NOTICE TO MEMBERS

N° 2021 - 102

July 5, 2021

REQUEST FOR COMMENTS

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, the Board of Directors of Canadian Derivatives Clearing Corporation ("CDCC") approved certain amendments to the Rules, Operations Manual, Risk Manual and Default Manual of CDCC in connection with the introduction of the Gross Client Margin Model.

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

Process for Changes to the Rules

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

The Board of Directors of CDCC has the power to approve the adoption or amendment of the Rules and Manuals of CDCC. Amendments are submitted to the AMF in accordance with the self-certification process and to the OSC in accordance with the process provided in the Recognition Order.

Comments on the proposed amendments must be submitted before **September 3, 2021**. Please submit your comments to:

Sophie Brault
Legal Counsel
Canadian Derivatives Clearing Corporation
1800-1190 av. des Canadiens-de-Montréal, P.O. Box 37
Montreal, Quebec H3B 0G7
Email: legal@tmx.com

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

Me Philippe Lebel
Corporate Secretary and
Executive Director, Legal Affairs
Autorité des marchés financiers
Place de la Cité, tour Cominar
2640 Laurier boulevard, suite 400
Québec (Québec) G1V 5C1
Fax : (514) 864-8381
E-mail:consultation-en-cours@lautorite.qc.ca

Manager, Market Regulation
Market Regulation Branch
Ontario Securities Commission
Suite 2200,
20 Queen Street West
Toronto, Ontario, M5H 3S8
Fax: 416-595-8940
Email: marketregulation@osc.gov.on.ca

For any question or clarification, Clearing Members may contact Sophie Brault at 514-268-0591 or at sophie.brault@tmx.com.

George Kormas
President

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

TABLE OF CONTENTS

I. DESCRIPTION

The Canadian Derivatives Clearing Corporation (hereafter "**CDCC**" or the "**Corporation**") is proposing changes to its Rules, Operations Manual, Risk Manual and Default Manual (the "**Rules**") in support of (i) the implementation of a Gross Client Margin Regime (the "**GCM Regime**") for futures markets and (ii) the enhancements of CDCC's porting arrangements under the GCM Regime, the whole in accordance with the Principle 14, segregation and portability, as described in the April 2012 report Principles for financial market infrastructures (the PFMI Principles) published by the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions of the Principles for Financial Market Infrastructures ("**CPMI-IOSCO**")[1]. Principle 14 states that a central counterparty ("**CCP**") should have rules and procedures that enable the segregation and portability of positions of a clearing participant's customers and the collateral provided to the CCP with respect to those positions. The purpose of such segregation and portability arrangements is to protect a clearing participant's customers' positions and related collateral from the default or insolvency of that participant. Complying with this principle would also ensure CDCC a reasonable level of alignment with other CCPs which have all already adopted such models.

In addition, the Canadian Securities Administrators (the "**CSA**") published in February 2017 an Update on Enhanced Segregation and Portability Initiatives for Clearing Agencies Serving the Domestic Futures Markets[2], where it was determined that this Principle 14, together with its key considerations and explanatory notes, provides sufficient guidance to CCPs in the Canadian context. This notice also puts into context the industry's commitment to the Gross Client Margin ("**GCM**") model and all the consultative work conducted since 2015, with representatives of CDCC, the Investment Industry Regulatory Organization of Canada ("**IIROC**"), the Canadian Investor Protection Fund ("**CIPF**"), dealer firms, buy-side firms, legal experts, and other key stakeholders. These discussions confirmed in principle that a GCM model was the most appropriate for the Canadian Futures marketplace, as it achieves an appropriate level of protection while limiting operational impacts and costs compared to more complex solutions such as full segregation of customer positions and collateral in a dedicated account. Indeed, following the analysis of various operation models, and given the specificity of the Canadian market, CDCC decided to offer the GCM Regime and the enhanced Segregation and Portability for its futures market only. It was also made clear that, while allowing CDCC to comply with Principle 14, this model would have implications on investment dealers and the customer protection regimes of IIROC and CIPF.

In 2019, CDCC announced[3] that it was resuming its work related to the development and implementation of the GCM model and, given the important impact on the Canadian Marketplace, consultation sessions were completed with all stakeholders, including the Clearing

[1] https://www.bis.org/cpmi/publ/d101a.pdf
[2] https://lautorite.qc.ca/fileadmin/lautorite/reglementation/valeurs-mobilieres/0-avis-acvm-staff/2017/2017fev09-24-315-avis-acvm-en.pdf
[3] https://www.cdcc.ca/u_avis_en/137-19_en.pdf

Members and IIROC/CIPF to align the regulatory environment. Following the industry consultation that took place between February 2020 and July 2020, the business operation model proposal was presented and discussed to ensure that all stakeholders plan for their internal technological development to support this significant change. In order to limit the impact on our Clearing Members, the proposed solution, although specific to the Canadian market and its particularities, leverages on the standard technological treatment proposed for the U.S. futures market.

Under the proposed GCM Regime, collateral will be posted on a shared basis and each Clearing Member's client will be allocated a portion of that collateral with a value equal to the Base Initial Margin requirement, which will allow for segregation. To this end, each Clearing Member would be required to report to CDCC on a daily basis, the positions of each client in order to determine the margin requirement. The record keeping requirements would allow the CDCC to more readily allocate positions and collateral relating to the Clearing Member from its own assets (Firm collateral) and those of other clients. This level of individual client identification would also allow the CDCC to have up to date information in the case of a Clearing Member default and facilitate the transfer by way of porting of client positions and collateral. Portability of client positions and related collateral is an alternative to closing out the positions under the standard default management procedure, without adversely impacting the client's open positions, particularly during periods of stress, and to maintain continuous clearing access and generally promote efficient financial markets. These accommodations will allow each client, regardless of the credit quality of their respective Clearing Members, to obtain equal protection from CDCC under the GCM Regime.

The introduction of the GCM model (which includes the oversight process and the rollout) is presently scheduled to occur in three phases, the first phase (”**Phase 1**”) being the approval by the CDCC Board of the proposed amendments to the Rules and subsequently its publication for comments. It is to be noted that the self-certification of the Rules changes will come at a later date. This first phase aims to establish in the Rules the new structural changes in connection with the margin, the individual client positions declaration, the collateral segregation & management of the accounts, and finally, the foundations of the portability process. The second phase (”**Phase 2**”) will define mutualized default waterfall resource impacts, default management, portability procedures, Additional Margin impacts (e.g. Capital Margin Risk) and other operationalization details. As such, over the next few months, the GCM model will be reviewed by several internal committees. These committees will examine, in each of their respective roles, the various impacts of the GCM model (i.e. technology, portability, other major CDCC initiatives, etc.), the default management process and the risk management framework. The first review will be performed by the Risk Evaluation Committee (”**REC**”). The REC will complete the risk analysis of the GCM model, and will make its recommendation to the Risk Management Committee (“**RMC**”), who oversees the management of risks at CDCC. The REC analysis is currently scheduled to be completed in the fourth quarter of 2021, and to be submitted to the CDCC Board and to the Bank of Canada thereafter. Finally, the GCM model will be presented to the Risk Management Advisory Committee (“**RMAC**”), throughout the three phases, which assists the management of the Corporation on risk management issues. The final phase ("**Phase 3**") of the project will be the significant change related to the information technology systems, which should take place in the fourth quarter of 2021. The GCM model is a multi-year project scheduled for a single implementation expected in the second quarter of 2022.

Unless otherwise defined herein, any defined term used in this analysis will have the meaning described in the Rules.

II. PROPOSED AMENDMENTS

The amendments to the Rules can be classified into two main categories: the GCM Regime and portability.

GCM Regime

With the upcoming implementation of the GCM Regime, it became necessary for CDCC to introduce new definitions related to this new model in its Rules. Hence, in addition to defining the applicability of the GCM Regime and Non-Gross Client Margin Regime (the "**Non-GCM Regime**"), the Section A-102 will also incorporate new types of attributes for Client and Market Maker Accounts; these definitions are essential to enable the application of this new model.

Also, with the specific treatment of the margin under the GCM Regime and the requirement to segregate the Firm from the Client margin collateral, CDCC needed to create specific types of Margin Accounts and Margin Deposit Accounts in order to link them to the corresponding Base Initial Margin requirement for the eligible positions under the GCM Regime, the Non-GCM Regime and the Firm. As such, the proposed changes will include definitions to that effect and appropriate segregation treatment in Business-As-Usual ("**BAU**") situations and under the Default Waterfall.

Furthermore, to ensure margin efficiency for certain types of Futures positions, the Rules will exclude from the GCM Regime certain positions: 1) Hedge positions eligible to reduce market risk and 2) Short Positions in Futures (or Options on Futures) which have Securities deposited.

The other changes in the Rules will mostly be found in Part-A; aligning the Rules so the GCM model can be applicable (Sections A-701 and A-704). Corresponding changes have also been made to the Operations Manual and Risk Manual (in particular to introduce the concept of risk account ("**Risk Account**") and to define two new GCM related Additional Margins).

Portability

As the aforementioned modification will permit certain segregation under the GCM Regime, CDCC will clarify its Rules by including the transfer by way of porting of client's positions and margin under the GCM Regime when a Clearing Member is suspended (if circumstances permit and all other conditions are met). To achieve this, CDCC is proposing a definition of the term porting, changes to Sections A-205, A-401, A-402 and A-404 of the Rules and by amending the Default Manual. These changes will enable CDCC to receive information from clients and make the proper correspondence with the accounts at the CDCC. The proposed changes will also define the role of the Receiving Clearing Member following a transfer by way of porting, who will become fully liable for the client identity and corresponding portfolio.

CDCC will further ensure that the porting process is found on its website so that the appropriate documentation and information is readily accessible.

III. ANALYSIS

a. Background

Under the CDCC proposed GCM Regime, all clients Futures[4] positions will be margined separately and the related collateral value will be protected from the default or insolvency of their respective Clearing Member. In accordance with this new GCM Regime, CDCC will be collecting the margin (Base Initial Margin) on a gross basis value, rather than on a net basis for Futures positions (and Options on Futures), where all individual client positions are currently commingled in Clients Accounts. This means that the amount of margin that a Clearing Member will have to post on behalf of its clients at CDCC will be the sum of the amounts of margin required for each client, rather than the net margin currently required for all clients.

Another important characteristic of the GCM Regime, will be the increased likelihood of a transfer by way of porting each clients' positions and collateral value from a current Clearing Member to a replacement Clearing Member. To that end, CDCC decided to clarify its portability mechanism in order to strengthen its efficiency. The improvements to the CDCC porting arrangements that are proposed are formally incorporated into the Rules and default management process. Contrary to the transfer[5] of positions, transfer of collateral is more complex. Following the default of a Clearing Member and at the request of a client, porting procedures can be initiated to move its identified positions and collateral value (Base Initial Margin) in a timely manner from the defaulting participant to the replacement Clearing Member; subject to all porting requirements being to the satisfaction of CDCC.

