Transactions at the Corporation shall maintain a deposit in the Clearing Fund of the amounts from time to time required by the Rules. The Clearing Fund shall be used for the purposes set out in Section A-609 and Subsection A-701(2).
- ~~2)~~ The Clearing Fund Base Deposits are as follows:
 - a) Options Clearing Base Deposit - \$25,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.

- b) Futures Clearing Base Deposit - \$75,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.
- c) OTCI Clearing Base Deposit(other than Fixed Income Transactions) - \$100,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.
- d) Fixed Income Transactions Clearing Base Deposit - \$1,000,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.

SECTION A-602 AMOUNT OF CLEARING FUNDS

The Clearing Fund is constituted of the aggregate amount of the Clearing Fund ~~to be deposited~~deposits required by ~~all~~each Clearing Members at the close of each calendar month ~~shall be equivalent to each Clearing Member's~~as Base Deposit and Variable Deposit. The amount ~~of the Clearing Fund~~required to be deposited by each Clearing Member to the Clearing Fund shall be calculated according to Section A-603. Unless otherwise specified, the Clearing Fund shall not include any deposit made in excess of the amount of the Clearing Fund deposits required by each Clearing Member.

SECTION A-603 AMOUNT OF DEPOSIT

- 1) The required deposit of each Clearing Member to the Clearing Fund shall be an amount equal to the total of:
 - a) an Options Clearing Base Deposit, if the Clearing Member has been accepted to clear Options;
 - b) a Futures Clearing Base Deposit, if the Clearing Member has been accepted to clear Futures;
 - c) an OTCI Clearing Base Deposit, if the Clearing Member has been accepted to clear OTCI transactions other than Fixed Income Transactions;
 - d) a Fixed Income Transactions Clearing Base Deposit, if the Clearing Member has been accepted to clear Fixed Income Transactions; and
 - e) a Variable Deposit equal to the amount by which (i) the Clearing Member's contribution, in accordance with the methodology set ~~forth~~out in the Risk Manual, to the Corporation's Uncovered Residual Risk exceeds (ii) such Clearing Member's Base Deposits.
- 2) Within a calendar month, if the Corporation determines that an increase to the Variable Deposit is necessary to protect its financial integrity, the Corporation will notify with a Clearing Fund statement the concerned Clearing Member(s), ~~whom~~ which shall increase in the determined amount and approved form its contribution to the Clearing Fund no later than 2:00 p.m. on the following Business Day.

SECTION A-604 CHANGES IN REQUIREMENT

The ~~required~~ amount of Base and Variable Deposits required to be made by Clearing Members may be ~~altered~~modified from time to time by the Corporation as a result of an amendment to the Rules. If the deposit to the Clearing Fund required to be made by a Clearing Member is thereby increased, the increase shall not become effective until the Clearing Member is given 3 Business Days prior written notice of such amendment. Unless a Clearing Member notifies the Corporation in writing that it wishes to ~~terminate~~withdraw its membership and closes out or transfers all of its aggregate positions in the relevant instrument before the effective date of such amendment, such Clearing Member shall be liable to make the increased deposit ~~whenever it is required of all Clearing Members~~.

SECTION A-605 CLEARING FUND STATEMENT

On the first Business Day of each calendar month, the Corporation shall issue to each Clearing Member a Clearing Fund statement that shall list the current amount of such Clearing Member's deposits to the Clearing Fund and the amount of deposit required of such Clearing Member. Any surplus over and above the amount required or any deficit to be satisfied will also be shown. A Clearing Fund statement will also be issued intra-monthly if an increase to the Variable Deposit is necessary. The concerned Clearing Member will have until no later than 2:00 p.m. on the next Business Day to remediate any deficit.

SECTION A-606 ADDITIONAL CLEARING FUND DEPOSIT

Whenever a Clearing Member's Clearing Fund statement shows a deficit, such Clearing Member shall satisfy the deficit by a deposit in a form approved by the Corporation no later than 2:00 p.m. on the Business Day following the issuance of the Clearing Fund statement.

SECTION A-607 WITHDRAWALS

In the event that the Clearing Fund statement of ~~the~~a Clearing Member shows a surplus, at~~the~~ Clearing Member may request the withdrawal of such surplus by submitting a withdrawal request in the form and ~~delay~~time prescribed by the Corporation.

SECTION A-608 FORM OF DEPOSITS

- 1) In addition to Base Deposits made pursuant to the requirements of Subsection A-601(2), Variable Deposits to the Clearing Fund shall also be in the form of Cash and/or in Acceptable Treasury Bills ~~which shall be~~ valued at a discounted rate, as determined by the Corporation from time to time in accordance with the methodology set ~~forth~~out in the Risk Manual, of their market value; if no market value is generally available for such Acceptable Treasury Bills, they shall be valued at an amount determined by the Corporation. Substitutions may be made with the prior approval of the Corporation. Deposits in Cash shall be transferred by irrevocable funds transfer to the Corporation and may, from time to time, be partially or wholly invested by the Corporation for its account. To the extent not so invested, they shall be deposited to the credit of the Corporation in such financial institutions as the Board may select. Deposits in Cash shall not be used by

the Corporation as working capital but any interest or gain received or accrued on the investment of such funds shall belong to the Corporation.

- 2) ~~The~~Any Clearing Fund deposit shall be deemed to be deposited with the Corporation at the time the Corporation accepts the Cash and/or Acceptable Treasury Bills. All interest or gain received or accrued on any Acceptable Treasury Bills, prior to any sale, negotiation or pledge thereof, shall belong to the depositing Clearing Member.

SECTION A-609 APPLICATION OF CLEARING FUND

- 1) The Corporation shall apply ~~the Non-Conforming~~a suspended Clearing Member's Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund), as well as the Clearing Fund deposits required of all other Clearing Members in accordance with Subsection A-609(2), as set out in Subsection A-701(2) and in accordance with the methodology set ~~forth~~out in the Default Manual.
- 2) If the amount of the ~~undischarged obligation, payment, loss or expense~~obligations, losses or expenses incurred or sustained by the Corporation in connection with the suspension of a Clearing Member exceeds the total ~~value~~amount of the ~~Non-Conforming~~suspended Clearing Member's Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund), and if ~~the~~such Clearing Member fails to pay the Corporation the amount of the deficiency on demand, the Corporation shall apply its own capital resources specifically set aside for such purpose up to the maximum amount set ~~forth~~out in the Default Manual for a single Default Management Period, and if the amount of the deficiency exceeds such amount, the remaining deficiency shall be paid out of the Clearing Fund and charged to each Clearing Member's Clearing Fund deposit, pro rata, based on the ~~size of each of the other Clearing Members' quotient obtained by dividing the amount of such Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period by the aggregate amount of~~ Clearing Fund deposits at that time, against all other required at the beginning of the Default Management Period by all Clearing Members' Clearing Fund deposits, subject to and in accordance with the methodology set forth in the Default Manual, other than the suspended Clearing Member(s). Notwithstanding any such ~~pro rata~~such charges made against the Clearing Fund deposits of each of the ~~other~~ Clearing Members, the ~~Non-Conforming~~suspended Clearing Member ~~who~~which failed to pay the deficiency shall remain liable to the Corporation for the full amount of such deficiency until its repayment ~~thereof~~.
- 3) Whenever any ~~pro rata~~such charges are made against Clearing Members' deposits to the Clearing Fund, the Corporation shall promptly notify ~~all~~each Clearing ~~Members~~Member of the amount of the charge and the reasons therefor. For the purposes of this Section A-609, the amount of any ~~loss sustained by~~claim of the Corporation for deficiencies against a Clearing Member shall be determined without reference to the possibility of any subsequent recovery in respect thereof, through insolvency proceedings or otherwise, but the net amount of any such recovery shall be applied in accordance with Section A-612.
- 4) Without limiting the rights of the parties under Section A-607 and Subsections A-609(1) and (2), at the sole discretion of the Corporation, all property deposited with the Corporation as a Clearing Fund deposit by any and all Clearing Members may be pledged, replighted, hypothecated, rehypothecated or transferred by the Corporation as security for, or in connection with, the Corporation's own obligations to any person incurred in order (a)

to obtain liquidity or credit for the purpose of assisting the Corporation to honour its obligations on a timely basis further to the designation by the Corporation of a Clearing Member as being a Non-Conforming Member, or (b) to fund a payment obligation of the Corporation which arises pursuant to a Failed Delivery under Subsection A-804(1) by any Clearing Member, and any such security or transfer will be effective without the holder or recipient thereof being required to make any enquiry as to whether the applicable obligations have been incurred for the purposes set out in this Subsection A-609(4) or whether the funds so obtained are being used for such purposes. Without limiting the rights of the Corporation under Subsection A-701(2), at the sole discretion of the Corporation, in the case of the situation described in (a) above, the Corporation shall pledge the Non-Conforming Member's Margin Deposits (including, without limitation, Margin and Clearing Fund), in accordance with Subsection A-701(5), before pledging the Clearing Fund deposits of other Clearing Members. In the case of the situation described in (b) above, the Corporation shall pledge the Clearing Fund deposits of the Provider of Securities responsible for the Failed Delivery before pledging the Clearing Fund deposits of other Clearing Members. The Corporation shall be deemed to continue to hold all property deposited with the Corporation as Clearing Fund deposits, regardless of whether the Corporation has exercised its rights under this Subsection A-609(4).

- 5) Without limiting the rights of the Corporation under section A-609(1) and A-609(4), during a single Default Management Period, CDCC shall not, with respect to each Clearing Member that has not been suspended, apply more than 200 % of the Clearing Fund deposit required by such Clearing Member to satisfy or otherwise settle any obligations, losses or expenses incurred or sustained by the Corporation in connection with the suspension(s) of Clearing Member(s).

SECTION A-610 MAKING GOOD ON CHARGES TO CLEARING FUND

Whenever an amount is paid out of the Clearing Fund deposits of ~~other~~the Clearing Members that have not been suspended, in accordance with Subsection A-609(2), such Clearing Members shall be liable to make good the deficiency if any in their deposits resulting from such payment no later than 2:00 p.m. on the Business Day following the date that the amount is paid out unless CDCC issues a notice specifying a later date. Notwithstanding the foregoing, Clearing Members will not be liable to make good more than an additional ~~100~~200% of the amount of their Clearing Fund deposits ~~than~~as prescribed by the Rules during a single Default Management Period.

SECTION A-611 DEPOSIT REFUND

- 1) Whenever a Clearing Member ceases to be a Clearing Member ~~with respect to all Transactions covered by the Clearing Fund, in accordance with Section A-1A09,~~ the amount of its Clearing Fund deposit, ~~relating to the Transactions no longer being cleared,~~ shall be returned, subject to the time limit specified in Subsection A-611(2), ~~but not until all Transactions of the Clearing Member from which losses or payments chargeable to the Clearing Fund might result have been fulfilled or closed, or with the approval of the Corporation, another Clearing Member has been substituted thereon.~~ All outstanding amounts chargeable against a Clearing Member's deposit in ~~the Clearing Fund on account of Transactions effected whilst~~connection with its activities while a Clearing Member, ~~including pro-rata charges,~~ shall be deducted from the amount to be returned.

- 2) Thirty days after ~~all outstanding items have been eliminated from the Clearing Member's accounts with the Corporation (the "Withdrawal Period") the balance of the Clearing Fund deposit owed to the former Clearing Member will be paid to that former member~~a Clearing Member has ceased to be member of the Corporation in accordance with Section A-1A09, the Corporation shall authorize such former member to withdraw its Clearing Fund deposit.
- 3) ~~If an Event of Default occurs during the Withdrawal Period, the period stops running and will begin to run again when the Event of Default has been resolved to the satisfaction of the Corporation.~~

SECTION A-612 RECOVERY OF LOSS

- 1) If ~~a loss~~an amount charged ~~pro-rata~~ against the deposits of Clearing Members in the Clearing Fund is ~~afterward~~subsequently recovered by the Corporation from the Clearing Member whose failure to pay led to the ~~loss~~amount being charged, in whole or in part, the net amount of such recovery shall be paid or credited to the Clearing Members against whose deposit the loss was charged in proportion to the amount charged against their respective deposits, whether or not they ~~are still~~remain Clearing Members.
- 2) Any Clearing Member that has had ~~a loss~~an amount charged against its deposit under Section A-609(2), shall have the right to claim from the Clearing Member whose failure to pay a deficiency led to the ~~loss~~amount being charged and the Clearing Member shall be ~~obligated~~obliged to reimburse such other Clearing Member; the amount so charged against the Clearing Member's deposit.

NEW RULE

RULE A-10 – RECOVERY PROCESS

SECTION A- 1001- RECOVERY POWERS

- 1) Unless otherwise specified in the applicable section of Rule A-10, upon the declaration by the Corporation of the beginning of a Recovery Process, CDCC may exercise any of rights or remedies against its Clearing Members (each of which, a "Recovery Power") in the manner set out in the applicable sections below, including applying a Recovery Loss Cash Payment.

SECTION A- 1002—DECLARATION OF RECOVERY PROCESS

- 1) During a Default Management Process, the Corporation may declare the commencement of a Recovery Process, subject to approval by the Board, upon any occurrence that,

individually or in the aggregate (a “Recovery Event”), may, in the reasonable judgment of the Corporation, result in the Corporation incurring obligations, losses or expenses in excess of the sum of the following:

- (i) the suspended Clearing Members’ Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund);
- (ii) the Corporation’s own capital resources specifically set aside for such purpose;
and
- (iii) 200% of the aggregate value of all Clearing Fund deposits required at the beginning of the Default Management Period of the Clearing Members which have not been suspended during the Default Management Period;

provided that the Recovery Event is caused or incurred in connection with the suspension of one or more Clearing Member(s) during the Default Management Period.

