

NOTICE TO MEMBERS No. 042-23 March 29, 2023

SELF-CERTIFICATION

AMENDMENTS TO THE RULES, OPERATIONS MANUAL, RISK MANUAL AND DEFAULT MANUAL OF THE CANADIAN DERIVATIVES CLEARING CORPORATION TO INTRODUCE THE GROSS CLIENT MARGIN MODEL

On May 6, 2021, November 2, 2021 and February 4, 2022, the Board of Directors of the Canadian Derivatives Clearing Corporation ("CDCC") approved amendments to the Rules, Operations Manual, Risk Manual and Default Manual (the "Rules") of CDCC in order to introduce the Gross Client Margin Model.

CDCC wishes to inform the Clearing Members that these amendments have been self-certified pursuant to the self-certification process set forth in the *Derivatives Act* (C.Q.L.R., c I-14.01) and submitted to the Ontario Securities Commission in accordance with the "Rule Change Requiring Approval in Ontario" process.

You will find attached hereto the amendments set to come into force and to be incorporated into the version of the Rules of CDCC that will be made available on the CDCC website at <u>www.cdcc.ca</u> on March 31, 2023, after market close.

The amendments described in the present notice were published for public comment by CDCC on July 5, 2021 (see Notice <u>102-21</u>), November 5, 2021 (see Notice <u>162-21</u>) and March 8, 2022 (see Notice <u>029-22</u>). Further to the publication of this notice, no comment was received by CDCC. Minor modifications have been made since the publication of the notices which were submitted to the regulators.

If you have any questions or concerns regarding this notice, please contact Sophie Brault, Legal Counsel, at 514-268-0591 or at <u>sophie.brault@tmx.com</u>.

George Kormas President

PART A – GENERAL RULE

A-1 DEFINITIONS

Section A-101

SCOPE OF APPLICATION

Unless the context otherwise requires or unless different meanings are specifically defined, for all purposes of these Rules the capitalized terms used herein shall have the meanings given them in Section A-102.

Section A-102

DEFINITIONS

[...]

"Client Account" – means the <u>type of</u> account or accounts required to be established for Transactions of the Clearing Members' Clients pursuant to Sections B-102, B-103, C-102, C-103, D-102 and D-103, <u>which</u> are as follow:

a) Client Account Individual

b) Client Account Omnibus

"Client Account Individual" - means a type of Client Account that requires specific documentation to be signed between the Clearing Member and the Corporation, for one single Client.

"Client Account Omnibus" - means a type of Client Account that requires specific documentation to be signed between the Clearing Member and the Corporation for multiple Clients.

[...]

"Firm Account" – means the account or accounts required to be established for Firm Transactions of the Clearing Members pursuant to Sections B-102, B-103, C-102, C-103, D-102 and D-103. The requirements of the GCM or Non-GCM Regime will not be applicable to this account. "Firm Margin Account" - means an account in which the margin requirement is the aggregation of the Firm Accounts' Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

"Firm Margin Deposit Account" - means an account in which the Deposit covers the Firm's Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

[...]

"GCM Declaration File" - File submitted each Business day in order to allow eligible positions declaration of each individual client within the Client Account Omnibus structure for the purpose of calculating the Base Initial Margin under the GCM Regime.

"GCM Regime or Gross Client Margin Regime" - means a regime that will be applicable to all the Open Positions on Futures and Futures Options and the related Margin Requirement in Client Accounts and Market Maker Non-Firm Accounts. As such, the margin will be calculated in accordance with the Rule A7 Margin Requirements and the methodology set out in the Risk Manual. The GCM Regime will exclude the Hedge Open Positions and Short Positions in Futures or Options for which they have deposited Securities held in specific Deposits in accordance with Sections A-212 and A-706 of the Rules.

"GCM Regime Margin Account" - means an account in which the margin requirement is the aggregation of the Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual for the Open Position eligible under the GCM Regime.

"GCM Regime Margin Deposit Account" - means an account in which the Deposit covers the GCM Regime Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

[...]

"Hedge Open Position" - means Open Positions identified by Clearing Members as eligible to reduce the market risk, for a Client Account Individual or Market Maker Non-Firm Account.

<u>"Margin Deposit Account"</u> – means a Firm Margin Deposit Account or a Non-GCM Regime Margin Deposit Account or a GCM Regime Margin Deposit Account.

[...]

"Market Maker Account" – means the <u>type of</u> account or accounts required to be established for Exchange Transactions of the Clearing Member's Market Makers pursuant to Sections B-102, B-103, C-102 and C-103 <u>which are as follow:</u>

a) Market Maker Firm Account

b) Market Maker Non-Firm Account

"Market Maker Firm Account" - means a Market Maker Account on which the Market Maker trades on behalf of the Firm. All the Rules applicable to a Firm Account (including the Rules related to the Margin) will be applicable in the same manner to a Market Maker Firm Account.

"Market Maker Non-Firm Account" - means a Market Maker Account on which the Market Maker does not trade on behalf of the Firm. All the Rules applicable to a Client Account under the GCM Regime or the Non-GCM Regime (including the Rules related to the Margin) will be applicable in the same manner to a Market Maker Non-Firm Account.

[...]

"Multi-Purpose Account" – means a Market Maker Account and/or a Netted Client Account Individual.

[...]

"Netted Client Account" – means a type of Client Account that requires specific documentation be signed between the Clearing Member and the Corporation, in which the Transactions of a sole Client are held on a net basis.

[...]

<u>"Non-GCM Regime or Non-Gross Client Margin Regime</u>" – means a regime that will be applicable to all accounts that are not subject to the GCM Regime or the Firm.

"Non-GCM Regime Margin Account" - means an account in which the margin requirement is the aggregation of the Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual for the Open Position eligible under the Non-GCM Regime.

"Non-GCM Regime Margin Deposit Account" - means an account in which the Deposit covers the NonGCM Regime Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

[...]

"Porting" means the transfer of Risk Accounts associated with a suspended Clearing Member, including any position maintained in such account and any Margin Deposits held by the Corporation in respect of such account under the GCM Regime, to a Receiving Clearing Member as contemplated under Section A401(3)(b) of the Rules. Transferring by way of Porting is part of the risk mitigation tools to protect the financial assets and positions of Clearing Members client's as contemplated in the Default Manual.

<u>"Porting Base Initial Margin Collateral"</u> - means the collateral value associated with the Base Initial Margin (including the Variation Margin for Options) for the Open Positions eligible for a transfer by way of Porting under the GCM Regime in accordance with subsection A-401(3)(b).

"Porting Coverage Threshold" - means the exposure limit assessed by CDCC and against which the Porting Base Initial Margin Collateral of the individual client Risk Account is compared to abandon the transfer by way of Porting process.

[...]

"Receiving Clearing Member"- means a Clearing Member that:

(i) was named by a client (as provided for in the Default Manual) to receive its Open Positions and

<u>the Porting Base Initial Margin Collateral in case its current Clearing Member becomes a suspended</u> <u>Non-Conforming Member in accordance with Subsection A-401(3)(b);</u>

(ii) immediately upon providing CDCC with its confirmation of accepting a client from a suspended

Non-Conforming Member:

a) has provided CDCC with an irrevocable acceptance of the client and corresponding ported Risk Account;

b) becomes fully liable for authenticating the identity of the client requesting a transfer

by way of Porting (including the client legal authority).

(iii) and once CDCC confirms proceeding with the transfer by way of Porting of a client, will also

be fully liable for all obligations related to the client ported Risk Account during and after the

Default Management Period.

[...]

"Risk Accounts" - means the level at which the Initial Margin requirement is calculated for Options, Futures, Unsettled Items and Fixed Income Transactions.

[...]

RULE A-2

MISCELLANEOUS REQUIREMENTS

[...]

Section A-205

RECORDS

(1) Every Clearing Member shall keep up to date records showing, with respect to each Transaction:

- (a) the names of the parties to the Transaction;
- (b) the trade date;
- (c) the name of the client;
- (d) if in respect of a Future, the Class and Series of Futures, the Underlying Interest, the number of contracts, the contract price, the delivery month and year, whether the transaction was a buy or sell transaction and whether it was an opening or closing transaction;

- (e) if in respect of an Option, the Class and Series of Options, the Underlying Interest, the number of contracts, the premium, the Exercise Price, the expiry month, whether the transaction was a purchasing or a writing transaction and whether it was an opening or a closing transaction;
- (f) the client information corresponding with the Risk Account maintained by the Corporation
 under the GCM Regime, and the evidence that the relevant information under Subsection
 A-401(3)(b) has been provided to the client in order to enable a transfer by way of Porting;
- (f)(g) if in respect of any OTCI the trade details as specified in the Trade Confirmation; and
- (g)(h) such other information as may from time to time be required by law, regulation, an Exchange or the Corporation.

RULE A-4

ENFORCEMENT

Section A-401

ACTION AGAINST A NON-CONFORMING OR SUSPENDED MEMBER

[...]

(2) In addition to a measure made available to the Corporation under the Rules and the Application for Membership to remedy a specific or general default of a Clearing Member, where a Clearing Member is a Non-Conforming Member, the Corporation may take any one of the actions prescribed by the Rules in respect of such Clearing Member including, but not limited to:

(d) transferring, whether by way of transfer <u>(outside of the Porting process)</u>, by way of assignment, by way of termination, close-out and re-establishment or otherwise, any Client Account <u>or Market Maker Non-Firm Account</u> 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;

(3) Upon the suspension of the Clearing Member and in addition to a measure made available to the Corporation under Subsection A-401(2) or other provisions under the Rules, the Corporation may take any one of the actions prescribed by the Rules in respect of such Clearing Member including, but not limited to:

(b) transferring by way of Porting (i) individual client Open Positions (at the Risk Account level) and (ii) the Porting Base Initial Margin Collateral in the respective GCM Regime Margin Accounts and GCM Margin Deposit Accounts to a Receiving Clearing Member. To effectively protect the individual clients of a suspended Non-Conforming Clearing Member, the Corporation will use all reasonable efforts to primarily take the action contemplated in Subsection A-401(3)(b) if it deems it is appropriate in the circumstances. In addition, each Clearing Member shall be required to inform its clients of the applicable requirements under Subsection A-401 (3)(b) in accordance with the Corporation's procedures (including informing the client to name a Receiving Clearing Member). The application of this requirement and of Subsection 205 (f) will be monitored by the Corporation;

(c) transferring, terminating, closing out or liquidating any or all of the Clearing Member Transactions or Open Positions, and upon such close out, converting all amounts into Canadian currency and calculating one net amount (taking into account the Corporation's rights with respect to the Margin Deposit of such Clearing Member) owing to such Clearing Member by the Corporation or by such Clearing Member to the Corporation.

Section A-402

CREATION OF LIQUIDATING SETTLEMENT ACCOUNT

(1) Upon the suspension of a Clearing Member, the Corporation may convert to cash all Margin Deposits with the Corporation by such Clearing Member in all accounts (including Securities held in bulk deposit but excluding Securities held in specific deposit). For purposes of making any such conversion to cash of Margin Deposits, the Corporation may sell, transfer, use or otherwise deal or dispose of any property deposited as Margin Deposit at any time, without prior notice to such Clearing Member. These and all other funds of the suspended Clearing Member subject to the control of the Corporation shall be placed by the Corporation in a special account, to be known as

[...]

the Liquidating Settlement Account, for the purposes hereinafter specified. <u>Margin Deposits in excess in</u> <u>GCM Margin Deposit Account and/or Non-GCM Margin Deposit Accounts shall not be subject to the</u> <u>control of the Corporation and shall be excluded from the Liquidating Settlement</u> <u>Account.</u>

[...]