Although CDCC is introducing a new GCM Regime for the futures market, by definition, all other non-futures client positions will be considered outside of the GCM Regime (thus under the Non-GCM Regime) and will not be eligible to the same level of protection and portability arrangements. The consideration of all client positions (mainly for the equity options market-exchange traded and over-the-counter ("**OTC**")) of a Clearing Member are however part of this analysis given the need to clarify their respective treatment. Thus, for the sake of clarity, the new model will define the treatment of the Clearing Member's client positions in both regimes (the

[4] Including Options on Futures and Share Futures

[5] Positions transfer is currently available at CDCC in a Business-as-Usual (BAU) situation (transfer of the client positions from an existing Clearing Member to an another Clearing Member) or a transfer upon a declaration of non-conforming status as a first risk mitigation action as described in CDCC's Default Manual.

GCM Regime and the Non-GCM Regime). It is to be noted that Firm proprietary trading will not fall under any of the proposed regimes as the segregation and portability arrangements are not applicable to the Firm's own positions. Moreover, Additional Margins (excluding the two newly proposed Additional Margin[6] to cover the specific GCM risk) and the Variation Margin will continue to be applied as currently is for all the Clearing Members positions (i.e. at the Firm level) and will also not fall under any of the proposed regimes. These elements must be specified in the new model because specific treatments will be applied by CDCC depending on the classification of a Clearing Member positions (i.e. GCM Regime, Non-GCM Regime, Firm), and especially with regard to the segregation of collateral and the management of margin excesses. Thus, to this end, all these elements are considered as part of the GCM model.

The key new features of the GCM model are the following:

I. Individual client position management and Initial Margin calculation[7] at the new Risk Account level;
II. Updated daily book positions keeping and margin calculation under the GCM Regime
    A. For Client Account Omnibus, using a new declaration client file ("**GCM Declaration File**");
    B. For individual positions segregated accounts ("**IPSA**"), using the current CDCC's book positions recorded in CDCS.
III. Segregation of Firm/Client collateral and individual clients with the introduction of three new collateral pools: Client GCM, Client Non-GCM and Firm;
IV. Client excess (margin) treatment to avoid any Firm margin deficit to be covered by client excesses and to prohibit its usage under CDCC's Default Waterfall;
V. Portability arrangements for eligible positions and related collateral value (Base Initial Margin) under the GCM Regime. Variation Margin and other Non-GCM Additional Margins are excluded from the portability arrangements.

The details of each of these new features are outlined below.

b. Description and Analysis of Impacts

I. Individual client position management and Initial Margin calculation at the new Risk Account level

Current process

For all accounts, Initial Margin is calculated at the account level on marginable positions. For the management of client positions, CDCC currently has two types of accounts: Client Account and Netted Client Account. A Client Account is considered to be an account of multiple client

[6] Intra-Day GCM Risk and Undeclared GCM Positions Risk are described in the Description and Analysis of Impacts section.

[7] The Initial Margin consists of the Base Initial Margin and the Additional Margins. The individual client margin calculation for the GCM Regime is done at the Base Initial Margin level. Note that the two new Additional Margins to cover the GCM Risk will also be part of the GCM Regime.

positions, while a Netted Client Account is considered to be an account of single client positions. In the Client Account, Futures positions are margined on a net basis and only short options positions are margined (i.e. all long positions are excluded). For Netted Client Account, the margin is calculated separately (for both Futures and Options) on a net basis. Positions are also treated in a similar manner for Firm Account and the Market Maker Account[8].

Rationale of the proposed change

Under the GCM model, CDCC must identify and separate eligible client positions in the GCM Regime from those in the Non-GCM Regime. All client Futures positions should be treated under the GCM Regime and all other client positions under the Non-GCM Regime. Positions in Market Maker Accounts, which are not considered firm based activity, should also be considered as client positions with the same GCM/Non-GCM Regime allocation rule. In addition, in order to allow margin efficiency, certain Futures positions will be excluded from the GCM Regime, including: 1) Hedge positions eligible to reduce market risk in individual client Accounts and 2) short positions in Futures or Options which have Securities deposited.

In terms of the need to margin clients individually, while this is currently possible using Netted Client Accounts, most of these Futures positions are instead managed by Clearing Members in Client Accounts, where the positions of several clients are commingled and therefore not margined separately.

Proposed changes

Position Management

CDCC is introducing a second level of position management to identify and separate GCM Regime and Non-GCM Regime positions based on the current physical account structure and account type. Under the new proposed definitions for account type, the Client Account will distinguish between a single client (Client Account Individual[9]) and multiple clients (Client Account Omnibus). While Market Maker Account will comprise Market Maker Firm and Market Maker Non-Firm accounts. Finally, in order to enable margin efficiency between Futures and Non-GCM Regime positions[10] (e.g. equity Options), exemption for the positions from the GCM Regime ("**Hedge Open Positions**") will be granted for these Futures positions. The Hedge Open Positions will be considered in a Non-GCM Regime. It should be noted that any margin reduction will be given in accordance with CDCC's Portfolio Margining framework, which will be updated to also take into account the separation (i.e. margin relief restriction) between the regimes.

The table-1 below shows the link between the physical accounts, the new account types, the corresponding regime and hedge or not eligibility.

[8] Note that Market Market Account and Netted Client Account are operationally considered as Multi-Purpose Account.
[9] This type of account has replaced the Netted Client Account and will be operated as a Multi-Purpose Account.
[10] Applicable for client Multi-Purpose Accounts only (Client Account Individual, Market-Marker Non-Firm).

Physical Account	New Account type	Second tier- Regime level	Hedge
Firm	Firm	N/A	N/A
Client Account	Client Account Omnibus	GCM or Non-GCM	N/A
Multi-Purpose	Client Account Individual	GCM or Non-GCM	Hedge (Non-GCM)
Multi-Purpose	Market-Marker Non-Firm	GCM or Non-GCM	Hedge (Non-GCM)
Multi-Purpose	Market-Marker Firm	N/A	N/A

Risk Management

CDCC is introducing a new level for risk calculation at the Risk Account level rather than at the Account level. This change will allow for the calculation of Initial Margin[11] for appropriate client positions under the GCM Regime and the Non-GCM Regime. Hence, for Client Account Omnibus of type GCM (after the second tier regime segmentation), multiple Risk Accounts (one per declared client) will be associated with a Client Account Omnibus. For other types of Non-Firm Accounts, Initial Margin is calculated directly at the second tier level of position management (GCM or Non-GCM).

Lastly, for the Firm Account, the Initial Margin is calculated at the account level which also corresponds to Risk Account level. All account types, except for the Client Account Omnibus of type GCM, will be linked to a single Risk Account. Client Account Omnibus are not mapped to a specific Risk Account, but rather multiple risk accounts would be created based on the GCM Declaration File. GCM Declaration File is covered in the next section of this document.

The table-2 below shows the link between the account types, the new account type, the second tier of position management and the Risk Accounts.

Account Types	Second tier- Regime level	Hedge	Risk Accounts
FIrm	N/A	N/A	Firm
Client Account Omnibus[12]	**GCM**	**N/A**	**Multiple Risk Accounts**
Client Account Omnibus	Non-GCM	N/A	Client Account Omnibus- Non-GCM
Client Account Individual	GCM	N/A	Client Account Individual- GCM
Client Account Individual	Non-GCM	N/A	Client Account Individual- Non-GCM

[11] Risk methodologies to calculate the Initial Margin (i.e. the Base Initial Margin and the current Additional Margins) remain the same as described in the Risk Manual.

[12] Requiring a new level of reporting from individual clients based on the GCM Declaration File.

Market-Marker Firm	N/A	N/A	Market-Marker Firm
Market-Marker Non-Firm	GCM	N/A	Market-Marker Non-Firm- GCM
Market-Marker Non-Firm	Non-GCM	N/A	Market-Marker Non-Firm- Non-GCM
Client Account Individual	Non-GCM	Hedge	Client Account Individual - Non-GCM & Hedge
Market-Marker Non-Firm	Non-GCM	Hedge	Market-Marker Non-Firm- Non-GCM & Hedge

II. Daily book position keeping and margin calculation under the GCM Regime

<u>Current process</u>

As described in the previous section, most of the Futures and Options on Futures positions are margined in the Client Omnibus Account. These positions are maintained in CDCC's position books (”**CDCC Book Positions**'') and are also used to calculate Initial Margin both intraday and end-of-day margin.

<u>Rationale of the proposed change</u>

Under the CDCC Book Positions for Client Omnibus Account, individual client positions cannot be identified. The proposed changes would permit the calculation of Base Initial Margin at the level of declaration disclosed by the Clearing Members for the positions held in a GCM Regime Client Omnibus Account.

<u>Proposed changes</u>

GCM Declaration File

CDCC is introducing an individual client position declaration file, the (**”GCM Declaration File”**), for Client Omnibus Account of type GCM. This file will be used to explicitly calculate the Base Initial Margin[13] at the new Risk Account level associated with an individual client declaration. In order to limit the operational impact on the Clearing Members, this file will use a standard communication protocol currently used by CME[14] and ICE Futures[15] for the U.S. market.

Clearing Members must submit the GCM Declaration File by 9:00 pm (Eastern Time) each business day. The Clearing Member may upload multiple GCM Declaration Files during the day and declarations for a given account will be overwritten by any new GCM Declaration Files made in subsequent files for that account. Unless a new GCM Declaration File is submitted within the

[13] Including Variation Margin for Options and Unsettled Items added to the Base Initial Margin. Note that Unsettled Items positions (physical positions) are allocated in the Non-GCM Regime

[14] https://www.cmegroup.com/clearing/risk-management/files/CGMTechnicalInformation.pdf

[15]https://www.theice.com/publicdocs/clear_singapore/circulars/004%20Attachment%201%20FIXML_EOD_Gross_Customer_Margin_Specifications_v2.0_R7.pdf

acceptable timelines, the last received GCM Declaration File will be considered as the official source for the calculation of the Initial Margin. Prior to an expiry period, Clearing Members can choose to either declare their pre-expiry or post-expiry positions. In order to facilitate the declaration process during that period, CDCC will generate an end-of-the-day report reconciling the positions in CDCC Book Positions with the GCM Declaration file.

Clearing Members may disclose, either in full or partially, the details of the Client Omnibus Account by providing the underlying individual client positions[16]. Undisclosed positions will be subject to Additional Margin as discussed below for the Undeclared GCM Positions Risk. Non-GCM positions or accounts are excluded from that process.

CDCC wants to clarify that it can accommodate any level of client declaration that a Clearing Member is able to provide in the GCM Declaration File, but the GCM positions must, at minimum, reflect the client end-of-day positions in accordance with the IIROC rules.

CDCC wishes to emphasize that it is the responsibility of the Clearing Members to ensure that the GCM Declaration File is aligned with the IIROC rules, including any subsequent amendments. According to IIROC rules, the first level of details for individual client management is expected to be included in the GCM Declaration File[17]. A second level of declaration is also possible but not mandatory. As stated in previous sections, individual clients will be then transposed into individual Risk Accounts.