- 2) During a Default Management Process, the Corporation may declare the commencement of a Recovery Process, subject to approval by the Board, if, after the suspension of one or more Clearing Members and the exercise of the rights and remedies set out in Rule A-4, the Corporation reasonably determines that it has been, or will likely be, unable to close-out all the positions of suspended Clearing Members. Such determination shall also constitute a Recovery Event.
- 3) Upon the declaration of the commencement of a Recovery Process, the Corporation will notify all Clearing Members, the Exchanges, any regulatory agency having oversight over the Corporation, the Bank of Canada and any such other Entities as the Corporation may consider appropriate.

SECTION A- 1003- RECOVERY PROCESS

Recovery Process means any of the actions, rights or remedies of the Corporation set out in this Rule and the Default Manual.

SECTION A- 1004- RECOVERY LOSSES

Recovery Losses means any obligations, losses or expenses incurred or sustained by the Corporation as a result of or in connection with the Recovery Event.

SECTION A- 1005- [PLACEHOLDER]

Reserved.

SECTION A- 1006- RECOVERY LOSS CASH PAYMENT

- 1) At any time during a Default Management Period, after a declaration by the Corporation of the commencement of a Recovery Process, if, in the reasonable opinion of the Corporation, the Recovery Event may result in the Corporation incurring obligations, losses or expenses in an amount in excess of the sum of the following:

- (i) the suspended Clearing Members' Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund);
- (ii) the Corporation's own capital resources specifically set aside for such purpose;
and
- (iii) 200% of the aggregate value of all Clearing Fund deposits required at the beginning of the Default Management Period of the Clearing Members which have not been suspended during the Default Management Period;

and such amount is known or can reasonably be determined, CDCC may require each Clearing Member which have not been suspended during the Default Management Period to pay to the Corporation its pro rata proportion of the Recovery Loss Cash Payment.

- 2) The Corporation shall determine the total amount of the Recovery Loss Cash Payment and calculate the pro rata proportion to be paid by each Clearing Member that is not a suspended Clearing Member, pro rata, based on the quotient obtained by dividing the amount of each Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period by the aggregate amount of Clearing Fund deposits required at the beginning of the Default Management Period of all Clearing Members other than the suspended Clearing Members.
- 3) The Corporation shall notify each Clearing Member that is not a suspended Clearing Member of the amount payable by such Clearing Member as Recovery Loss Cash Payment.
- 4) The aggregate amounts payable in Recovery Loss Cash Payments by a Clearing Member during a Default Management Period shall not exceed the value of such Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period.
- 5) The Recovery Loss Cash Payment shall be paid by each Clearing Member no later than the first Settlement Time on the Business Day following the date the Corporation notifies Clearing Members in writing that the Recovery Loss Payment is due, unless any other date is specified in the Corporation's notice.
- 6) A Recovery Loss Cash Payment must be paid to the Corporation in Cash and, once received, will belong to the Corporation. The Corporation shall not be required to pay any interest in respect of any Recovery Loss Cash Payment.
- 7) The Corporation shall use the Recovery Loss Cash Payment after exhausting the funds referred to in subsection (1) for the sole purpose of satisfying or otherwise settling Recovery Losses.

SECTION A- 1007- [PLACEHOLDER]

Reserved

SECTION A- 1008- [PLACEHOLDER]

Reserved

SECTION A- 1009- NO LIMITED RECOURSE

Nothing in this Rule shall limit the actions that may be taken by the Corporation pursuant to Rule A-4 against a Non-Conforming Clearing Member or a suspended Clearing Member.

SECTION A-1010- NO EVENT OF DEFAULT

No action or omission of the Corporation taken or occurring in connection with the Recovery Process during a Default Management Period shall constitute an Event of Default.

SECTION A-1011 NO ADJUSTMENT OF PAYMENT

Nothing in this Rule shall affect a Clearing Member's obligation to satisfy any other obligation under the Rules.

SECTION A-1012 APPLICATION OF PAYMENTS

No amount paid or deposited by a Clearing Member in connection with a Recovery Event shall be applied by the Corporation to satisfy or to compensate the Corporation for obligations other than those arising in connection with such Recovery Event.

SECTION A-1013 RECOVERY OF LOSS

- 1) Notwithstanding the remedies available to the Corporation under this Rule and to the extent that a Recovery Loss has been sustained by the Corporation, the suspended Clearing Member shall remain liable to the Corporation for the full amount of such Recovery Loss until its repayment.
- 2) If a Recovery Loss that has been satisfied with an amount levied from a Clearing Member, including through a Recovery Loss Cash Payment, is subsequently recovered by the Corporation from the Clearing Member whose suspension led to the Recovery Loss, in whole or in part, the net amount of such recovery shall be paid or credited to the Clearing Members to whom the Recovery Loss Cash Payment was charged in proportion to the amount paid by them whether or not they remain Clearing Members.
- 3) Any Clearing Member that has paid a Recovery Loss Cash Payment under Section A-1006, shall have the right to claim from the Clearing Member whose suspension led to the charging of the Recovery Loss Cash Payment to it and the Clearing Member shall be obliged to reimburse such other Clearing Member the amount paid by the Clearing Member.

APPENDIX 2

(CLEAN)

SECTIONS A-102, A-1A09, A-411, RULE A-6 AND NEW RULE A-10

SECTION A-102 DEFINITIONS

“Default Management Period” has the meaning attributed thereto in Section A-411.

“Default Management Period End Date” has the meaning attributed thereto in Section A-411.

“Recovery Event” has the meaning attributed thereto in Section A-1002.

“Recovery Losses” has the meaning attributed thereto in Section A-1004.

“Recovery Loss Cash Payment” has the meaning attributed thereto in Section A-1006.

“Recovery Power” has the meaning attributed thereto in Section A-1001.

“Recovery Process” has the meaning attributed thereto in Section A-1003.

(...)

SECTION A-1A09 VOLUNTARY WITHDRAWAL

- 1) A Clearing Member may at any time notify CDCC that it wishes to withdraw its Membership, by giving a minimum of 30 days’ prior written notice. The Clearing Member shall cease to be a Clearing Member at the later of the expiry of such notice period or the time determined by CDCC at which all of the Clearing Member’s obligations have been satisfied and any requirements for withdrawal have been met, including obligations related to the winding down of all the Clearing Member’s activities. The withdrawal of any Clearing Member which has given a notice of withdrawal but whose withdrawal has not been completed at the commencement of a Default Management Period shall be stayed for the duration of the Default Management Period.
- 2) CDCC shall give notice to all Clearing Members that the Clearing Member has given notice of its intention to withdraw its Membership.
- 3) If the withdrawal notice is given by a Non-Conforming Clearing Member, the Corporation shall promptly notify the Board, the other Clearing Members, the Exchanges, such Clearing Member’s applicable self-regulatory organization or agency, any regulatory agency having oversight over the Corporation and such other Entities as the Corporation may consider appropriate, that it has received notice of the Clearing Member’s withdrawal from membership in the Corporation.

RULE A-4 ENFORCEMENT

(...)

SECTION A- 411 -DEFAULT MANAGEMENT PERIOD

- 1) A Default Management Period means the period
 - (i) commencing on the day that CDCC declares the suspension of a Clearing Member, and
 - (ii) concluding on the Default Management End Date.

provided however, that if CDCC declares the suspension of a Clearing Member when a Default Management Period is ongoing due to the prior suspension of another Clearing Member, multiple Clearing Members' suspensions will be processed in a single Default Management Period.
- 2) The Default Management Period End Date shall occur on the Business Day following the declaration by CDCC that:
 - (i) the obligations, losses or expenses incurred or sustained by the Corporation in connection with the suspension(s) of Non-Conforming Member(s) are known or can reasonably be determined and have been satisfied or otherwise settled; or
 - (ii) any of the actions, rights or remedies available to CDCC with respect to the suspension of any Clearing Member that were deemed necessary by CDCC have been taken; and
 - (iii) the Default Management Period with respect to the suspended Clearing Member(s) has been completed.

RULE A-6 CLEARING FUND DEPOSITS

SECTION A-601 CLEARING FUND MAINTENANCE AND PURPOSE

- 1) The Corporation shall establish a Clearing Fund relating to all Transactions cleared by the Corporation. Each Clearing Member admitted to clear Transactions at the Corporation shall maintain a deposit in the Clearing Fund of the amounts from time to time required by the Rules. The Clearing Fund shall be used for the purposes set out in Section A-609 and Subsection A-701(2).

The Clearing Fund Base Deposits are as follows:

- a) Options Clearing Base Deposit - \$25,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.

- b) Futures Clearing Base Deposit - \$75,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.
- c) OTCI Clearing Base Deposit(other than Fixed Income Transactions) - \$100,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.
- d) Fixed Income Transactions Clearing Base Deposit - \$1,000,000 Cash or equivalent value (as set out in Section A-608) of Acceptable Treasury Bills.

SECTION A-602 AMOUNT OF CLEARING FUNDS

The Clearing Fund is constituted of the aggregate amount of the Clearing Fund deposits required by each Clearing Members at the close of each calendar month as Base Deposit and Variable Deposit. The amount required to be deposited by each Clearing Member to the Clearing Fund shall be calculated according to Section A-603. Unless otherwise specified, the Clearing Fund shall not include any deposit made in excess of the amount of the Clearing Fund deposits required by each Clearing Member.

SECTION A-603 AMOUNT OF DEPOSIT

- 1) The required deposit of each Clearing Member to the Clearing Fund shall be an amount equal to the total of:
 - a) an Options Clearing Base Deposit, if the Clearing Member has been accepted to clear Options;
 - b) a Futures Clearing Base Deposit, if the Clearing Member has been accepted to clear Futures;
 - c) an OTCI Clearing Base Deposit, if the Clearing Member has been accepted to clear OTCI transactions other than Fixed Income Transactions;
 - d) a Fixed Income Transactions Clearing Base Deposit, if the Clearing Member has been accepted to clear Fixed Income Transactions; and
 - e) a Variable Deposit equal to the amount by which (i) the Clearing Member's contribution, in accordance with the methodology set out in the Risk Manual, to the Corporation's Uncovered Residual Risk exceeds (ii) such Clearing Member's Base Deposits.
- 2) Within a calendar month, if the Corporation determines that an increase to the Variable Deposit is necessary to protect its financial integrity, the Corporation will notify with a Clearing Fund statement the concerned Clearing Member(s) which shall increase in the determined amount and approved form its contribution to the Clearing Fund no later than 2:00 p.m. on the following Business Day.

SECTION A-604 CHANGES IN REQUIREMENT

The amount of Base and Variable Deposits required to be made by Clearing Members may be modified from time to time by the Corporation as a result of an amendment to the Rules. If the deposit to the Clearing Fund required to be made by a Clearing Member is thereby increased, the increase shall not become effective until the Clearing Member is given 3 Business Days prior written notice of such amendment. Unless a Clearing Member notifies the Corporation in writing that it wishes to withdraw its membership and closes out or transfers all of its aggregate positions in the relevant instrument before the effective date of such amendment, such Clearing Member shall be liable to make the increased deposit.

SECTION A-605 CLEARING FUND STATEMENT

On the first Business Day of each calendar month, the Corporation shall issue to each Clearing Member a Clearing Fund statement that shall list the current amount of such Clearing Member's deposits to the Clearing Fund and the amount of deposit required of such Clearing Member. Any surplus over and above the amount required or any deficit to be satisfied will also be shown. A Clearing Fund statement will also be issued intra-monthly if an increase to the Variable Deposit is necessary. The concerned Clearing Member will have until no later than 2:00 p.m. on the next Business Day to remediate any deficit.

SECTION A-606 ADDITIONAL CLEARING FUND DEPOSIT

Whenever a Clearing Member's Clearing Fund statement shows a deficit, such Clearing Member shall satisfy the deficit by a deposit in a form approved by the Corporation no later than 2:00 p.m. on the Business Day following the issuance of the Clearing Fund statement.

SECTION A-607 WITHDRAWALS

In the event that the Clearing Fund statement of a Clearing Member shows a surplus, the Clearing Member may request the withdrawal of such surplus by submitting a withdrawal request in the form and time prescribed by the Corporation.

SECTION A-608 FORM OF DEPOSITS

- 1) In addition to Base Deposits made pursuant to the requirements of Subsection A-601(2), Variable Deposits to the Clearing Fund shall also be in the form of Cash and/or in Acceptable Treasury Bills valued at a discounted rate, as determined by the Corporation from time to time in accordance with the methodology set out in the Risk Manual, of their market value; if no market value is generally available for such Acceptable Treasury Bills, they shall be valued at an amount determined by the Corporation. Substitutions may be made with the prior approval of the Corporation. Deposits in Cash shall be transferred by irrevocable funds transfer to the Corporation and may, from time to time, be partially or wholly invested by the Corporation for its account. To the extent not so invested, they shall be deposited to the credit of the Corporation in such financial institutions as the Board may select. Deposits in Cash shall not be used by the Corporation as working capital but any

interest or gain received or accrued on the investment of such funds shall belong to the Corporation.