SECTION A-404 OPEN POSITIONS

2) With respect to Options:

(a) Open Long Positions in the Client Account <u>and Market Maker Non-Firm Account</u> of a suspended Clearing Member shall be maintained by the Corporation. The Corporation shall promptly use its best efforts to identify each Client having a Long Position in such account, to transfer each such Client's Long Position to another Clearing Member, and to notify each such Client of such transfer; in the event that notwithstanding the best efforts of the Corporation any Long Position in a Client Account <u>and Market Maker Non-Firm Account</u> of a suspended Clearing Member cannot promptly be transferred to another Clearing Member, such Long Position may be closed by the Corporation in the most orderly manner practicable and the proceeds shall be deposited in a Clients Settlement Account;

(b) Open Long Positions in any Market Maker <u>Firm</u> Account of a suspended Clearing Member shall be closed by the Corporation in the most orderly manner practicable and the proceeds of such closing transactions shall be held in such account pending the closing out of all Open Positions and transactions for application in accordance with the applicable Market Maker Account agreement;

[...]

RULE A-7 MARGIN REQUIREMENTS Section A-701 MARGIN MAINTENANCE AND PURPOSE

[...]

(3) Each Clearing Member grants to the Corporation a first ranking pledge over all property (including

without limitation Margin and Clearing Fund) that constitutes Margin Deposit or other property which may from time to time be in the possession or control of the Corporation, or in the possession or control of a person acting on behalf of the Corporation. This pledge shall secure the performance by the Clearing Member of all of its obligations to the Corporation and, to the extent such pledge relates to Clearing Fund deposits, it shall also secure the performance by another Clearing Member which is a Non-Conforming Member of its obligations to the Corporation, all subject to the provisions of Rule A-6 and the Default Manual, provided that, except for Clearing Fund deposits, Margin Deposits with respect to a Client Account shall only secure the performance by the Clearing Member of its obligations in respect of that Client Account, and Margin Deposits with respect to a Market Maker Account shall only secure the performance by the Clearing Member of its obligations in respect of that Market Maker Account. Notwithstanding the foregoing, if the Clearing Member does not identify its Margin Deposits with respect to each of its accounts, the Corporation shall use Margin Deposits as securing the obligations in respect to each of the corresponding Margin Deposit Account all Margin Deposits without distinction as securing all the obligations of the Clearing Member in respect of all its accounts. The Clearing Member shall execute and deliver (or cause to be executed and delivered) such other documents as the Corporation may from time to time request for the purpose of confirming or perfecting the pledge granted to the Corporation by the Clearing Member; provided that the failure by the Corporation to request or by the Clearing Member to execute and deliver (or cause to be executed and delivered) such documents shall not limit the effectiveness of the pledge in favour of the Corporation.

[...]

Section A-704 WITHDRAWALS OF MARGIN

[...]

(2) If a Clearing Member has excess Margin deposited in respect of any Firm Account, the Corporation shall be entitled to apply such excess (or a portion thereof) as is necessary to meet the Margin requirements in respect of a Client Account or Market Maker Account. If a Clearing Member has excess Margin deposited in respect of any Client Account or any Market Maker Account, the Clearing Member shall not be entitled to apply such excess (or a portion thereof) to meet the Margin requirements in respect of a Firm Account; provided, however, that if the Clearing Member does

not identify its Margin Deposits with respect to each of its accounts, the Corporation shall apply the Margin deposited by a Clearing Member-indistinctively to meet the Margin requirements in respect of all its accounts. at the Margin Deposit Account level using the following rule: if a Clearing Member has excess Margin deposited in respect of a Firm Margin Deposit Account, the Corporation shall be entitled to apply such excess (or a portion thereof) as is necessary to meet the Margin requirements in respect of a GCM Regime Margin Deposit Account and a Non-GCM Regime Margin Deposit Account. If a Clearing Member has excess Margin deposited in respect of the GCM Regime Margin Deposit Account or the Non-GCM Regime Margin Deposit Account, the Corporation shall not be entitled to apply such excess (or a portion thereof) to meet the Margin requirements in respect of any other Margin Deposit Account. Excess Margin will be identified and monitored by the Corporation.

PART C – FUTURES

RULE C-1

CLEARING OF EXCHANGE TRANSACTIONS RESPECTING FUTURES

The provisions of this Part C shall apply only to Exchange Transactions which are trades in Futures issued by the Corporation, pursuant to these rules and to those Clearing Members who are required to make a base deposit to the Clearing Fund for Futures clearing as set out in Paragraph A-601(2)(b).

[...]

Section C-107

NETTING OF OPEN LONG POSITIONS AND SHORT POSITIONS

[...]

(2) A Long Position and a Short Position in the same Series of Futures in a particular Firm Account or particular <u>Market Maker Account and Client Account Individual</u> <u>Multi-Purpose Account</u> shall be automatically netted in such account by the Corporation.

(3) A Long Position or a Short Position in the same Series of Futures in a Client Account (excluding any <u>Client Account Individual Netted Client Account</u>) shall be netted only if the Clearing Member informs the Corporation specifically that one is a closing transaction for another.

DEFINITIONS

Unless otherwise defined in this Operations Manual, capitalized terms shall have the meanings given to them in the Rules.

"Margin Fund Accounts" – the CDCS record provided to each Clearing Member containing all Margin deposited by such Clearing Member to CDCC, in respect to the Firm Margin Accounts, GCM Regime Margin Accounts and Non-GCM Regime Margin Accounts for of any of the following: (1) Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), (2) Additional Margin for Market Liquidity Settlement Risk, (5) Additional Margin for Intra-Day Variation Margin Risk, (6) Additional Margin for Unpaid Option Premium Exposure Risk, (7) Additional Margin for Banking Holiday Risk, (8) Additional Margin for Variation Margin Delivery Risk, (9) Additional Capital Margin Risk, (10) Additional Margin for Uncovered Risk of Limited Clearing Members, (11) Variation Margin for Options, and (12) Variation Margin for Unsettled Item; the whole in accordance with the Risk Manual, or otherwise as set forth in Section 8-1 hereof.

[...]

"Overnight Clearing Cycle" – clearing cycle starting at 8:00pm (t-1) and ending at 8:15 6:00 am ET.

[...]

"Regular Clearing Cycle" – clearing cycle starting at 8:15 6:00 am and ending at 5:30 pm ET

TIME FRAMES

ON-LINE ACCESS

[...]

The CDCC Clearing Application allows Clearing Members to view their current information throughout the day electronically (except during scheduled maintenance or unforeseen outages). In addition, Clearing Members can download their reports after 79:030 p.m. every day (except on expiry days - see Time Frame sections) using the SFTP Download function.

TIME FRAMES

Activity	Time Frames	Activity Type
GCM Declaration File - end-of-day cut-off	<u>9:00 p.m.</u>	System Activity/Deadline
Clearing Member's (excluding LCMs) Overnight Margin Calculation & Notification	Every hour from <u>109</u> :00 p.m. (t-1) to <u>57</u> :00 <u>and</u> <u>8:15</u> a.m. (t)	System Activity/ Notification
End of Overnight Clearing Cycle	6:00 <u>8:15</u> a.m.	System Activity
Beginning of Regular Clearing Cycle	6:00 <u>8:15</u> a.m.	System Activity
Clearing Member's (excluding LCMs) Early Morning Intra-Day Margin Calculation &	· · · · ·	h Activity/Notification

Deadline to settle Early Morning Intra-Day Margin Call 1 hour after notification Obligation Deadline for Clearing Members (excluding LCMs)

Deadline for Clearing Members (excluding LCMs) for Settlement Time with respect to payments for overnight settlement

7:45 <u>8:15</u> a.m.

Obligation Deadline

REPORT DETAILS

Report Code	Report Name	Report Description
MA01	Deposits and Withdrawals Report	Details on Clearing Member's deposits and
		withdrawals for Margin Fund Account <u>s (Firm,</u>
		GCM Regime, Non-GCM Regime), Clearing Fund
		and (Fixed Income) Variation Margin Account.
		(Note: will find the letters D, W and PW next to
		the date of deposit)
MS01	Daily Settlement Summary Report	Lists assets balances with Margin requirements
		for each Margin Fund Accounts (Firm, GCM
		Regime and Non-GCM Regime) and cash
		settlement in Canadian and U.S. dollars.
MS06	Total Margin Requirement Report	Total margin requirement report with breakdown
		by m Margin <u>Fund Accounts (Firm, GCM Regime</u>
		and Non-GCM Regime) categories, account types
		(Firm, Client, Multi-pPurpose) and sub-accounts.
MS07	Intra-Day Margin Report	Margin call details with Margin requirements by
		Margin Fund aAccounts (Firm, GCM Regime and
		Non-GCM Regime) and Risk Accounts.
		Details the results of the GCM Declaration File
<u>MP54</u>	MP54 <u>(CSV file)</u>	
		received from Clearing Members and provide any
		errors found (in CSV format)
<u>MP55</u>	GCM Declaration Report	Lists the Clearing Member's Clients Futures and
		Options on Futures Open Positions declared via
		the GCM Declaration File with the associated
		margin figures of each individual client account
		within the Client Account Omnibus structure.

TRADE PROCESSING

EXCHANGE TRANSACTIONS (OPTIONS AND FUTURES)

[...]

It is required that a Closing Transaction for a Client Account be designated as such on the trade input. Such designation is not required for a Netted Client Account, a Multi-Purpose Account or a Firm Account, as CDCC carries net position records in the Open Position File for each of these accounts.

[...]

CDCC maintains both the Long Position <u>and</u> the Short Position for each Series of Options and Series of Futures for Client Accounts but only maintains a net Long Position or net Short Position for each Series of Options and Series of Futures for <u>Netted Client Accounts</u>, Multi-Purpose Accounts and Firm Accounts.

SETTLEMENT

SETTLEMENT

[...]

SETTLEMENT CALCULATION

[...]

The Net Daily Settlement amount for each Clearing Member is determined in the following manner:

(i) The amount of Margin required for the Margin Fund Account<u>s</u> are compared with Margin Deposits made by the Clearing Member for such accounts.

MARGIN PROCESSING

MARGIN FUND ACCOUNTS

Margin Fund Accounts are is the CDCS records provided to each Clearing Member containing all Margin deposited by such Clearing Member to CDCC, in respect of such Clearing Member's Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), Additional Margin for Market Liquidity Risk, Additional Margin for Specific Wrong-Way Risk, Additional Margin for Mismatched Settlement Risk, Additional Margin for Intra-Day Variation Margin Risk, Additional Margin for Unpaid Option Premium Exposure Risk, Additional Margin for Banking Holiday Risk, Additional Margin for Variation Margin Delivery Risk, Additional Capital Margin Risk, Additional Margin for Uncovered Risk of Limited Clearing Members, Variation Margin for Options, and Variation Margin for Unsettled Items, in accordance with the Risk Manual and as set forth in Section 8-1 hereof.

In addition to the foregoing, an amount may be requested from a Clearing Member for the protection of the Corporation, Clearing Members or the investing public, in accordance with section A-702 of the Rules.

Each Clearing Member must record in its Margin Fund Accounts any deposit made to cover the shortfalls resulting from the requirements. Deposits must be in the form of Eligible Collateral, as specified in the Risk Manual, in an amount sufficient, taking into account the market value and applicable haircuts as specified in Section A-707.