Daily Margin runs (Intraday, end-of-day basis)

Since individual client GCM positions in Omnibus Client Accounts are only reported at the end-of-the-day via the new GCM Declaration File, this implies that the frequency of Base Initial Margin calculation is limited to once per day. In order to ensure that the level of margin requirement between two end-of-day processes adequately reflects the level of risk, two (2) Additional Margins are introduced specifically to increase the portability likelihood.

1. **Intra-Day GCM Risk:** Additional Margin addressing the risk associated with uncovered exposures arising from new trades and the incremental market risk. This Additional Margin is calculated by taking the difference between the intra-day Base Initial Margin and the previous end-of-day Base Initial Margin based on the CDCC Book Positions and on a net basis. For clarity, this Additional Margin is based on the actual positions in CDCC Book Positions (i.e. not using the positions from the GCM Declaration File) which are used in this particular way to calculate this specific risk only. It is important to note that this risk is currently captured directly in the Base Initial Margin (when calculating intraday margins) whereas it will now come from this Additional Margin for GCM positions in Omnibus Client Accounts;

[16] An affiliate Clearing Member may also be considered an individual client.

[17] This obligation also applied to the declaration level for client positions declaration level in individual Multi-Purpose/Client Account Individual. In that case, one account should be opened oer declared client.

2. **Undeclared GCM Positions Risk:** Additional Margin addressing 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. This risk is determined by comparing, on a net basis, the aggregated positions in the GCM Declaration File and the related CDCC Book Positions at the Risk Account level to validate whether they match. Any undeclared positions are considered as naked positions and treated separately in a specific Risk Account ("**GCM Balance Risk Accoun**t"), i.e. no netting occurs between the longs and shorts.

It should be noted that for all other Risk Accounts (i.e. excluding the Risk Accounts for Omnibus Client Accounts-GCM) the Initial Margin will be calculated directly from the CDCC Book Positions, since the information is considered complete for Initial Margin calculation requirements.

In addition, for the purpose of clarity, the calculation of margins will be done at the same frequency as today (i.e on an intraday and end-of-day basis), the difference being that the Base Initial Margin will be updated only once a day for Risk Accounts for Omnibus Client Accounts-GCM once the GCM Declaration File is processed. To this end, a new batch activity will be added to process the GCM Declaration File, to finalize end-of-day Margin Fund calculation & Bank Transfers, and to finalize end-of-day reports.

III. Firm/Client collateral segregation and individual client segregation

Current process

The Margin Requirement, composed of the Initial Margin and the Variation Margin is calculated at the account level (for Firm, Client and Multipurpose) and then aggregated at the Clearing Member level. Only one pool of collateral (at the Clearing Member level) is managed at CDCC. Pledging is performed within the CDS Clearing and Depository Services Inc. ("**CDS**") system to a CDCC collateral pledging account.

In addition, as part of the current loss allocation rules, it is permitted for the Client Margin Deposit to be used to satisfy default losses associated with a Clearing Member's Firm accounts. Indeed, CDCC may use the entire pool of collateral (at the Clearing Member level) to cover losses associated with positions in that account.

Rationale of the proposed change

Under the GCM model, Firm's collateral pool must be segregated from the client's collateral pool. In addition, client collateral must also be segregated across regimes to avoid fellow risk between protected (GCM Regime) and unprotected clients (Non-GCM Regime). In order to limit the operational impacts, while complying with Principle 14, the current process for pledging is not affected by this initiative and therefore pledges can be executed at the same collateral pool level, within the CDCC operational structure of its account at CDS, i.e., each account (or Risk Account) will not be assigned a segregated collateral pool and collateral pools are only segregated at CDCC's level, not CDS.

Under the GCM Regime, clients are not entitled to specific assets pertaining to the relevant collateral pool (i.e. Margin Deposits). Principle 14 on segregation and portability states that a CCP is not required to identify specific assets pledged as collateral for a particular customer and may rely solely on value segregation. As a consequence, individual client collateral value would represent a proportion of the total collateral pool value. The allocation of the collateral is based on the Client's Base Initial Margin. Therefore, information regarding a specific client's collateral (asset) or excess will not be provided to CDCC.

In addition, following the default of a Clearing Member, segregation must also be proposed to ensure that under the Default Waterfall process, the Client collateral pools are not used to cover default losses associated with positions in the Firm accounts.

Note that these new proposed segregation features would not impact the existing process in BAU for calculating the Variation Margin for Futures and the calculation would remain on a net basis at the Clearing Member level.

Proposed changes

CDCC is proposing the introduction of three collateral pools (Margin Accounts) to manage the aggregate Margin Requirements of the Firm, the GCM Regime and the Non-GCM Regime calculated at the Risk Account level, as detailed in the previous section.

Specifically, each of the components of the Margin Requirement will also be allocated to each of the related new pools (Firm Margin Account, GCM Regime Margin Account, Non-GCM Regime Margin Account). The most impacted component is the Base Initial Margin which must be assigned to the appropriate Margin Account, depending on the originating Risk Account. The two new GCM related Additional Margins are allocated to the GCM Regime Margin Account because in the event of a default, these margin components may be used to maximize the likelihood that the client's margin (Base Initial Margin) is fully margined (funded) for portability.

The other Additional Margins and the Variation Margin component will remain at the same Clearing Member level which is now explicitly associated with the Firm's Margin Account.

The table-3 below compares the link between the Margin Requirement components and the Margin Account under the current situation and the GCM model.

Margin Requirement	Current - Margin Account	GCM model - Margin Account
Base Initial Margin[18]	Clearing Member Level	Firm, GCM, Non-GCM
New GCM Additional Margin	N/A	GCM
Other Additional Margin	Clearing Member Level	Clearing Member Level (Firm)
Variation Margin	Clearing Member Level	Clearing Member Level (Firm)

[18] Including Variation Margin for Options and Unsettled items added to the Base Initial Margin. Note that Unsettled positions (physical positions) are allocated in the Non-GCM Regime

In addition, following the default of a Clearing Member, segregation is proposed to ensure that under the Default Waterfall process (as part of the loss allocation rules), a Client Margin Deposit Account (in the GCM Regime or Non-GCM Regime) will not be used to cover default losses in the Margin Account of the Firm. Moreover, a Client Margin Deposit Account of one regime may not be used to cover default losses in the Margin Account of another regime.

IV. Client excess margin treatment

Current process

In a BAU situation, Clearing Members may retain excess margin in their Margin Deposit Account. This excess can be withdrawn on a daily basis by Clearing Members under the conditions set out in the Operations Manual. In addition, an increase (loss) in margin in one Firm Account can, for example, be offset by a reduction (gain) in margin in another Member's Client Account, since they share the same collateral pool (Margin Deposits). Indeed, a margin call (on a intraday or end-of day-basis) is triggered if the Member’s Margin Requirement is greater than the amount in its Margin Deposits Account, including any the excess margin[19].

Moreover in the event of a Clearing Member's suspension, the excess margin would be under CDCC's control as part of the Default Waterfall management.

Rationale of the proposed change

CDCC needs to put in place new margin call rules under the GCM model, including the treatment of Firm and Client excess margin in BAU situations. In addition, since the client excess margin is currently unknown at the individual client level (unlike the allocated margin calculated per client under the GCM Regime), this excess should not be eligible for porting and may not also be used by CDCC in its Default Waterfall.

Proposed changes

In a BAU situation, CDCC will prohibit the use of any excess margin in a client Margin Deposit Account (GCM/Non-GCM Regime) to cover any margin deficit in a Firm Margin Account. The use of margin excess in a client Margin Deposit Account of one regime may not be used to cover deficits in the Margin Account of another regime. For clarity, a margin call will be triggered if the Member’s Margin Requirement in one of the Margin Accounts (Firm, GCM Regime, Non-GCM Regime) is greater than the amount in the related Margin Deposits Accounts (Firm, GCM Regime, Non-GCM Regime). However, any excess in a Firm Margin Deposit may be used at any time to cover deficits in the Margin Accounts in both regimes (prioritizing the GCM Regime). In addition, to limit the operational impact on the Clearing Members, this coverage from the Firm to the clients Margin Account may be done automatically by the clearing system following a margin call, without the Clearing Member having to manually move any of this Firm excess margin. However, any margin excess, at the request of the Clearing Member, may be withdrawn in accordance with the terms and conditions applicable in the Operation Manual.

[19] Conditional on exceeding certain limits established in the Operational Manual.

Upon the default of a Clearing Member, the client excess margin would be excluded from the Default Waterfall, hence not accessible to the Corporation. However, any Firm excess would remain under CDCC control. In fact, by having control over this Firm excess, CDCC aims at minimizing, to the extent possible and on a best efforts basis, the losses to the Corporation and its stakeholders. CDCC would also prevent or restrict the suspended Clearing Member's right to withdraw any excess in Margin Deposits. Note that excess margin will be identified in value by the Corporation on a daily basis (on a BAU) and at the deposit level following the default of a Clearing Member.

V. Portability arrangements and client protection

Current process

Positions transfer is currently available at CDCC in a BAU situation (transfer of the client positions from an existing Clearing Member to an another Clearing Member) or a transfer upon a declaration of Non-Conforming or suspension status as a risk mitigation tool as described in CDCC's Default Manual.

Rationale of the proposed change

In the current context, CDCC does not offer an explicit solution for portability for individual clients. Although it is possible to transfer client positions at the physical account level, other key minimum conditions for portability may not be met, such as accurate knowledge of each client's positions and collateral value (to ensure that the client is not under-margined), up-to-date client information and a revised operational framework (for transferring positions and collateral to a willing and replacement Clearing Member) as well as rules and procedures to enable the implementation of portability principles.

Indeed, the porting arrangements (through the position transfer risk mitigation tool) are not sufficiently well defined at present and may lead to a less efficient process under the current standard default management, which implies that positions are expected to be closed-out. Portability of client positions and related collateral is an alternative to closing out the positions under the standard default management procedure, without adversely impacting the client's open positions, particularly during periods of stress, and to maintain continuous clearing access and generally promote efficient financial markets. These new arrangements increase the portability likelihood and are integrated under CDCC's current default management process.

Proposed changes

Positions transfer will continue to be offered at CDCC in a BAU situation or a transfer upon a declaration of Non-Conforming status as a first risk mitigation action. However, in the event that suspended status is declared, new portability arrangements are then offered as a new risk mitigation tool, applicable solely for individual clients under the GCM Regime.

CDCC proposes to offer (on a best effort basis) porting ("**Porting**"), which means the transfer by way of porting of any client who explicitly requests CDCC to transfer its positions and the Base

Initial value of the associated collateral (**"Porting Base Initial Margin Collateral"**)[20] to a Clearing Member that has accepted to act as a receiving Clearing Member (**"Receiving Clearing Member"**). The transfer by way of Porting is a client initiated process which requires the assent of a client prospective Receiving Clearing Member. Although not mandatory, the likelihood of Porting success could be increased by *ex ante* arrangements being in place. This also means that any client who does not explicitly request to be ported (within the required timeframe), will have indirectly consented to have their positions closed-out by CDCC.