- 2) Any Clearing Fund deposit shall be deemed to be deposited with the Corporation at the time the Corporation accepts the Cash and/or Acceptable Treasury Bills. All interest or gain received or accrued on any Acceptable Treasury Bills, prior to any sale, negotiation or pledge thereof, shall belong to the depositing Clearing Member.

SECTION A-609 APPLICATION OF CLEARING FUND

- 1) The Corporation shall apply a suspended Clearing Member's Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund), as well as the Clearing Fund deposits required of all other Clearing Members in accordance with Subsection A-609(2), as set out in Subsection A-701(2) and in accordance with the methodology set out in the Default Manual.
- 2) If the amount of the obligations, losses or expenses incurred or sustained by the Corporation in connection with the suspension of a Clearing Member exceeds the total amount of the suspended Clearing Member's Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund), and if such Clearing Member fails to pay the Corporation the amount of the deficiency on demand, the Corporation shall apply its own capital resources specifically set aside for such purpose up to the maximum amount set out in the Default Manual for a single Default Management Period, and if the amount of the deficiency exceeds such amount, the remaining deficiency shall be paid out of the Clearing Fund and charged to each Clearing Member's Clearing Fund deposit, pro rata, based on the quotient obtained by dividing the amount of such Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period by the aggregate amount of Clearing Fund deposits required at the beginning of the Default Management Period by all Clearing Members other than the suspended Clearing Member(s). Notwithstanding any such charges made against the Clearing Fund deposits of each of the Clearing Members, the suspended Clearing Member which failed to pay the deficiency shall remain liable to the Corporation for the full amount of such deficiency until its repayment.
- 3) Whenever any such charges are made against Clearing Members' deposits to the Clearing Fund, the Corporation shall promptly notify each Clearing Member of the amount of the charge and the reasons therefor. For the purposes of this Section A-609, the amount of any claim of the Corporation for deficiencies against a Clearing Member shall be determined without reference to the possibility of any subsequent recovery in respect thereof, through insolvency proceedings or otherwise, but the net amount of any such recovery shall be applied in accordance with Section A-612.
- 4) Without limiting the rights of the parties under Section A-607 and Subsections A-609(1) and (2), at the sole discretion of the Corporation, all property deposited with the Corporation as a Clearing Fund deposit by any and all Clearing Members may be pledged, repledged, hypothecated, rehypothecated or transferred by the Corporation as security for, or in connection with, the Corporation's own obligations to any person incurred in order (a) to obtain liquidity or credit for the purpose of assisting the Corporation to honour its obligations on a timely basis further to the designation by the Corporation of a Clearing Member as being a Non-Conforming Member, or (b) to fund a payment obligation of the

Corporation which arises pursuant to a Failed Delivery under Subsection A-804(1) by any Clearing Member, and any such security or transfer will be effective without the holder or recipient thereof being required to make any enquiry as to whether the applicable obligations have been incurred for the purposes set out in this Subsection A-609(4) or whether the funds so obtained are being used for such purposes. Without limiting the rights of the Corporation under Subsection A-701(2), at the sole discretion of the Corporation, in the case of the situation described in (a) above, the Corporation shall pledge the Non-Conforming Member's Margin Deposits (including, without limitation, Margin and Clearing Fund), in accordance with Subsection A-701(5), before pledging the Clearing Fund deposits of other Clearing Members. In the case of the situation described in (b) above, the Corporation shall pledge the Clearing Fund deposits of the Provider of Securities responsible for the Failed Delivery before pledging the Clearing Fund deposits of other Clearing Members. The Corporation shall be deemed to continue to hold all property deposited with the Corporation as Clearing Fund deposits, regardless of whether the Corporation has exercised its rights under this Subsection A-609(4).

- 5) Without limiting the rights of the Corporation under section A-609(1) and A-609(4), during a single Default Management Period, CDCC shall not, with respect to each Clearing Member that has not been suspended, apply more than 200 % of the Clearing Fund deposit required by such Clearing Member to satisfy or otherwise settle any obligations, losses or expenses incurred or sustained by the Corporation in connection with the suspension(s) of Clearing Member(s).

SECTION A-610 MAKING GOOD ON CHARGES TO CLEARING FUND

Whenever an amount is paid out of the Clearing Fund deposits of the Clearing Members that have not been suspended, in accordance with Subsection A-609(2), such Clearing Members shall be liable to make good the deficiency if any in their deposits resulting from such payment no later than 2:00 p.m. on the Business Day following the date that the amount is paid out unless CDCC issues a notice specifying a later date. Notwithstanding the foregoing, Clearing Members will not be liable to make good more than an additional 200% of the amount of their Clearing Fund deposits as prescribed by the Rules during a single Default Management Period.

SECTION A-611 DEPOSIT REFUND

- 1) Whenever a Clearing Member ceases to be a Clearing Member in accordance with Section A-1A09, the amount of its Clearing Fund deposit shall be returned, subject to the time limit specified in Subsection A-611(2). All outstanding amounts chargeable against a Clearing Member's deposit in connection with its activities while a Clearing Member, shall be deducted from the amount to be returned.
- 2) Thirty days after a Clearing Member has ceased to be member of the Corporation in accordance with Section A-1A09, the Corporation shall authorize such former member to withdraw its Clearing Fund deposit.

SECTION A-612 RECOVERY OF LOSS

- 1) If an amount charged against the deposits of Clearing Members in the Clearing Fund is subsequently recovered by the Corporation from the Clearing Member whose failure to pay led to the amount being charged, in whole or in part, the net amount of such recovery shall be paid or credited to the Clearing Members against whose deposit the loss was charged in proportion to the amount charged against their respective deposits, whether or not they remain Clearing Members.
- 2) Any Clearing Member that has had an amount charged against its deposit under Section A-609(2), shall have the right to claim from the Clearing Member whose failure to pay a deficiency led to the amount being charged and the Clearing Member shall be obliged to reimburse such other Clearing Member the amount so charged against the Clearing Member's deposit.

NEW RULE

RULE A-10 –RECOVERY PROCESS

SECTION A- 1001- RECOVERY POWERS

- 1) Unless otherwise specified in the applicable section of Rule A-10, upon the declaration by the Corporation of the beginning of a Recovery Process, CDCC may exercise any of rights or remedies against its Clearing Members (each of which, a “Recovery Power”) in the manner set out in the applicable sections below, including applying a Recovery Loss Cash Payment.

SECTION A- 1002—DECLARATION OF RECOVERY PROCESS

- 1) During a Default Management Process, the Corporation may declare the commencement of a Recovery Process, subject to approval by the Board, upon any occurrence that, individually or in the aggregate (a “Recovery Event”), may, in the reasonable judgment of the Corporation, result in the Corporation incurring obligations, losses or expenses in excess of the sum of the following:
 - (i) the suspended Clearing Members' Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund);
 - (ii) the Corporation's own capital resources specifically set aside for such purpose; and
 - (iii) 200% of the aggregate value of all Clearing Fund deposits required at the beginning of the Default Management Period of the Clearing Members which have not been suspended during the Default Management Period;

provided that the Recovery Event is caused or incurred in connection with the suspension of one or more Clearing Member(s) during the Default Management Period.

- 2) During a Default Management Process, the Corporation may declare the commencement of a Recovery Process, subject to approval by the Board, if, after the suspension of one or more Clearing Members and the exercise of the rights and remedies set out in Rule A-4, the Corporation reasonably determines that it has been, or will likely be, unable to close-out all the positions of suspended Clearing Members. Such determination shall also constitute a Recovery Event.
- 3) Upon the declaration of the commencement of a Recovery Process, the Corporation will notify all Clearing Members, the Exchanges, any regulatory agency having oversight over the Corporation, the Bank of Canada and any such other Entities as the Corporation may consider appropriate.

SECTION A- 1003- RECOVERY PROCESS

Recovery Process means any of the actions, rights or remedies of the Corporation set out in this Rule and the Default Manual.

SECTION A- 1004- RECOVERY LOSSES

Recovery Losses means any obligations, losses or expenses incurred or sustained by the Corporation as a result of or in connection with the Recovery Event.

SECTION A- 1005- [PLACEHOLDER]

Reserved.

SECTION A- 1006- RECOVERY LOSS CASH PAYMENT

- 1) At any time during a Default Management Period, after a declaration by the Corporation of the commencement of a Recovery Process, if, in the reasonable opinion of the Corporation, the Recovery Event may result in the Corporation incurring obligations, losses or expenses in an amount in excess of the sum of the following:
 - (i) the suspended Clearing Members' Margin Deposit (including, without limitation, deposits required or made as Margin and Clearing Fund);
 - (ii) the Corporation's own capital resources specifically set aside for such purpose; and
 - (iii) 200% of the aggregate value of all Clearing Fund deposits required at the beginning of the Default Management Period of the Clearing Members which have not been suspended during the Default Management Period;

and such amount is known or can reasonably be determined, CDCC may require each Clearing Member which have not been suspended during the Default Management

- Period to pay to the Corporation its pro rata proportion of the Recovery Loss Cash Payment.
- 2) The Corporation shall determine the total amount of the Recovery Loss Cash Payment and calculate the pro rata proportion to be paid by each Clearing Member that is not a suspended Clearing Member, pro rata, based on the quotient obtained by dividing the amount of each Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period by the aggregate amount of Clearing Fund deposits required at the beginning of the Default Management Period of all Clearing Members other than the suspended Clearing Members.
 - 3) The Corporation shall notify each Clearing Member that is not a suspended Clearing Member of the amount payable by such Clearing Member as Recovery Loss Cash Payment.
 - 4) The aggregate amounts payable in Recovery Loss Cash Payments by a Clearing Member during a Default Management Period shall not exceed the value of such Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period.
 - 5) The Recovery Loss Cash Payment shall be paid by each Clearing Member no later than the first Settlement Time on the Business Day following the date the Corporation notifies Clearing Members in writing that the Recovery Loss Payment is due, unless any other date is specified in the Corporation's notice.
 - 6) A Recovery Loss Cash Payment must be paid to the Corporation in Cash and, once received, will belong to the Corporation. The Corporation shall not be required to pay any interest in respect of any Recovery Loss Cash Payment.
 - 7) The Corporation shall use the Recovery Loss Cash Payment after exhausting the funds referred to in subsection (1) for the sole purpose of satisfying or otherwise settling Recovery Losses.

SECTION A- 1007- [PLACEHOLDER]

Reserved

SECTION A- 1008- [PLACEHOLDER]

Reserved

SECTION A- 1009- NO LIMITED RECOURSE

Nothing in this Rule shall limit the actions that may be taken by the Corporation pursuant to Rule A-4 against a Non-Conforming Clearing Member or a suspended Clearing Member.

SECTION A- 1010- NO EVENT OF DEFAULT

No action or omission of the Corporation taken or occurring in connection with the Recovery Process during a Default Management Period shall constitute an Event of Default.

SECTION A-1011 NO ADJUSTMENT OF PAYMENT

Nothing in this Rule shall affect a Clearing Member's obligation to satisfy any other obligation under the Rules.

SECTION A-1012 APPLICATION OF PAYMENTS

No amount paid or deposited by a Clearing Member in connection with a Recovery Event shall be applied by the Corporation to satisfy or to compensate the Corporation for obligations other than those arising in connection with such Recovery Event.

SECTION A-1013 RECOVERY OF LOSS

- 1) Notwithstanding the remedies available to the Corporation under this Rule and to the extent that a Recovery Loss has been sustained by the Corporation, the suspended Clearing Member shall remain liable to the Corporation for the full amount of such Recovery Loss until its repayment.
- 2) If a Recovery Loss that has been satisfied with an amount levied from a Clearing Member, including through a Recovery Loss Cash Payment, is subsequently recovered by the Corporation from the Clearing Member whose suspension led to the Recovery Loss, in whole or in part, the net amount of such recovery shall be paid or credited to the Clearing Members to whom the Recovery Loss Cash Payment was charged in proportion to the amount paid by them whether or not they remain Clearing Members.
- 3) Any Clearing Member that has paid a Recovery Loss Cash Payment under Section A-1006, shall have the right to claim from the Clearing Member whose suspension led to the charging of the Recovery Loss Cash Payment to it and the Clearing Member shall be obliged to reimburse such other Clearing Member the amount paid by the Clearing Member.



DEFAULT MANUAL

February 7, 2017

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This Default Manual (the “Manual”) is intended to summarize the Rules of the Canadian Derivatives Clearing Corporation (“CDCC” or the “Corporation”) and confirm certain details concerning the actions, [rights and remedies that](#) the Corporation may take with respect to Clearing Members in financial difficulty, potentially in default or in default of obligations under the Rules. [The Manual also address the actions, rights and remedies that the Corporation may take with respect to all Clearing Members upon the declaration of a Recovery Process.](#) This Manual describes the Corporation’s possible course of action, including management of a default situation, authority, communication with a Clearing Member and implementation. **In case of conflict between the provisions set out in this Manual and the Rules of the Corporation, the Rules will prevail.** Terms with capitals which are not defined in this Manual have the meanings ascribed to them in the Rules.