Excess

Any surplus amount from the Margin Fund Accounts (Firm, GCM Regime and Non-GCM Regime). Excess amounts from the GCM Regime Margin Account are determined on an end-of-day basis after the GCM Declaration File – end-of-day cut-off.

<u>Deficit</u>

Any shortfall amount from the Margin Fund Accounts. Deficits from the Clients' Margin Fund Accounts (GCM Regime and Non-GCM Regime) can be covered by any Firm Excess. Excesses from the GCM Margin Account cannot cover deficits of the Non-GCM Margin Account (and vice-versa) nor deficits from the Firm Margin Account.

[...]

Withdrawals

Clearing Members may request to withdraw <u>Excess</u> any surplus amount from the Margin Fund Account, subject to applicable deadlines, as set forth in Section 2 of this Operations Manual. CDCC will respond within the specified time set forth in Section 2 and, on a best effort basis, approve the withdrawal in CDCC Clearing Application.

Substitutions

A Clearing Member may request to substitute a specific CUSIP/ISIN previously pledged in the Margin Fund Accounts to the Corporation. The Clearing Member must first pledge equivalent securities and withdraw the existing securities subject to substitution. The value of the equivalent securities so pledged must be equal to or in excess of the securities being withdrawn, subject to applicable deadlines, as set forth in Section 2 of this Operations Manual.

CDCC verifies the validity of each deposit made by Clearing Members and ensures that withdrawals of existing securities subject to substitution do not create deficits in the Clearing Member's Margin Fund Accounts. CDCC will respond within the specified time set forth in Section 2 and, on a best effort basis, approve the substitution in CDCC Clearing Application.

Cash deposit

Cash deposited in the Margin Fund Accounts must be sent to the relevant CDCC bank account. After performing all the validation processes, CDCC confirms within the CDCC Clearing Application the Clearing Member's deposits and/or withdrawals. Deposits, withdrawals and changes thereto will be reflected on the immediately following Business Day's Deposits and Withdrawals Report (MA01). In accordance with the Rules, any discrepancies that the Clearing Member notices against its own records should be reported to CDCC immediately

Pledging (CDS)

Securities pledges in the Margin Fund Accounts must be performed through CDSX in CDCC's account. The entries on the pledging screen of the CDCC Clearing Application are matched by CDCC to corresponding entries on the reporting system of the relevant Central Securities Depository. In some cases an exchange of document at a CDCC Office by the Clearing Member (accompanied by a screen print of the entry bearing the signature of an Authorized Representative of the Clearing Member) may be accepted by CDCC as constituting a physical deposit or withdrawal.

CLEARING FEES

[...]

Fees for cost incurred at CDS (or other Central Securities Depository)

[...]

Clearing Members shall designate up to three (3) individuals within their firm who will be responsible for handling the Clearing Member's User Profiles ("Security Officers"). The designation of Securities Officers is done by filing with CDCC a CDCCS Clearing <u>Application</u> – Security Officer Identification form, which form shall be renewed on an annual basis.

ESCALATION PROCEDURE

OVERNIGHT UNCOVERED RISK EXPOSURE

During the Overnight Clearing Cycle, CDCC's risk appetite for acceptable levels of uncovered risk are measured every hour on a per Clearing Member basis as a proportion of their Margin requirements, and will therefore take the form of a relative threshold (the "Threshold") The first monitoring snapshot occurs at <u>9:10:00</u> pm ET (t-1) and the last one at <u>5:00 8:15</u> am ET, where the Margin requirement is systemically updated with movements in Initial Margin, but only updated <u>twice_once</u> with movements in Variation Margin1 (at the 1:00 am ET and 8:15 am ET monitoring snapshot). The hourly monitoring of both the Initial Margin and Variation Margin is available and used to estimate the build-up of credit exposure (the "Live margin check").

OVERNIGHT CLEARING CYCLE REQUIREMENTS

OVERNIGHT CLEARING CYCLE REQUIREMENTS

[...]

By default, Clearing Members are considered part of the Pre-funding solution until they demonstrate their ability to meet their obligations towards CDCC from amongst the below list of Overnight Clearing Cycle eligible collateral with respect to the Asian hours, European hours, or both:

- "Asian hours" i.e. 8:00 pm to 1:00 am ET in a selection of eligible Non-CAD currencies.
- "European hours" i.e. 1:00 am to 8:15 6:00 am ET in a selection of eligible Non-CAD currencies until 7:00 am ET or any form of eligible collateral pledged through CDSX.

Glossary

[...]

Additional Margin(s): Additional Margins are added to the Base Initial Margin (or Adjusted Base Initial Margin, where applicable) to form part of the Initial Margin in accordance with the methodology set out in this Manual. The Additional Margins include the following: (1) Additional Margin for Market Liquidity Risk, (2) Additional Margin for Specific Wrong-Way Risk, (3) Additional Margin for Mismatched Settlement Risk, (4) Additional Margin for Intra-Day Variation Margin Risk, (5) Additional Margin for Unpaid Option Premium Exposure Risk, (6) Additional Margin for Capital Risk, (9) Additional Margin for Uncovered Risk of Limited Clearing Members and (10) Additional Margin for Intraday GCM Risk (11) Additional Margin for Undeclared GCM Positions Risk (12) any other additional Margins as set out in the Rules (other than required pursuant to Rule D-607). When used in the singular form, Additional Margin shall refer to one of the Additional Margins described above, whenever the context so requires.

[...]

Additional Margin for Intra-day GCM Risk: This Additional Margin covers the risk associated with uncovered exposures arising from new trades and the incremental market risk that the Corporation could face between two consecutive Business Day updates of the GCM Declaration File.

[...]

Additional Margin for Market Liquidity Risk: This Margin requirement covers the liquidity risk arising when the Corporation has to close-out positions at a price different than the market price. This liquidity risk could be divided into two components: the first one is the inherent market liquidity risk which is mainly associated <u>withte</u> the bid-ask spread, and the second one is the additional liquidity risk due to concentrated positions that cannot be liquidated within the bid-ask spread.

[...]

Additional Margin for Undeclared GCM positions Risk: This Margin requirement covers the risk that arises on a Business day when a Clearing Member does not report in whole or in part eligible positions in the GCM Declaration File.

CDCC Book Positions: positions by account recorded in CDCS. The level corresponds to the Risk Account level for all the types of accounts, with the exception of the GCM eligible positions under the Client Account Omnibus for which an additional account segregation will be provided by the GCM Declaration File.

[...]

Historical P&L Scenarios: Set of scenarios for a Fixed Income Transaction representing the hypothetical gains and losses derived from Historical Filtered Scenarios. The gains and losses are created by calculating the difference between the price <u>of</u> the Fixed Income Transaction under an Historical Filtered Scenario and the initial reference price.

[...]

Scanning Risk: The difference between the initial <u>reference refnerece</u> price of an Underlying Interest and its most unfavourable projected liquidation value obtained by shocking the values of the Underlying Interest according to several scenarios representing adverse changes in normal market conditions.

Section 1: Margin Deposits

[...]

1.1.1.2 Additional Margins

In addition to the Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), the Corporation requires Margin Deposits for the following Additional Margins:

- (1) Additional Margin for Market Liquidity Risk
- (2) Additional Margin for Specific Wrong-Way Risk
- (3) Additional Margin for Mismatched Settlement Risk
- (4) Additional Margin for Intra-day Variation Margin Risk
- (5) Additional Margin for Unpaid Option Premium Exposure Risk
- (6) Additional Margin for Banking Holiday Risk
- (7) Additional Margin for Variation Margin Delivery Risk
- (8) Additional Capital Margin Risk

- (9) Additional Margin for Uncovered Risk of Limited Clearing Members
- (10) Additional Margin for Intra-Day GCM Risk
- (11) Additional Margin for Undeclared GCM Positions Risk
- (12) Any other additional Margins

ADDITIONAL MARGIN FOR INTRA-DAY GCM RISK

The Additional Margin for Intra-Day GCM Risk is requested for uncovered Intra-day exposure for eligible positions under the GCM regime in a Client Omnibus Account.

The uncovered Intra-day exposure is calculated by taking the difference between the Intra-day Base Initial Margin requirement and the previous Business Day Base Initial Margin requirement based on the CDCC Book Positions and on a net basis, and including the Variation Margin for Options. When calculating the value of Additional Margin for Intra-day GCM Risk, the value cannot be lower than zero.

[...]

ADDITIONAL MARGIN FOR BANKING HOLIDAY RISK

This Additional Margin considers the risk associated <u>with</u>to uncovered exposures arising from new trades and the additional market risk that the Corporation could face during the Banking Holiday.

[...]

ADDITIONAL CAPITAL MARGIN RISK

[...]

The Corporation compares the Clearing Member's capital amount to the Base Initial Margin <u>requirement</u> <u>based on the CDCC Book Positions</u>. In the event that the Base Initial Margin of the Clearing Member exceeds the capital amount, Additional Margin in the amount of <u>the a minimum of 50%</u> of the excess will be collected from the Clearing Member. <u>The proportion value is updated by CDCC from time to time</u>.

ADDITIONAL MARGIN FOR UNDECLARED GCM POSITIONS RISK

This Additional Margin addresses the risk exposure that arises if a Clearing Member does not fully declare GCM Regime eligible positions on Futures and Futures Options in the GCM Declaration File. This risk is determined by comparing, on a net basis, the aggregated positions in the GCM Declaration File and the related CDCC Book Positions to validate whether they match. Any undeclared positions are considered as naked positions and treated separately in a specific Risk Account ("GCM Balance Risk Account"), i.e. no netting occurs between the longs and shorts. The aggregated value in the GCM Balance Risk Account is requested from the Clearing Member as Additional Margin for Undeclared GCM Positions Risk. This Additional Margin is calculated on a daily basis.

[...]

1.1.3 Account Structure, Netting and Risk Aggregation

1.1.3.1 Account Types and Risk Accounts

<u>The Corporation uses five types of accounts ¹for position management of Firm and Client: 1) Firm Account,</u> <u>2) Market Maker Firm Account, 3) Client Account Individual, 4) Client Account Omnibus, 5) MarketMaker</u> <u>Non-Firm Account.</u>

The Corporation uses Risk Accounts for the Initial Margin requirement calculation. Risk aggregation is determined based on the position management account type and the eligibility of the positions under the <u>GCM Regime or the Non-GCM Regime.</u>

More specifically, for the Firm Account and the Market Maker Firm Account, risk aggregation is done directly at the account level, i.e. each account has a corresponding Risk Account ("Firm Risk Account"). For the Client Account Individual and the Market Maker Non-Firm Account, positions are further segregated in two Risk Accounts ("GCM Risk Account", "Non-GCM Risk Account") depending on the eligibility regime. Hedge Open Positions, identified in these accounts by Clearing Members as eligible to reduce the market risk for an individual client, are also treated under the Non-GCM Risk Account. For Client Account Omnibus, the treatment is different depending on the eligibility regime. For positions eligible under the GCM Regime, an additional risk segregation is done, where each account/positions

¹ Please refer to section A-102 of the Rules for definitions related to these 5 account types.

disclosed from the GCM Declaration File (rather than the CDCC Book Positions) are mapped to an individual client Risk Account ("Declared GCM Risk Account"). Whereas, positions eligible under the Non-GCM Regime and based on CDCC Book Position, are carried out in a single Risk Account ("Non-GCM Risk Account").

<u>1.1.1.3.2</u> Short Positions, Account Types, <u>Risk Accounts</u> and Positions Netting

Clearing Members shall not be required to deposit Margin in respect of Short Positions in Futures or Options for which they have deposited the Underlying Interest in accordance with Sections <u>A-212 and</u> A-706 of the Rules.