Operationally, each Clearing Member will be required to keep certain key information that will allow CDCC to identify the account (at Risk Account level) for transfer by way of Porting to the selected Receiving Clearing Member, when a client explicitly expresses its choice of Porting to its new Clearing Member. It should be noted that under a BAU basis, Clearing Members will have to demonstrate, upon request from CDCC, that they maintain this one-to-one relationship between the individual accounts reported to CDCC and the client information. This information will have to be provided by Clearing Members to CDCC for all individual clients following the Clearing Member's default.

The transfer process (by way of Porting) will begin for CDCC immediately after the suspension of the Clearing Member and will continue until the end of the Default Management Period. However, clients wishing to be transferred by way of Porting are required to provide instructions (by sending a written request which should also include the identity of the accepting Receiving Clearing Member) to CDCC no later than noon on the next Business Day following the initiation of the transfer process. Thus, at the start of this process, a Base Initial Margin calculation (**"Suspension Point Margin Calculation"**) will be performed using the updated GCM Declaration File to determine the Open Positions and the Porting Base Initial Margin Collateral for each individual Client Risk Account.

It should be noted that the GCM Additional Margins (Intra-Day GCM Risk and Undeclared GCM Positions Risk) are also available to allow Risk Accounts to be fully margined[21], which is a minimum requirement by CDCC to allow for a transfer by way of Porting. It is also at this stage that the determination of the GCM/Non-GCM excess margin (as described in the previous section: Client excess margin treatment) is made. As mentioned, excess margin is not known by individual clients and is instead determined at the collateral pool level (Client GCM and Client Non-GCM).

CDCC will do its best efforts, following the request of a client to transfer by way of Porting its Open Positions and the Porting Base Initial collateral held by CDCC in respect of such individual client Risk Accounts, subject to (1) the consent of the Receiving Clearing Member and CDCC, (2) the completion of any additional documentation or requirements which may be required to transfer by way of Porting and (3) the available Porting Base Initial Margin Collateral remaining above a certain exposure limit (**"Porting Coverage Threshold"**) assessed by CDCC to proceed with a transfer by way of Porting. Note that upon confirmation from a Receiving Clearing Member accepting taking on a client from a suspended Member, the Receiving Clearing Member will become fully liable for the identity of the client requesting a transfer by way of Porting and

[20] Residual risk remains: risk that the client will not get the exact value of its collateral, residual fellow risk & other market and liquidity risks related to collateral liquidation

[21] Within a tolerance level determined by CDCC

the corresponding portfolio, including meeting any Margin Requirements and/or settlements associated with the transferred portfolio during and after the transfer process by way of Porting. CDCC will also notify all Clearing Members of the successful completion, or failure, as the case may be, of a transfer by way of Porting.

c. Comparative analysis

While developing its clearing model to support its GCM model, CDCC conducted a benchmarking analysis of other CCPs' segregation and portability model. CDCC consulted publicly available information[22] about CME Clearing ("**CME**"), ICE Clear U.S. ("**ICE**"), Eurex Clearing ("**EUREX**"), Australian Securities Exchange ("**ASX**") and LCH SA ("**LCH**") segregation and portability arrangements. The comparative table including comparisons with CDCC's proposed model is attached, and the analysis of each follows:

CFTC regulations

Under the Commodity Futures Trading Commission ("CFTC") regulations, CCPs such as the CME and ICE segregate customer positions and margin requirements from those of their clearing members[23]. Clearing members must collect margin for segregated customer accounts on a gross basis for each customer while collateral for each customer account is held on an omnibus basis. The collection of margins on a gross basis allows each customer's positions to be fully margined independently.

CME and ICE will port the positions to a receiving clearing member, subject to the approval of that clearing member. Collateral associated with the positions will be ported at equivalent value. However, with respect to customers, CME uses a "negative consent" approach, where customers must indicate to CME their desire not to be ported. Ported customers have the right to request a new clearing member once the porting process is complete. CME Clearing also performs a "white knight" analysis to identify clearing members with similar and/or complementary risk and business profiles to increase the likelihood of portability.

EMIR regulations

Under the European Market Infrastructure Regulation (EMIR), CCPs such as EUREX and LCH generally offer three (3) types of segregation to clients, with increasing levels of protection: Net Omnibus Segregated Account ("NOSA"), Gross Omnibus Segregated Account ("GOSA") and Individual Segregated Account ("ISA"). EMIR allows clients to indicate to CCPs the type of account they want, depending on their needs and the level of protection required.

In an ISA, a client's collateral is fully protected against losses of other clients resulting from loss-making positions. In omnibus accounts, there are varying degrees of protection against other clients' risk, which may include a mutualisation of losses and a pooling in a given account.

---

[22] CME qualitative disclosure Nov 2019; CME financial safeguards 2020; ICE qualitative disclosure April 2021; Eurex qualitative disclosure April 2020; Eurex booklet client protection; LCH qualitative disclosure 2020;LCH collateral account segregation; ASX qualitative disclosure Dec 2019

[23] Appendix A: Comparative Analysis Table

For Eurex and LCH, regardless of the type of account, porting is available at the request of the client and conditional on the approval of the surviving clearing member.

ASX proposes instead to retain the net omnibus structure (NOSA), but also proposes to offer an ISA client account type. The GOSA (or GCM) model is not proposed. In terms of portability, like many CCPs in the analysis, a receiving (or backup) clearing member will need to be appointed by the client prior to default and porting will be done at the client's request.

<u>Comparative table with CDCC</u>

The CDCC's proposed GCM regime is closer to the CFTC's, where clearing members do not offer a choice of protection to their clients (as proposed by EMIR) but rather apply the same treatment to the futures market. In this model, the fellow client risk is greatly reduced but remains since clients share the same collateral pool under the Default Waterfall process (as part of the loss allocation rules). In this model, it does not protect specific assets, assign excess or Variation Margin to any specific GCM client.

Please refer to the attached Appendix A for a comparison table, including comparisons with CDCC's proposed model. CDCC has analyzed the CCPs segregation and portability model on topics such as the different types of account structures, Variation Margin treatment, porting of positions and collateral and the fellow customer risk associated with the type of account. We also note that the porting of positions can be done either in bulk (at the omnibus account level) or on an individual basis. A bulk transfer of positions makes the porting less likely to succeed because all clients must agree to be carried to the same willing and receiving clearing member. Depending on the CCP, collateral porting can either be performed as actual asset transfer (for ISA) or in equivalent value to the original collateral. CDCC has also analysed other aspects such as the porting window or the measures put in place to facilitate porting, for example the appointment of a back-up clearing member prior to the declaration of a default period.

IV. IMPACTS ON MARKET

<u>Base Initial Margin Impact</u>

In order to calculate the increase on the Base Initial Margin requirement, CDCC requested all Clearing Members affected by the GCM Regime to provide a five-day data sample of individual client positions, declared at the minimum reporting level required by IIROC in their rules.

For each Clearing Member, CDCC first used the five-day sample to quantify the relative impact (%) of calculating the Base Initial Margin on a gross basis rather than a net basis. Subsequently, the relative impacts were used to project the new margin at the GCM Client Accounts level for the period from 2020-01-02 to 2021-01-15. These projections were finally used to generate the dollar amount analysis at the Clearing Member level as well as at the CDCC level.

Impact at CDCC level:
Based on this preliminary analysis, some Clearing Members would be impacted, as their margin would be calculated on a gross basis (in Client Omnibus Accounts) rather than on a net basis. On average the current Base Initial Margin at the CDCC level (i.e. for all Clearing Members) is at $ 9.2 billion, with the following distribution: GCM (81% on a net basis), Non-GCM (6%) and Firm (13%).

Following the introduction of the gross basis calculation for GCM client accounts, the Base Initial Margin would increase by $ 3.3 billion, bringing the average Base Initial Margin at $ 12.5 billion at the CDCC level, with the following distribution: GCM (86%), Non-GCM (4.5%) and Firm (9.5%).

Impact at Clearing Member level:
Among the affected Clearing Members, the observed increase at Clearing Member level are as follows: the minimum impact is 0.3%, the maximum is 215%, the mean is 54% and the median is 40%. When evaluating this impact on each Clearing Member's overall positions (i.e. including GCM, Non-GCM and Firm positions), the results are as follows: the minimum impact is 0.3%, the maximum is 102%, the average is 35% and the median is 30%.

<u>Intra-Day GCM Risk Additional Margin impact</u>

Based on our analysis, the average daily Additional Margin required on an intraday basis at CDCC level from June 2019 to March 2021 (excluding COVID-19 period) would have been approximately as follow : the minimum impact is $ 0.1M, the maximum is $ 121M, the mean is $ 18M (excluding the COVID-19 period, 2020-03-01 to 2020-04-30). During the COVID-19 period, the Additional Margin required would have been as follow : the minimum impact is $ 0.7M, the maximum is $ 622M, the mean is $ 144M. In fact, this Additional Margin would have increased by 700 % during the COVID-19 crisis due to significant changes in client portfolio positions (in combination with daily increase in the required Base Initial Margin per contract by CDCC) between the end-of-day positions (of the previous day) and the positions observed the following day (on an intraday basis).

Note that CDCC is already collecting intraday margins. Instead, this Additional Margin replaces this exposure and covers the difference between two consecutive business day updates of the GCM Declaration File. The main difference with the current processing is that no margin reduction will be allowed on an intraday basis (i.e. the value cannot be lower than zero) for these specific GCM positions in Client Omnibus Accounts. For other accounts, the intraday process remains the same and no additional impact will be observed.

V. IMPACTS ON TECHNOLOGICAL SYSTEMS

It goes without saying that, by its nature, the implementation of the GCM model has various material impacts on CDCC's systems. This aspect of the project will be subject to a Significant

Change Notice addressed to the Bank of Canada and to a notification for a significant change to CDCC's systems addressed to the Autorité des marchés financiers and the Ontario Securities Commission.

As previously mentioned, the implementation of the GCM model is part of a multi-year project. Since February 2020, CDCC has put in place a GCM working group that provides various and relevant stakeholders (Clearing Members, their service providers, regulators, etc.) with updates on the project progress, milestones and upcoming developments.

With respect to impact on external stakeholders, CDCC's preliminary view is that the GCM model (using the GCM Declaration File) is already implemented by many Clearing Members/service providers for the U.S. market, which greatly reduces the impact for the implementation of CDCC's GCM Regime model. However, since each implementation has its own particularities, there may still be important technological impacts on the Clearing Members systems to adapt for the Canadian futures market. The main proposed technological impact will be the requirements related to the GCM Declaration File which has been already shared with the relevant stakeholders. Appropriate user acceptance tests (internally and with the Clearing Members) will be conducted to ensure the new GCM model functionalities (including the collateral management and the margin call treatment linked to the Firm/Client segregation), the declaration and the reporting functions are appropriately handled in all the relevant technological systems. CDCC will continue its engagement with the Clearing Members and their service providers along the course of the project, in order to ensure operational readiness.

VI. IMPACTS ON TRADING FUNCTIONS

The original physical account structure for position management in CDCC Book Positions recorded in CDCS is not impacted and the trading/novation cycle via this account structure, will remain. Thus, no technological changes will be required for the trading functions.

