

NOTICE TO MEMBERS

No: 098-25

July 25, 2025

SELF-CERTIFICATION

AMENDMENTS TO THE RULES AND OPERATIONS MANUAL OF THE CANADIAN DERIVATIVES CLEARING CORPORATION ON PARTICIPATION REQUIREMENTS

On January 30, 2025, the Board of Directors of the Canadian Derivatives Clearing Corporation ("CDCC") approved certain amendments to CDCC's Rules and Operations Manual (hereafter the "Rules") in order to implement the Participation Requirements initiative.

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

You will find attached hereto the amendments set to come into force and to be incorporated into the version of the Rules of CDCC that will be made available on the CDCC website at www.cdcc.ca on July 31, 2025, after market close.

The amendments described in the present notice were published for public comment by CDCC on March 6, 2025 (see Notice 037-25). Further to the publication of this Notice, CDCC received comments. A summary of the comments received as well as responses from the CDCC to these comments is attached hereto. Minor modifications have been made since the publication of the notices which were submitted to the regulators.

If you have any questions or concerns regarding this notice, please contact Sophie Brault, Legal Counsel, by email at sophie.brault@tmx.com.

George Kormas President

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APPENDIX A BLACKLINE VERSION

CANADIAN DERIVATIVES CLEARING CORPORATION RULES

OCTOBER 24, 202<u>5</u>4

PART A - GENERAL

RULE A-1 – DEFINITIONS

[...]

Section A-102 – Definitions

[...]

"Authenticator" – means a factor intended to provide assurance that a person or an entity is who they claim to be, as evidenced by an associated credential linked to that factor. Factors may include: physical or virtual card, certificate or token, challenge, image, password, PIN, fingerprint or an iris scan.

"Authorized Representative" – means a person for whom the Clearing Member has filed evidence of authority pursuant to Section A-202.

[...]

"CDCC Contact" – means any key personnel or staff member employed by the Clearing Member that is required to conduct business with the Corporation during Business Hours.

"CDCC Daylight Credit Facility" – means the daylight credit facility of the Corporation, the amount of which is subject to change from time to time, with prior notice to Clearing Members.

[...]

"CDS Clearing and Settlement System CDSX" – means the clearing and settlement system comprising the Depository Service and the Settlement Service (each as defined in the CDS Participant Rules) of CDS.

"Central Securities Depository" – means any central securities depository acceptable to the Corporation, including CDS.

[...]

<u>"Clearing Message"</u> – means electronic messages sent by the Corporation to Clearing Members for their respective accounts reflecting the activities performed in CDCC services.

"Client" – means those customers of a Clearing Member who are not Market Makers or trading on behalf of a broker.

[...]

"Platform" – means the application, software, web-site, and/or other means of access, including all modules, functions, programs, data files, databases, database content, data and other related information, and all technology resources and infrastructure (including all hardware and software), interfaces, visual expressions, screen formats, report formats and other design features of, supporting, or incorporated into the Platform made available to the Clearing Member by the Corporation. The Platform includes all updates, releases, enhancements, developments, modifications, improvements, and corrections thereto from time to time.



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

[...]

"Reconnection Attestation" – means a form prescribed by the Corporation signed by a Clearing Member's Authorized Representative, which describes the measures taken by the Clearing Member to remediate the Security Incident. This includes such representations required as determined by the Corporation to provide assurance of controls implemented to prevent recurring Security Incidents.

Reconnection Checklist" means a checklist prescribed by the Corporation with the required remediation measures deemed necessary, to address the Security Incident.

"Recovery Event" – has the meaning attributed thereto in Section A-1002(1).

[...]

"Security Incident" means an event in the normal operation of the Clearing Member's system(s) that results in the loss of the Corporation's data or system integrity, unauthorized disclosure of sensitive information related to the Corporation, or the inability of the Corporation to conduct essential clearing and settlement functions.

"Securities Intermediary" – has the meaning assigned to this term by the QSTA.

RULE A-1A - MEMBERSHIP IN THE CORPORATION

Section A-1A01 - Eligibility for Membership

- (a) In order to apply for membership and subject to Subsection A-1A01(b), an applicant must be:
 - (i) a member or approved participant in good standing with an exchange recognized in a Canadian province or a dealer member in good standing with the <u>Canadian Investment Regulatory Organization Investment Industry Regulatory Organization of Canada</u>; or
 - (ii) a bank or an authorized foreign bank to which the *Bank Act* (Canada), as amended from time to time, applies; or



Section A-1A02 - Standards of Membership

Every applicant to become a Clearing Member must meet such standards as may be adopted from time to time by the Board, including the following:

- (a) the applicant must meet the minimum financial resilience requirements then in effect, in accordance with Section A-301 or, in the case of an applicant to become a Limited Clearing Member, the minimum financial resilience requirements for admission as a Limited Clearing Member then in effect, in accordance with Section A-1B04;
- (b) the applicant must be engaged, or propose to engage, in the clearance of Options or Futures which are the subject of Exchange Transactions or in the clearance of Fixed Income Transactions or other OTCI transactions through the facilities of the Corporation;
- the applicant shall demonstrate to the Corporation that it maintains adequate operations facilities and staff and has sufficient and competent personnel for the expeditious and orderly transactions of business with the Corporation and other Clearing Members (including the ability to process the expected volumes and values of transactions it intends to clear in a timely manner required, including during peak hours and days), and to meet the requirements of these Rules;
- (d) unless the applicable Entity is applying to become a Limited Clearing Member, the applicant has deposited with the Corporation its initial deposit with the Clearing Fund in the amount and at the time required by the Rules and has signed and delivered to the Corporation an agreement in such form as the Board shall require; and
- unless the applicable Entity is applying to become a Limited Clearing Member, the applicant has provided the Corporation with its initial Supplemental Liquidity Contributions to the Supplemental Liquidity Fund in the amount and at the time required by the Rules and the Risk Manual.
- (f) The applicant shall fulfill within reasonable the time frame established by the

 Corporation, any operational and risk testing requirements (the scope of such testing to be determined by the Corporation in its sole discretion) and related reporting requirements (such as reporting the test results to the Corporation in a manner specified by the Corporation) that may be imposed by the Corporation to ensure operational and risk management capabilities of the applicant.
- (e)(g) the applicant must meet the cybersecurity requirements then in effect and shall complete and deliver to the Corporation such confirmation as required by these Rules.

Section A-1A03 - Admission Procedure

[...]

Nothing contained herein shall be construed as derogating or attempting to derogate from the right of any applicant whose application has been disapproved to avail itself of any right of appeal which is provided to such applicant by applicable law.



If the Board approves the application, a Clearing Member must fulfill all conditions attached to its approval and commence operations within six months of being notified of its approval, unless the Corporation agrees to extend this delay. Failing this, the Corporation may, at its sole discretion, consider the granting of the approval to have expired and may therefore inform the potential Clearing Member that it will be asked to provide additional information, after which the request will be submitted for reapproval.

Section A-1A04 - Non-Conforming Member

(1) A Clearing Member who is or may become insolvent or unable to meet its obligations shall immediately notify the Corporation of its situation by telephone. Such notice shall be confirmed by the Clearing Member by notice in writing to the Corporation sent by <u>faesimile email</u> transmission within the next business day.

[...]

(5) If a Clearing Member is late in making a payment at Settlement Time, the Corporation shall impose fines and may deem that Clearing Member a Non-Conforming Member, in accordance with Section 7 of the Operations Manual. Additionally In addition, the Board may take disciplinary measures as set forth in Rule A-5 against the Non-Conforming Member.