The Initial Margin requirement is calculated at the Risk Account level on a net basis for all account types and asset classes, except for Option positions in Client Account Omnibus and eligible under the Non-GCM Regime, for which only short Options are taken into account when computing the Initial Margin.

The Corporation uses three types of accounts for Margin calculation purposes and positions management: Firm Account, Multi-Purpose Account and Client Account. •For all account types, the Margin requirement for Futures positions and Fixed Income Transactions is calculated on a net basis. •The Margin requirement for Options is calculated on a net basis for the Firm Account and the Multi-Purpose Account, but on a gross basis for the Client Account, which means that only short Options are considered when computing the Initial Margin.

1.1.3.3 Margin Aggregation

The total Margin requirement of each Clearing Member is composed of the Initial Margin requirement and the Variation Margin requirement.

The calculation is made at the <u>Risk aA</u>ccount level and then aggregated at the <u>corresponding margin</u> account level pursuant to Rule A-7 Margin Requirements: Firm Margin Account, GCM Regime Margin <u>Account and Non-GCM Regime Margin Account</u> <u>Clearing Member level</u>. However, operationally the Margin requirement is subject to the following aggregation, subject to the applicable type of products being cleared by the Clearing Member:

INITIAL MARGIN REQUIREMENT (including the Variation Margin for Options and Unsettled Items)

The Initial Margin requirement for all products is aggregated with the Variation Margin for Options and Unsettled Items as follows:

a) The Base Initial Margin (or Adjusted Base Initial Margin, as the case may be) is calculated at the <u>Risk</u> <u>aA</u>ccount level. For Options, Futures and Unsettled Items, the margin results are calculated at the Combined Commodity level and the Base Initial Margin corresponds to the sum of all Combined Commodities. For Fixed Income Transactions, the Base Initial Margin represents the sum<u>of</u> all VaR Risk Groups. The Base Initial Margin at the <u>Risk</u><u>aA</u>ccount level corresponds to the sum of the Base Initial Margin for Options, Futures and Unsettled Items and the Base Initial Margin for Fixed Income Transactions.

b) The Variation Margin for Options and Unsettled Items is calculated at the <u>Risk aA</u>ccount level and then added to the Base Initial Margin (or Adjusted Base Initial Margin, as the case may be).

- If the Variation Margin for Options and Unsettled Items is negative, this will result in a margin credit² decreasing the aggregate value of the Base Initial Margin for Options and Unsettled Items.
- If the Variation Margin for Options and Unsettled Items is positive, this will result in a margin debit increasing the aggregate value of the Base Initial Margin for Options and Unsettled Items.

c) The Initial Margin requirement in respect of each Clearing Member margin accounts is calculated by aggregating for all <u>Risk aA</u>ccount the value of (1) the Base Initial Margin (or Adjusted Base Initial Margin, as the case may be) and the Variation Margin for Options and Unsettled Items and (2) the following Additional Margins calculated at the Clearing Member level: Additional Margin for Market Liquidity Risk, Additional Margin for Specific Wrong-Way Risk, Additional Margin for Mismatched Settlement Risk, Additional Margin for Intra-Day Variation Margin Risk, Additional Margin for Unpaid Option Premium Exposure Risk, Additional Margin for Banking Holiday Risk, Additional Margin for Variation Margin Delivery Risk, Additional Capital Margin Risk, Additional Margin for Uncovered Risk of Limited Clearing Members, Additional Margin for Intra-Day GCM Risk, Additional Margin for Undeclared GCM Positions Risk and any other Additional Margins as set out in the Rules (other than required pursuant to Rule D-607). Additional Margins are required at the Firm Margin Account level, except for Additional Margin for Intra-Day GCM Risk and Additional Margin for Intra-Day GCM Risk Risk and Additional Margin for Intra-Day GCM Risk Risk and Additional Margin for Intra-Day GCM Risk Risk Risk and Additional Margin for Intra-Day GCM Risk Risk Risk Risk Risk Risk Required at the GCM Regime Margin Account level.

² For a given <u>Risk</u> aAccount, the margin credit is capped to the Base Initial Margin for Options, Futures and Unsettled Items.

VARIATION MARGIN FOR FUTURES

The Variation Margin for Futures (the net value of Gains and Losses) is aggregated at the Clearing Member level (for all Risk Accounts).

1.2 CLEARING FUND REQUIREMENT

• Each Clearing Member's Clearing Fund Requirement amount is equal to the weight of its respective Base Initial Margin <u>requirement based on the CDCC Book Positions</u> over the last sixty (60) Business Days multiplied by the size of the Clearing Fund. A Clearing. Member's contribution is subject to a minimum floor (Base Deposit), which varies according to the Clearing Member's type of activity

[...]

Section 6: Appendix

The other variables influencing the value of the Base Initial Margin are the Intra-Commodity, the Inter-Commodity and the Short Option Minimum. The following table summarizes the variables used in the calculation.

3

Input variables to calculate the Base Initial Margin ⁴	Options	Futures	Unsettled Items
Scanning Risk	•	•	•
Intra-Commodity		•	

⁴ <u>Under CDCC's Portfolio Margining framework, Options, Futures and Unsettled Items may be grouped in the same</u> <u>Combined Commodity or may be subject, if eligible, to Inter-Commodity credit. Margin relief between GCM</u> <u>Regime and Non-GCM Regime positions is not permitted.</u>

Inter-Commodity ⁵		•	<u>•</u>
Short Option Minimum	•		

5 Not applicable for Share Futures.

6.1.3 Inter-Commodity

The Corporation may consider the correlation that exists between different Futures Combined Commodities when calculating the Base Initial Margin. The Corporation will grant a credit according to the historical correlation of the returns of the two Combined Commodities Futures. If multiple Inter-Commodity are defined, the Corporation will prioritize the ones with the highest correlation. The Inter-Commodity and the spread priorities are updated by CDCC from time to time.

[...]

6.3RECALIBRATION OF THE EFFECTIVE RATIO

6.3.2 Recalibration Governance

• On a quarterly basis, CDCC will report to <u>the</u> Risk Management Advisory Committee (RMAC) for information purposes the Boundaries calculated over the preceding quarter.

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. **d**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. <u>dD</u>escribe the governance process followed by the Corporation;

3. <u>dD</u>escribe the risk mitigation tools that can be used by the Corporation; and

4. **dD**escribe the Recovery Process and the related powers.

Section 1: Default Management Process - Triggers and Implementation

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 surviving Clearing Members' Margin Deposits, and 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 default. This includes, wherever possible, the comprehensive and efficient transfer by way of Porting of individual Celient Risk Accounts within Client Accounts and Market Maker Non-Firm Accounts associated with a suspended Clearing Member, including any position maintained in such account and any Margin Deposits held by the Corporation in respect of such account

under the GCM Regime, to another Clearing Member <u>as contemplated under Section A-401(3)(b) of the</u> <u>Rules.</u>

[...]

1.4.4 ENFORCEMENT ACTIONS PURSUANT TO A SUSPENSION

In addition to the actions that the Corporation may take under the Non-Conforming Status, CDCC may, following the suspension of a Clearing Member:

[...]

• Use all reasonable efforts to perform efficient transfer by way of Porting of individual client Risk Accounts within Client Accounts and Market Maker Non-Firm Accounts as contemplated under Section A-401(3)(b) of the Rules in a timeframe which is consistent with the Corporation's risk management model. [...]

• Render a determination as to which Firm Accounts and Market Maker <u>Firm</u> Accounts of the suspended Clearing Member (subject to the objective of protecting to the largest extent possible, all Client Accounts <u>and Market Maker Non-Firm Accounts</u>) may have offsets which could be netted for risk reduction purposes.

1.5 DEFAULT MANAGEMENT PERIOD

[...]

While the exact definition is provided in 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 has been completely managed and the Corporation declares the Default Management Process to be completed. A default is deemed to be completely managed when:

1. <u>Aall</u> obligations, losses and expenses are known or can reasonably be determined and have been successfully absorbed or otherwise settled; and

2. **<u>+</u>**The Corporation has successfully reestablished a matched book.

1.6 DEFAULT WATERFALL: APPLICATION OF FINANCIAL RESOURCES TO COVER DEFAULTRELATED LOSSES

[...]

i. Suspended Clearing Member Resources

• Excess in the Firm Margin Deposit will be available to the Corporation as part of the Default Waterfall or otherwise available to cover shortfalls resulting from uncovered losses in Client Accounts and Market Maker Non-Firm Accounts; Excess in GCM Margin Deposit Account and/or Non-GCM Margin Deposit Accounts will not be available to the Corporation as part of the Default Waterfall;

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 surviving 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 and Marker Maker Non-Firm Accounts (outside of the Porting process), this section details how the Corporation will implement the risk mitigation tools, upon the suspension of the Clearing Member.

• **Prevention:** Prevention 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 <u>transferring by way of Porting as contemplated in Section</u> <u>A-401(3)(b) of the Rules</u>, transferring risks, re-establishing a matched book, and neutralizing risks, at the lowest cost possible for the Corporation and the surviving 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 BY WAY OF PORTING OF INDIVIDUAL CLIENT RISK ACCOUNTS

The Corporation will attempt, <u>if it deems appropriates under the circumstances and on a best effort basis</u>, to transfer <u>by way of Porting Colient Risk</u> Accounts <u>within Client Accounts and Market Maker Non-Firm</u> <u>Accounts</u>, in whole or in part, to the books of other Clearing Members. Note that, as specified in Subsection 1.1 (Objectives) of this Manual, the efficient and comprehensive transfer <u>by way of Porting</u> of <u>individual</u> all <u>Colient Risk</u> Accounts is an identified objective of the Default Management Process. For the avoidance of doubt, this includes transferring any <u>Open Pp</u>ositions maintained in such account, or any

account carried by such Clearing Member and any <u>associated collateral (referred to herein as Porting Base</u> <u>Initial Margin Collateral)</u> Margin Deposits held by the Corporation in respect of such account, to another Clearing Member <u>as contemplated in Section A-401(3)(b) of the Rules.</u>

3.1.1 PROCEDURE RELATED TO A TRANSFER BY WAY OF PORTING

The procedure related to the transfer by way of Porting will start for CDCC immediately after the suspension of the Clearing Member and will continue until the end of the Default Management Period. Upon receipt of an updated GCM Declaration File and other client identification confirmation from the suspended Non-Conforming Clearing Member, CDCC will perform a Base Initial Margin calculation (thereafter the "Suspension Point Margin Calculation"). The updated GCM Declaration File is required for CDCC to determine the Open Positions and the Porting Base Initial Margin Collateral for each individual client Risk Account. As outputs from the Suspended Point Margin Calculation, CDCC will produce reports containing porting information data, which it will make available to each client via its suspended Non-Conforming Clearing Member or by any other acceptable manner to CDCC.

<u>Clients wishing to be transferred by way of Porting are required to provide transfer instructions to CDCC</u> (via its Receiving Clearing Member or by any other acceptable manner to CDCC) no later than noon on the next Business Day following the initiation of the transfer process.