A fundamental objective of a central counterparty is to ensure the integrity of payments and/or physical delivery of securities, even in the unlikely event of a Clearing Member default. Since the default of one or more Clearing Members may have an impact on the continuity of clearing operations, the Corporation must ensure that efficient mechanisms and processes are in place, capable of limiting the adverse impacts of such an event, with respect to monitoring and the determination of a Clearing Member’s Non-Conforming Member status and a Clearing Member’s suspension. As such, this Manual is meant to:

1. describe the grounds and events which may trigger the implementation of the default management ~~procedure~~[process](#) and the enforcement actions that may be taken by the Corporation throughout the process;
2. describe the governance process followed by the Corporation; and
3. describe the risk mitigation tools that can be used by the Corporation.
- [4. describe the Recovery Process and the related powers.](#)

Section 1: ~~SECTION 1: Default Management Process - Triggers and~~ And Implementation ~~of Default Management Procedure~~

~~In the following section, the~~ The grounds and events which may trigger the implementation of the ~~default management procedure and the~~ steps, decisions, enforcement actions or remedies that may be taken by the Corporation ~~throughout the process are described.~~ Key sub-sections include Objectives of Default Management, Triggers Leading to Non-Conforming or suspension status, Implications of Default, Status Associated with Default, Corporation Prerogatives in the Default Mitigation Process, and Waterfall - Financial Remedies to Cover Default-Induced Losses., which shall be referred therein as the Default Management Process, are described below. The Rules, notably Rule A-1A - Membership in the Corporation, Rule A-3 - Capital Requirements, Rule A-6 - Clearing Fund Deposits and Rule A-7 - Margin Requirements, support CDCC's authority in these actions and must be adhered to with extreme rigor.

1.1 ~~1.1.~~ OBJECTIVES OF DEFAULT MANAGEMENT

Participants in the ~~default management process~~ Default Management Process should at all times bear in mind the objectives of the default management exercise. These are delineated below:

- To minimize Clearing Member losses deriving from an inability of the Corporation to make settlement payments, protect Clearing Member Margin Deposit, or otherwise manage its responsibilities in a manner consistent with orderly markets.
- To ensure the continued effective functioning of the clearing process both during and after the ~~event of default~~ of a Clearing Member.
- To use all available powers and resources to protect the financial assets and positions of Clearing Members not contributing to the condition of default. This includes, wherever possible, the comprehensive and efficient transfer of Client Accounts associated with a defaulting Clearing Member, including any position maintained in such account and any Margin Deposits held by the Corporation in respect of such account, to another Clearing Member.
- To minimize the market impact of the ~~default management process~~ Default Management Process.
- To ensure the continued solvency of the Corporation and timely access to liquidity both during and after the ~~default management process~~ Default Management Process.

- To communicate with regulatory authorities on actions taken throughout the ~~default management process~~ [Default Management Process](#).

Corporation management, staff and agents should conduct themselves at all times during the ~~default management process~~ [Default Management Process](#) in a manner consistent with these objectives, and in general without regard to other considerations.

1.2 ~~1.2.~~ TRIGGERS LEADING TO NON-CONFORMING OR SUSPENSION STATUS

Critical to the process of default management is, of course, defining the grounds and events which can lead a Clearing Member to default on its obligation and result in the Corporation declaring such member Non-Conforming or suspending it, where warranted. As a general rule, the Corporation views any situation which would, in its judgment, impede a Clearing Member's ability to meet its obligations, as specified in the Rules, as grounds to declare a Clearing Member Non-Conforming. Sections A-1A04 and A-1A05 of the Rules provide the details of the grounds and events that can lead the Corporation to declare a member Non-Conforming or suspend it, respectively.

For the avoidance of doubt, as indicated in the Rules, the Corporation may in advance of, or in anticipation of a default or breach of eligibility or standard requirement, declare a Clearing Member Non-Conforming.

Where the Non-Conforming Clearing Member is insolvent or is unable or likely to be unable to meet its obligations under the Rules on a continuing basis, and has no reasonable prospect of returning to good standing or curing its default within a reasonable timeframe, the Corporation may then suspend the Non-Conforming Clearing Member. The Corporation will act accordingly for any default, whether actual or imminent, that is of such a gravity that suspension would be warranted, taking into consideration the protection of the integrity of the market.

~~1.3.~~ IMPLICATIONS OF DEFAULT

~~A Clearing Member's default is among the most serious issue faced by the Corporation, as it can have myriad consequences, and in the most extreme cases, can threaten both the continued effective functioning/integrity of the markets, as well as the viability of the Corporation itself. More specifically, a Clearing Member default can result in losses to the Corporation, other Clearing Members and their Clients, can impact the funding liquidity of these entities and can disrupt the routine functioning of the markets. As such, the Corporation must have adequate financial and risk management resources, in order to identify potential conditions of default, assess potential damage, mitigate market and financial impacts, and apply appropriate financial remedies to minimize losses for both itself and its stakeholders.~~

~~The Corporation must therefore commit appropriate resources and have in place proper procedures to ensure that the Clearing Members meet all standards of membership. The Rules, notably Rule A-1A—Membership in the Corporation, Rule A-3—Capital Requirements, Rule A-6—Clearing Fund Deposits and Rule A-7—Margin Requirements, provide for such oversight authority, and must be adhered to with extreme rigor.~~

1.3 ~~1.4.~~ STATUS ASSOCIATED WITH A DEFAULT

The Rules specify two distinct status levels associated with the default of a Clearing Member. The first such form is Non-Conforming status. At any point when the Clearing Member is or may become insolvent or unable to meet its obligations, management may declare that Clearing Member to be a Non-Conforming Member. Section A-1A04 of the Rules provides the grounds on which the Corporation may do so. Upon a declaration of Non-Conforming status, the Corporation is empowered with the authority, as further specified below, to undertake a wide range of mitigating actions.

Considering the gravity of the situation, the likelihood of a remediation of the default by the Clearing Member and in order to protect the integrity of the market, the Board may, in its sole discretion, choose to suspend the Non-Conforming Member.

The Corporation's management is responsible to declare a Clearing Member Non-Conforming whereas a suspension decision must be taken by the Board. Please refer to sections A-1A04 and A-1A05 of the CDCC Rules which lay out the specificities of Non-Conforming and suspension statuses respectively.

1.4 ~~1.5.~~ POWERS OF THE CORPORATION ~~PREROGATIVES~~ IN THE DEFAULT ~~MITIGATION~~ MANAGEMENT PROCESS

Imposition of Additional Margin Call in Pre-Default

In accordance with Section A-702, the Corporation, following a management decision, may, without advance notice and at its sole discretion, impose an additional Margin on Clearing Member, whether Non-Conforming or not, for an indeterminate period. While this may be necessary under a wide range of circumstances, it is particularly relevant in situations where the Corporation has reason to believe a default is imminent but has yet to take a decision on Non-Conforming status.

The Clearing Member will be informed and will have to meet its additional Margin requirements within the same deadlines as regular Margin calls. This additional Margin will be added to the amount of Margin.

Implementation of Default ~~Mitigation~~ Management Process: Non-Conforming and Suspension

In the event that the Corporation or the Board, as applicable, chooses to place a Clearing Member, in either Non-Conforming Member status or suspension, it must, as soon as practicable, ~~act to~~ assess the situation and ensure that any and all remedies available to it are at its immediate disposal. The Corporation must use any and all commercially reasonable efforts to manage the default process.

For further clarity, the Corporation may simultaneously declare a Member Non-Conforming and suspend such Member, without applying first the measures available under the Non-Conforming status.

Taking into consideration the context and materiality of the trigger event, the ability of the Clearing Member to correct the situation within reasonable delay, the Corporation or the Board, as applicable, may therefore choose to undertake any of the following set of actions in its efforts to mitigate associated damage.

Enforcement Actions Pursuant to a Non-Conforming Status

- Prohibit and/or impose limitations on the acceptance and / or clearance of Transactions by the defaulting Clearing Member.
- Requiring such Clearing Member to reduce or close out existing Transactions in such Clearing Member's accounts with the Corporation.
- Prevent or restrict the defaulting Clearing Member's right to withdraw any excess in Margin Deposits pursuant to Section A-607 or Section A-704.
- Transferring, requiring to transfer or transferring on its behalf, all or any portion of a defaulting Clearing Member's Client Account maintained by such Clearing Member with the Corporation, any position maintained in such account and any Margin Deposits held by the Corporation in respect of such Account, to another Clearing Member.
- Undertake any legal action against the defaulting Clearing Member that in the judgment of the Corporation may help to mitigate default-related losses.
- Sanction, reprimand, fine or impose a penalty on the defaulting Member.
- Suspend the Non-Conforming Member.

Enforcement Actions Pursuant to a Suspension

In addition to the actions that the Corporation may take under the Non-Conforming Status, CDCC may;

- Seize all Margin Deposits posted to the Corporation by the defaulting Clearing Member, including his contribution to the Clearing Fund and use it to satisfy such Clearing Member's obligation.
- Seize control of all Open Positions held by the defaulting Clearing Member.

- Gain access, and, if necessary, control of the defaulting Clearing Member prescribed records, so as to ensure the continued efficient processing of business, and to ensure the defaulting entity continues to comply with all Rules and mandates.
- Neutralize market exposures through the use of hedging instruments where, as determined by the Corporation, market conditions do not allow for an orderly auctioning or closeout of a defaulting Clearing Member's Open Positions in a timeframe which is consistent with the Corporation's risk management model.
- Render a determination as to which Firm Accounts and Market Maker Accounts of the defaulting Clearing Member (subject to the objective of protecting to the largest extent possible, all Client Accounts) may have offsets which could be netted for risk reduction purposes.
- Place all accounts of the defaulting Clearing Member on liquidation only status.
- With respect to such accounts, effect liquidation of Open Positions, either directly by Corporation staff, or as appropriate, through appointed agents.
- Schedule an auction to transfer all remaining Open Positions to other Clearing Members at best available prices.
- Potentially postpone delivery obligations if, in the judgement of the Corporation, not doing so would expose the Corporation and surviving Clearing Members to increased risk of financial loss.
- Apply any and all available financial [remediesresources](#), as further described below.

1.5 DEFAULT MANAGEMENT PERIOD

The Default Management Period defines the period during which Clearing Members' financial resources are potentially exposed to losses following a default from another Clearing Member.

While the exact definition is provided in the Rule A-411, the intent is to define the Default Management Period as the period starting from the suspension of a Clearing Member and ending when this default is been completely managed and the Corporation declares the Default Management Process to be completed. A default is deemed to be completely managed when:

- i) all obligations, losses and expenses are known or can reasonably be determined and have been successfully absorbed or otherwise settled; or
- ii) the Corporation has successfully reestablished a matched book.

If a second Clearing Member suspension occurs during the Default Management Period, this period is extended and will end when the two defaults have been completely

managed. For example, if a second default occurs while the Corporation is still managing a first one, the maximum amount of Clearing Members' financial resources potentially exposed to losses will remain the same for the duration of the Default Management Period whether one or several defaults are processed.

1.6 ~~1.6.~~ DEFAULT WATERFALL -: APPLICATION OF FINANCIAL REMEDIES RESOURCES TO COVER DEFAULT-INDUCED RELATED LOSSES

In implementing the ~~default management process~~ Default Management Process, the Corporation will aim at minimizing, to the extent possible and on best efforts basis, the losses to the Corporation and its stakeholders. If there are nonetheless losses to the Corporation, the Corporation must apply, in specified order, a series of financial ~~remedies~~ resources to ensure its ongoing viability and financial solvency. ~~Following is a description of these~~ The sections i to iv below describe the financial resources, ~~as presented in which form the "Default Waterfall" and~~ the order in which the Corporation would CDCC will apply them to cover ~~unsatisfied claims~~ losses associated with the liquidation of a defaulting Clearing Member. Elements i to iii are referred to "Prefunded Financial Resources".

~~Note that these financial remedies fall into two categories. The first such grouping is a list of the assets posted by the defaulting Clearing Member itself. The Corporation, in its efforts to cover its obligations, would first exhaust this pool of assets, before applying certain of its own resources, and those of the other Clearing Members, in the resolution of the shortfall.~~

i. Defaulting Clearing Member Resources

- Defaulting Clearing Member Margin Deposit. The first line of financial protection is the Margin Deposit posted by the defaulting Clearing Member as part of the Corporation's routine collateralization process; and
- Defaulting Clearing Member's Contribution to the Clearing Fund. As specified by the Rules, each Clearing Member must post an additional contribution to the Clearing Fund. Once the Corporation has exhausted the defaulting Clearing Member's Margin Deposit, it will next apply use these resources ~~to the~~ in its ~~loss mitigation~~ absorption effort.

If after applying these resources of the defaulting Clearing Member, a shortfall still remains, the Corporation would, as indicated below, use the Resources resources of the Corporation ~~and common resources of the system~~ to cover the ~~loss~~ losses.

ii. Resources of the Corporation ~~and the System~~ (Default Risk Capital - DRC)

- ~~Corporation Capital Resources.~~ The Corporation would first look to its own capital, but ~~only to its~~ CDCC has capital reserves set aside specifically for ~~this~~ the purpose of absorbing Default Related Losses, which ~~are~~ is currently ~~a maximum~~ of \$5 million. This capital therein referred to as it “Default Risk Capital”.

If, after applying these resources of the defaulting Clearing Member, and of CDCC, a shortfall still remains, CDCC will, as indicated below, use the required Clearing Fund deposits of the other Clearing Members to cover the loss.

iii. Non-Defaulting Clearing Member Clearing Fund Deposits

- ~~Other Clearing Members Clearing Fund Deposits.~~ The Corporation would next apply the remaining ~~balances in~~ balance of the Clearing Fund, on a pro-rata basis as determined by the size of each non-defaulting Clearing Member’s contribution.