[...]

Section A-1A11 - Reinstatement of mMembership

[...]

RULE A-2 - MISCELLANEOUS REQUIREMENTS

Section A-202- Evidence of Authority

(1) Every Clearing Member shall file with the Corporation a certified list of the signatures of the representatives ("Authorized Representatives") of such Clearing Member (including partners and officers) who are authorized to sign certificates, cheques, agreements, receipts, orders and other papers necessary for conducting business with the Corporation, together with an executed copy of the powers of attorney, resolutions or other instruments giving such authority. Clearing Members shall promptly notify the Corporation by email whenever there is a change to Section A-202(1).

Section A-205 – Records

[...]

(2) Each Clearing Member shall:

(a) prepare, maintain and keep adequate accounting systems, internal accounting controls, and procedures for safeguarding client and Clearing Member assets (this includes, but is not limited to, preparing and maintaining complete and accurate reconciliations of all accounts on a daily basis and submitting position changes to the Corporation each trading day not later than the time specified in the Operations Manual;



- (b) Clearing Members shall advise the Corporation by telephone (confirmed in writing), email or hand delivered notice on the Business Day on which a report is deemed to have been received or the Expiration Date of any item requiring change for any reason and the failure to report any such required change by such time shall constitute a waiver of the Clearing Member's right to have such item changed;
- (a)(c) submit to the Corporation reports, financial statements or other information as the Corporation may reasonably require, from time to time.
- (3) 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. ET 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.

Section A-206- Notices and Reports by the Corporation

(1) Unless otherwise specifically provided for in any other Rule, the Corporation may give notice to a Clearing Member in such manner as the Corporation deems appropriate in the circumstances of the notice being given, including by telephone, by hand delivery, by fax and by Electronic Communication.

- (4) The Corporation may from time to time prescribe the form of reports to be given by the Corporation to Clearing Members. These reports may be sent by hand delivery, fax or Electronic Communication.
- (5) Each Clearing Member shall maintain and upgrade their computer system, network, software and communication technology with the standards and protocols established by the Corporation from time to time. a computer system at the Clearing Member's designated office capable of obtaining, displaying and receiving Electronic Communications from the Corporation. Each Clearing Member should ensure that it is capable of shall have an obligation to review promptly each report, notice, instruction, data or other information made available receiving Electronic Communications and Clearing Messages and shall have the obligation to retrieve and review them daily. by the Corporation to such Clearing Member through Electronic Communication. Each Clearing Member shall be responsible for advising the Corporation by telephone (confirmed in writing), fax or hand delivered notice on the Business Day on which a report is deemed to have been received or the Expiration Date of any item requiring change for any reason and the failure to report any such required change by such time shall constitute a waiver of the Clearing Member's right to have such item changed the distribution of such information to appropriate departments and other interested parties, including third-party service providers. Clearing Members shall notify the Corporation as soon as practicable if it is unable to communicate reliably with CDCS (CDCC Clearing System) and accessing Clearing Messages and Electronic Communication.



[...]

- (7) Subject to Subsection A-206(89):
 - (a) a notice given by telephone shall be deemed to have been received by a Clearing Member as of and to be effective from the time of the telephone call to an individual in accordance with Paragraph A-206(2) or Subsection A-206(9), as the case may be, as recorded in the relevant Notice File, unless the notice or another Rule specifically provides otherwise;
 - (b) a notice given or report sent <u>emailby fax</u> shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received as of and, unless otherwise stated, to be effective from and after the time of the <u>emailfax</u> on the day it is sent, unless the notice or another Rule specifically provides otherwise;
 - (c) a notice or report given by Electronic Communication shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received on and to be effective as of the day it is sent, unless the notice or another Rule specifically provides otherwise; and
 - (d) a notice given by mail shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received and to be effective on the fifth day after mailing and a notice given or report sent by hand delivery shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received and to be effective on the earlier of when it actually is received by the Clearing Member and the next Business Day immediately following the date it was sent.
- (8) Where a notice is given or a report is sent by any means out of Business Hours or on a day that is not a Business Day, the notice or the report, as the case may be, shall be deemed to have been received on the earlier of
 - (a) the time the Corporation confirms it has actually been communicated to a responsible individual with the Clearing Member; and
 - (b) the beginning of the Business Hours on the next following Business Day.

For greater certainty, under Paragraph A 206(9)(b), where a notice is given or report is received prior to 9:00 a.m. on a Business Day, it shall be deemed to have been received not later than 9:15 a.m. on that Business Day. The Corporation shall maintain a list of emergency contact telephone numbers; and email addresses and/or fax numbers of not less than three responsible individuals employed by each Clearing Member with whom the Corporation can communicate at all times during the Business Hours if the Corporation determines such communication is necessary or advisable. It shall be the responsibility of each Clearing Member to ensure that the individuals so selected can be readily contacted during all Business Hours, and that the contact numbers for them are kept current.

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Section A-210- Distribution of Information, Confidentiality and Use of CDCC Materials



(3) Use of CDCC Materials

- (a) The Corporation grants each Clearing Member a limited, non-exclusive, revocable and non-transferable license to use CDCC Materials only for uses directly related to the Clearing Member's use of CDCS. The Clearing Member will not use CDCC Materials or any information obtained or derived from CDCC Materials except in accordance with this license. The Clearing Member acknowledges and agrees that all ownership right in the CDCC Materials belongs to the Corporation or its suppliers.
- (b) If a Clearing Member (with CDCC's permission) discloses CDCC Materials or any information obtained or derived from CDCC Materials to a client (including to any of its Affiliates) receiving services from a Clearing Member, the Corporation may require the Clearing Member to obtain an undertaking from such client to comply with Section A-210 in its use of CDCC Materials or any information obtained or derived from CDCC Materials.
- (c) Except as provided in Paragraphs (a) and (b) of this Subsection A-210(3), a Clearing Member will not: (i) copy or modify the CDCC Materials; (ii) sell, sublicense or otherwise transfer the CDCC Materials to any third party; (iii) reverse engineer or create derivative works based on the CDCC Materials; or (iv) use, disclose or communicate CDCC Materials or any information obtained or derived from CDCC Materials to or for the benefit of any third party or any Affiliate of the Clearing Member by any means whatsoever whether as a service bureauor back office service provider, outsourcer, or wholesaler to any third party or Affiliate of the Clearing Member or for the benefit of any joint venture or partnership to which the Clearing Member is a party.
- (e)(d) If a Clearing Member provides access or discloses CDCC Materials or any information obtained or derived from CDCC Materials to a third party service provider or service bureau, the Corporation will require the third party service provider or service bureau to enter into a written agreement requiring such third party service provider or service bureau to comply with the Corporation requirements in its use of CDCC Materials and any information obtained or derived from CDCC Materials.

[...]

Section A-213 – Accounts with Financial Institutions

Every Clearing Member shall <u>at the commencement of its clearing activities and throughout its</u> participation, establish, maintain, designate and operate:

- (a) <u>designate</u> an account or accounts <u>established and maintained by it inwith</u> a financial institution acceptable to the Corporation <u>(Designated Bank)</u> for each currency of the Transactions that it enters into.
- (b) Canadian dollar contingency payment account with a financial institution other than the

 Designated Bank in order to meet compliance with all obligations in the event of the failure of the

 Designated Bank(s).