<u>CDCC will use its best efforts, if it deems appropriate under the circumstances, following the request of a client, to transfer its Open Positions and the Porting Base Initial Margin Collateral held by the Corporation in respect of such individual client Risk Account. The aforementioned subject to (1) the consent of the Receiving Clearing Member and CDCC, (2) the completion of any additional documentation required to proceed with a transfer by way of Porting.</u>

3.1.2 PROCEDURE RELATED TO POST-CONFIRMATION OF A TRANSFER BY WAY OF PORTING

Immediately upon providing CDCC with its confirmation of accepting a client from a suspended Non-Conforming Member, a Receiving Clearing Member provides its irrevocable acceptance of receiving the client Risk Account. The Receiving Clearing Member also becomes fully liable for authenticating the identity of the client requesting a transfer by way of Porting. Once CDCC confirms proceeding with the transfer by way of Porting of a client to such Receiving Clearing Member, the latter will also be fully liable for all obligations related to the client ported Risk Account during and after the Default Management <u>Period.</u>

The Margin Requirement impact of the incremental positions contained in the ported Risk Account is considered immediately, but the amount of collateral agreed to be ported by the Corporation to the Receiving Clearing Member in relation to the ported Risk Account will be considered as collateral covering this Margin Requirement. Any failure by the Receiving Clearing Member to accept a transfer by way of Porting of positions and/or meet any obligations associated with the Risk Account will be deemed a breach of obligations and such Clearing Member shall become liable for all fees, expenses and obligations incurred by the Corporation in connection with such Clearing Member's failure to meet or honor its obligations. A failure by such Clearing Member to pay the costs and damages or meet any other obligations will automatically result in the determination by the Corporation of a Non-Conforming status. The Corporation will also notify all Clearing Members of the successful completion, or failure, as the case may be, of a transfer by way of Porting.

3.3.1 PRE-AUCTION PROCEDURE

a) [...]

Invitation to participate in the auction

• For each Auction Portfolio, the Corporation will identify a set of "Eligible Clearing Members" which are Clearing Members that clear the asset class2 contained in such Auction Portfolio (including hedged positions <u>and Hedge Open Positions</u> if applicable), either directly, through their CDCC membership, or indirectly3, through a pre-existing clearing relationship with another CDCC Clearing Member whose membership covers the relevant asset class(es) with CDCC.

[...]

Appendix 2: Loss Allocation Methodology

I. Determination of the composition of each Final Portfolio

[...]

The Final Portfolio shall only be composed of <u>eligible</u> positions of <u>three distinct portfolios for</u> <u>a single the</u> suspended Clearing Member (Firm, GCM Regime and Non-GCM Regime) and of the same asset class, except for any positions from other asset classes which have been added by CDCC for hedging purposes.

PART A - GENERAL RULE

A-1 DEFINITIONS

Section A-101

SCOPE OF APPLICATION

Unless the context otherwise requires or unless different meanings are specifically defined, for all purposes of these Rules the capitalized terms used herein shall have the meanings given them in Section A-102.

Section A-102

DEFINITIONS

[...]

"Client Account" – means the type of account or accounts required to be established for Transactions of the Clearing Members' Clients pursuant to Sections B-102, B-103, C-102, C-103, D-102 and D-103, which are as follow:

a) Client Account Individual

b) Client Account Omnibus

"Client Account Individual" - means a type of Client Account that requires specific documentation to be signed between the Clearing Member and the Corporation, for one single Client.

"Client Account Omnibus" - means a type of Client Account that requires specific documentation to be signed between the Clearing Member and the Corporation for multiple Clients.

[...]

"Firm Account" – means the account or accounts required to be established for Firm Transactions of the Clearing Members pursuant to Sections B-102, B-103, C-102, C-103, D-102 and D-103. The requirements of the GCM or Non-GCM Regime will not be applicable to this account.

"Firm Margin Account" - means an account in which the margin requirement is the aggregation of the Firm Accounts' Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

"Firm Margin Deposit Account" - means an account in which the Deposit covers the Firm's Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

[...]

"GCM Declaration File" - File submitted each Business day in order to allow eligible positions declaration of each individual client within the Client Account Omnibus structure for the purpose of calculating the Base Initial Margin under the GCM Regime.

"GCM Regime or Gross Client Margin Regime" - means a regime that will be applicable to all the Open Positions on Futures and Futures Options and the related Margin Requirement in Client Accounts and Market Maker Non-Firm Accounts. As such, the margin will be calculated in accordance with the Rule A7 Margin Requirements and the methodology set out in the Risk Manual. The GCM Regime will exclude the Hedge Open Positions and Short Positions in Futures or Options for which they have deposited Securities held in specific Deposits in accordance with Sections A-212 and A-706 of the Rules.

"GCM Regime Margin Account" - means an account in which the margin requirement is the aggregation of the Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual for the Open Position eligible under the GCM Regime.

"GCM Regime Margin Deposit Account" - means an account in which the Deposit covers the GCM Regime Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

[...]

"Hedge Open Position" - means Open Positions identified by Clearing Members as eligible to reduce the market risk, for a Client Account Individual or Market Maker Non-Firm Account.

[...]

"Margin Deposit Account" – means a Firm Margin Deposit Account or a Non-GCM Regime Margin Deposit Account or a GCM Regime Margin Deposit Account.

[...]

"Market Maker Account" – means the type of account or accounts required to be established for Exchange Transactions of the Clearing Member's Market Makers pursuant to Sections B-102, B-103, C-102 and C-103 which are as follow:

- a) Market Maker Firm Account
- b) Market Maker Non-Firm Account

"Market Maker Firm Account" - means a Market Maker Account on which the Market Maker trades on behalf of the Firm. All the Rules applicable to a Firm Account (including the Rules related to the Margin) will be applicable in the same manner to a Market Maker Firm Account.

"Market Maker Non-Firm Account" - means a Market Maker Account on which the Market Maker does not trade on behalf of the Firm. All the Rules applicable to a Client Account under the GCM Regime or the Non-GCM Regime (including the Rules related to the Margin) will be applicable in the same manner to a Market Maker Non-Firm Account.

[...]

"Multi-Purpose Account" – means a Market Maker Account and/or a Netted Client Account Individual. [...]

"Non-GCM Regime or Non-Gross Client Margin Regime" – means a regime that will be applicable to all accounts that are not subject to the GCM Regime or the Firm.

"Non-GCM Regime Margin Account" - means an account in which the margin requirement is the aggregation of the Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual for the Open Position eligible under the Non-GCM Regime.

"Non-GCM Regime Margin Deposit Account" - means an account in which the Deposit covers the NonGCM Regime Margin requirements pursuant to Rule A-7 Margin Requirements and the methodology set out in the Risk Manual.

[...]

"**Porting**" means the transfer of Risk Accounts associated with a suspended Clearing Member, including any position maintained in such account and any Margin Deposits held by the Corporation in respect of such account under the GCM Regime, to a Receiving Clearing Member as contemplated under Section A401(3)(b) of the Rules. Transferring by way of Porting is part of the risk mitigation tools to protect the financial assets and positions of Clearing Members client's as contemplated in the Default Manual.

"Porting Base Initial Margin Collateral" - means the collateral value associated with the Base Initial Margin (including the Variation Margin for Options) for the Open Positions eligible for a transfer by way of Porting under the GCM Regime in accordance with subsection A-401(3)(b).

"Porting Coverage Threshold" - means the exposure limit assessed by CDCC and against which the Porting Base Initial Margin Collateral of the individual client Risk Account is compared to abandon the transfer by way of Porting process.

[...]

"Receiving Clearing Member" - means a Clearing Member that:

- (i) was named by a client (as provided for in the Default Manual) to receive its Open Positions and the Porting Base Initial Margin Collateral in case its current Clearing Member becomes a suspended Non-Conforming Member in accordance with Subsection A-401(3)(b);
- (ii) immediately upon providing CDCC with its confirmation of accepting a client from a suspended Non-Conforming Member:

a) has provided CDCC with an irrevocable acceptance of the client and corresponding ported Risk Account;

b) becomes fully liable for authenticating the identity of the client requesting a transfer

by way of Porting (including the client legal authority).

(iii) and once CDCC confirms proceeding with the transfer by way of Porting of a client, will also be fully liable for all obligations related to the client ported Risk Account during and after the Default Management Period.

[...]

"Risk Accounts" - means the level at which the Initial Margin requirement is calculated for Options, Futures, Unsettled Items and Fixed Income Transactions.

[...]

RULE A-2

MISCELLANEOUS REQUIREMENTS

[...]

Section A-205

RECORDS

(1) Every Clearing Member shall keep up to date records showing, with respect to each Transaction:

- (a) the names of the parties to the Transaction;
- (b) the trade date;
- (c) the name of the client;
- (d) if in respect of a Future, the Class and Series of Futures, the Underlying Interest, the number of contracts, the contract price, the delivery month and year, whether the transaction was a buy or sell transaction and whether it was an opening or closing transaction;
- (e) if in respect of an Option, the Class and Series of Options, the Underlying Interest, the number of contracts, the premium, the Exercise Price, the expiry month, whether the transaction was a purchasing or a writing transaction and whether it was an opening or a closing transaction;

- (f) the client information corresponding with the Risk Account maintained by the Corporation under the GCM Regime, and the evidence that the relevant information under Subsection A-401(3)(b) has been provided to the client in order to enable a transfer by way of Porting;
- (g) if in respect of any OTCI the trade details as specified in the Trade Confirmation; and
- (h) such other information as may from time to time be required by law, regulation, an Exchange or the Corporation.

[...]

RULE A-4

ENFORCEMENT

Section A-401

ACTION AGAINST A NON-CONFORMING OR SUSPENDED MEMBER

[...]

(2) In addition to a measure made available to the Corporation under the Rules and the Application for Membership to remedy a specific or general default of a Clearing Member, where a Clearing Member is a Non-Conforming Member, the Corporation may take any one of the actions prescribed by the Rules in respect of such Clearing Member including, but not limited to:

(d) transferring, whether by way of transfer (outside of the Porting process), by way of assignment, by way of termination, close-out and re-establishment or otherwise, any Client Account or Market Maker Non-Firm 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;

(3) Upon the suspension of the Clearing Member and in addition to a measure made available to the Corporation under Subsection A-401(2) or other provisions under the Rules, the Corporation may take any one of the actions prescribed by the Rules in respect of such Clearing Member including, but not limited to:

[...]

(b) transferring by way of Porting (i) individual client Open Positions (at the Risk Account

level) and (ii) the Porting Base Initial Margin Collateral in the respective GCM Regime Margin Accounts and GCM Margin Deposit Accounts to a Receiving Clearing Member. To effectively protect the individual clients of a suspended Non-Conforming Clearing Member, the Corporation will use all reasonable efforts to primarily take the action contemplated in Subsection A-401(3)(b) if it deems it is appropriate in the circumstances. In addition, each Clearing Member shall be required to inform its clients of the applicable requirements under Subsection A-401 (3)(b) in accordance with the Corporation's procedures (including informing the client to name a Receiving Clearing Member). The application of this requirement and of Subsection 205 (f) will be monitored by the Corporation;

(c) terminating, closing out or liquidating any or all of the Clearing Member Transactions or Open Positions, and upon such close out, converting all amounts into Canadian currency and calculating one net amount (taking into account the Corporation's rights with respect to the Margin Deposit of such Clearing Member) owing to such Clearing Member by the Corporation or by such Clearing Member to the Corporation.