VII. PUBLIC INTEREST

CDCC is of the view that the proposed amendments are not contrary to the public interest. In fact, the public and Clearing Members are generally requesting clear rules that are consistent with the best practices of other clearinghouses and are PFMI compliant.

VIII. PROCESS

The proposed amendments, including this analysis, must be approved by CDCC's board of directors and submitted to the Autorité des marchés financiers, in accordance with the regulatory self-certification process, and to the Ontario Securities Commission in accordance with the rules stated in Appendix "A" of Schedule "C" of CDCC Recognition Order dated April 8, 2014 (as amended from time to time). The proposed amendments and analysis will also be submitted to the Bank of Canada in accordance with the Regulatory Oversight Agreement.

The GCM model is a multi-year project scheduled for a single implementation expected in the second quarter of 2022.

IX. ATTACHED DOCUMENTS

Appendix A: Comparative Analysis Table
Appendix B: Proposed amendments to the Rules and Manuals.

Appendix A: Comparative Analysis Table

	CDCC	CME	ICE	EUREX	LCH	ASX
Account structure	- Position and margin is collected on gross basis for each client in a single collateral pool under the GCM Regime. - GCM Regime positions and collateral are segregated from Non-GCM Regime	CFTC Regime - Gross omnibus: Gross positions with single collateral pool	CFTC Regime - Gross omnibus: Gross positions with single collateral pool	EMIR regime - Net omnibus: Net positions with single collateral pool - Gross omnibus: Gross positions with single collateral pool - Individual Segregated Account (ISA): Segregate positions and collateral	EMIR regime - Net omnibus: Net positions with single collateral pool - Gross omnibus: Gross positions with single collateral pool - Individual Segregated Account (ISA): Segregate positions and collateral	Omnibus account or Individual Client Account (ICA). - Omnibus: Net positions - ICA: Segregate positions and collateral
Positions porting	Individual porting (provided under the GCM Regime only)	Individual porting	Individual porting	- Omnibus net: Porting in bulk of all customers - Omnibus gross & ISA: Individual porting	- Omnibus net: Porting in bulk of all customers - Omnibus gross & ISA: Individual porting	- Omnibus: Porting in bulk of all customers - ICA: Individual porting
Collateral porting	Equivalent collateral value	Equivalent collateral value	Equivalent collateral value	- Omnibus (net & gross): equivalent collateral value - ISA: asset transfer	- Omnibus (net & gross): equivalent collateral value of Initial Margin and add-ons. - ISA: asset transfer	- Omnibus: equivalent collateral value - ICA: asset transfer
Porting of Variation Margin	No	No	No	No	No	No
Porting window	**Start:** Suspension of the Clearing Member. **End:** End of the Default Management Period.	On an expedited basis through an established and well-tested legal regime.	N/A	**Start:** Insolvency Termination Event of the Clearing Member or the publication of the Porting Notice. **End:** Next business day following the default at 13:00 CET.	24 hours	24 hours
Fellow customer risk	Limited: No fellow risk between GCM Regime and Non-GCM Regime margin accounts.	Limited	Limited	- Net omnibus: Yes - Gross omnibus: Limited - Invidiual: No	- Net omnibus: Yes - Gross omnibus: Limited - Invidiual: No	- Omnibus: Yes - ICA: No
Loss netting between firm and client accounts	No	No	No	No	No	No
Porting to Receving Clearing Member (CM)	Requires approval from receiving Clearing Member.	- Requires approval from receiving Clearing Member. - CME performs "White Knight" analysis of Clearing Members to analyse potential porting options in advance of default period.	Requires approval from receiving Clearing Member.	Requires approval from receiving Clearing Member.	- Requires approval from receiving Clearing Member. - Customer should have backup Member before Default to facilitate porting.	- Requires approval from receiving Clearing Member. - Customer should have backup Member before Default to facilitate porting.
Negative/positive consent to port?	- Customer should contact CDCC to initiate porting. - Instructions and contact details will be posted in a notice on the CDCC website at the point of the Clearing Member default.	- Negative consent. Customers have to confirm willingness not to be ported. - Customers can request a new Clearing Member after they were transfered.	ICE may transfer non-defaulting customer positions to the extent permitted by law.	At customer's request	- At customer's request - Instructions and contact details will be posted in a notice on the LCH website at the point of the Clearing Member default.	At customer's request

APPENDIX B: PROPOSED AMENDMENTS TO THE RULES AND MANUALS

BLACKLINE VERSION

CANADIAN DERIVATIVES CLEARING CORPORATION

RULES

~~MARCH 19~~, 2021

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 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 A-7 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 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.~~

[…]

“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 Non-GCM 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 A-401(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 to receive its positions and the Porting Base Initial Margin Collateral in cases the client’s current Clearing Member becomes a suspended Non-Conforming Member in accordance with Subsection A-401(3)(b)

(ii) accepts taking on a client from a suspended Non-Conforming Member and be (a) deemed as owner of the ported portfolio, and (b) becoming fully liable for the identity of the client requesting a transfer by way of Porting and the corresponding portfolio, including meeting any Margin Requirements and/or settlements associated with the ported portfolio.

[…]

"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.

(2) Every Clearing Member shall retain and keep readily accessible to the Corporation in a form acceptable to the Corporation, all records required by these Rules, including without limitation, the records referred to in Subsection A-205(1), for at least seven (7) years from the end of the calendar

year to which such records relate in such form as the Corporation may authorize. The Corporation shall be entitled to inspect or take temporary possession of any such records at any time upon demand. All reports shall be available to the Corporation no later than 8:00 a.m. on the Business Day immediately following the report date. A Clearing Member must file any information requested by the Corporation within the time period specified in such demand.

[…]

RULE A-4
ENFORCEMENT

Section A-401
ACTION AGAINST A NON-CONFORMING OR SUSPENDED MEMBER

(1) The actions contemplated by the Rules in respect of a Non-Conforming Member or suspended Clearing Member may be taken in any sequence the Corporation deems appropriate.

(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:

(a) prohibiting and/or imposing limitations on the acceptance and/or clearance of Transactions by such Clearing Member;

(b) increasing the Margin Requirements for such Clearing Member or requiring additional Margin Deposits;

(c) requiring such Clearing Member to reduce or close out (or closing out on behalf of such Clearing Member) existing Transactions in such Clearing Member's accounts with the Corporation 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;

(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;

(e) sanctioning, reprimanding, fining or imposing a penalty on the Clearing Member;

(f) preventing or restricting the Clearing Member's right to withdraw any excess in Margin Deposits pursuant to Section A-607 or Section A-704; and

(g) suspending the Non-Conforming 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:

(a) applying the Margin Deposit (including, without limitation, Margin and Clearing Fund) of the suspended Clearing Member against the obligations of such Member to the Corporation, subject to Subsection A-402(3) and, for such purpose, selling, transferring, using or otherwise dealing or disposing of, or terminating under an Account Control Agreement authorizations to deal with, any property deposited as Margin Deposit at any time, without prior notice to the Clearing Member;

(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 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 regularly;

(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.

(4) Before exercising any actions contemplated under this Section A-401, however, the Corporation will enter into consultations with the Bank of Canada and specify the actions it considers exercising with respect to the Non-Conforming Member or suspended Clearing Member who may be affected by an order under subsection 39.13(1) of the *Canada Deposit Insurance Corporation Act* or the Affiliates of such Clearing Member.

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.

(2) Notwithstanding the provisions of Subsection A-402(1), if the Corporation shall determine in its sole discretion, taking into account the size and nature of a suspended Clearing Member's Margin Deposits, the market condition prevailing at the time, the potential market effects of liquidating transactions that might be directed by the Corporation, and such other circumstances that the Corporation deems relevant, that the conversion to cash of some or all of the suspended Clearing Member's Margin Deposits would not be in the best interest of the Corporation, other Clearing

[…]

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

(1) Prior to the Settlement Time on every Business Day, every Clearing Member shall be obligated to deposit Margin as determined by the Corporation in accordance with the Margin requirement methodology set out in the Risk Manual, in respect of:

(a) each Long Position,

(b) each Short Position,

(c) each Assigned Position,

(d) each exercised Option position, and

(e) each tendered Futures position;

in each account maintained by such Clearing Member with the Corporation at the opening of such Business Day, including each such position that arises out of a Transaction having a Settlement Time on such Business Day, but excluding Short Positions and Assigned Positions for which either the Underlying Interest or the Underlying Interest Equivalent as specified in Section A-706 has been deposited with the Corporation. When determining whether additional Margin is required from a Clearing Member, the Corporation shall take into account, subject to Subsection A-704(2), all Margin deposited by the Clearing Member and not returned by the Corporation to the Clearing Member.

(2) The Corporation shall apply the suspended Non-Conforming Member's Margin Deposit (including, without limitation, Margin and Clearing Fund), subject to Subsection A-701(3), to the discharge of:

(a) the Non-Conforming Member's obligation with respect to any Transaction accepted by the Corporation, whether such failure is caused or not by the Non-Conforming Member;

(b) a failure or anticipated failure to make any payment to the Corporation required of the Non-Conforming Member, whether such failure is attributable to the Non-Conforming Member or not;

(c) any loss or expense anticipated or suffered by the Corporation upon the liquidation of the Non-Conforming Member's position;

(d) any loss or expense anticipated or suffered by the Corporation pertaining to the Non-Conforming Member's obligations in respect of exercised Options or tendered Futures or OTCI for which settlement has not yet been made or in connection with hedging transactions effected for the account of the Corporation pursuant to Rule A-4 in respect of the Non-Conforming Member's positions in Options, Futures and OTCI;

(e) any protective or hedging transaction effected for the account of the Corporation pursuant to Rule A-4 in respect of the Non-Conforming Member's positions in Options and Futures;

(f) any protective or hedging transaction effected for the account of the Corporation pursuant to Rule A-4 in respect of the Non-Conforming Member's positions in any OTCI; or

(g) subject to Section A-1B01, any other situation determined by the Board.

(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.

(4) Except as permitted under Subsection A-609(4) in respect of Clearing Fund deposits and under Subsection D-607 in respect of Net Variation Margin Requirement deposits, and without limiting the right of the Corporation to invest the Margin Deposits in the form of cash under Subsections A-608(1) and A-707(1), the Corporation shall not grant a pledge over, transfer, or terminate under an Account Control Agreement authorizations to deal with, any property deposited as Margin Deposit by a Clearing Member which has not been designated as a Non-Conforming Member and suspended by the Corporation.

(5) Without limiting the rights of the Corporation under Subsection A-701(2), the Corporation may at its sole discretion grant a pledge over or transfer all property deposited as Margin Deposit (including, without limitation, Margin and Clearing Fund) by a Clearing Member which has been suspended, as security for, or in connection with, the Corporation's own obligations to any person incurred in order to obtain liquidity or credit for the purpose of assisting the Corporation to honour

its obligations on a timely basis further to the designation by the Corporation of such Clearing Member as being a suspended Clearing Member. In such circumstances, the Corporation shall grant a pledge over or transfer such Clearing Member's Margin Deposits before doing so with respect to the Clearing Fund deposits of other Clearing Members, in accordance with Subsection A-609(4). The Corporation shall be deemed to continue to hold all Margin Deposits regardless of whether the Corporation has exercised its rights under this Subsection A-701(5).