<u>Clearing Members may be required to provide evidence of compliance on an ongoing basis, as requested by the Corporation from time to time.</u>



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Section - A-217- Corporation as Agent Re Settlement Accounts

Each Clearing Member will establish a separate Canadian dollar bank account, and if a Clearing Member clears Options, Futures, or Options and Futures, a separate United States of America dollar Bank account at its Designated Bank, for settling Transactions in this currency (the "Settlement Accounts"). Each Clearing Member hereby appoints the Corporation to act as its agent, and the Corporation hereby accepts such appointment upon the terms and conditions hereof, solely for the purpose of effecting, on behalf of such Clearing Member, electronic payment instructions from the Settlement Accounts for the purpose of paying all amounts owing by the Clearing Member to CDCC. Nothing herein shall abrogate a Clearing Member's obligations hereunder to maintain sufficient funds in the Settlement Accounts for the purposes of ensuring complete and timely settlement of the Clearing Member's obligations hereunder.

[...].

Section A-221- Contact Information

Each Clearing Member shall <u>upon approval of the application of the Board and thereafter be responsible to:</u>

- (1) , upon admission as a Clearing Member and, promptly following any change in such information, communicatemaintain and provide to the Corporation the accurate names and full contact information for its Clearing Member Level 1, Clearing Member Level 2 and Clearing Member Level 3 CDCC Contacteontacts, as set forth in the Operations Manual:
- (2) maintain and provide to the Corporation accurate names and full contact information of its key operational personnel in a form acceptable to the Corporation;
- (3) ensure that CDCC Contacts are easily accessible during all Business Hours and that their contact details are up to date;
- (4) Promptly notify the Corporation in writing whenever a change is made to Subsection A-221 (1) and (2).

[...]

Section A-225 - Platform access

If the Corporation determines that Clearing Members are required to have access to a Platform, the Clearing Members shall comply with the Corporation's requirements which will be provided from time to time.

Section A-226 - Clearing Operations

Each Clearing Member shall be responsible for:

- (1) conducting its clearing operations in a manner which does not disrupt CDCS processes;
- (2) employing a sufficient number of personnel or maintain proper contractual arrangements with third-party service providers with appropriate experience and expertise
- (3) maintain adequate supervisory authority over all internal personnel conducting business with the Corporation or over the activities and functions performed by third-party service providers;



- (4) each Clearing Member shall inform the Corporation in writing before changing its service bureau used to process its trades and operational activities
- (1)(5) having and maintaining a written business resilience related to policies and procedures, including disaster recovery and business continuity plan and are tested on a periodic basis. These policies and procedures should be designed to enable a Clearing Member to continue its activities during an emergency or significant business disruption. Such procedures must be reasonably designed to enable the Clearing Members to stay in business in the event of a significant business disruption in order to meet obligations to its clients and counterparts and must be derived from the Clearing Member's assessment of its critical business functions and required levels of operation during and following a disruption. Clearing Members shall promptly provide to the Corporation, upon request, confirmation of the existence, currency, and testing of its business resilience policies, procedures and practices and disaster recovery and business continuity plans;

Section A-227 Security Information

- 1. The CDCS system confirms the validity of the Authenticator before accepting any communication, transaction, authorization or instruction. Access is used by the Clearing Member directly through its own systems or on the Clearing Member's behalf by other persons authorized by the Clearing Member (including service bureaus and third -party service providers).
- 2. Clearing Members must take appropriate measures to protect the security of their access and prevent the unauthorized use thereof. A Clearing Member must immediately notify the Corporation if it has reason to believe that any Authenticator has been compromised and take such other security measures as may be necessary or appropriate.

Section A-228 – Operational Risk Management

Each Clearing Member shall:

- 1. have and maintain written risk management policies, procedures and controls in support of the Clearing Member's ability at all relevant times, to oversee their unique operational risk profile and operational risks;
- promptly provide to the Corporation, upon request, information and documents regarding its risk
 management policies, procedures and practices, including, without limitation, information and
 documents relating to the liquidity of its financial resources, settlement procedures operational
 issues;
- 3. provide the Corporation with adequate assurances regarding its financial responsibility and operational capacity to manage the prompt and accurate clearing, settlement and processing of transactions;
- 4. have the capacity to fulfill collateral, payment, and delivery obligations as required by the Corporation;
- 5. be able participate in risk management activities as it may be defined and requested by the Corporation from time to time



Section A-229 - Testing Requirements

- 1. The Corporation may, from time to time, determine Clearing Members that shall be required to fulfill, within the time frames established by the Corporation:
- a. certain operational and risk testing requirements and related reporting requirements that may be imposed by the Corporation to ensure the continuing operational and risk management capabilities of the Clearing Member;
- <u>b.</u> <u>certain risk management testing and reporting, including, but not limited to, default management and operational recovery testing;</u>
- c. certain disaster recovery and other related business continuity testing scenarios including but not limited to cybersecurity.
- 2. The Corporation may, from time to time, determine Clearing Members that shall be required to participate in annual business continuity testing that the Corporation reasonably determines are necessary for the maintenance of fair and orderly markets in the event that business continuity plans are required to be activated.
- 3. <u>Upon notification that a Clearing Member has been designated to participate as described in subsection A-227 (1) and (2), Clearing Member shall :</u>
 - a. fulfill, within the timeframes established by the Corporation, certain testing requirements (the scope of such testing to be determined by the Corporation in its sole discretion) and related reporting requirements (such as reporting the test results to the Corporation in a manner specified by the Corporation) that may be imposed by the Corporation; and
 - b. appoint an individual that will serve as a liaison between the internal Clearing Members' organization and the Corporation to ensure adequate communication and coordination on testing activities and other requirements.

Section A-230 - Cybersecurity Requirements

A Clearing Member must maintain specific cybersecurity standards and requirement in order to be qualified to use access and receive services. Clearing Members will be required to demonstrate that they meet the following qualification criteria and the standards provided in these Rules.

A Clearing Member must (a) update its cybersecurity program and framework operational processes periodically based on a risk assessment or changes to technology, business activities, the threat environment, and/or regulatory environment and; (b) ensure appropriate protection of the interface and/or connectivity between its systems and those of CDCC, in order to prevent the interruption or contamination of CDCC's systems in the event of a Security Incident at the Clearing Member.

Each Clearing Member shall complete and deliver a written document in a form prescribed by the Corporation that confirms the existence of an information system cybersecurity program and includes the



representations listed below ("Cybersecurity Attestation") to the Corporation at least every two years, on a date that is set by the Corporation. The Corporation may request the Clearing Member to provide an additional confirmation in the event of a cybersecurity incident.

Each Cybersecurity Confirmation shall (1) be on a form provided by the Corporation; (2) be signed by an Authorized Representative; and (3) include the following representations, made with respect to the two years prior to the date of the Cybersecurity Confirmation:

- 1. The Clearing Member or applicant has defined and maintains a comprehensive cybersecurity program and framework that considers potential cyber threats that impact their organization and protects the confidentiality, integrity and availability requirements of their systems and information.
- 2. The Clearing Member or applicant has implemented and maintains a written cybersecurity policy or policies approved by senior management or the organization's board of directors, and the organization's cybersecurity framework is in alignment with standard industry best practices and guidelines, as indicated in the form of Cybersecurity Confirmation.
- 3. If using a third party service provider or service bureau(s) to connect or transact business or to manage the connection with the Corporation, the Clearing Member or applicant has an appropriate policy program to (a) evaluate the potential cyber risks and impact of these third-parties, and (b) review the third-party insurance reports.
- 4. The cybersecurity program and framework protect the segment (s) of the Clearing Member or applicant's system that connects to and/or interacts with the Corporation.
- 5. The Clearing Member or applicant has in place an established process to remediate cyber issues identified to fulfill the Clearing Member or applicant's regulatory and/or statutory requirements.
- 6. The cybersecurity program's risk management processes are updated periodically based on a Clearing Member internal risk assessment or changes to technology, business, threat environment, and/or regulatory environment.
- 7. A review of the Clearing Member's or applicant's cybersecurity program has been conducted by and is deemed acceptable to any one of the following:
 - A regulator who assesses the program against a designated cybersecurity framework or industry standard, including, but not limited to those that are listed on the form of the Cybersecurity Confirmation and in a notice issued by the Corporation from time to time;
 - An independent external entity with cybersecurity domain expertise; and
 - An independent internal audit group reporting directly to the board of directors or designated board of directors committee of the Clearing Member or applicant, such that the findings of that review are shared with these governance bodies.