The above set of financial resources (listed in (i) to (iii)) which form the Prefunded Financial Resources of the Default Waterfall and are readily available for the Corporation to extinguish financial losses stemming from a participant default are deemed highly reliable as they are under the control of CDCC and for this sole purpose. All Margin and Clearing Fund deposits are subject to a first ranking security interest granted by the Clearing Members to CDCC for such purpose.

iv. Additional Clearing Fund Contribution of Surviving Clearing Members

- ~~Assessment of Other Clearing Members.~~ If after applying all of the ~~remedies~~ financial resources specified above, a loss still persists, ~~then~~ the Corporation, ~~as specified in Section A-610 of its Rules,~~ may request that the remaining Clearing Members replenish their Clearing Fund contributions ~~to their original levels and use on a pro-rata basis according to CDCC’s exposure to each remaining Clearing Member, an amount that in total satisfies,~~ in a manner specified in Section A-610 of its Rules and apply up to a maximum of 200% of the Clearing Fund deposits required of all remaining Clearing Members, to satisfy the outstanding obligation as provided in Section A-609(5).

The Corporation must act with rigor to ensure it follows ~~these policies, execute them effectively~~ the prescribed order of the Default Waterfall, and communicate with all relevant parties in an effective fashion. In the event that the Corporation is later able to recover from any loss incurred from the defaulting Clearing Member, it shall first reimburse any contributions to the Clearing Fund of the remaining Clearing Members that were used to cover the ~~loss~~ losses, before reimbursing CDCC’s own capital reserves used.

1.7 MAKING GOOD ON CHARGES TO CLEARING FUND

As described in section 1.6 above on the Default Waterfall, a non-defaulting Clearing Member is potentially exposed to a loss representing 2 times its required Clearing Fund deposits during a Default Management Period.

However, the Corporation must have the capacity to replenish promptly any depleted financial resources to ensure that CDCC maintains appropriate financial resources to continue to operate in a safe and prudent manner and maintain its Cover 1 status. As such, each Clearing Member is subject to an obligation to make good on charges to Clearing Fund whenever an amount is paid out of the Clearing Fund deposits. During a single Default Management Period, each Clearing Member is however only liable to make good of an additional 200% of its required Clearing Fund deposit. The additional contribution must be made no later than 2:00 p.m. on the Business Day following the date that the amount is paid out unless the Corporation issues a notice specifying a later date.

Section 2: ~~Section 2:~~ Default Management Governance Procedures

In this section, the Corporation outlines the specific actions to be taken by its staff, management and the Board, in order to ensure that it quickly identifies, reacts to, and effectively manages a condition of default. The two sub-sections are:

1. Governance Structure; and
2. Roles and Responsibilities upon a Declaration of Non-Conforming or Suspension.

2.1 ~~2.1:~~ GOVERNANCE STRUCTURE

The Corporation's procedures for the management of a default are governed, under the auspices of its Board and by two Committees, presented below in their hierarchical order:

- Default Management Committee (DMC)
- Emergency Committee (EC)

In the default process, it is important for the Corporation to react in as timely a fashion as possible to identify the potential for a default by a Clearing Member. As such, under the authority of the President or his designee, if at any point the Corporation receives information which would, in its view, acting reasonably, likely lead to a default event by any Clearing Member, it will, as soon as practicable, convene a meeting of the Default

Management Committee (DMC). The DMC is comprised of the individuals holding the following positions (or their delegates):

- President ~~and Chief Clearing Officer, of~~ CDCC
- Vice-President & Chief Risk Officer, CDCC
- Director Risk Management, CDCC ~~Risk Management~~
- ~~Director Corporate~~ Vice-President Integrated Operations, ~~CDCC Operations~~ GES
- Director Strategic Initiatives, CDCC
- ~~Vice-President~~ Chief Legal ~~Affairs~~ Officer, CDCC ~~Legal~~
- Chief Compliance Officer, CDCC
- ~~Manager, Release Management, TMX IT~~ Head, Client Technology Delivery - Clearing Systems, GES

Each of these individuals, in managing their departments, must act with due rigor to assess issues, identify associated magnitudes, recommend actions and inform management, to the Board and other Corporation stakeholders, as appropriate.

The responsibility of the DMC is to ~~take~~ make decisions related to the ~~default management process~~ Default Management Process, e.g. the determination of the Non-Conforming status, actions to be implemented to limit losses to the Corporation and the conforming Clearing Members. The DMC can count on the participation of a sub-committee to help performing its mandate, namely the Emergency Committee (EC).

The EC, chaired by the VP and Chief Risk Officer, is composed of all DMC members plus the following specialists (and/or any other representatives or designees deemed appropriate to involve in the process):

- CDCC Treasurer
- MX Vice-President, Regulatory Division
- ~~TMX Vice-President,~~ Head of Corporate Communications ~~& Public Affairs,~~ TMX
- ~~MX Vice-President~~ Director, Market Operations, ~~Services and Connectivity~~ MX
- ~~Director, Corporate Operations~~
- Managers, Risk Management

It will be the responsibility of the EC to provide an ongoing assessment of the situation, and to report ~~back~~, as appropriate, to the DMC and the Board, so as to ensure these bodies are in a position to render informed decisions throughout the process.

2.2 ~~2.2.~~ ROLES AND RESPONSIBILITIES UPON A DECLARATION OF NON-CONFORMING OR SUSPENSION

The Rules provide for two statuses associated with the default for a Clearing Member: Non-Conforming Member status and suspension. Non-Conforming Member status can be determined by the Corporation's management, while a suspension must be ratified by the Board.

2.2.1 DECLARATION OF NON-CONFORMING MEMBER STATUS

Grounds

Section A-1A04 addresses the grounds upon which the Corporation may declare the Non-Conforming Member status. The grounds are however not exhaustive.

Communication

The Clearing Member should notify the Corporation if it is insolvent or unable to honour its obligations under the Rules.

However, in the event that the Clearing Member is declared as a Non-Conforming Member by the Corporation, the Corporation must inform the Clearing Member in writing or by telephone.

Authority

The Corporation may decide on Non-Conforming Member status.

Required Response by Non-Conforming Members

A Clearing Member which has experienced an event, technical or otherwise, as a result of which it fails or finds itself likely to fail to meet any of its day-to-day operational needs for its business must inform the Corporation immediately of such event. Failure to notify the appropriate Corporation staff members immediately may result in any actions contemplated under the Rules, including disciplinary actions. A Non-Conforming Member may in certain cases remedy its situation via wiring required funds or posting additional collateral to the Corporation.

Contemporaneous to the notification of Non-Conforming Member status to a Clearing Member, the Corporation will ask such Clearing Member to state in writing its assertions with respect to each of the following:

- Cause of the action which placed it in Non-Conforming Member status;
- Remedies for the immediate circumstance; and
- Changes in its financial profile and operating protocols to guard against recurrence.

Corporation staff will work with the Non-Conforming Member to secure and assess its written response. Contemporaneously, the EC will work with the DMC to determine any potential immediate additional actions, including recommendations to the Board regarding suspension.

In the event that a remedy occurs in a timely fashion, the Corporation will review the Non-Conforming Member’s written explanation and will then determine next steps, including the potential removal of Non-Conforming Member status, or recommendations to the Board for suspension.

In executing these procedures, the Corporation must remain mindful of the narrow time window available to it to determine the next steps in the process. It is essential that all members of management and all Board members make themselves available as necessary to render timely and efficient decisions under these circumstances.

Implementation

The Corporation must work in concert with the Non-Conforming Member and the appropriate regulatory authorities to rectify the Clearing Member’s Non-Conforming Member status.

The enforcement actions available to the Corporation, as set out under section A-401 and as further explained in the Section 1 of this Manual, are not exhaustive and are not necessarily presented in chronological order, and can be adapted as required by the Corporation according to the circumstances that prevail during the period the Clearing Member is a Non-Conforming Member.

Notifications

Once the Corporation has declared a Clearing Member to be a Non-Conforming Member, the Corporation will immediately consider its notice obligations. Those entities whose notification is considered include:

- The Clearing Members
- Appropriate regulatory authorities
- Exchanges and central clearing organizations (CCOs)

While it will be the prerogative of the Corporation to determine the timing and content of its outside disclosures, it will nonetheless immediately inform any CCOs with which the Corporation has in place a Memorandum of Understanding for such information sharing.

2.2.2 DECLARATION OF A SUSPENSION

Grounds

A Non-Conforming Member may be suspended in accordance with Section A-1A04 or any other conditions that the Corporation may deem relevant. Section 1.2 of this Manual also discusses the triggers which may lead to a suspension. In effect, the Corporation, upon approval of the Board, may decide to suspend a Clearing Member without first declaring it Non-Conforming.

Communication

The Corporation will communicate to the Clearing Member a written statement setting out the grounds for its suspension.

Authority

The Board has the authority regarding the suspension and lifting of a Clearing Member's suspension.

Implementation

Once the Board approves a suspension, the Corporation ceases to act on behalf of the Clearing Member.

According to Section A-1A05, the Corporation may then implement any of the enforcement actions set out under Section A-401 and as described in the Section 1 of this Manual.

As mentioned in Section A-1A05, the suspension may be total or may be for any function with respect to a particular security or class of securities, with respect to a particular Transaction or class of Transactions, or with respect to securities or Transactions generally.

The Board may lift a Clearing Member's suspension at any time.

Notifications

Once the Board has declared a Clearing Member to be suspended, the Board will immediately consider its notice obligations. Those entities whose notification is considered include:

- The general population of Clearing Members
- Appropriate regulatory authorities
- Exchanges and CCOs

While it will be the prerogative of the Board to determine the timing and content of its outside disclosures, it will nonetheless immediately inform any CCOs with which the Corporation has in place a Memorandum of Understanding for such information sharing.

Appeal

According to Section A-1A07, the Clearing Member may appeal a suspension decision. Such appeal does not impede the actions of the Corporation in the ~~default management process~~ [Default Management Process](#).

Section 3: ~~SECTION 3:~~ Risk Mitigation Tools

Once a Clearing Member has been suspended, the Corporation shall take specific actions in order to protect the Corporation and the non-defaulting Clearing Members. Conceptually, these actions can be aggregated into three categories and are normally executed in the order presented. While some actions might have been initiated by the Corporation pursuant to a declaration of Non-Conforming status, including, namely, the transfer of Client Accounts, this section details how the Corporation will implement the risk mitigation tools, upon the suspension of the Clearing Member.

- **Prevention:** Preventing controls are the starting point of the management of a default under the suspension status. They are focused on preventing new transactions to be cleared in the suspended Clearing Member's books.
- **Control:** Such actions are focused on taking control over the suspended Clearing Member's assets and positions.
- **Risk mitigation:** Such actions are focused on transferring risks, re-establishing a matched book, and neutralizing risks, at the lowest cost possible for the Corporation and the conforming Clearing Members, while managing the liquidity risk associated with the ~~default management process~~ [Default Management Process](#).

This section provides more information on the risk mitigation tools available to the Corporation.

3.1 ~~3.1-~~ TRANSFER OF CLIENT ACCOUNTS

The Corporation will attempt to transfer Client Accounts, in whole or in part, to the books of other Clearing Members. Note that, as specified in the Objectives section of this Manual, the efficient and comprehensive transfer of all Client Accounts is an identified objective of the default management exercise. For the avoidance of doubt, this includes transferring any position maintained in such account, or any account carried by such Clearing Member and any Margin Deposits held by the Corporation in respect of such account, to another Clearing Member.

3.2 ~~3.2~~ AUCTION AND LIQUIDATION

In order to manage a default situation and following the suspension of a Clearing Member, the Corporation must re-establish a matched book. In order to do so, the Corporation can hold an auction for the suspended Clearing Member positions or liquidate its positions.

Immediately subsequent to the declaration of a suspension of a Non-Conforming Member, the Corporation must take the appropriate and following steps to conducting an auction designed to transfer the remaining collateral and positions to those of another Clearing Member.

- The President of the Corporation will call the most senior available representative of the defaulting Clearing Member, to notify the organization of its intent to hold an auction.
- The Corporation will execute a Non-Disclosure Agreement with the defaulting Clearing Member, enabling it, among other things, to show position and collateral information to potential auction participants.
- The Corporation will identify potential participants in the auction process. Note that these entities can include other Clearing Members and/or other investment enterprises.
- The Risk and Operations Departments will conduct an analysis to determine the ability of potential auction participants to participate in the auction without causing financial or operational impairment to their businesses. Only those enterprises that, in the judgment of the Corporation meet this suitability test, will be eligible for participation in the auction. Note that in the event that Non-Clearing Member participants request to participate in the auction process, the Risk and Operations Departments must perform the suitability test not only on the potential participant, but upon its Clearing Member as well.
- Potential participants in the auction process must sign a Non-Disclosure Agreement, as a precursor to examining the portfolio and collateral content of the defaulting Clearing Member.
- The Corporation will then hold an individual auction separately for each asset class.
- Participants may bid on one or more asset classes, and will submit their bids on the basis of how much collateral they would require to assume the positions of the defaulting Clearing Member.
- The bids will be submitted on a sealed basis, and should be in the hands of the Corporation by the close of business on the date designated for auction.
- The Corporation will determine the winner of the auction on the basis of which participant has requested the least amount of collateral to support the position transfer process with priority to bidders whose risk profile improves (i.e. reduced or

minimal marginal increase in risk exposure) subsequent to the inclusion of the defaulting Clearing Members positions.

- The Corporation will transfer all positions and collateral by the close of business the following day, as marked under the Corporation's routine settlement cycle.