(6) Any account or sub-account of a Clearing Member with the Corporation that reflects Financial Assets deposited with the Corporation by or on behalf of such Clearing Member for Margin purposes and to which such Financial Assets are credited, shall be considered a securities account for purposes of the QSTA or any similar securities transfer law of any other jurisdiction.

[…]

Section A-704
WITHDRAWALS OF MARGIN

(1) Subject to Subsection A-704(2), in the event that on any particular day the amount of a Clearing Member's Margin on deposit exceeds the amount required to be deposited by such Clearing Member on such day pursuant to this Rule A-7, the Corporation shall authorize the withdrawal of the amount of the excess upon the submission to the Corporation, by such Clearing Member during the hours specified by the Corporation, of a withdrawal request in the form prescribed by the Corporation provided that the Clearing Member shall provide the Corporation with sufficient prior notice of such withdrawal request as set out in the Operations Manual.

(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.

BLACKLINE VERSION

PARCT 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

(1) When any Clearing Member is long or short any Futures and desires to close out such position, he shall sell, in the case of a Long Position, and buy, in the case of a Short Position, the same quantity of the same Series of Futures.

(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 ~~Multi-Purpose Account~~ 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 ~~Netted Client Account~~) shall be netted only if the Clearing Member informs the Corporation specifically that one is a closing transaction for another.

BLACKLINE VERSION

CANADIAN DERIVATIVES CLEARING CORPORATION
CORPORATION CANADIENNE DE COMPENSATION DE PRODUITS DÉRIVÉS

OPERATIONS MANUAL

~~FEBRUARY 8~~, 2021

PREAMBLE AND DEFINITIONS

PREAMBLE

This Amended and Restated Operations Manual cancels and supersedes the previous versions thereof.

CDCC and its Clearing Members are contractually bound by the Membership Agreement which is constituted by the Application for Membership when accepted by CDCC, as may be amended from time to time, which incorporates by reference the Rules of CDCC, as may be amended from time to time. The Rules of CDCC include this Operations Manual, as may be amended from time to time. In the case of conflict, the provisions of the Rules (excluding the Operations Manual) prevail over this Operations Manual. The provisions of the Rules (including this Operations Manual), in the case of conflict, prevail over the provisions of the Application for Membership.

The Operations Manual provides practical details with respect to (i) certain definitions, (ii) timelines, (iii) reports, (iv) trade processing, (v) open positions, (vi) exercises, tenders, assignments and delivery, (vii) settlement, (viii) additional margin processing, and (ix) clearing fees. The Operations Manual contains two schedules which are integral parts thereof: (a) the Risk Manual providing practical details with respect to margin and other risk management processes, including the Default Manual as an Appendix, and (b) the templates of depository agreements.

All times specified in this Operations Manual refer to Eastern Time, unless otherwise indicated.

All amounts specified in this Operations Manual refer to Canadian currency, unless otherwise indicated.

All capitalized terms used in this Operations Manual shall have the meanings assigned to them in the Rules unless the context otherwise requires or unless specifically defined differently herein.

DEFINITIONS

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

[…]

"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.

[…]

"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.

[...]

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

TIME FRAMES

Activity	Time Frames	Activity Type
Unsettled Item (Options Underlying deliveries only): Confirmation of settled items to be sent to CDCC	4:15 p.m.	Operational Deadline
Deadline for CDCC to respond to substitution or withdrawal request (other than (Fixed Income) Variation Margin)	4:30 p.m.	Obligation Deadline
OTCI (other than Fixed Income Transactions) - Trade Submission Deadline	4:30 p.m.	Operational Deadline
Projected Margin Report Computation	4:30 p.m.	System Activity
Request for Standard vs Mini Offset	5:00 p.m.	Operational Deadline
Position Transfers	5:25 p.m.	Operational Deadline
Same Day and T+1 Trade corrections	5:30 p.m.	Operational Deadline
Futures - Tender Notices submission	5:30 p.m.	Operational Deadline
Options - Exercise Notices submission	5:30 p.m.	Operational Deadline
Fixed Income Transactions and Futures contracts on Acceptable Securities - Netting Cut Off Time (Netted settlement instructions (Net Delivery Requirements and Net Payment Against Delivery Requirements) sent to CDS for settlement on the next business day)	5:30 p.m.	System Activity
FIFO: Daily reporting by Clearing Members of the Long Positions in each of their accounts in chronological order	5:30 p.m.	Operational Deadline
FIFO: Submission of Tender Notices	5:30 p.m.	Operational Deadline
Open Position changes / Position Change Submission (PCS)	6:00 p.m.	Operational Deadline
CDCC Clearing Application shutdown - Close of Business	6:00 p.m.	System Activity
LCM Only - All assets deposits other than cash (in respect of all Margin requirements)	6:30 p.m.	Operational Deadline
Fixed Income Transactions - available (next Business Day start)	7:00 p.m.	System Activity
GCM Declaration File - end-of-day cut-off	9:00 p.m.	System Activity/Deadline

CDCC-REPORTS

REPORT DETAILS

Report Code	Report Name	Report Description
Daily:		
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)
MD01	Options Unsettled Delivery Report	Lists unsettled deliveries for Options.
MD51	Futures Unsettled Delivery Report	Lists unsettled deliveries for Futures (does not include Share Futures) - the issue and number of Futures contracts which must be delivered - the account to which the delivery has been assigned and the opposite Clearing Member - the Settlement Amount and settlement date
MD52	Share Futures Unsettled Delivery Report	Lists unsettled deliveries for Share Futures (SF) - the issue and number of SF contracts which must be delivered - the account to which the delivery has been assigned and the opposite Clearing Member - the Settlement Amount and settlement date
MD70	Fixed Income Net Settlement Delivery Status Report	Status of Clearing Member's settlement activity at the Central Securities Depository with respect to Acceptable Securities on that day.
MD71	Settlement Obligation Calculated Amounts Reports	Provide information on each Settlement Instruction produced at the exit of the Intra-Day netting that is being considered in the PITSO.
MD72	Settlement Obligation Fulfillment	Provide the different settlement instruction status changes during the PITSO. The report is separated in three sections: Settlement, Pending Party At Fault and Cancelled.
MP01	Options Open Positions Report	Lists the Clearing Member's Open Positions for puts and calls.
MP02	Sub-Account Options Open Positions Report	Lists all Options Open Positions in sub-accounts of the Clearing Member's Client Account(s), Firm Account(s) and Multi-Purpose Account(s).
MP21	Contract Adjustment Report	Lists the Clearing Member's Long Positions and Short Positions before and after the relevant contract adjustment.
MP51	Futures Open Positions Report	Lists the Clearing Member's Futures and Options on Futures Open Positions for all accounts.
MP70	Fixed Income Forward Repo Position Report	Lists the Clearing Member's Repurchase Transactions accepted for clearing by CDCC.
MP71	Fixed Income Repo Conversion Position Report	Lists all of the Clearing Member's Repurchase Transactions that have progressed from Forward Repurchase Transactions to Running Repurchase Transactions on that day.

MP73	Fixed Income Running Repo Open Positions Report	Lists all of the Clearing Member's Running Repurchase Transactions as of that day.
MP75	Fixed Income Forward Net Settlement Positions Report	Lists all of the Clearing Member's forward Net Settlement Positions obligations.
MP79	Daily Repo Rate Mark to Market Report	Lists the Clearing Member's Repo Rate Requirements.
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 Fund Accounts (Firm, GCM Regime and Non-GCM Regime) categories, account types (Firm, Client, Multi-~~p~~Purpose) and sub-accounts.
MS07	Intra-Day Margin Report	Margin call details with Margin requirements by Margin Fund ~~a~~Accounts (Firm, GCM Regime and Non-GCM Regime) and Risk Accounts.
MS08	Daily Margin Activity Report	Lists details of positions by Class Group with Margin requirements.
MS10	Variation Margin Summary Report	Lists the details of the Fixed Income Clearing Member's Variation Margin activities and suggests securities to return if applicable.
MS70	Fixed Income Net Settlement Position Activity Report	Lists all of the Clearing Member's Fixed Income Transactions activities that contribute to its Net Settlement Position.
MS73	Entitlement Report	Lists all Fixed Income Clearing Member's coupon payments.
MS75	Fixed Income End of Day Settlement Instruction Report	Detail of Clearing Member's net settlement instructions to be sent to the Central Securities Depository after Netting Cut-Off Time.
MS77	Net Payment Against Delivery Requirement	Provide information at the sub-account level on settlements that occurred during the PITSO.
MS78	Forward NSP & Settlement Instruction Reconciliation Report	Information report containing Net Settlement Position information for the use of Clearing Member for reconciliation.
MT01	Options Daily Transaction Report	Lists details for all Option contracts from previous Business Day.
MT02	Options Exercised and Assigned Report	Lists totals for Options Exercised Positions and Assigned Positions by Series of Options (including the debit and credit dollar values of the Transactions).
MT03	List of Options/Cash Adjustments Report	Lists all trade adjustments and Open Position changes including cash adjustments and Position Transfers.
MT05	Options Consolidated Activity Report	Lists all positions with activity including Option Premiums.
MT06	Options Sub-Account Consolidated Activity Report	Lists positions with activity including Option Premiums for only the sub-accounts of Client, Firm and Multi-Purpose.
MT10	Unconfirmed Items Report	Lists all items that remained unconfirmed by the opposite member at the end of the current Business Day.
MT29	Trades Rejection Modification Report	Lists all original and modified trade rejections for the Clearing Member.
MT51	Final Futures Daily Transaction Report	Lists trade details for all Futures and Options on Futures activity.
MT52	Futures Tenders and Assignments Report	Lists all Tender Notices and Assigned Positions details.

TRADE PROCESSING

EXCHANGE TRANSACTIONS (OPTIONS AND FUTURES)

Positions of each Clearing Member are carried by CDCC for Client Account(s), Firm Account(s) and Multi-Purpose Account(s), each of which is maintained separately. CDCC supplies reports for each account.

Such separation requires that each Clearing Member designate whether a Transaction is submitted for a "Client", "Firm" or "Multi-Purpose" when submitting a Transaction for clearing. Furthermore, if separate sub-accounts are maintained for each account type, each Transaction must be coded to indicate the appropriate sub-account information.

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.

All Transactions for a Client Account which are not specifically designated as Closing Transactions shall be processed by CDCC as Opening Transactions. Opening Purchase Transactions increase the Long Position and Opening Writing Transactions increase the Short Position, in the particular Series of Options involved, as reported in the Clearing Member's Client Account. Opening Buy Transactions increase the Long Position and Opening Sell Transactions increase the Short Position, in the particular Series of Futures involved, as reported in the Clearing Member's Client Account.

Conversely, all Transactions designated as Closing Transactions decrease the Short Position and Long Position, respectively, for the particular Series of Options or Series of Futures in the reporting Clearing Member's Client Account. The CDCC Clearing Application verifies that all the Closing Transactions are valid and if the volume of a Closing Transaction exceeds the Open Position, the CDCC Clearing Application will reject it and replace it by an Opening Transaction for the entire volume.