Section A- 231 - Security Incident Reporting, Disconnection and Reconnection

A. Occurrence of a Security Incident.



A Clearing Member shall immediately notify the Corporation, and promptly thereafter confirm such Security Incident writing, if it becomes aware of a Security Incident that has occurred, or a Security Incident is occurring, involving a cyber-related disruption or intrusion of the Clearing Member's system(s) that is reasonably likely to pose an imminent risk or threat to the Corporation's operations or the operations of the Canadian financial markets.

Upon receiving such notice, or if the Corporation has a reasonable grounds to believe that a Security Incident has occurred, or is occurring, the Corporation may take any actions reasonably necessary to mitigate any effects to its operations, including the right to disconnect access, or to modify the scope and specifications of access, of the Clearing Member to the Corporation's information and data systems. In determining whether to disconnect a Clearing Member, the Corporation will evaluate all relevant information and circumstances related to the Security Incident. The Corporation may take into consideration a number of factors, including, but not limited to, the potential loss of control by a Clearing Member of its internal system(s), the potential disclosure of the Corporation's confidential data, the potential inability of the Clearing Member or Corporation to perform clearing and settlement functions, and the overall severity of the threat to the security and operations of the Corporation. If the Corporation determines that disconnection of a Clearing Member is necessary, the Clearing Member must continue to meet its obligations to the Corporation, notwithstanding disconnection from the Corporation's systems.

B. Procedure for Connecting Following a Security Incident that Results in Disconnection.

In the event the Corporation disconnects a Clearing Member that has reported a Security Incident, the Clearing Member must complete and submit a Reconnection Attestation and Reconnection Checklist form in the timeframe established and required by the Corporation.

(1) Reconnection and functionality restoration attestation

The Reconnection Attestation must be signed by an Authorized Representatives of the Clearing Member which shall attest to the following required representations therein, including, but not limited to:

- i. A full, complete, comprehensive and accurate information in response to all requests made by the Corporation regarding the Security Incident, including all requests contained in the Reconnection Checklist.
- ii. A full, complete, comprehensive and accurate information regarding any data or systems of the Corporation that were potentially compromised consequent to the Security Incident, including any potential exposure of credentials used to access the Corporation's systems. The Clearing Member will immediately notify the Corporation if it later becomes or is made aware of a previously undetected or unreported compromise of data or systems of the Corporation during the Security Incident.
- iii. An identification of failed or circumvented controls by its employees or service providers ("Failed Controls"). In a manner approved by the Corporation, the Clearing Member has communicated Failed Controls to the Corporation and is remediating or has remediated all Failed Controls.
- iv. Implemented technical and operational changes, or planned changes, both preventative and detective, with the intent to prevent future recurrence of the Security Incident. The



<u>Clearing Member must provide written summaries of such technical and operational changes to the Corporation.</u>

(2) Information Requirements in the Reconnection Checklist.

The Reconnection Checklist may require information including, but not limited to, the following:

- i. whether the disconnection was the result of a cybersecurity-related incident; the nature of the incident; in sufficient detail to permit the Corporation to adequately evaluate impacts to its systems and operations, and the steps taken to contain the incident;
- ii. the data of the Corporation, if any, that was compromised during the incident;
- iii. the systems of the Corporation, if any, that were impacted during the incident;
- iv. whether there was any risk of exposure of credentials used to access the systems of the Corporation, and if so, whether the credentials were reissued;
- v. the controls that were circumvented or failed that led to the incident occurring; the changes, preventative and detective, that were implemented to prevent a reoccurrence;
- vi. details on how data integrity has been preserved and what data checks have been performed;
- vii. whether third-parties, including Clearing Member's applicable self-regulatory organization or regulatory or governmental agency, have been notified; and any additional details relevant to reconnection.

RULE A-4 - ENFORCEMENT

Section A-401 - Action Against A Non-Conforming Or Suspended 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 Non-Conforming Clearing Member, the Corporation will use all reasonable efforts to primarily take the action contemplated in Subsection A-401(3)(b) if it deems it is appropriate in the circumstances. In addition, each Clearing Member shall be required to inform its clients of the applicable requirements under Subsection A-401 (3)(b) in accordance with the Corporation's procedures (including



- informing the client to name a Receiving Clearing Member). The application of this requirement and of Subsection 205 (1) (f) will be monitored by the Corporation;
- (c) terminating, closing out or liquidating any or all of the Clearing Member Transactions or Open Positions, and upon such close out, converting all amounts into Canadian currency and calculating one net amount (taking into account the Corporation's rights with respect to the Margin Deposit of such Clearing Member) owing to such Clearing Member by the Corporation or by such Clearing Member to the Corporation.

RULE A-5 - DISCIPLINARY PROCEEDINGS

Section A-502- Procedures

Except as provided for in Subsection A 502(4) and in Section 7 of the Operations Manual-with respect to late payments, a description of the nature and of any sanction sought (whether monetary or non-monetary), including the quantum of any fine or penalty or sanction sanction shall be determined and imposed by the Board. Before any sanction and/or fine and/or penalty is imposed by the Board, the Corporation shall furnished to the Non-Conforming Member with in a concise written statement of the charges for each violation. The written statement of charges shall also contain any provision of the Application for Membership which is alleged to have been violated, the facts alleged and intended to be relied upon by the Corporation and the penalty or remedy recommended by the Corporation for each violation.

- (1) In the event that a Non-Conforming Member commits a breach contemplated under any provision of the Application for Membership, that Non-Conforming Member is subject to <u>sanctions</u>, the penalties <u>and finesprovided for in respect of such provisions</u>. <u>Said-If the Non-Conforming Member denies allegations</u>, <u>said sanctions</u>, penalties <u>and fines</u> shall not be imposed against such Non-Conforming Member until a hearing is held pursuant to Subsection A-502(3).
- (2) The Non-Conforming Member shall have 10 days after the delivery of a statement under Subsection 502(1) to file a written answer thereto. The answer shall admit or deny each allegation contained in the statement of charges and may also contain any defence which the Non-Conforming Member wishes to submit. If a Non-Conforming Member denies an allegation, the Disciplinary Committee The Board shall schedule a hearing as soon as reasonably practicable. The Non-Conforming Member shall be given not less than 10 days' advance notice of the place and time of such hearing. The notice of hearing shall contain a statement of the date, time and place of the hearing; a reference to the authority under which the hearing is being held; and the facts alleged and intended to be relied upon by the Corporation and the conclusions drawn by the Corporation based on the alleged facts. At the hearing, the Non-Conforming Member shall be afforded the opportunity to be heard and may be represented by counsel. A Non-Conforming Member shall be deemed to have waived its right to contest the imposition of any sanctions and/or fines and/or penalties if it fails to file a defence and shall be deemed to have accepted any allegations and/or fines and/or penalties contained in the statement of charges which are not denied. As soon as practicable after the conclusion of the hearing, the Disciplinary Committee Board shall furnish the Non-Conforming Member with a written statement of its decision, which shall be final, conclusive and binding on the Non-Conforming Member.
- (3) The Any action required to be taken under this Rule A 5 by the Board may be delegated to a committee (the "Disciplinary Committee"), which shall consist of not less than three officers of the Corporation directors and may include such officers as the Board may delegate. In the event an



action is taken by the Disciplinary Committee, the Board shall be advised and such action-will review may be reviewed by the Board, either upon its own motion made at or before its next regular meeting or upon a motion filed by any person directly affected within seven-ten days after the Disciplinary Committee has rendered its final decision. The Board-willmay, in its sole discretion, afford the Non-Conforming Member a further opportunity to be heard or to present evidence as stipulated in the By-laws of the Corporation. A majority of the members of the Disciplinary Committee shall be Resident Canadians.