Section A-402

CREATION OF LIQUIDATING SETTLEMENT ACCOUNT

(1) Upon the suspension of a Clearing Member, the Corporation may convert to cash all Margin Deposits with the Corporation by such Clearing Member in all accounts (including Securities held in bulk deposit but excluding Securities held in specific deposit). For purposes of making any such conversion to cash of Margin Deposits, the Corporation may sell, transfer, use or otherwise deal or dispose of any property deposited as Margin Deposit at any time, without prior notice to such Clearing Member. These and all other funds of the suspended Clearing Member subject to the control of the Corporation shall be placed by the Corporation in a special account, to be known as the Liquidating Settlement Account, for the purposes hereinafter specified. Margin Deposits in excess in GCM Margin Deposit Account and/or Non-GCM Margin Deposit Accounts shall not be subject to the control of the Corporation and shall be excluded from the Liquidating Settlement Account.

SECTION A-404 OPEN POSITIONS

2) With respect to Options:

(a) Open Long Positions in the Client Account and Market Maker Non-Firm Account of a suspended Clearing Member shall be maintained by the Corporation. The Corporation shall promptly use its best efforts to identify each Client having a Long Position in such account, to transfer each such Client's Long Position to another Clearing Member, and to notify each such Client of such transfer; in the event that notwithstanding the best efforts of the Corporation any Long Position in a Client Account and Market Maker Non-Firm Account of a suspended Clearing Member cannot promptly be transferred to another Clearing Member, such Long Position may be closed by the Corporation in the most orderly manner practicable and the proceeds shall be deposited in a Clients Settlement Account;

(b) Open Long Positions in any Market Maker Firm Account of a suspended Clearing Member shall be closed by the Corporation in the most orderly manner practicable and the proceeds of such closing transactions shall be held in such account pending the closing out of all Open Positions and transactions for application in accordance with the applicable Market Maker Account agreement;

[...]

RULE A-7

MARGIN REQUIREMENTS Section A-701 MARGIN MAINTENANCE AND PURPOSE

[...]

(3) Each Clearing Member grants to the Corporation a first ranking pledge over all property (including without limitation Margin and Clearing Fund) that constitutes Margin Deposit or other property which may from time to time be in the possession or control of the Corporation, or in the possession or control of a person acting on behalf of the Corporation. This pledge shall secure the performance by the Clearing Member of all of its obligations to the Corporation and, to the extent such pledge relates to Clearing Fund deposits, it shall also secure the performance by another Clearing Member

which is a Non-Conforming Member of its obligations to the Corporation, all subject to the provisions of Rule A-6 and the Default Manual, provided that, except for Clearing Fund deposits, Margin Deposits with respect to a Client Account shall only secure the performance by the Clearing Member of its obligations in respect of that Client Account, and Margin Deposits with respect to a Market Maker Account shall only secure the performance by the Clearing Member of its obligations in respect of that Market Account. Notwithstanding the foregoing, if the Clearing Member does not identify its Margin Deposits with respect to each of its accounts, the Corporation shall use Margin Deposits as securing the obligations in respect to each of the corresponding Margin Deposit Account. The Clearing Member shall execute and deliver (or cause to be executed and delivered) such other documents as the Corporation may from time to time request for the purpose of confirming or perfecting the pledge granted to the Corporation by the Clearing Member; provided that the failure by the Corporation to request or by the Clearing Member to execute and deliver (or cause to be executed and delivered) such documents shall not limit the effectiveness of the pledge in favour of the Corporation.

[...]

Section A-704 WITHDRAWALS OF MARGIN

[...]

(2) If a Clearing Member has excess Margin deposited in respect of any Firm Account, the Corporation shall be entitled to apply such excess (or a portion thereof) as is necessary to meet the Margin requirements in respect of a Client Account or Market Maker Account. If a Clearing Member has excess Margin deposited in respect of any Client Account or any Market Maker Account, the Clearing Member shall not be entitled to apply such excess (or a portion thereof) to meet the Margin requirements in respect of a Firm Account; provided, however, that if the Clearing Member does not identify its Margin Deposits with respect to each of its accounts, the Corporation shall apply the Margin deposited by a Clearing Member. at the Margin Deposit Account level using the following rule: if a Clearing Member has excess Margin deposited in respect of a Firm Margin Deposit Account, the Corporation shall be entitled to apply such excess (or a portion thereof) as is necessary to meet the Margin requirements in respect of a GCM Regime Margin Deposit Account and a Non-GCM Regime Margin Deposit Account. If a Clearing Member has excess Margin deposited in respect of a Non-GCM Regime Margin Deposit Account. If a Clearing Member has excess Margin deposited in respect of a Non-GCM Regime Margin Deposit Account.

the GCM Regime Margin Deposit Account or the Non-GCM Regime Margin Deposit Account, the Corporation shall not be entitled to apply such excess (or a portion thereof) to meet the Margin requirements in respect of any other Margin Deposit Account. Excess Margin will be identified and monitored by the Corporation.

PART C – FUTURES

RULE C-1

CLEARING OF EXCHANGE TRANSACTIONS RESPECTING FUTURES

The provisions of this Part C shall apply only to Exchange Transactions which are trades in Futures issued by the Corporation, pursuant to these rules and to those Clearing Members who are required to make a base deposit to the Clearing Fund for Futures clearing as set out in Paragraph A-601(2)(b).

[...]

Section C-107

NETTING OF OPEN LONG POSITIONS AND SHORT POSITIONS

[...]

(2) A Long Position and a Short Position in the same Series of Futures in a particular Firm Account or particular Market Maker Account and Client Account Individual shall be

automatically netted in such account by the Corporation.

(3) A Long Position or a Short Position in the same Series of Futures in a Client Account (excluding

any Client Account Individual) shall be netted only if the Clearing Member

informs the Corporation specifically that one is a closing transaction for another.

[...]

DEFINITIONS

Unless otherwise defined in this Operations Manual, capitalized terms shall have the meanings given to them in the Rules.

"Margin Fund Accounts" – the CDCS record provided to each Clearing Member containing all Margin deposited by such Clearing Member to CDCC, in respect to the Firm Margin Accounts, GCM Regime Margin Accounts and Non-GCM Regime Margin Accounts for of any of the following: (1) Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), (2) Additional Margin for Market Liquidity Settlement Risk, (5) Additional Margin for Intra-Day Variation Margin Risk, (6) Additional Margin for Unpaid Option Premium Exposure Risk, (7) Additional Margin for Banking Holiday Risk, (8) Additional Margin for Variation Margin Delivery Risk, (9) Additional Capital Margin Risk, (10) Additional Margin for Uncovered Risk of Limited Clearing Members, (11) Variation Margin for Options, and (12) Variation Margin for Unsettled Item; the whole in accordance with the Risk Manual, or otherwise as set forth in Section 8-1 hereof.

[...]

"Overnight Clearing Cycle" – clearing cycle starting at 8:00pm (t-1) and ending at 8:15 am ET.

[...]

"Regular Clearing Cycle" – clearing cycle starting at 8:15 am and ending at 5:30 pm ET

TIME FRAMES

ON-LINE ACCESS

[...]

The CDCC Clearing Application allows Clearing Members to view their current information throughout the day electronically (except during scheduled maintenance or unforeseen outages). In addition, Clearing Members can download their reports after 9:30 p.m. every day (except on expiry days - see Time Frame sections) using the SFTP Download function.

Section: 2 - 4

TIME FRAMES

Activity	Time Frames	Activity Type
GCM Declaration File - end-of-day cut-off	9:00 p.m.	System Activity/Deadline
Clearing Member's (excluding LCMs) Overnight Margin Calculation & Notification	Every hour from 10:00 p.m. (t-1) to 7:00 and 8:15 a.m. (t)	System Activity/ Notification
End of Overnight Clearing Cycle	8:15 a.m.	System Activity
Beginning of Regular Clearing Cycle	8:15 a.m.	System Activity
Deadline for Clearing Members (excluding LCMs) for Settlement Time with respect to payments for overnight settlement	8:15 a.m.	Obligation Deadline

[...]

CDCC-REPORTS

REPORT DETAILS

REPORT DETAILS				
Report Code	Report Name	Report Description		
MA01	Deposits and Withdrawals Report	Details on Clearing Member's deposits and		
		withdrawals for Margin Fund Accounts (Firm,		
		GCM Regime, Non-GCM Regime), Clearing Fund		
		and (Fixed Income) Variation Margin Account.		
		(Note: will find the letters D, W and PW next to		
		the date of deposit)		
MS01	Daily Settlement Summary Report	Lists assets balances with Margin requirements		
		for each Margin Fund Accounts (Firm, GCM		
		Regime and Non-GCM Regime) and cash		
		settlement in Canadian and U.S. dollars.		
MS06	Total Margin Requirement Report	Total margin requirement report with breakdown		
		by Margin Fund Accounts (Firm, GCM Regime		
		and Non-GCM Regime) categories, account types		
		(Firm, Client, Multi-Purpose) and sub-accounts.		
MS07	Intra-Day Margin Report	Margin call details with Margin requirements by		
		Margin Fund Accounts (Firm, GCM Regime and		
		Non-GCM Regime) and Risk Accounts.		
MP54	MP54 (CSV file)	Details the results of the GCM Declaration File		
WII 54		received from Clearing Members and provide any		
		errors found (in CSV format)		
MP55	GCM Declaration Report	Lists the Clearing Member's Clients Futures and		

Options on Futures Open Positions declared via the GCM Declaration File with the associated margin figures of each individual client account within the Client Account Omnibus structure.

TRADE PROCESSING

EXCHANGE TRANSACTIONS (OPTIONS AND FUTURES)

[...]

It is required that a Closing Transaction for a Client Account be designated as such on the trade input.

Such designation is not required for a Multi-Purpose Account or a Firm Account,

as CDCC carries net position records in the Open Position File for each of these accounts.

[...]

CDCC maintains both the Long Position and the Short Position for each Series of Options and Series of Futures for Client Accounts but only maintains a net Long Position or net Short Position for each Series of Options and Series of Futures for Multi-Purpose Accounts and Firm Accounts.

SETTLEMENT

SETTLEMENT

[...]

SETTLEMENT CALCULATION

[...]

The Net Daily Settlement amount for each Clearing Member is determined in the following manner:

(i) The amount of Margin required for the Margin Fund Accounts are compared with Margin Deposits made by the Clearing Member for such accounts.

MARGIN PROCESSING

MARGIN FUND ACCOUNTS

Margin Fund Accounts are is the CDCS records provided to each Clearing Member containing all Margin deposited by such Clearing Member to CDCC, in respect of such Clearing Member's Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), Additional Margin for Market Liquidity Risk, Additional Margin for Specific Wrong-Way Risk, Additional Margin for Mismatched Settlement Risk, Additional Margin for Intra-Day Variation Margin Risk, Additional Margin for Unpaid Option Premium Exposure Risk, Additional Margin for Banking Holiday Risk, Additional Margin for Variation Margin Delivery Risk, Additional Capital Margin Risk, Additional Margin for Uncovered Risk of Limited Clearing Members, Variation Margin for Options, and Variation Margin for Unsettled Items, in accordance with the Risk Manual and as set forth in Section 8-1 hereof.

In addition to the foregoing, an amount may be requested from a Clearing Member for the protection of the Corporation, Clearing Members or the investing public, in accordance with section A-702 of the Rules.

Each Clearing Member must record in its Margin Fund Accounts any deposit made to cover the shortfalls resulting from the requirements. Deposits must be in the form of Eligible Collateral, as specified in the Risk Manual, in an amount sufficient, taking into account the market value and applicable haircuts as specified in Section A-707.

Excess

Any surplus amount from the Margin Fund Accounts (Firm, GCM Regime and Non-GCM Regime). Excess amounts from the GCM Regime Margin Account are determined on an end-of-day basis after the GCM Declaration File – end-of-day cut-off.