The designation of a Transaction as "opening" or "closing" can be modified by the Close of Business.

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 ~~Netted Client Accounts,~~ Multi-Purpose Accounts and Firm Accounts.

SETTLEMENT

SETTLEMENT

INTRODUCTION

CDCC provides the mechanism for a single cash settlement with respect to amounts which are not settled through a Central Securities Depository due by a Clearing Member to CDCC and by CDCC to such Clearing Member on a daily basis, as prescribed in Paragraph A-801(2)(a) of the Rules. Clearing Members are able to make a single payment to CDCC or receive a single payment from CDCC that represents the net value of their purchases, sales, gains and losses and, on a monthly basis, clearing fees. Additionally, the CDCS incorporates the amounts due from the Clearing Members for Margin (excluding for the Net Variation Margin Requirement) and the exercise/assignment Settlement Amounts of cash settled Transactions.

Settlement of trading in a given currency is kept separate throughout the clearing procedure. All payments in the Canadian currency to and from CDCC are collected via an irrevocable payment processing system, known as the Large Value Transfer System (LVTS), or any other payment method approved by CDCC. Any US dollar payments are collected via a payment processing system known as Financial Electronic Data Interchange (FEDI). As described in the Risk Manual, the amount of Margin due by a Clearing Member on a given day is computed on the basis of that day's Open Positions shown on the relevant report.

SETTLEMENT CALCULATION

The calculation of a Clearing Member's Net Daily Settlement amount is based on Transactions (including adjustments, exercises, tenders and assignments) and Margin requirements and, on a monthly basis, clearing fees.

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.

(ii) The premiums, Futures Settlement of Gains and Losses, cash settled exercise/assignment Settlement Amounts and cash adjustments for each account type (Client Account(s), Firm Account(s) and Multi-Purpose Account(s)) are netted to a single pay or collect figure.

All cash settlements to CDCC are to be made to CDCC's settlement account at the Bank of Canada, or to any other account of CDCC with a Schedule I bank, as designated by CDCC.

FINES

CDCC applies fines with regards to late payments to deter Clearing Members from being late in the performance of their payment obligations.

THE FUTURE IS YOURS TO SEE.

[…]

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.

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

CLEARING FEES

Clearing services fees

Clearing fees are charged to both Clearing Members submitting a Transaction for clearing to CDCC and are based on the number of contracts involved. There is a minimum monthly clearing fee charge with respect to certain product types (Futures, Options and OTCI (other than Fixed Income Transactions)). Once a Clearing Member, otherwise eligible to do so in accordance with the Rules, starts using a particular clearing service by submitting a first Transaction of such product type, the applicable minimum monthly clearing fee shall be charged to the Clearing Member thereafter whether the Clearing Member actually uses the services or not during any given month, until the Clearing Member duly notifies CDCC in writing that it wishes to withdraw from the clearing services for that product type, effective sixty (60) days after CDCC receives such notice, provided there is no outstanding Transaction of such product type standing to an account of the Clearing Member at such time. Clearing Members should refer to the CDCC website www.cdcc.ca for a complete list of applicable fees.

Clearing fees are collected as a separate pay figure and are payable to CDCC on the morning of the 5th Business Day of each month through LVTS or any other payment method approved by CDCC. The MB01 Monthly Clearing Fees Invoice, MB02 Monthly Clearing Fees Details Reports and MB03 Monthly Fixed Income Clearing Fees Invoice are generated on every 2nd Business Day of each month and are available to Clearing Members on the morning of the 3rd Business Day of each month.

Fees for additional services

There are a number of discretionary services available to Clearing Members, in addition to the normal clearing services. These are published periodically as an Operational Notice to Members and can be viewed on the Secured Website. CDCC issues a statement on a monthly basis for these services. The fees are collected as per the date on the statement through LVTS or any other payment method approved by CDCC.

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

Any settlement cost incurred by CDCC within CDSX (or the settlement platform of another Central Securities Depository) will be charged to the Clearing Member with which CDCC is settling. Such cost will be included on the Monthly Clearing Fees Details Report (MB01) of the second Business Day of each month as a separate pay figure, payable to CDCC on the 5th Business Day of each month through LVTS or any other payment method approved by CDCC.

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 CDCC~~S~~ Clearing Application – Security Officer Identification form, which form shall be renewed on an annual basis.

Once duly designated, a Security Officer shall submit a CDCS Clearing User Profile Request form to request that CDCC add or delete a User Profile (this form is accessible on CDCC's Secured Website).

BLACKLINE VERSION

RISK MANUAL

~~FEBRUARY 2~~, 2021

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 Banking Holiday Risk, (7) Additional Margin for Variation Margin Delivery Risk, (8) 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~~to~~ 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.

[…]

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.

[…]

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

[…]

Scanning Risk: The difference between the initial reference ~~refnerece~~ 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

As set out in the Rules, every Clearing Member shall be obligated to deposit Margin with the Corporation, as determined by the Corporation. Deposits must be made in the form of eligible collateral, as specified in Section 2 of this Risk Manual, in an amount sufficient, taking into account the market value and applicable Haircuts.

The Corporation requires Margin Deposits to cover two types of requirements, namely:

- Margin requirement; and
- Clearing Fund Requirement.

1.1 MARGIN REQUIREMENT

The Margin requirement is composed of the Initial Margin and the Variation Margin.

1.1.1 Initial Margin

The Initial Margin is composed of the Base Initial Margin (or Adjusted Base Initial Margin, as the case may be) and the Additional Margins. In order to cover the Initial Margin described below, Clearing Members shall deliver to CDCC an acceptable form of Deposits in accordance with Section 2 of this Risk Manual.

[...]

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

~~(10)~~(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. 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~~to~~ uncovered exposures arising from new trades and the additional market risk that the Corporation could face during the Banking Holiday.

The incremental exposure is based on the historical fluctuation of the Base Initial Margin requirement over a specific period and it is designed to capture the potential uncovered Base Initial Margin requirement arising from new trades during the Banking Holiday.

With respect to the additional market risk, one (1) more Business Day is added to the MPOR of the Base Initial Margin requirement for the eligible tradeable products during the Banking Holiday. This Base Initial Margin requirement is then compared to the Base Initial Margin calculated with the MPOR. The difference between the two values corresponds to the additional market risk.

[...]

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 for 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 eligible under the GCM Regime, an additional risk segregation is done, where each account/positions 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").

~~1.1.3.1~~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.

~~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.~~

~~1.1.3.2~~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 Risk ~~a~~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 ~~Clearing Member level~~. 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 Risk ~~a~~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 ~~a~~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 ~~a~~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 credit[1] 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 ~~a~~Accounts 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

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

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 Undeclared 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 and required at the Firm Margin Account level.

[…]

Section 6: Appendix

6.1 BASE INITIAL MARGIN CALCULATION FOR OPTIONS, FUTURES AND UNSETTLED ITEMS[2]

For greater certainty, this sections only applies to Options, Futures and Unsettled Items.

To calculate the Base Initial Margin the risk methodology is based on the PSR and the VSR which are then converted into the Scanning Risk parameter. The Scanning Risk parameter represents the difference between the most unfavourable projected liquidation value and the initial reference price[3]. The most unfavourable projected liquidation value amongst the Risk Array is obtained by varying the values of the Underlying Interest and implied volatility according to several scenarios representing adverse changes in normal market conditions. The projected liquidation values are obtained using specific valuation models such as Black 76, Black-Scholes, Binomial and others.

The Scanning Risk is calculated at the Combined Commodity level and is denominated in the same currency as the contract. For contracts belonging to the same Combined Commodity, the Risk Array results are added up for all contracts under the same scenario. The highest loss represents the Scanning Risk.

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[4]	Options	Futures	Unsettled Items
Scanning Risk	●	●	●
Intra-Commodity		●	

[2] Unsettled Items resulting of a physical delivery of Government of Canada Bond Futures are margined under the VaR methodology.

[3] The initial reference price is the market price or the theoretical price derived from market observations.

[4] 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.

Inter-Commodity[5]	●	●	●
Short Option Minimum	●		

6.1.2 Intra-Commodity

Long positions on Futures maturing in one month are automatically matched with short positions on Futures maturing in another month. The resulting Base Initial Margin on these two Futures belonging to the same Combined Commodity, could be lower than the real risk associated with the combination of the two contracts. In order to cover this inter-month spread risk, a charge is included in the Base Initial Margin.

For the Futures, the Intra-Commodity which is an additional dollar amount charge applied to each combination of two different Futures, is determined as follows:

$$Intra - Commodity = \alpha \times \sqrt{n} \times \sigma$$

Where 'n' is the number of MPOR, $'\alpha'$ is equal to the confidence value equivalent to 99.87% (three standard deviations) of the cumulative normal distribution (applicable to all products except for the Three-Month Canadian Bankers' Acceptance Futures (BAX), the CORRA Futures (COA & CRA)) and the S&P/TSX 60 Dividend Index Futures) or equal to the confidence value equivalent to 99% of the cumulative student's t-distribution with 4 degrees of freedom (applicable to the BAX, CORRA Futures and the S&P/TSX 60 Dividend Index Futures). 'σ' is the volatility estimator of the Futures combination's daily profit and loss over the reference period and is computed using the EWMA approach. Further details on the EWMA are described in Appendix 6.5.

In addition, CDCC considers a floor for the EWMA volatility estimator. The level of such floor is calculated as an average of the daily EWMA volatility estimator observed over the last 10 years. The EWMA volatility estimator that will be used to calculate the Intra-Commodity cannot be lower than the calculated floor.

With respect to the BAX, the CORRA Futures (COA & CRA), the S&P/TSX 60 Index Standard Futures (SXF) and the S&P/TSX 60 Dividend Index Futures, CDCC calculates the Intra-Commodity for combinations of spreads and/or butterfly strategies and applies a same charge for a same group of combinations with close

[5] ~~Not applicable for Share Futures.~~

maturities. If multiple Intra-Commodity are defined, the Corporation will prioritize the ones providing the lowest Base Initial Margin.

The combinations and the spread priorities for the Intra-Commodity are updated by CDCC from time to time.

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.

[...]

6.3 RECALIBRATION 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.

BLACKLINE VERSION

DEFAULT MANUAL

~~APRIL 6~~, 20~~18~~

This Default Manual (the "Manual") intends to summarize the Rules and provides certain details concerning the default management process of the Canadian Derivatives Clearing Corporation ("CDCC" or the "Corporation") which is comprised of the actions, rights and remedies that the Corporation may take with respect to, and in connection with, Clearing Members in financial difficulty or potentially in default of any or all obligations under the Rules as well as the governance, steps in implementing the default management and risk mitigation tools available to the Corporation (thereafter the "Default Management Process"). The Manual also addresses the actions, rights and remedies that the Corporation may take with respect to all Clearing Members upon the declaration of a Recovery Process, which also forms part of the Default Management Process. In case of conflict between the provisions set out in this Manual and the Rules of the Corporation, the Rules will prevail. Terms with capitals which are not defined in this Manual have the meanings ascribed to them in the Rules.