In the event that the auction process unfolds in such a way as to create a residual balance on the books of the defaulting Clearing Member, the Corporation will freeze this collateral, and await further instructions as to its disposition, from both the Legal Department and the Board. In the event that the auction proceeds in such a way as to generate a residual shortfall, then the Corporation, as determined by the Board, has the right to reject all bids, accept some bids and reject others, or accept the best bids submitted. Under these circumstances, the Corporation will then proceed with the implementation of additional mitigants, as set forth below:

- A negotiated allocation of existing Open Positions and associated Margin Deposits amongst surviving Clearing Members.
- By invoking Section A-404, CDCC may elect to closeout remaining Open Positions at a price(s) that it deems reasonable based on best available market information.

3.3 ~~3.3~~ PORTFOLIO HEDGING

At any time during the ~~default management process~~ [Default Management Process](#), the Corporation may, if it deems appropriate, hedge the portfolio of the suspended Clearing Member in order to limit the accumulation of market and credit losses. Note that in such cases the Corporation may consider the use of instruments not part of the organization's clearing universe, including cash securities.

3.4 ~~3.4~~ LIQUIDITY MANAGEMENT

While not a source of capital available for the offset of losses, the Corporation has available an array of liquidity facilities, which it may, at its discretion, call upon to assist with the funding of its loss mitigation activities. In the event of a default, the Corporation must make a determination as to how to deploy these resources. Included among its alternatives are:

- Drawing upon the Corporation's commercial bank liquidity lines, in whole or in part.
- Raising of liquidity through out-rights sales and/or Repurchase Transactions involving Securities of the defaulting Clearing Member.
- Through the exercising of its rights of re-pledging/re-hypothecation of defaulter's Margin Deposits.

- Through the exercising of its rights of re-pledging/re-hypothecation of defaulter's and survivors' Clearing Fund Deposits.

The management of this process is one that should ensue across the entire course of the liquidation efforts, and the Corporation must make routine, periodic judgments as to how and when this funding merits deployment.

3.5 ~~3.5~~ LOSS ABSORPTION MECHANISM

In implementing the ~~default management process~~ Default Management Process, the Corporation will aim at minimizing, to the extent possible and on best efforts basis, the losses to the Corporation and its stakeholders. If there are nonetheless losses to the Corporation, the Corporation must apply, in specified order, a series of financial ~~remedies~~ resources to ensure its ongoing viability and financial solvency. The loss absorption mechanism, also referred as Default Waterfall, is described in Sub-section 1.6.

Section 4: Recovery Plan

The Default Management Process described above ensures that the Corporation has in place tools and processes to appropriately manage the risks following the default of a Clearing Member. Supplementing the Default Management Process, the Corporation has in place a Recovery Plan which provides for a defined set of actions to address any uncovered loss, liquidity shortfall or capital inadequacy, arising from participant default in in the unlikely event where the Default Waterfall proves insufficient. Rule A-10 in the Rules governs the Corporation and the Participants' obligations in a Recovery Process.

The section below provides for general information with respect to the triggers of the Recovery Process, a description of the Recovery Powers that may be used by the Corporation upon a declaration of Recovery Process, the governance supporting such process and the financial resources that may be used by the Corporation to supplement its loss absorption.

4.1 TRIGGERS FOR THE RECOVERY PROCESS

The Corporation management may recommend to the Board to trigger the implementation of the Recovery Process, in either of the following situations:

1. The Corporation reasonably believes that payments, losses and expenses incurred in connection with the suspension of one or more Clearing Members are or will be in excess of the total value of the Default Waterfall.
2. After the suspension of a Non-Conforming Clearing Member and the exercise of the normal default management tools (powers contemplated in Rule A-4) or any rights or

remedies provided under the Rules, the Corporation has been, or reasonably believes that it will be, unable to close-out all the positions of such Clearing Member.

Some extreme financial stress could lead the Corporation to have insufficient Default Waterfall resources to absorb losses or support expenses, payments or obligations in connection with the default of a Clearing Member. For example, the most favorable bids received in the course of the auction may be significantly in excess of the margin associated with the positions contained in the auction as a result of market uncertainty, or the defaulter's portfolio value may be negatively impacted by the occurrence of a market event that is greater than the market scenario that was planned for as part of the daily risk management activities. CDCC can also face a short-term liquidity pressure arising from an unexpectedly high settlement amount incurred by CDCC as a result of the defaulter's fixed income positions.

Alternatively, CDCC could also have sufficient financial resources but be unable to close-out all the positions of the defaulter following a series of failed auctions in the absence of bidder.

4.2 RECOVERY POWERS

Upon the declaration by the Corporation of the commencement of a Recovery Process, CDCC may exercise extraordinary remedies against its Clearing Members in good standing to ensure that the Corporation can continue to operate on an ongoing basis and address uncovered losses or liquidity shortfall. Such extraordinary remedies referred to as Recovery Powers are listed below and can be applied in the manner set out in the applicable sections.

4.2.1 Recovery Loss Cash Payment

During a Default Management Period, subsequent to the commencement of the Recovery Process, the Corporation may require from its Clearing Members to meet a Recovery Loss Cash Payment. The use of such tool is limited to certain conditions:

- **Trigger:** If in the reasonable judgment of the Corporation, the Recovery Event may result in the Corporation incurring obligations, losses and expenses in an amount in excess of the Default Waterfall and such amount is known or can reasonably be determined ;
- **Maximum Amount:** The maximum aggregate amount which may be required from a Clearing Member during a single Default Management Period cannot exceed such Clearing Member's required Clearing Fund deposits as of the commencement of the Default Management Period;

- Limited Use: The Corporation will use the financial resources accumulated through Recovery Loss Cash Payments to extinguish any outstanding loss incurred by the Corporation in connection with the Recovery Event on a pro rata basis, based on the quotient obtained by dividing the amount of each Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period divided by the aggregate amount of Clearing Fund deposits required at the beginning of the Default Management Period of all Clearing Members other than the suspended Clearing Members; and
- Notice and Implementation: The Corporation will communicate to each Clearing Member its proportional amount which should be provided by the next Settlement Time.

The Recovery Powers form part of the rights and remedies that may be exercised by the Corporation pursuant to a declaration of the commencement of a Recovery Process, therefore the non-payment of a Recovery Loss Cash Payment is a ground for the Non-Conforming status and may lead to the suspension of a Clearing Member.

4.3 RECOVERY GOVERNANCE

Following the declaration by the Corporation, and as approved by the Board, of the commencement of a Recovery Process (see Sub-section 4.1), the Board shall delegate to CDCC management the authority to make any reasonable decision regarding the timing and use of Recovery Powers to allocate uncovered losses caused by participants' defaults and re-establish a matched book, in accordance with the powers entrusted to the Corporation in the Rules. The decision-making around the application of recovery tools is a natural extension of the existing Default Management Process. As such, the governance in place for the Default Management Process and set out under Section 2 of this Manual will be extended for the Recovery Process. The Default Management Committee will be responsible to make decisions related to the application of the Recovery Powers with the support of the Emergency Committee.

Upon the declaration of a Recovery Process, the Corporation will notify all Clearing Members, the Exchange, all regulatory organizations or agencies having oversight of the Corporation, the Bank of Canada and any such other Entities that the Corporation considers appropriate.

As it is the case while the Corporation is managing a default pre-Recovery Process, appropriate and timely communication will be maintained between CDCC, the Board, its Risk Management Advisory Committee and its regulators.

4.4 RECOVERY LOSS ABSORPTION MECHANISM

The Corporation's capacity to absorb loss increases with the addition of the availability of Recovery Loss Cash Payment(s). However, in absorbing default-related losses, CDCC must use the financial resources in the prescribed order. As such, the loss absorption mechanism that starts with the application of the Default Waterfall, as described in Sub-section 1.6, is supplemented by any financial resources levied by Recovery Loss Cash Payment.

In the event that the Corporation is later able to recover from the defaulting Clearing Member any loss incurred by the Corporation in managing the default, it shall reimburse the financial resources of any Clearing Members and the Corporation in the reverse order that these financial resources were used to cover the losses.



DEFAULT MANUAL

February 7, 2017

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This Default Manual (the “Manual”) is intended to summarize the Rules of the Canadian Derivatives Clearing Corporation (“CDCC” or the “Corporation”) and confirm certain details concerning the actions, rights and remedies that the Corporation may take with respect to Clearing Members in financial difficulty, potentially in default or in default of obligations under the Rules. The Manual also address the actions, rights and remedies that the Corporation may take with respect to all Clearing Members upon the declaration of a Recovery Process. This Manual describes the Corporation’s possible course of action, including management of a default situation, authority, communication with a Clearing Member and implementation. **In case of conflict between the provisions set out in this Manual and the Rules of the Corporation, the Rules will prevail.** Terms with capitals which are not defined in this Manual have the meanings ascribed to them in the Rules.

A fundamental objective of a central counterparty is to ensure the integrity of payments and/or physical delivery of securities, even in the unlikely event of a Clearing Member default. Since the default of one or more Clearing Members may have an impact on the continuity of clearing operations, the Corporation must ensure that efficient mechanisms and processes are in place, capable of limiting the adverse impacts of such an event, with respect to monitoring and the determination of a Clearing Member’s Non-Conforming Member status and a Clearing Member’s suspension. As such, this Manual is meant to:

1. describe the grounds and events which may trigger the implementation of the default management process and the enforcement actions that may be taken by the Corporation throughout the process;
2. describe the governance process followed by the Corporation; and
3. describe the risk mitigation tools that can be used by the Corporation.
4. describe the Recovery Process and the related powers.

Section 1: Default Management Process - Triggers And Implementation

The grounds and events which may trigger the implementation of the steps, decisions, enforcement actions or remedies that may be taken by the Corporation, which shall be referred therein as the Default Management Process, are described below. The Rules, notably Rule A-1A - Membership in the Corporation, Rule A-3 - Capital Requirements, Rule A-6 - Clearing Fund Deposits and Rule A-7 - Margin Requirements, support CDCC's authority in these actions and must be adhered to with extreme rigor.

1.1 OBJECTIVES OF DEFAULT MANAGEMENT

Participants in the Default Management Process should at all times bear in mind the objectives of the default management exercise. These are delineated below:

- To minimize Clearing Member losses deriving from an inability of the Corporation to make settlement payments, protect Clearing Member Margin Deposit, or otherwise manage its responsibilities in a manner consistent with orderly markets.
- To ensure the continued effective functioning of the clearing process both during and after the default of a Clearing Member.
- To use all available powers and resources to protect the financial assets and positions of Clearing Members not contributing to the condition of default. This includes, wherever possible, the comprehensive and efficient transfer of Client Accounts associated with a defaulting Clearing Member, including any position maintained in such account and any Margin Deposits held by the Corporation in respect of such account, to another Clearing Member.
- To minimize the market impact of the Default Management Process.
- To ensure the continued solvency of the Corporation and timely access to liquidity both during and after the Default Management Process.
- To communicate with regulatory authorities on actions taken throughout the Default Management Process.

Corporation management, staff and agents should conduct themselves at all times during the Default Management Process in a manner consistent with these objectives, and in general without regard to other considerations.

1.2 TRIGGERS LEADING TO NON-CONFORMING OR SUSPENSION STATUS

Critical to the process of default management is, of course, defining the grounds and events which can lead a Clearing Member to default on its obligation and result in the Corporation declaring such member Non-Conforming or suspending it, where warranted.

As a general rule, the Corporation views any situation which would, in its judgment, impede a Clearing Member's ability to meet its obligations, as specified in the Rules, as grounds to declare a Clearing Member Non-Conforming. Sections A-1A04 and A-1A05 of the Rules provide the details of the grounds and events that can lead the Corporation to declare a member Non-Conforming or suspend it, respectively.

For the avoidance of doubt, as indicated in the Rules, the Corporation may in advance of, or in anticipation of a default or breach of eligibility or standard requirement, declare a Clearing Member Non-Conforming.

Where the Non-Conforming Clearing Member is insolvent or is unable or likely to be unable to meet its obligations under the Rules on a continuing basis, and has no reasonable prospect of returning to good standing or curing its default within a reasonable timeframe, the Corporation may then suspend the Non-Conforming Clearing Member. The Corporation will act accordingly for any default, whether actual or imminent, that is of such a gravity that suspension would be warranted, taking into consideration the protection of the integrity of the market.

1.3 STATUS ASSOCIATED WITH A DEFAULT

The Rules specify two distinct status levels associated with the default of a Clearing Member. The first such form is Non-Conforming status. At any point when the Clearing Member is or may become insolvent or unable to meet its obligations, management may declare that Clearing Member to be a Non-Conforming Member. Section A-1A04 of the Rules provides the grounds on which the Corporation may do so. Upon a declaration of Non-Conforming status, the Corporation is empowered with the authority, as further specified below, to undertake a wide range of mitigating actions.

Considering the gravity of the situation, the likelihood of a remediation of the default by the Clearing Member and in order to protect the integrity of the market, the Board may, in its sole discretion, choose to suspend the Non-Conforming Member.

The Corporation's management is responsible to declare a Clearing Member Non-Conforming whereas a suspension decision must be taken by the Board. Please refer to sections A-1A04 and A-1A05 of the CDCC Rules which lay out the specificities of Non-Conforming and suspension statuses respectively.