Deficit

Any shortfall amount from the Margin Fund Accounts. Deficits from the Clients' Margin Fund Accounts (GCM Regime and Non-GCM Regime) can be covered by any Firm Excess. Excesses from the GCM Margin Account cannot cover deficits of the Non-GCM Margin Account (and vice-versa) nor deficits from the Firm Margin Account.

[...]

Withdrawals

Clearing Members may request to withdraw Excess any surplus amount from the Margin Fund Account, subject to applicable deadlines, as set forth in Section 2 of this Operations Manual. CDCC will respond within the specified time set forth in Section 2 and, on a best effort basis, approve the withdrawal in CDCC Clearing Application.

Substitutions

A Clearing Member may request to substitute a specific CUSIP/ISIN previously pledged in the Margin Fund Accounts to the Corporation. The Clearing Member must first pledge equivalent securities and withdraw the existing securities subject to substitution. The value of the equivalent securities so pledged must be equal to or in excess of the securities being withdrawn, subject to applicable deadlines, as set forth in Section 2 of this Operations Manual.

CDCC verifies the validity of each deposit made by Clearing Members and ensures that withdrawals of existing securities subject to substitution do not create deficits in the Clearing Member's Margin Fund Accounts. CDCC will respond within the specified time set forth in Section 2 and, on a best effort basis, approve the substitution in CDCC Clearing Application.

Cash deposit

Cash deposited in the Margin Fund Accounts must be sent to the relevant CDCC bank account. After performing all the validation processes, CDCC confirms within the CDCC Clearing Application the Clearing Member's deposits and/or withdrawals. Deposits, withdrawals and changes thereto will be reflected on the immediately following Business Day's Deposits and Withdrawals Report (MA01). In accordance with the Rules, any discrepancies that the Clearing Member notices against its own records should be reported to CDCC immediately

Pledging (CDS)

Securities pledges in the Margin Fund Accounts must be performed through CDSX in CDCC's account. The entries on the pledging screen of the CDCC Clearing Application are matched by CDCC to corresponding entries on the reporting system of the relevant Central Securities Depository. In some cases an exchange of document at a CDCC Office by the Clearing Member (accompanied by a screen print of the entry bearing the signature of an Authorized Representative of the Clearing Member) may be accepted by CDCC as constituting a physical deposit or withdrawal.

CLEARING FEES

[...]

Fees for cost incurred at CDS (or other Central Securities Depository)

[...]

Clearing Members shall designate up to three (3) individuals within their firm who will be responsible for handling the Clearing Member's User Profiles ("Security Officers"). The designation of Securities Officers is done by filing with CDCC a CDCCS Clearing Application – Security Officer Identification form, which form shall be renewed on an annual basis.

ESCALATION PROCEDURE

OVERNIGHT UNCOVERED RISK EXPOSURE

During the Overnight Clearing Cycle, CDCC's risk appetite for acceptable levels of uncovered risk are measured every hour on a per Clearing Member basis as a proportion of their Margin requirements, and will therefore take the form of a relative threshold (the "Threshold") The first monitoring snapshot occurs at 10:00 pm ET (t-1) and the last one at 8:15 am ET, where the Margin requirement is systemically updated with movements in Initial Margin, but only updated twice with movements in Variation Margin1 (at the 1:00 am ET and 8:15 am ET monitoring snapshot). The hourly monitoring of both the Initial Margin and Variation Margin is available and used to estimate the build-up of credit exposure (the "Live margin check").

OVERNIGHT CLEARING CYCLE REQUIREMENTS

OVERNIGHT CLEARING CYCLE REQUIREMENTS

[...]

By default, Clearing Members are considered part of the Pre-funding solution until they demonstrate their ability to meet their obligations towards CDCC from amongst the below list of Overnight Clearing Cycle eligible collateral with respect to the Asian hours, European hours, or both:

• "Asian hours" - i.e. 8:00 pm to 1:00 am ET - in a selection of eligible Non-CAD currencies.

• "European hours" - i.e. 1:00 am to 8:15 am ET - in a selection of eligible currencies until 7:00 am ET or any form of eligible collateral pledged through CDSX.

Glossary

[...]

Additional Margin(s): Additional Margins are added to the Base Initial Margin (or Adjusted Base Initial Margin, where applicable) to form part of the Initial Margin in accordance with the methodology set out in this Manual. The Additional Margins include the following: (1) Additional Margin for Market Liquidity Risk, (2) Additional Margin for Specific Wrong-Way Risk, (3) Additional Margin for Mismatched Settlement Risk, (4) Additional Margin for Intra-Day Variation Margin Risk, (5) Additional Margin for Unpaid Option Premium Exposure Risk, (6) Additional Margin for Capital Risk, (9) Additional Margin for Uncovered Risk of Limited Clearing Members and (10) Additional Margin for Intraday GCM Risk (11) Additional Margin for Undeclared GCM Positions Risk (12) any other additional Margins as set out in the Rules (other than required pursuant to Rule D-607). When used in the singular form, Additional Margin shall refer to one of the Additional Margins described above, whenever the context so requires.

[...]

Additional Margin for Intra-day GCM Risk: This Additional Margin covers the risk associated with uncovered exposures arising from new trades and the incremental market risk that the Corporation could face between two consecutive Business Day updates of the GCM Declaration File.

[...]

Additional Margin for Market Liquidity Risk: This Margin requirement covers the liquidity risk arising when the Corporation has to close-out positions at a price different than the market price. This liquidity risk could be divided into two components: the first one is the inherent market liquidity risk which is mainly associated with the bid-ask spread, and the second one is the additional liquidity risk due to concentrated positions that cannot be liquidated within the bid-ask spread.

[...]

Additional Margin for Undeclared GCM positions Risk: This Margin requirement covers the risk that arises on a Business day when a Clearing Member does not report in whole or in part eligible positions in the GCM Declaration File.

[...]

CDCC Book Positions: positions by account recorded in CDCS. The level corresponds to the Risk Account level for all the types of accounts, with the exception of the GCM eligible positions under the Client Account Omnibus for which an additional account segregation will be provided by the GCM Declaration File.

[...]

Historical P&L Scenarios: Set of scenarios for a Fixed Income Transaction representing the hypothetical gains and losses derived from Historical Filtered Scenarios. The gains and losses are created by calculating the difference between the price of the Fixed Income Transaction under an Historical Filtered Scenario and the initial reference price.

[...]

Scanning Risk: The difference between the initial reference price of an Underlying Interest and its most unfavourable projected liquidation value obtained by shocking the values of the Underlying Interest according to several scenarios representing adverse changes in normal market conditions.

Section 1: Margin Deposits

[...]

1.1.1.2 Additional Margins

In addition to the Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), the Corporation requires Margin Deposits for the following Additional Margins:

(1) Additional Margin for Market Liquidity Risk

- (2) Additional Margin for Specific Wrong-Way Risk
- (3) Additional Margin for Mismatched Settlement Risk
- (4) Additional Margin for Intra-day Variation Margin Risk
- (5) Additional Margin for Unpaid Option Premium Exposure Risk
- (6) Additional Margin for Banking Holiday Risk
- (7) Additional Margin for Variation Margin Delivery Risk
- (8) Additional Capital Margin Risk

- (9) Additional Margin for Uncovered Risk of Limited Clearing Members
- (10) Additional Margin for Intra-Day GCM Risk
- (11) Additional Margin for Undeclared GCM Positions Risk
- (12) Any other additional Margins

ADDITIONAL MARGIN FOR INTRA-DAY GCM RISK

The Additional Margin for Intra-Day GCM Risk is requested for uncovered Intra-day exposure for eligible positions under the GCM regime in a Client Omnibus Account.

The uncovered Intra-day exposure is calculated by taking the difference between the Intra-day Base Initial Margin requirement and the previous Business Day Base Initial Margin requirement based on the CDCC Book Positions and on a net basis, and including the Variation Margin for Options. When calculating the value of Additional Margin for Intra-day GCM Risk, the value cannot be lower than zero.

[...]

ADDITIONAL MARGIN FOR BANKING HOLIDAY RISK

This Additional Margin considers the risk associated with uncovered exposures arising from new trades and the additional market risk that the Corporation could face during the Banking Holiday.

[...]

ADDITIONAL CAPITAL MARGIN RISK

[...]

The Corporation compares the Clearing Member's capital amount to the Base Initial Margin requirement based on the CDCC Book Positions. In the event that the Base Initial Margin of the Clearing Member exceeds the capital amount, Additional Margin in the amount of the a minimum of 50% of the excess will be collected from the Clearing Member. The proportion value is updated by CDCC from time to time.

ADDITIONAL MARGIN FOR UNDECLARED GCM POSITIONS RISK

This Additional Margin addresses the risk exposure that arises if a Clearing Member does not fully declare GCM Regime eligible positions on Futures and Futures Options in the GCM Declaration File. This risk is determined by comparing, on a net basis, the aggregated positions in the GCM Declaration File and the related CDCC Book Positions to validate whether they match. Any undeclared positions are considered as naked positions and treated separately in a specific Risk Account ("GCM Balance Risk Account"), i.e. no netting occurs between the longs and shorts. The aggregated value in the GCM Balance Risk Account is requested from the Clearing Member as Additional Margin for Undeclared GCM Positions Risk. This Additional Margin is calculated on a daily basis.

[...]

1.1.3 Account Structure, Netting and Risk Aggregation

1.1.3.1 Account Types and Risk Accounts

The Corporation uses five types of accounts ¹for position management of Firm and Client: 1) Firm Account, 2) Market Maker Firm Account, 3) Client Account Individual, 4) Client Account Omnibus, 5) Market Maker Non-Firm Account.

The Corporation uses Risk Accounts for the Initial Margin requirement calculation. Risk aggregation is determined based on the position management account type and the eligibility of the positions under the GCM Regime or the Non-GCM Regime.

More specifically, for the Firm Account and the Market Maker Firm Account, risk aggregation is done directly at the account level, i.e. each account has a corresponding Risk Account ("Firm Risk Account"). For the Client Account Individual and the Market Maker Non-Firm Account, positions are further segregated in two Risk Accounts ("GCM Risk Account", "Non-GCM Risk Account") depending on the eligibility regime. Hedge Open Positions, identified in these accounts by Clearing Members as eligible to reduce the market risk for an individual client, are also treated under the Non-GCM Risk Account. For Client Account Omnibus, the treatment is different depending on the eligibility regime. For positions

¹ Please refer to section A-102 of the Rules for definitions related to these 5 account types.

disclosed from the GCM Declaration File (rather than the CDCC Book Positions) are mapped to an individual client Risk Account ("Declared GCM Risk Account"). Whereas, positions eligible under the Non-GCM Regime and based on CDCC Book Position, are carried out in a single Risk Account ("Non-GCM Risk Account").

1.1.1.3.2 Short Positions, Account Types, Risk Accounts and Positions Netting

Clearing Members shall not be required to deposit Margin in respect of Short Positions in Futures or Options for which they have deposited the Underlying Interest in accordance with Sections A-212 and A-706 of the Rules.

The Initial Margin requirement is calculated at the Risk Account level on a net basis for all account types and asset classes, except for Option positions in Client Account Omnibus and eligible under the Non-GCM Regime, for which only short Options are taken into account when computing the Initial Margin.

1.1.3.3 Margin Aggregation

The Margin requirement of each Clearing Member is composed of the Initial Margin requirement and the Variation Margin requirement.