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

1. ~~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. ~~d~~Describe the governance process followed by the Corporation;
3. ~~d~~Describe the risk mitigation tools that can be used by the Corporation; and
4. ~~d~~Describe the Recovery Process and the related powers.

Section 1: Default Management Process - Triggers and Implementation

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

1.1 OBJECTIVES OF DEFAULT MANAGEMENT

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

- To minimize Clearing Member losses deriving from an inability of the Corporation to make settlement payments, protect 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 ~~C~~client 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 as contemplated under Section A-401(3)(b) of the Rules.
- To minimize the market impact of the Default Management Process.
- To ensure the continued solvency of the Corporation and timely access to liquidity both during and after the Default Management Process.
- To communicate with regulatory authorities on actions taken throughout the Default Management Process.

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

[...]

1.4 POWERS OF THE CORPORATION IN THE DEFAULT MANAGEMENT PROCESS

[...]

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:

- Seize all Margin Deposits posted to the Corporation by the suspended Clearing Member, including its contribution to the Clearing Fund and use it to satisfy such Clearing Member's obligations.
- Seize control of all Open Positions held by the suspended Clearing Member.
- Gain access, and, if necessary, control of the suspended Clearing Member's prescribed records, so as to ensure the continued efficient processing of business, and to ensure the suspended entity continues to comply with all Rules.
- 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.
- Neutralize market exposures through the use of hedging instruments where, as determined by the Corporation, market conditions do not allow for an orderly auctioning or closeout of a suspended Clearing Member's Open Positions in a timeframe which is consistent with the Corporation's risk management model.
- Render a determination as to which Firm Accounts and Market Maker 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.
- Place all accounts of the suspended Clearing Member on liquidation only status.

- With respect to such accounts, effect liquidation of Open Positions, either directly by Corporation staff, or as appropriate, through appointed agents.
- Schedule an auction to transfer all remaining Open Positions to other Clearing Members at best available prices.
- Potentially postpone delivery obligations in accordance with Rule A-8 if, in the judgement of the Corporation, not doing so would expose the Corporation and surviving Clearing Members to increased risk of financial loss.
- Apply any and all available financial resources, as further described below.

1.5 DEFAULT MANAGEMENT PERIOD

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

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. A~~a~~ll obligations, losses and expenses are known or can reasonably be determined and have been successfully absorbed or otherwise settled; and
2. ~~t~~The Corporation has successfully reestablished a matched book.

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

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

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

i. Suspended Clearing Member Resources

- **Suspended Clearing Member Margin Deposit (Other than Clearing Fund deposits).** The first line of financial protection is the Margin Deposit posted by the suspended Clearing Member as part of the Corporation’s routine collateralization process;
- 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; and
- **Suspended Clearing Member’s Clearing Fund deposits.** As specified by the Rules, each Clearing Member (other than a Limited Clearing Member) must also post a contribution to the Clearing Fund. Once the Corporation has exhausted the suspended Clearing Member’s Margin Deposit, it will next use the suspended Clearing Member's contribution to the Clearing Fund in its loss absorption effort.

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

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

- CDCC has capital reserves set aside specifically for the purpose of absorbing any loss outstanding after the exhaustion of the suspended Clearing Member’s resources. This capital, which is currently $5 million, is referred to herein as “Default Risk Capital” or "DRC".

If, after applying these resources of the suspended Clearing Member and of CDCC, a shortfall still remains, CDCC will, as indicated below, use the required Clearing Fund deposits (referred therein as “Clearing Fund Requirement”) of the other Clearing Members to cover the loss.

iii. Surviving Clearing Members Clearing Fund Requirements

- The Corporation will subsequently use the Clearing Fund Requirements of the surviving Clearing Members (i.e. the Clearing Members that have not been suspended). For further details on the loss allocation, please refer to Appendix 2.

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

iv. 2nd Surviving Clearing Members' Clearing Fund Requirements

- If after applying all of the financial resources specified above, a loss still persists, the Corporation may request that the remaining Clearing Members (other than Limited Clearing Members) replenish their Clearing Fund Requirements, in the manner specified in Section A-610 of its Rules. The Corporation in total may apply up to a maximum of 200%[1] of the Clearing Fund Requirements of all such remaining Clearing Members, to satisfy the outstanding obligation as provided in Section A-609(5).

The Corporation shall follow the prescribed order of the Default Waterfall, and communicate with all relevant parties in an effective fashion. In the event that the Corporation is able to recover any loss incurred from the suspended Clearing Member, it shall first reimburse any other Clearing Member Clearing Fund Requirements that were used to extinguish losses, in the reverse order of their application, before reimbursing CDCC's own capital reserves used.

[...]

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

[1] The maximum percentage of 200% includes the prefunded surviving Clearing Members Clearing Fund Requirements described in sub-section iii.

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, on a best effort basis, to transfer by way of Porting ~~C~~client Risk Accounts within Client Accounts and Market Maker Non-Firm Accounts, ~~in whole or in part,~~ 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 C~~client Risk Accounts is an identified objective of the Default Management Process. For the avoidance of doubt, this includes transferring any Open P~~p~~ositions 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. Clients wishing to be transferred by way of Porting are required to provide transfer instructions to CDCC no later than noon on the next Business Day following the initiation of the transfer process. Thus, at the beginning of this process, a Base Initial Margin calculation will be performed (thereafter the **"Suspension Point Margin Calculation"**) using the updated GCM Declaration File to determine the Open Positions and the Porting Base Initial Margin Collateral for each individual client Risk Account.

CDCC will use its best efforts, 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, 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 and (3) the available Porting Base Initial Margin Collateral remains above CDCC Porting Coverage Threshold, as defined in Section A-102 of the Rules, for each individual client Risk Account.

3.1.2 POST TRANSFER BY WAY OF PORTING CONFIRMATION PROCEDURE

Upon the confirmation from a Receiving Clearing Member accepting taking on a client from a suspended Non-Conforming Member, the Receiving Clearing Member will become fully liable for the identity of the client requesting a transfer by way of Porting and the corresponding portfolio, including meeting any Margin Requirements and/or settlements associated with the transferred portfolio during and after the transfer process by way of Porting. The Margin Requirement impact of the incremental positions contained in the ported portfolio 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 portfolio 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 or meet any obligations associated with the portfolio 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 honor its obligations. A failure by such Clearing Member to pay the costs and damages 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.

3.2 LIQUIDATION

Upon a Clearing Member suspension, the Corporation may either liquidate, close-out, and/or auction the suspended Clearing Member's positions as a means to crystallize their value and re-establish a matched book. The liquidation process may take place before, in parallel or subsequent to any auction(s) if the Corporation is not satisfied with the auction(s) outcome. For example, the liquidation could be preferred to the auction if the suspended Clearing Member's portfolio is small and liquid. A portfolio that was successfully liquidated shall be referred to as a "Liquidated Portfolio".

3.3 DEFAULT AUCTION

CDCC may also choose to organize one or more Default Auctions as a means to re-establish a matched book following the suspension of a Clearing Member. The auction may affect a portion or the entirety of the suspended Clearing Member's unmatched positions. The terms and the procedure governing the Default Auction are summarized below:

3.3.1 PRE-AUCTION PROCEDURE

Before proceeding with the suspended Clearing Member's portfolio auction, the Corporation must:

- Identify the Clearing Members which can be invited to participate in the auction.
- Determine which positions of the suspended Clearing Member will be part of the auction and distribute such positions into different portfolios (thereafter "Auction Portfolios").
- Determine the value of the surviving Clearing Members' financial resources at risk in each Auction Portfolio.

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 class[2] contained in such Auction Portfolio (including hedged positions and Hedge Open Positions if applicable), either directly, through their CDCC membership, or indirectly[3], through a pre-existing clearing relationship with another CDCC Clearing Member whose membership covers the relevant asset class(es) with CDCC.
- Participation to the Default Auction is voluntary for all Eligible Clearing Members. However, the participation in the Corporation's annual default simulation is mandatory for all Clearing Members.
- For each Auction Portfolio, the Corporation will invite all Eligible Clearing Members to confirm their intention to participate in the upcoming auction. Clearing Members who wish to participate in the auction shall send such confirmation in the prescribed time period specified in the invitation

[2] An asset class is a category of products sharing similar characteristics. Three different asset classes are cleared at CDCC, namely Futures, Options and Fixed Income.

[3] An indirect participant must, as part of the CDCC annual due diligence process, demonstrate that it is an active participant in the relevant market with a pre-established relationship with another Clearing Member acting as its Clearing Member for that relevant asset class.

notification. Clearing Members who confirmed their intention to participate in the auction are referred to as “Auction Participants”.

- All Auction Participants understand and acknowledge, for the purpose of the auction, that they will receive certain confidential information, including confidential information related to the suspended Clearing Member, and agree to treat such information with the highest standard of confidentiality.
- All Auction Participants shall participate in the auction in good faith, and any loss suffered by the Corporation as a result of any dishonest or fraudulent act of any of the Auction Participants whether committed alone or in collusion with others shall be charged to the wrongdoer.

b) Auction Portfolio determination

- The Corporation may auction the suspended Clearing Member’s portfolio in whole or in part, by decomposing it into smaller Auction Portfolios, if deemed necessary.

c) Allotment of financial resources to Portfolio Incentive Pools

- Before conducting an auction, the Corporation will allot, on a preliminary basis[4], the Prefunded Financial Resources to each Portfolio Incentive Pool related to each Auction Portfolio or Liquidated Portfolio.

[4] The final allocation of financial resources to absorb losses, i.e. to discharge CDCC of obligations or losses, can only be done once the amount of losses are known and final, as described in section 3.6.

[...]

Appendix 2: Loss Allocation Methodology

This appendix describes how the Corporation will allocate losses amongst Clearing Members and CDCC, or, in other words, what resources will be used to extinguish losses. As outlined in Sub-sections 1 and 2 below, the loss allocation methodology differs depending on the type of financial resources used to extinguish losses, e.g. CDCC Default Risk Capital, Clearing Fund Requirements, etc.

This loss allocation process can only be done after the end of the Default Management Period, when losses are known. These losses include all default related obligations, costs or expenses, incurred or sustained by the Corporation in connection with the administration, auction, closing-out, liquidation, hedging, financing or transfer of positions or collateral.

The final loss allocation process does not take into account the preliminary allotment of financial resources and PIP as described in Appendix 1, which is performed for information purposes only.

The loss allocation methodology is based on the four following steps:

1. Determination the composition of each Final Portfolio
1. Creation of the Portfolio Allocation Pools ("PAPs")
2. Determination of the amount of losses for each PAP
3. Allocation of financial resources to each PAP

I. Determination of the composition of each Final Portfolio

The Corporation shall first group together a suspended Clearing Member's positions which have been closed-out together, whether as an auctioned portfolio, a liquidated portfolio or a group of torn-up positions (each, a "Final Portfolio").

The Final Portfolio shall only be composed of eligible positions of three distinct portfolios for ~~a single~~ 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.