(4) Any time limit set forth in this Section may be extended by the Board, the Disciplinary Committee, or by any officer acting pursuant to authorization of the Board.

[...]

Section A806 -- Failed and Partial Payments Against Delivery

- (1) If a Clearing Member does not have sufficient funds in its CDS Funds Account to satisfy its payment against delivery obligation pursuant to Subsection A-801(3), or only partially settles such payment against delivery obligation (in either case, a "Failed Payment Against Delivery") at the Morning Net DVP Settlement Timeframe, the Corporation shall impose a fine and may determine that the Clearing Member is a Non-Conforming Member, in accordance with Section 6 of the Operations Manual. In addition, the Board may take Additional disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.
- (2) If a Clearing Member does not have sufficient funds in its CDS Funds Account to satisfy its Afternoon Net DVP Settlement Requirement pursuant to Subsection A-801(5)(ii) or any Gross Payment Against Delivery Requirement by the End of Day DVP Settlement Time or only partially settles such payment against delivery obligation (also, in either case, a Failed Payment Against Delivery), the Clearing Member shall automatically be determined by the Corporation to be a Non-Conforming Member in accordance with Section 6 of the Operations Manual and additional the Board may take disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.

[...]

RULE B-1- CLEARING OF EXCHANGE TRANSACTIONS IN OPTIONS

[...]

Section B-109- Payment to the Corporation

[...]

(2) If a Clearing Member is late in making a payment at Settlement Time, the Corporation shall impose fines and may deem that Clearing Member a Non-Conforming Member, in accordance with Section 7 of the Operations Manual. In addition, the Board may take Additional disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.



PART C-FUTURES

RULE C-1- CLEARING OF EXCHANGE TRANSACTIONS RESPECTING FUTURES

[...]

Section C-109- Payment of Credit Balances

[...]

(2) If a Clearing Member is late in making a payment at Settlement Time, the Corporation shall impose fines and may deem that Clearing Member a Non-Conforming Member, in accordance with Section 7 of the Operations Manual. In addition, the Board may take Additional disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.

[...]

Section C-1004 - Delivery Through the Corporation

[...]

(3) If delivery of the Underlying Interest by the delivering Clearing Member, or payment therefor by the assigned Clearing Member, is not effected by the time provided in Subsection C-1004(2), such Non-Conforming Clearing Member must inform the Corporation of such failure of the Non-Conforming Member no later than 3:00 p.m. on the Day of Delivery. The Non-Conforming Clearing Member shall notify the Corporation of the default of the Non-Conforming Member by telephone, with written notification sent by facsimile transmission or electronic mail to be provided as soon as possible.

[...]

Section C-1809 - Delivery Through the Corporation

[...]

(4) If delivery of the Underlying Interest by the delivering Clearing Member, or payment thereof by the assigned Clearing Member, is not effected by the time provided in Subsection C-18091904(2), such Non-Conforming Clearing Member must inform the Corporation of such failure of the Non-Conforming Member no later than 3:00 p.m. on the Day of Delivery. The Non-Conforming Clearing Member shall notify the Corporation of the default of the Non-Conforming Member by telephone, together with written notification sent by facsimile transmission or electronic mail to be provided as soon as possible.

[...]

Section C1904 – Delivery Through the Corporation



(4) If delivery of the Underlying Interest by the delivering Clearing Member, or payment thereof by the assigned Clearing Member, is not effected by the time provided in Subsection C-1904(2), such Non-Conforming Clearing Member must inform the Corporation of such failure of the Non-Conforming Member no later than 3:00 p.m. on the Day of Delivery. The Non-Conforming Clearing Member shall notify the Corporation of the default of the Non-Conforming Member by telephone, together with written notification sent by faesimile transmission or electronic mail to be provided as soon as possible.

[...]

PART D- OVER-THE-COUNTER INSTRUMENTS ("OTCI")

RULE D3- PHYSICAL DELIVERY OF UNDERLYING INTEREST ON OVER-THE-COUNTER INSTRUMENTS

[...]

Section D-305- Penalties and Restrictions

(1) As described in Rule A-5, tThe Board shall set by resolution, from time to time, the penalties payable in the event that a Clearing Member fails to make delivery or fails to accept delivery and make payment when required to do so in accordance with these Rules; provided, however, that the penalty for any single failure shall not exceed \$250,000. The amount of these penalties shall be in addition to any other sanctions that may be imposed by the Corporation under the Rules in respect of such a default. If a Clearing Member fails to make delivery or accept delivery and make payment, as required under these Rules, such penalty shall be assessed against it commencing as of the Time of Delivery and continuing until the Non-Conforming Member's obligations to the Corporation are fulfilled or the Non-Conforming Member is suspended, whichever is the sooner.



CANADIAN DERIVATIVES CLEARING CORPORATION CORPORATION CANADIENNE DE COMPENSATION DE PRODUITS DÉRIVÉS OPERATIONS MANUAL



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Section 1 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, clearing and supplemental liquidity funds 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.

"Automatic Exercise" - a process by which CDCS will exercise In-the-Money Options at a <u>predetermined predetermined</u> threshold.

"Assets" - Securities pledged and cash deposited by the Clearing Member to the CDCC.

"CAD" - Canadian Dollars.

"CDCC Clearing Application" - CDCS and all the processes associated with it, as may be supplemented or otherwise changed from time to time.

"Certified List of Authorized Representatives" - a document to be completed by each Clearing Member, in the form prescribed by CDCC, to identify all individuals within their organization who are designated as Authorized Representatives in accordance with the Section A-202 of CDCC Rules.

"Closing Transaction" - any Transaction that is either a Closing Buy Transaction, a Closing Purchase Transaction, a Closing Sell Transaction or a Closing Writing Transaction, as such terms are defined in the Rules, and in all cases that reduces or eliminates the Clearing Member's Open Interest.

"Contingency Form" - Form to be completed by a Clearing Member, in the form prescribed by CDCC, in the event a Clearing Member is unable to perform a specific instruction or action, and is requesting to have CDCC perform it on their behalf. All such forms can be found in a dedicated section of the Secured Extranet Website, where Clearing Members can download the relevant form to complete and submit.