The calculation is made at the Risk Account level and then aggregated at the corresponding margin account level pursuant to Rule A-7 Margin Requirements: Firm Margin Account, GCM Regime Margin Account and Non-GCM Regime Margin Account. However, operationally the Margin requirement is subject to the following aggregation, subject to the applicable type of products being cleared by the Clearing Member:

INITIAL MARGIN REQUIREMENT (including the Variation Margin for Options and Unsettled Items)

The Initial Margin requirement for all products is aggregated as follows:

a) The Base Initial Margin (or Adjusted Base Initial Margin, as the case may be) is calculated at the Risk Account level. For Options, Futures and Unsettled Items, the margin results are calculated at the Combined Commodity level and the Base Initial Margin corresponds to the sum of all Combined Commodities. For Fixed Income Transactions, the Base Initial Margin represents the sum of all VaR Risk Groups. The Base Initial Margin at the Risk Account level corresponds to the sum of the Base Initial Margin for Options, Futures and Unsettled Items and the Base Initial Margin for Fixed Income Transactions.b) The Variation Margin for Options and Unsettled Items is calculated at the Risk Account level and then added to the Base Initial Margin (or Adjusted Base Initial Margin, as the case may be).

- If the Variation Margin for Options and Unsettled Items is negative, this will result in a margin credit² decreasing the aggregate value of the Base Initial Margin for Options and Unsettled Items.
- If the Variation Margin for Options and Unsettled Items is positive, this will result in a margin debit increasing the aggregate value of the Base Initial Margin for Options and Unsettled Items.

c) The Initial Margin requirement in respect of each Clearing Member margin accounts is calculated by aggregating for all Risk Account the value of (1) the Base Initial Margin (or Adjusted Base Initial Margin, as the case may be) and the Variation Margin for Options and Unsettled Items and (2) the following Additional Margins calculated at the Clearing Member level: Additional Margin for Market Liquidity Risk, Additional Margin for Specific Wrong-Way Risk, Additional Margin for Mismatched Settlement Risk, Additional Margin for Intra-Day Variation Margin Risk, Additional Margin for Unpaid Option Premium Exposure Risk, Additional Margin for Banking Holiday Risk, Additional Margin for Variation Margin Delivery Risk, Additional Margin for Intra-Day GCM Risk, Additional Margin for Undeclared GCM Positions Risk and any other Additional Margins as set out in the Rules (other than required pursuant to Rule D-607). Additional Margins are required at the Firm Margin Account level, except for Additional Margin for Intra-Day GCM Risk and Additional Margin for Intra-Day GCM Positions Risk required at the GCM Regime Margin Account level.

VARIATION MARGIN FOR FUTURES

The Variation Margin for Futures (the net value of Gains and Losses) is aggregated at the Clearing Member level (for all Risk Accounts).

² For a given Risk Account, the margin credit is capped to the Base Initial Margin for Options, Futures and Unsettled Items.

1.2 CLEARING FUND REQUIREMENT

• Each Clearing Member's Clearing Fund Requirement amount is equal to the weight of its respective Base Initial Margin requirement based on the CDCC Book Positions over the last sixty (60) Business Days multiplied by the size of the Clearing Fund. A Clearing. Member's contribution is subject to a minimum floor (Base Deposit), which varies according to the Clearing Member's type of activity

[...]

Section 6: Appendix

The other variables influencing the value of the Base Initial Margin are the Intra-Commodity, the Inter-Commodity and the Short Option Minimum. The following table summarizes the variables used in the calculation.

Input variables to calculate the Base Initial Margin ³	Options	Futures	Unsettled Items
Scanning Risk	•	•	•
Intra-Commodity		•	
Inter-Commodity	•	•	•
Short Option Minimum	•		

6.1.3 Inter-Commodity

The Corporation may consider the correlation that exists between different Combined Commodities when calculating the Base Initial Margin. The Corporation will grant a credit according to the historical correlation of the returns of the two Combined Commodities. If multiple Inter-Commodity are defined,

³ Under CDCC's Portfolio Margining framework, Options, Futures and Unsettled Items may be grouped in the same Combined Commodity or may be subject, if eligible, to Inter-Commodity credit. Margin relief between GCM Regime and Non-GCM Regime positions is not permitted.

the Corporation will prioritize the ones with the highest correlation. The Inter-Commodity and the spread priorities are updated by CDCC from time to time.

[...]

6.3RECALIBRATION OF THE EFFECTIVE RATIO

6.3.2 Recalibration Governance

• On a quarterly basis, CDCC will report to the Risk Management Advisory Committee (RMAC) for information purposes the Boundaries calculated over the preceding quarter.

[...]

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;

3. Describe the risk mitigation tools that can be used by the Corporation; and

4. Describe the Recovery Process and the related powers.

Section 1: Default Management Process - Triggers and Implementation

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 surviving Clearing Members' Margin Deposits, and 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 default. This includes, wherever possible, the comprehensive and efficient transfer by way of Porting of individual client Risk Accounts within Client Accounts and Market Maker Non-Firm Accounts with a suspended Clearing Member, including any position maintained in such account and any Margin Deposits held by the Corporation in respect of such account under the GCM Regime, to another Clearing Member as contemplated under Section A-401(3)(b) of the Rules.

[...]

1.4.4 ENFORCEMENT ACTIONS PURSUANT TO A SUSPENSION

In addition to the actions that the Corporation may take under the Non-Conforming Status, CDCC may, following the suspension of a Clearing Member:

[...]

• Use all reasonable efforts to perform efficient transfer by way of Porting of individual client Risk Accounts within Client Accounts and Market Maker Non-Firm Accounts as contemplated under Section A-401(3)(b) of the Rules in a timeframe which is consistent with the Corporation's risk management model. [...]

• Render a determination as to which Firm Accounts and Market Maker Firm Accounts of the suspended Clearing Member (subject to the objective of protecting to the largest extent possible, all Client Accounts and Market Maker Non-Firm Accounts) may have offsets which could be netted for risk reduction purposes.

1.5 DEFAULT MANAGEMENT PERIOD

[...]

While the exact definition is provided in 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 has been completely managed and the Corporation declares the Default Management Process to be completed. A default is deemed to be completely managed when:

1. all obligations, losses and expenses are known or can reasonably be determined and have been successfully absorbed or otherwise settled; and

2. The Corporation has successfully reestablished a matched book.

1.6 DEFAULT WATERFALL: APPLICATION OF FINANCIAL RESOURCES TO COVER DEFAULTRELATED LOSSES

[...]

i. Suspended Clearing Member Resources

[...]

• Excess in the Firm Margin Deposit will be available to the Corporation as part of the Default Waterfall or otherwise available to cover shortfalls resulting from uncovered losses in Client Accounts and Market Maker Non-Firm Accounts; Excess in GCM Margin Deposit Account and/or Non-GCM Margin Deposit Accounts will not be available to the Corporation as part of the Default Waterfall;

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 surviving 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 and Marker Maker Non-Firm Accounts (outside of the Porting process), this section details how the Corporation will implement the risk mitigation tools, upon the suspension of the Clearing Member.

• **Prevention:** Prevention 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 by way of Porting as contemplated in Section A-401(3)(b) of the Rules, transferring risks, re-establishing a matched book, and neutralizing risks, at the lowest cost possible for the Corporation and the surviving 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 BY WAY OF PORTING OF INDIVIDUAL CLIENT RISK ACCOUNTS

The Corporation will attempt, if it deems appropriates under the circumstances and on a best effort basis, to transfer by way of Porting client Risk Accounts within Client Accounts and Market Maker Non-Firm Accounts, to the books of other Clearing Members. Note that, as specified in Sub-section 1.1 (Objectives) of this Manual, the efficient and comprehensive transfer by way of Porting of individual all client Risk Accounts is an identified objective of the Default Management Process. For the avoidance of doubt, this includes transferring any Open Positions maintained in such account, or any account carried by such

Clearing Member and any associated collateral (referred to herein as Porting Base Initial Margin Collateral) Margin Deposits held by the Corporation in respect of such account, to another Clearing Member as contemplated in Section A-401(3)(b) of the Rules.

3.1.1 PROCEDURE RELATED TO A TRANSFER BY WAY OF PORTING

The procedure related to the transfer by way of Porting will start for CDCC immediately after the suspension of the Clearing Member and will continue until the end of the Default Management Period. Upon receipt of an updated GCM Declaration File and other client identification confirmation from the suspended Non-Conforming Clearing Member, CDCC will perform a Base Initial Margin calculation (thereafter the "Suspension Point Margin Calculation"). The updated GCM Declaration File is required for CDCC to determine the Open Positions and the Porting Base Initial Margin Collateral for each individual client Risk Account. As outputs from the Suspended Point Margin Calculation, CDCC will produce reports containing porting information data, which it will make available to each client via its suspended Non-Conforming Clearing Member or by any other acceptable manner to CDCC.

Clients wishing to be transferred by way of Porting are required to provide transfer instructions to CDCC (via its Receiving Clearing Member or by any other acceptable manner to CDCC) no later than noon on the next Business Day following the initiation of the transfer process.

CDCC will use its best efforts, if it deems appropriate under the circumstances, following the request of a client, to transfer its Open Positions and the Porting Base Initial Margin Collateral held by the Corporation in respect of such individual client Risk Account. The aforementioned subject to (1) the consent of the Receiving Clearing Member and CDCC, (2) the completion of any additional documentation required to proceed with a transfer by way of Porting.

3.1.2 PROCEDURE RELATED TO POST-CONFIRMATION OF A TRANSFER BY WAY OF PORTING

Immediately upon providing CDCC with its confirmation of accepting a client from a suspended Non-Conforming Member, a Receiving Clearing Member provides its irrevocable acceptance of receiving the client Risk Account. The Receiving Clearing Member also becomes fully liable for authenticating the identity of the client requesting a transfer by way of Porting. Once CDCC confirms proceeding with the transfer by way of Porting of a client to such Receiving Clearing Member, the latter will also be fully liable for all obligations related to the client ported Risk Account during and after the Default Management Period.

The Margin Requirement impact of the incremental positions contained in the ported Risk Account is considered immediately, but the amount of collateral agreed to be ported by the Corporation to the Receiving Clearing Member in relation to the ported Risk Account will be considered as collateral covering this Margin Requirement. Any failure by the Receiving Clearing Member to accept a transfer by way of Porting of positions and/or meet any obligations associated with the Risk Account will be deemed a breach of obligations and such Clearing Member shall become liable for all fees, expenses and obligations incurred by the Corporation in connection with such Clearing Member's failure to meet or honor its obligations. A failure by such Clearing Member to pay the costs and damages or meet any other obligations will automatically result in the determination by the Corporation of a Non-Conforming status. The Corporation will also notify all Clearing Members of the successful completion, or failure, as the case may be, of a transfer by way of Porting.

3.3.1 PRE-AUCTION PROCEDURE

a) [...]

Invitation to participate in the auction

• For each Auction Portfolio, the Corporation will identify a set of "Eligible Clearing Members" which are Clearing Members that clear the asset class2 contained in such Auction Portfolio (including hedged positions and Hedge Open Positions if applicable), either directly, through their CDCC membership, or indirectly, through a pre-existing clearing relationship with another CDCC Clearing Member whose membership covers the relevant asset class(es) with CDCC.

[...]

Appendix 2: Loss Allocation Methodology

I. Determination of the composition of each Final Portfolio

[...]

The Final Portfolio shall only be composed of eligible positions of three distinct portfolios for the suspended Clearing Member (Firm, GCM Regime and Non-GCM Regime) and of the same asset class, except for any positions from other asset classes which have been added by CDCC for hedging purposes.