1.4 POWERS OF THE CORPORATION IN THE DEFAULT MANAGEMENT PROCESS

Imposition of Additional Margin Call in Pre-Default

In accordance with Section A-702, the Corporation, following a management decision, may, without advance notice and at its sole discretion, impose an additional Margin on

Clearing Member, whether Non-Conforming or not, for an indeterminate period. While this may be necessary under a wide range of circumstances, it is particularly relevant in situations where the Corporation has reason to believe a default is imminent but has yet to take a decision on Non-Conforming status.

The Clearing Member will be informed and will have to meet its additional Margin requirements within the same deadlines as regular Margin calls. This additional Margin will be added to the amount of Margin.

Implementation of Default Management Process: Non-Conforming and Suspension

In the event that the Corporation or the Board, as applicable, chooses to place a Clearing Member, in either Non-Conforming Member status or suspension, it must, as soon as practicable, assess the situation and ensure that any and all remedies available to it are at its immediate disposal. The Corporation must use any and all commercially reasonable efforts to manage the default process.

For further clarity, the Corporation may simultaneously declare a Member Non-Conforming and suspend such Member, without applying first the measures available under the Non-Conforming status.

Taking into consideration the context and materiality of the trigger event, the ability of the Clearing Member to correct the situation within reasonable delay, the Corporation or the Board, as applicable, may therefore choose to undertake any of the following set of actions in its efforts to mitigate associated damage.

Enforcement Actions Pursuant to a Non-Conforming Status

- Prohibit and/or impose limitations on the acceptance and / or clearance of Transactions by the defaulting Clearing Member.
- Requiring such Clearing Member to reduce or close out existing Transactions in such Clearing Member's accounts with the Corporation.
- Prevent or restrict the defaulting Clearing Member's right to withdraw any excess in Margin Deposits pursuant to Section A-607 or Section A-704.
- Transferring, requiring to transfer or transferring on its behalf, all or any portion of a defaulting Clearing Member's Client Account maintained by such Clearing Member with the Corporation, any position maintained in such account and any Margin Deposits held by the Corporation in respect of such Account, to another Clearing Member.
- Undertake any legal action against the defaulting Clearing Member that in the judgment of the Corporation may help to mitigate default-related losses.
- Sanction, reprimand, fine or impose a penalty on the defaulting Member.
- Suspend the Non-Conforming Member.

Enforcement Actions Pursuant to a Suspension

In addition to the actions that the Corporation may take under the Non-Conforming Status, CDCC may;

- Seize all Margin Deposits posted to the Corporation by the defaulting Clearing Member, including his contribution to the Clearing Fund and use it to satisfy such Clearing Member's obligation.
- Seize control of all Open Positions held by the defaulting Clearing Member.
- Gain access, and, if necessary, control of the defaulting Clearing Member prescribed records, so as to ensure the continued efficient processing of business, and to ensure the defaulting entity continues to comply with all Rules and mandates.
- Neutralize market exposures through the use of hedging instruments where, as determined by the Corporation, market conditions do not allow for an orderly auctioning or closeout of a defaulting Clearing Member's Open Positions in a timeframe which is consistent with the Corporation's risk management model.
- Render a determination as to which Firm Accounts and Market Maker Accounts of the defaulting Clearing Member (subject to the objective of protecting to the largest extent possible, all Client Accounts) may have offsets which could be netted for risk reduction purposes.
- Place all accounts of the defaulting Clearing Member on liquidation only status.
- With respect to such accounts, effect liquidation of Open Positions, either directly by Corporation staff, or as appropriate, through appointed agents.
- Schedule an auction to transfer all remaining Open Positions to other Clearing Members at best available prices.
- Potentially postpone delivery obligations if, in the judgement of the Corporation, not doing so would expose the Corporation and surviving Clearing Members to increased risk of financial loss.
- Apply any and all available financial resources, as further described below.

1.5 DEFAULT MANAGEMENT PERIOD

The Default Management Period defines the period during which Clearing Members' financial resources are potentially exposed to losses following a default from another Clearing Member.

While the exact definition is provided in the Rule A-411, the intent is to define the Default Management Period as the period starting from the suspension of a Clearing Member and ending when this default is been completely managed and the Corporation declares the

Default Management Process to be completed. A default is deemed to be completely managed when:

- i) all obligations, losses and expenses are known or can reasonably be determined and have been successfully absorbed or otherwise settled; or
- ii) the Corporation has successfully reestablished a matched book.

If a second Clearing Member suspension occurs during the Default Management Period, this period is extended and will end when the two defaults have been completely managed. For example, if a second default occurs while the Corporation is still managing a first one, the maximum amount of Clearing Members' financial resources potentially exposed to losses will remain the same for the duration of the Default Management Period whether one or several defaults are processed.

1.6 DEFAULT WATERFALL : APPLICATION OF FINANCIAL RESOURCES TO COVER DEFAULT-RELATED LOSSES

In implementing the Default Management Process, the Corporation will aim at minimizing, to the extent possible and on best efforts basis, the losses to the Corporation and its stakeholders. If there are nonetheless losses to the Corporation, the Corporation must apply, in specified order, a series of financial resources to ensure its ongoing viability and financial solvency. The sections i to iv below describe the financial resources which form the "Default Waterfall" and the order in which CDCC will apply them to cover losses associated with the liquidation of a defaulting Clearing Member. Elements i to iii are referred to "Prefunded Financial Resources".

i. Defaulting Clearing Member Resources

- **Defaulting Clearing Member Margin Deposit.** The first line of financial protection is the Margin Deposit posted by the defaulting Clearing Member as part of the Corporation's routine collateralization process; and
- **Defaulting Clearing Member's Contribution to the Clearing Fund.** As specified by the Rules, each Clearing Member must post an additional contribution to the Clearing Fund. Once the Corporation has exhausted the defaulting Clearing Member's Margin Deposit, it will next use these resources in its loss absorption effort.

If after applying these resources of the defaulting Clearing Member, a shortfall still remains, the Corporation would, as indicated below, use the resources of the Corporation to cover the losses.

ii. Resources of the Corporation (Default Risk Capital - DRC)

- CDCC has capital reserves set aside specifically for the purpose of absorbing Default Related Losses, which is currently of \$5 million. This capital therein referred to as it "Default Risk Capital".

If, after applying these resources of the defaulting Clearing Member, and of CDCC, a shortfall still remains, CDCC will, as indicated below, use the required Clearing Fund deposits of the other Clearing Members to cover the loss.

iii. Non-Defaulting Clearing Member Clearing Fund Deposits

- The Corporation would next use the remaining balance of the Clearing Fund, on a pro-rata basis as determined by the size of each non-defaulting Clearing Member's contribution.

The above set of financial resources (listed in (i) to (iii)) which form the Prefunded Financial Resources of the Default Waterfall and are readily available for the Corporation to extinguish financial losses stemming from a participant default are deemed highly reliable as they are under the control of CDCC and for this sole purpose. All Margin and Clearing Fund deposits are subject to a first ranking security interest granted by the Clearing Members to CDCC for such purpose.

iv. Additional Clearing Fund Contribution of Surviving Clearing Members

- If after applying all of the financial resources specified above, a loss still persists, the Corporation may request that the remaining Clearing Members replenish their Clearing Fund contributions, in a manner specified in Section A-610 of its Rules and apply up to a maximum of 200% of the Clearing Fund deposits required of all remaining Clearing Members, to satisfy the outstanding obligation as provided in Section A-609(5).

The Corporation must act with rigor to ensure it follows the prescribed order of the Default Waterfall, and communicate with all relevant parties in an effective fashion. In the event that the Corporation is later able to recover from any loss incurred from the defaulting Clearing Member, it shall first reimburse any contributions to the Clearing Fund of the remaining Clearing Members that were used to cover the losses, before reimbursing CDCC's own capital reserves used.

1.7 MAKING GOOD ON CHARGES TO CLEARING FUND

As described in section 1.6 above on the Default Waterfall, a non-defaulting Clearing Member is potentially exposed to a loss representing 2 times its required Clearing Fund deposits during a Default Management Period.

However, the Corporation must have the capacity to replenish promptly any depleted financial resources to ensure that CDCC maintains appropriate financial resources to continue to operate in a safe and prudent manner and maintain its Cover 1 status. As such, each Clearing Member is subject to an obligation to make good on charges to Clearing Fund whenever an amount is paid out of the Clearing Fund deposits. During a single Default Management Period, each Clearing Member is however only liable to make good of an additional 200% of its required Clearing Fund deposit. The additional contribution must be made no later than 2:00 p.m. on the Business Day following the date that the amount is paid out unless the Corporation issues a notice specifying a later date.

Section 2: Default Management Governance

In this section, the Corporation outlines the specific actions to be taken by its staff, management and the Board, in order to ensure that it quickly identifies, reacts to, and effectively manages a condition of default. The two sub-sections are:

1. Governance Structure; and
2. Roles and Responsibilities upon a Declaration of Non-Conforming or Suspension.

2.1 GOVERNANCE STRUCTURE

The Corporation's procedures for the management of a default are governed, under the auspices of its Board and by two Committees, presented below in their hierarchical order:

- Default Management Committee (DMC)
- Emergency Committee (EC)

In the default process, it is important for the Corporation to react in as timely a fashion as possible to identify the potential for a default by a Clearing Member. As such, under the authority of the President or his designee, if at any point the Corporation receives information which would, in its view, acting reasonably, likely lead to a default event by any Clearing Member, it will, as soon as practicable, convene a meeting of the Default Management Committee (DMC). The DMC is comprised of the individuals holding the following positions (or their delegates):

- President of CDCC
- Vice-President & Chief Risk Officer, CDCC
- Director Risk Management, CDCC
- Vice-President Integrated Operations, GES
- Director Strategic Initiatives, CDCC
- Chief Legal Officer, CDCC
- Chief Compliance Officer, CDCC
- Head, Client Technology Delivery - Clearing Systems, GES

Each of these individuals, in managing their departments, must act with due rigor to assess issues, identify associated magnitudes, recommend actions and inform management, to the Board and other Corporation stakeholders, as appropriate.

The responsibility of the DMC is to make decisions related to the Default Management Process, e.g. the determination of the Non-Conforming status, actions to be implemented to limit losses to the Corporation and the conforming Clearing Members. The DMC can count on the participation of a sub-committee to help performing its mandate, namely the Emergency Committee (EC).

The EC, chaired by the VP and Chief Risk Officer, is composed of all DMC members plus the following specialists (and/or any other representatives or designees deemed appropriate to involve in the process):

- CDCC Treasurer
- MX Vice-President, Regulatory Division
- Head of Corporate Communications , TMX
- Director, Market Operations, MX
- Managers, Risk Management

It will be the responsibility of the EC to provide an ongoing assessment of the situation, and to report, as appropriate, to the DMC and the Board, so as to ensure these bodies are in a position to render informed decisions throughout the process.

2.2 ROLES AND RESPONSIBILITIES UPON A DECLARATION OF NON-CONFORMING OR SUSPENSION

The Rules provide for two statuses associated with the default for a Clearing Member: Non-Conforming Member status and suspension. Non-Conforming Member status can be determined by the Corporation's management, while a suspension must be ratified by the Board.

2.2.1 DECLARATION OF NON-CONFORMING MEMBER STATUS

Grounds

Section A-1A04 addresses the grounds upon which the Corporation may declare the Non-Conforming Member status. The grounds are however not exhaustive.

Communication

The Clearing Member should notify the Corporation if it is insolvent or unable to honour its obligations under the Rules.

However, in the event that the Clearing Member is declared as a Non-Conforming Member by the Corporation, the Corporation must inform the Clearing Member in writing or by telephone.

Authority

The Corporation may decide on Non-Conforming Member status.

Required Response by Non-Conforming Members

A Clearing Member which has experienced an event, technical or otherwise, as a result of which it fails or finds itself likely to fail to meet any of its day-to-day operational needs for its business must inform the Corporation immediately of such event. Failure to notify the appropriate Corporation staff members immediately may result in any actions contemplated under the Rules, including disciplinary actions. A Non-Conforming Member may in certain cases remedy its situation via wiring required funds or posting additional collateral to the Corporation.

Contemporaneous to the notification of Non-Conforming Member status to a Clearing Member, the Corporation will ask such Clearing Member to state in writing its assertions with respect to each of the following:

- Cause of the action which placed it in Non-Conforming Member status;
- Remedies for the immediate circumstance; and
- Changes in its financial profile and operating protocols to guard against recurrence.

Corporation staff will work with the Non-Conforming Member to secure and assess its written response. Contemporaneously, the EC will work with the DMC to determine any potential immediate additional actions, including recommendations to the Board regarding suspension.

In the event that a remedy occurs in a timely fashion, the Corporation will review the Non-Conforming Member's written explanation and will then

determine next steps, including the potential removal of Non-Conforming Member status, or recommendations to the Board for suspension.

In executing these procedures, the Corporation must remain mindful of the narrow time window available to it to determine the next steps in the process. It is essential that all members of management and all Board members make themselves available as necessary to render timely and efficient decisions under these circumstances.

Implementation

The Corporation must work in concert with the Non-Conforming Member and the appropriate regulatory authorities to rectify the Clearing Member's Non-Conforming Member status.

The enforcement actions available to the Corporation, as set out under section A-401 and as further explained in the Section 1 of this Manual, are not exhaustive and are not necessarily presented in chronological order, and can be adapted as required by the Corporation according to the circumstances that prevail during the period the Clearing Member is a Non-Conforming Member.