- "Converge" marketing brand of the portion of the CDCC Clearing Application that captures and processes OTCI Transactions, including Fixed Income Transactions.
- "Eligible Collateral" collateral which may be deposited with the Corporation for the purpose of fulfilling Margin requirements and which meets certain criteria described in the Risk Manual.
- "Exerciser" a Clearing Member that holds a Long Position in a particular Series of Options and submits an Exercise Notice to CDCC.
- **"Expiry Friday"** the third Friday of the month, unless that Friday is not a Business Day, then the Business Day preceding the third Friday of the month.
- "FIFO Period" the quarterly delivery period for Futures contracts on Government of Canada bonds (with the exception of the LGB), in accordance with Contract Specifications of the relevant Exchange.
- "Forward Repurchase Transaction" a Repurchase Transaction in respect of which the Open Leg has not settled yet at the time of the relevant report.
- "SFTP Downloads" Clearing Member's access to files and reports on an SFTP (Secure File Transfer Protocol) server that is part of the CDCC Clearing Application.
- "Inquiry Screen" Graphical User Interface (GUI) view of the CDCC Clearing Application.
- "LYNXarge Value Transfer System" or "LYTS" an the Real Time Gross Settlement ("RTGS") electronic wire system used by Payments Canada introduced by the Canadian Payments Association in February 1999 to facilitate the transfer of irrevocable payments in Canadian dollars across the country Canada.
- "Limited Clearing Member (LCM)" has the meaning given thereto in Section A-102 of the Rules.
- "Margin Fund Accounts" the CDCS record provided to each Clearing Member containing all Margin deposited by such Clearing Member to CDCC, in respect to the Firm Margin Accounts, GCM Regime Margin Accounts and Non-GCM Regime Margin Accounts for any of the following: (1) Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), (2) Additional Margin for Market Liquidity Risk, (3) Additional Margin for Specific Wrong-Way Risk, (4) Additional Margin for Mismatched 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 hereof.
- "Mini Contract" a Future or an Option that has the same Underlying Interest as a Standard Contract but having a Unit of Trading that is a ratio of the Standard Contract in accordance with applicable Contract Specifications.
- "Net Settlement Position" all the future Net Delivery Requirements and Net Payment Against Delivery Requirements of a Clearing Member, as reported by CDCC on a daily basis, taking into account all Fixed Income Transactions that have settled during the day and all new Fixed Income Transactions that have been novated to CDCC.
- "Net Variation Margin Requirement" has the meaning given thereto in Section D-601 of the Rules. Reference will be made to (Fixed Income) Net Variation Margin Requirement in this Manual.
- "Open Position File" database of the CDCC Clearing Application which compiles the Open Positions of all Clearing Members. Each Clearing Member can access the information pertaining to his accounts only, not to other Clearing Members' accounts.
- "Opening Transaction" any Transaction that is either an Opening Buy Transaction, an Opening Purchase Transaction, an Opening Sell Transaction or an Opening Writing Transaction as set forth in Section A-102 of the Rules.



- "Operational Notices" formal notifications to the Clearing Members, representing items that are not published on CDCC's website. These documents are available on the CDCC Secured Extranet Website.
- "OTCI Equity Options" over the counter options on an equity, bearing characteristics that differ from Exchange traded Options and are cleared by CDCC through Converge.
- "Overnight Clearing Cycle" clearing cycle starting at 8:00pm (t-1) and ending at 8:15 a.m. ET.
- "Position Transfer" this is the CDCC Clearing Application function to move a position from one Clearing Member to another.
- **"Production Schedule"** all of the <u>timelinestime lines</u> that are followed by CDCC, as set forth in Section 2 of this Operations Manual.
- "Regular Clearing Cycle" clearing cycle starting at 8:15am and ending at 5:30pm ET.
- "Request for Standard vs Mini Offset" the request by a Clearing Member, in the form prescribed by CDCC, to offset one (1) or more Long Position(s) on a Standard Contract against the equivalent number of Short Positions on the corresponding Mini Contract (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Contract), having the same Delivery Month and booked in the same Clearing Member's account, or the other way around.
- "Running Repurchase Transaction" a Repurchase Transaction in respect of which the Open Leg has already settled at the time of the relevant report.
- "Secured Website" Clearing Members only secured web site that requires a sign on and password, where CDCC publishes Operational Notices as well as documents that are meant only for the Clearing Members.
- "Security Officer" any individuals designated by each Clearing Member with the authority to instruct CDCC to make user access changes to CDCC's Clearing Application, including creating profiles and updating passwords. Formally identified by means of the "Security Officer Identification Form" template form.
- "Security Officer Identification Form" template in the form prescribed by CDCC (accessible in CDCC's Secured Extranet Website) completed by Clearing Members with the purpose of identifying all individuals within their organization that are designated as "Security Officers".
- "Specific Deposit" a Put Escrow Receipt, a Call Underlying Interest Deposit or a Futures Underlying Interest Deposit which are accepted by CDCC as Underlying Interest Equivalent to cover a specific Short Position.
- "Standard Contract" a Future or Option in relation to which a Mini Contract exists.
- "Tenderer" a Clearing Member that holds a Short Position in a particular Series of Futures and submits a Tender Notice, or is deemed to do so in accordance with the Rules, to CDCC.
- "Unsettled Item" any delivery of the Underlying Interest that has not been settled at the Central Securities Depository.
- "(Fixed Income) Variation Margin Account" the CDCS record provided to each Clearing Member containing all Margin deposits made by such Clearing Member to CDCC for (Fixed Income) Net Variation Margin Requirement purposes only, in accordance with Section D-607 of the Rules, or otherwise as set forth in Section 8 hereof.
- "Weekly Options" Options that expire on any Friday, other than Expiry Friday. Only monthly Options expire on Expiry Friday.



Section 2 TIME FRAMES

ON-LINE ACCESS

Each Clearing Member must be connected to the CDCC Clearing Application using its PC terminals to perform a variety of functions. (Clearing Members must supply their own PC terminals and Internet connection, at their own cost).

All instructions (corrections, Open Position changes, Position Transfers, Deposits, contributions, withdrawals, and submission of Exercise Notices and Tender Notices) must be entered on-line.

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

Should a Clearing Member not have electronic access to the CDCC Clearing Application during Business Hours, CDCC can perform instructions on behalf of the Clearing Member. This requires that the a phone call from the Clearing Member to CDCC, along with the appropriate Contingency Form (available for download from the Secured Extranet Website) form faxed or scanned and be duly completed and e-mailed to CDCC. Such forms must be signed by an Authorized Representative of the Clearing Member.

With respect to operational activity related to Options with an Expiration Date on Expiry Friday, CDCC staff members are <u>continuously</u> available from <u>8</u>7:00 a.m. to fifteen (15) minutes after delivery of the Options Exercised and Assigned Report (MT02).



SETTLEMENT TIME FOR EVERY BUSINESS DAY

Activity	Time Frames	Activity Type
Beginning of Clearing Day and Overnight Clearing Cycle	8:00 p.m. (t-1)	System Activity
Clearing Member's (excluding LCMs) Overnight Margin Calculation & Notification	Every hour from 10:00 p.m. (t-1) to 7:00 a.m. and 8:15 a.m. (t)	System Activity/Notification
Deadline to settle Overnight Margin Call notification	2 hours after	Obligation Deadline
Beginning of Settlement Day at CDS	5:30 a.m.	System Activity
Assets Concentration Limits breach notification	<u>7:30 a.m.</u>	Notification
End of Overnight Clearing Cycle	8:15 a.m.	System Activity
Beginning of Regular Clearing Cycle	8:15 a.m.	System Activity
Assets Concentration Limits breach notification	7:30 a.m.	Notification
Deadline for Clearing Members (excluding LCMs) for Settlement Time with respect to-payments for overnight settlement	8:15 a.m.	Obligation Deadline
Fixed Income Transactions - Netting Cycle Timeframe in respect of any Pending Settlement Requirements - 15 minutes cycle	8:30 a.m.	System Activity
Deadline for LCMs for payments for overnight settlement	9:00 a.m.	Obligation Deadline
Deadline for Clearing Members (excluding LCMs) to receive EOD Amount due from CDCC	<u>9:15</u> 8:45 a.m.	Obligation Deadline
<u>Deadline for Clearing Members to complete</u> reconciliation and submit position changes	<u>9:30 a.m.</u>	Obligation Deadline
SGC Securities Adjustment and SGC Initial Securities Adjustments Settlement Time	9:30 a.m.	Obligation Deadline
SGC Concentration Limits compliance	9:30 a.m.	Obligation Deadline
Deadline for LCMs for Settlement Time with respect to payments for overnight settlement	9:00 a.m.	Obligation Deadline
Fixed Income Transactions - Morning Netting Cycle Timeframe in respect of any Pending Payment Against Delivery Requirements (Morning Net Payment Against Delivery Requirements sent to CDS for settlement during the Morning Net DVP Settlement Timeframe) - 15 minutes cycle	10:00 a.m.	System Activity
Morning Net DVP Settlement Calculation	10:15 a.m.	System Activity/Notification
<u>Final Deadline for Morning Net DVP</u> <u>Requirement Settlement</u>	10:30 a.m.	System Activity/NotificationObligation Deadline



Activity	Time Frames	Activity Type
Clearing Member's (excluding LCMs) Morning Intra- Day Margin Calculation & Notification	10:30 a.m.	System Activity/Notification
SGC Maturity Settlement Time	10:30 a.m.	Obligation Deadline
Deadline to settle Morning Intra-Day Margin Call for Clearing Members (excluding LCMs)	1 hour after notification	Obligation Deadline
ACV Securities Requirement Delivery - Deadline on any given day pursuant to an Open Leg or Close Leg of the SGC Repurchase Transaction	8:30 a.m.	Obligation Deadline
Start of the SGC Close Leg process	8:30 a.m.	Operational Activity/Notification
End of the SGC Close Leg process & Deadline for SGC Clearing Members to cover payment obligation	10:30 a.m.	Obligation Deadline
SGC Clearing Members - Beginning of SGC Repurchase Transaction Submission Period - Sale of SGC Securities (3 Business Day Prior Notice)	11:00 a.m.	Operational Activity/Notification
<u>Deadline for Morning Net DVP Settlement</u>	<u>11:00 a.m.</u>	Obligation Deadline
Assets Concentration Limit breach correction deadline	11:45 a.m.	Obligation Deadline
Fixed Income Transactions - Netting Cycle Timeframe in respect of any Pending Settlement Requirements - 15 minutes cycle	12:15 p.m.	System Activity
Clearing Member's Afternoon Intra-Day Margin Calculation & Notification	12:45 p.m.	System Activity/Notification
SGC Securities Adjustment Requirement and SGC Initial Securities Adjustments Calculation and Notification	12:45 p.m.	System Activity/Notification
Deadline to settle Afternoon Intra-Day Margin Call for Clearing Members (excluding LCMs)	1 hour after notification	Obligation Deadline
SGC Securities Adjustment and SGC Initial Securities Adjustments Settlement Time	2 hours after notification	Obligation Deadline
Specific Deposits (same day withdrawal)	12:45 p.m.	Operational Deadline
Deadline to settle Intra-Day Margin Call and Additional Margins for LCMs	The later of 2:45 p.m. or 2 hours after notification	Obligation Deadline
Fixed Income Transactions - Netting Cycle Timeframe in respect of any Pending Settlement Requirements - 15 minutes cycle	2:00 p.m.	System Activity
CAD Deposits - \$10,000,000 and under (same day deposit)	2:45 p.m.	Operational Deadline
CAD Deposits - over \$10,000,000 (2 Business Days notice)	2:45 p.m.	Operational Deadline
CAD withdrawal requests - \$10,000,000 and under (same day withdrawal)	2:45 p.m.	Operational Deadline



Activity	Time Frames	Activity Type
CAD withdrawal requests - over \$10,000,000 (2 Business Days notice)	2:45 p.m.	Operational Deadline
SGC Clearing Members - End of SGC Repurchase Transaction Submission Period (3 Business Day Prior Notice)	3:00 p.m.	Operational Deadline
Fixed Income Transactions - (Same Day Transactions) - Submission Cut-Off Time	3:30 p.m.	Operational Deadline
Clearing Members (excluding LCMs) - All Assets deposits other than cash (Margin deposits)	3:30 p.m.	Operational Deadline
Clearing Members - All Assets withdrawal requests other than cash (Margin deposits) for same day withdrawal	3:30 p.m.	Operational Deadline
Clearing Members - All Assets substitution requests other than cash (Margin deposits) for same day substitution	3:30 p.m.	Operational Deadline
Foreign currency withdrawal requests deadline	3:30 p.m.	Operational Deadline
Fixed Income Transactions - Afternoon Netting Cycle Timeframe in respect of any Pending Settlement Requirements (Afternoon Net DVP Settlement Requirements sent to CDS for settlement by End of Day DVP Settlement Time) - 5 minutes cycle	3:35 p.m.	System Activity
CDS Payment Exchange, Net Wire Payment	4:00 p.m.	System Activity
ACV Securities (same day withdrawal)	4 :00 p.m.	Operational Deadline
End of Day DVP Settlement Time	4:00 p.m.	Obligation Deadline
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
SGC Securities Adjustment Requirement and SGC Initial Securities Adjustments Calculation and Notification	4 :30 p.m.	System Activity
SGC Concentration Limits breach notification	4 :30 p.m.	Notification
<u>Deadline for Clearing Members to request 15-minute delay to start of EOD Batch</u>	5:00 p.m.	Operational Deadline
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



Activity	Time Frames	Activity Type
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)	6:15 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
End of Regular Clearing Cycle and 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 Position Adjustment availability	7:00 p.m.	System Activity
GCM Position Adjustment end of availability	8:45 p.m.	Operational Deadline
GCM Declaration File - Submission-	Before 9:00 p.m.	Operational Deadline
GCM Settlement Calculation	9:00 p.m.	System Activity



SETTLEMENT TIME FOR (FIXED INCOME) VARIATION MARGIN FOR EVERY BUSINESS DAY

Activity	Time Frames	Activity Type
Deadline to deliver securities to CDCC to settle Net Variation Margin Requirement	9:30 a.m.	Obligation Deadline
Deadline to submit to CDCC a (Fixed Income) Buy-In request for same day settlement	10:00 a.m.	Operational Deadline
Deadline to deliver securities to Clearing Members by CDCC to settle (Fixed Income) Variation Margin payout_amount	10:30 a.m.	Obligation Deadline
Deadline to submit substitutions for same day settlement	11:00 a.m.	Operation Deadline
Deadline for CDCC to submit substitution instructions to Clearing Members for same day settlement	12:00 (noon)	Operational Deadline
Deadline to deliver same day settlement substitution to CDCC	3:00 p.m.	Obligation Deadline
Deadline for CDCC to deliver same day substitutions For (Fixed Income) Variation Margin	4:00 p.m.	Obligation Deadline
EOD Net Variation Margin Requirement Computation and Notification	4:30 p.m.	System Activity <u>/</u> <u>Notification</u>