Notifications

Once the Corporation has declared a Clearing Member to be a Non-Conforming Member, the Corporation will immediately consider its notice obligations. Those entities whose notification is considered include:

- The Clearing Members
- Appropriate regulatory authorities
- Exchanges and central clearing organizations (CCOs)

While it will be the prerogative of the Corporation to determine the timing and content of its outside disclosures, it will nonetheless immediately inform any CCOs with which the Corporation has in place a Memorandum of Understanding for such information sharing.

2.2.2 DECLARATION OF A SUSPENSION

Grounds

A Non-Conforming Member may be suspended in accordance with Section A-1A04 or any other conditions that the Corporation may deem relevant. Section 1.2 of this Manual also discusses the triggers which may lead to a suspension. In effect, the Corporation, upon approval of the Board, may decide to suspend a Clearing Member without first declaring it Non-Conforming.

Communication

The Corporation will communicate to the Clearing Member a written statement setting out the grounds for its suspension.

Authority

The Board has the authority regarding the suspension and lifting of a Clearing Member's suspension.

Implementation

Once the Board approves a suspension, the Corporation ceases to act on behalf of the Clearing Member.

According to Section A-1A05, the Corporation may then implement any of the enforcement actions set out under Section A-401 and as described in the Section 1 of this Manual.

As mentioned in Section A-1A05, the suspension may be total or may be for any function with respect to a particular security or class of securities, with respect to a particular Transaction or class of Transactions, or with respect to securities or Transactions generally.

The Board may lift a Clearing Member's suspension at any time.

Notifications

Once the Board has declared a Clearing Member to be suspended, the Board will immediately consider its notice obligations. Those entities whose notification is considered include:

- The general population of Clearing Members
- Appropriate regulatory authorities
- Exchanges and CCOs

While it will be the prerogative of the Board to determine the timing and content of its outside disclosures, it will nonetheless immediately inform any CCOs with which the Corporation has in place a Memorandum of Understanding for such information sharing.

Appeal

According to Section A-1A07, the Clearing Member may appeal a suspension decision. Such appeal does not impede the actions of the Corporation in the Default Management Process.

Section 3: Risk Mitigation Tools

Once a Clearing Member has been suspended, the Corporation shall take specific actions in order to protect the Corporation and the non-defaulting Clearing Members. Conceptually, these actions can be aggregated into three categories and are normally executed in the order presented. While some actions might have been initiated by the Corporation pursuant to a declaration of Non-Conforming status, including, namely, the transfer of Client Accounts, this section details how the Corporation will implement the risk mitigation tools, upon the suspension of the Clearing Member.

- **Prevention:** Preventing controls are the starting point of the management of a default under the suspension status. They are focused on preventing new transactions to be cleared in the suspended Clearing Member's books.
- **Control:** Such actions are focused on taking control over the suspended Clearing Member's assets and positions.
- **Risk mitigation:** Such actions are focused on transferring risks, re-establishing a matched book, and neutralizing risks, at the lowest cost possible for the Corporation and the conforming Clearing Members, while managing the liquidity risk associated with the Default Management Process.

This section provides more information on the risk mitigation tools available to the Corporation.

3.1 TRANSFER OF CLIENT ACCOUNTS

The Corporation will attempt to transfer Client Accounts, in whole or in part, to the books of other Clearing Members. Note that, as specified in the Objectives section of this Manual, the efficient and comprehensive transfer of all Client Accounts is an identified objective of the default management exercise. For the avoidance of doubt, this includes transferring any position maintained in such account, or any account carried by such Clearing Member and any Margin Deposits held by the Corporation in respect of such account, to another Clearing Member.

3.2 AUCTION AND LIQUIDATION

In order to manage a default situation and following the suspension of a Clearing Member, the Corporation must re-establish a matched book. In order to do so, the Corporation can hold an auction for the suspended Clearing Member positions or liquidate its positions.

Immediately subsequent to the declaration of a suspension of a Non-Conforming Member, the Corporation must take the appropriate and following steps to conducting an auction

designed to transfer the remaining collateral and positions to those of another Clearing Member.

- The President of the Corporation will call the most senior available representative of the defaulting Clearing Member, to notify the organization of its intent to hold an auction.
- The Corporation will execute a Non-Disclosure Agreement with the defaulting Clearing Member, enabling it, among other things, to show position and collateral information to potential auction participants.
- The Corporation will identify potential participants in the auction process. Note that these entities can include other Clearing Members and/or other investment enterprises.
- The Risk and Operations Departments will conduct an analysis to determine the ability of potential auction participants to participate in the auction without causing financial or operational impairment to their businesses. Only those enterprises that, in the judgment of the Corporation meet this suitability test, will be eligible for participation in the auction. Note that in the event that Non-Clearing Member participants request to participate in the auction process, the Risk and Operations Departments must perform the suitability test not only on the potential participant, but upon its Clearing Member as well.
- Potential participants in the auction process must sign a Non-Disclosure Agreement, as a precursor to examining the portfolio and collateral content of the defaulting Clearing Member.
- The Corporation will then hold an individual auction separately for each asset class.
- Participants may bid on one or more asset classes, and will submit their bids on the basis of how much collateral they would require to assume the positions of the defaulting Clearing Member.
- The bids will be submitted on a sealed basis, and should be in the hands of the Corporation by the close of business on the date designated for auction.
- The Corporation will determine the winner of the auction on the basis of which participant has requested the least amount of collateral to support the position transfer process with priority to bidders whose risk profile improves (i.e. reduced or minimal marginal increase in risk exposure) subsequent to the inclusion of the defaulting Clearing Members positions.
- The Corporation will transfer all positions and collateral by the close of business the following day, as marked under the Corporation's routine settlement cycle.

In the event that the auction process unfolds in such a way as to create a residual balance on the books of the defaulting Clearing Member, the Corporation will freeze this

collateral, and await further instructions as to its disposition, from both the Legal Department and the Board. In the event that the auction proceeds in such a way as to generate a residual shortfall, then the Corporation, as determined by the Board, has the right to reject all bids, accept some bids and reject others, or accept the best bids submitted. Under these circumstances, the Corporation will then proceed with the implementation of additional mitigants, as set forth below:

- A negotiated allocation of existing Open Positions and associated Margin Deposits amongst surviving Clearing Members.
- By invoking Section A-404, CDCC may elect to closeout remaining Open Positions at a price(s) that it deems reasonable based on best available market information.

3.3 PORTFOLIO HEDGING

At any time during the Default Management Process, the Corporation may, if it deems appropriate, hedge the portfolio of the suspended Clearing Member in order to limit the accumulation of market and credit losses. Note that in such cases the Corporation may consider the use of instruments not part of the organization's clearing universe, including cash securities.

3.4 LIQUIDITY MANAGEMENT

While not a source of capital available for the offset of losses, the Corporation has available an array of liquidity facilities, which it may, at its discretion, call upon to assist with the funding of its loss mitigation activities. In the event of a default, the Corporation must make a determination as to how to deploy these resources. Included among its alternatives are:

- Drawing upon the Corporation's commercial bank liquidity lines, in whole or in part.
- Raising of liquidity through out-rights sales and/or Repurchase Transactions involving Securities of the defaulting Clearing Member.
- Through the exercising of its rights of re-pledging/re-hypothecation of defaulter's Margin Deposits.
- Through the exercising of its rights of re-pledging/re-hypothecation of defaulter's and survivors' Clearing Fund Deposits.

The management of this process is one that should ensue across the entire course of the liquidation efforts, and the Corporation must make routine, periodic judgments as to how and when this funding merits deployment.

3.5 LOSS ABSORPTION MECHANISM

In implementing the Default Management Process, the Corporation will aim at minimizing, to the extent possible and on best efforts basis, the losses to the Corporation and its stakeholders. If there are nonetheless losses to the Corporation, the Corporation must apply, in specified order, a series of financial resources to ensure its ongoing viability and financial solvency. The loss absorption mechanism, also referred as Default Waterfall, is described in Sub-section 1.6.

Section 4: Recovery Plan

The Default Management Process described above ensures that the Corporation has in place tools and processes to appropriately manage the risks following the default of a Clearing Member. Supplementing the Default Management Process, the Corporation has in place a Recovery Plan which provides for a defined set of actions to address any uncovered loss, liquidity shortfall or capital inadequacy, arising from participant default in in the unlikely event where the Default Waterfall proves insufficient. Rule A-10 in the Rules governs the Corporation and the Participants' obligations in a Recovery Process.

The section below provides for general information with respect to the triggers of the Recovery Process, a description of the Recovery Powers that may be used by the Corporation upon a declaration of Recovery Process, the governance supporting such process and the financial resources that may be used by the Corporation to supplement its loss absorption.

4.1 TRIGGERS FOR THE RECOVERY PROCESS

The Corporation management may recommend to the Board to trigger the implementation of the Recovery Process, in either of the following situations:

1. The Corporation reasonably believes that payments, losses and expenses incurred in connection with the suspension of one or more Clearing Members are or will be in excess of the total value of the Default Waterfall.
2. After the suspension of a Non-Conforming Clearing Member and the exercise of the normal default management tools (powers contemplated in Rule A-4) or any rights or remedies provided under the Rules, the Corporation has been, or reasonably believes that it will be, unable to close-out all the positions of such Clearing Member.

Some extreme financial stress could lead the Corporation to have insufficient Default Waterfall resources to absorb losses or support expenses, payments or obligations in connection with the default of a Clearing Member. For example, the most favorable bids received in the course of the auction may be significantly in excess of the margin associated with the positions contained in the auction as a result of market uncertainty,

or the defaulter's portfolio value may be negatively impacted by the occurrence of a market event that is greater than the market scenario that was planned for as part of the daily risk management activities. CDCC can also face a short-term liquidity pressure arising from an unexpectedly high settlement amount incurred by CDCC as a result of the defaulter's fixed income positions.

Alternatively, CDCC could also have sufficient financial resources but be unable to close-out all the positions of the defaulter following a series of failed auctions in the absence of bidder.

4.2 RECOVERY POWERS

Upon the declaration by the Corporation of the commencement of a Recovery Process, CDCC may exercise extraordinary remedies against its Clearing Members in good standing to ensure that the Corporation can continue to operate on an ongoing basis and address uncovered losses or liquidity shortfall. Such extraordinary remedies referred to as Recovery Powers are listed below and can be applied in the manner set out in the applicable sections.

4.2.1 Recovery Loss Cash Payment

During a Default Management Period, subsequent to the commencement of the Recovery Process, the Corporation may require from its Clearing Members to meet a Recovery Loss Cash Payment. The use of such tool is limited to certain conditions:

- **Trigger:** If in the reasonable judgment of the Corporation, the Recovery Event may result in the Corporation incurring obligations, losses and expenses in an amount in excess of the Default Waterfall and such amount is known or can reasonably be determined ;
- **Maximum Amount:** The maximum aggregate amount which may be required from a Clearing Member during a single Default Management Period cannot exceed such Clearing Member's required Clearing Fund deposits as of the commencement of the Default Management Period;
- **Limited Use:** The Corporation will use the financial resources accumulated through Recovery Loss Cash Payments to extinguish any outstanding loss incurred by the Corporation in connection with the Recovery Event on a pro rata basis, based on the quotient obtained by dividing the amount of each Clearing Member's Clearing Fund deposit required at the beginning of the Default Management Period divided by the aggregate amount of Clearing Fund deposits required at the beginning of the Default Management Period of all Clearing Members other than the suspended Clearing Members; and

- **Notice and Implementation:** The Corporation will communicate to each Clearing Member its proportional amount which should be provided by the next Settlement Time.

The Recovery Powers form part of the rights and remedies that may be exercised by the Corporation pursuant to a declaration of the commencement of a Recovery Process, therefore the non-payment of a Recovery Loss Cash Payment is a ground for the Non-Conforming status and may lead to the suspension of a Clearing Member.

4.3 RECOVERY GOVERNANCE

Following the declaration by the Corporation, and as approved by the Board, of the commencement of a Recovery Process (see Sub-section 4.1), the Board shall delegate to CDCC management the authority to make any reasonable decision regarding the timing and use of Recovery Powers to allocate uncovered losses caused by participants' defaults and re-establish a matched book, in accordance with the powers entrusted to the Corporation in the Rules. The decision-making around the application of recovery tools is a natural extension of the existing Default Management Process. As such, the governance in place for the Default Management Process and set out under Section 2 of this Manual will be extended for the Recovery Process. The Default Management Committee will be responsible to make decisions related to the application of the Recovery Powers with the support of the Emergency Committee.

Upon the declaration of a Recovery Process, the Corporation will notify all Clearing Members, the Exchange, all regulatory organizations or agencies having oversight of the Corporation, the Bank of Canada and any such other Entities that the Corporation considers appropriate.

As it is the case while the Corporation is managing a default pre-Recovery Process, appropriate and timely communication will be maintained between CDCC, the Board, its Risk Management Advisory Committee and its regulators.

4.4 RECOVERY LOSS ABSORPTION MECHANISM

The Corporation's capacity to absorb loss increases with the addition of the availability of Recovery Loss Cash Payment(s). However, in absorbing default-related losses, CDCC must use the financial resources in the prescribed order. As such, the loss absorption mechanism that starts with the application of the Default Waterfall, as described in Sub-section 1.6, is supplemented by any financial resources levied by Recovery Loss Cash Payment.

In the event that the Corporation is later able to recover from the defaulting Clearing Member any loss incurred by the Corporation in managing the default, it shall reimburse the financial resources of any Clearing Members and the Corporation in the reverse order that these financial resources were used to cover the losses.