SETTLEMENT TIME FOR SECURED GENERAL COLLATERAL (SGC) NOTES FOR EVERY BUSINESS DAY

<u>Activity</u>	Time Frames	Activity Type
ACV Securities Requirement Delivery - Deadline on any given day pursuant to an Open Leg or Close Leg of the SGC Repurchase <u>Transaction</u>	8:30 a.m.	Obligation Deadline
Start of the SGC Close Leg process	8:30 a.m.	Operational Activity/Notification
End of Day SGC Securities Adjustment Requirements and SGC Initial Securities Adjustments compliance Settlement Time	9:30 a.m.	Obligation Deadline
SGC Concentration Limits compliance Settlement Time	<u>9:30 a.m.</u>	Obligation Deadline
SGC Maturity De-Collateralization Settlement Time	10:30 a.m.	Obligation Deadline
End of the SGC Close Leg process and Deadline for SGC Clearing Members to cover payment obligations	<u>10:30 a.m.</u>	Obligation Deadline
SGC Clearing Members - Beginning of SGC Repurchase Transaction Submission Period - Sale of SGC Securities (3 Business Days' Prior Notice)	<u>11:00 a.m.</u>	Operational Activity/Notification
SGC Intraday Securities Adjustment Requirement and SGC Initial Securities Adjustments Calculation and Notification	<u>12:45 p.m.</u>	System Activity/Notification
SGC Intraday Securities Adjustment and SGC Initial Securities Adjustments Settlement Time	2 hours after notification	Obligation Deadline
SGC Clearing Members - End of SGC Repurchase Transaction Submission Period (3 Business Days' Prior Notice)	3:00 p.m.	Operational Deadline
ACV Securities (same day withdrawal)	4:00 p.m.	Operational Deadline
End of Day SGC Securities Adjustment Requirement and SGC Initial Securities Adjustments Calculation and Notification	4:30 p.m.	System Activity/Notification
SGC Concentration Limits breach notification	<u>4:30 p.m.</u>	<u>Notification</u>



SETTLEMENT TIME FOR MONTHLY EXPIRY

Activity	Time Frames	Activity Type
Reports available (SFTP Download):	7:15 p.m.	Publication
Expiry Report (MX01)		
Expiry Options Daily Transaction Report (MT01)		
List of Options/Cash Adjustments (MT03)		
CDCC Clearing Application available for:	7:15 to 9:15 p.m.	Operational Deadline
Trade corrections		
Open Position changes		
Position Transfers		
Changes to Automatic Exercises		
Exercise Notices input		
Cancel / correct Friday's exercises		
CDCC Clearing Application shutdown:	9:15 p.m.	Operational Deadline
CDCC processes expiry entries	·	•
Reports available (SFTP Download):	9:30 p.m.	Publication
List of Expiry Adjustments Report (MX02)	·	
Expiry Difference Report (MX03)		
CDCC Clearing Application available again for:	9:30 to 9:45 p.m.	Operational Deadline
Review of expiry entries		·
Corrections to expiry entries		
CDCC Clearing Application shutdown	9:45 p.m.	Operational Deadline
Close of Business	·	
Reports available (SFTP Download):	10:30 p.m.	Publication
Options Exercised and Assigned Report (MT02)	·	
Other reports and files also available		



SETTLEMENT TIME FOR WEEKLY EXPIRY

Activity	Time Frames	Activity Type
CDCC Clearing Application available for:	7:00 to 8:00 p.m.	Operational Deadline
Trade corrections		
Open Position changes		
Position Transfers		
Changes to Automatic Exercises		
CDCC Clearing Application shutdown:	8:00 p.m.	Operational Deadline
Close of Business		
Reports available (SFTP Download):	9:45 p.m.	Operational Deadline
Options Exercised and Assigned Report (MT02)		
Other reports and files also available		



ADDITIONAL NET DVP SETTLEMENT PROCESS

In respect of any Pending Payment Against Delivery Requirements at the Netting Cycle Timeframe(s) specified in Section 2 of this Operations Manual, CDCC shall send new settlement records (Net Payment Against Delivery Requirements) to the Central Securities Depository reducing any Pending Payment Against Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Payment Against Delivery Requirements of CDCC in favour of the same Clearing Member.



Section 3 REPORTS

REPORT REFERENCES

Clearing Member reports contain the following information:

Transactions	Reports relating to Clearing Member's Transactions such as trade entries, trade corrections, trade rejections and exercises/tenders. These reports start with the alpha code MT.
Fees	Report relating to the collection of service fees from the Clearing Member. These reports start with the alpha code MB.
Settlements	Reports relating to Premiums, Settlement of Gains and Losses, and Margin. These reports start with the alpha code MS.
Assets	Reports relating to the maintenance of Clearing Member's assets as well as depository information. These reports start with the alpha code MA.
Delivery	Reports relating to delivery obligations and unsettled deliveries. These reports start with the alpha code MD.
Positions	Reports relating to positions held by Clearing Members separately for Futures, Options, OTCI and Fixed Income Transactions. These reports start with the alpha code MP.
Expiry	Reports used by Clearing Members to verify expiring positions and automatic exercises. These reports start with the alpha code MX.
Risk	Reports relating to risk management. These reports start with the alpha code MR.





REPORT DETAILS

Report Code	Report Name	Report Description
Daily:		
MA01	Collateral 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)
MA30	SGC Repurchase Transactions Activity Report	Lists asset balances with SGC Securities Adjustment, SGC Securities Initial Adjustment requirements and SGC Securities sale settlement in Canadian dollars.
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.
MI12	U/I Primary Exchange	List of the underlying prices
MO12	Converge Option Price	List of the Clearing Member's Converge option prices
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).



Report Code	Report Name	Report Description
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.
MP53	GCM Forecasted Balance Account Report	Lists the Clearing Member's clients Futures and Options on Futures open positions declared via the GCM Declaration File at the time of the GCM file submission highlighting the forecasted balance account positions.
MP54	GCM Declaration File Report	Details the results of the GCM Declaration File received from Clearing Members and provide any errors found (in CSV format)
MP55	GCM Balance Account Report	Lists the Clearing Member's Clients Futures and Options on Futures Open Positions declared via the GCM Declaration File with the associated margin figures of each individual client account within the Client Account Omnibus structure.
MP70	Fixed Income Forward Repo Position Report	Lists the Clearing Member's Repurchase Transactions accepted for clearing by CDCC.
MP71	Fixed Income Forward Repo Conversion	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 Margin Fund Accounts (Firm, GCM Regime and Non-GCM Regime) categories, account types (Firm, Client, Multi-Purpose) and sub-accounts.
MS07	Margin Report By Collateral Pool	Margin call details with Margin requirements by Margin Fund Accounts (Firm, GCM Regime and Non-GCM Regime) and Risk Accounts.
MS08	Daily Margin Positions 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.
MS30	SGC Securities Adjustment Requirement Report	SGC Securities Adjustment and SGC Initial Securities Adjustment requirement detailed per Series for the SGC Securities on a net basis and for all Series for the SGC Securities on a net basis.



Report Code	Report Name	Report Description
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.
MS72	Fixed Income Net Settlement Position Summary Report	Lists a summary 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 SubAccount Consolidated Activity Report	Lists positions with activity including Option Premiums for only the subaccounts 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.
MT53	List of Futures/Cash Adjustments Report	Lists details on all Futures and Options on Futures trade adjustments, Open Position changes, including cash adjustments and Position Transfers.
MT54	Futures Trading Summary Report	Lists all Series of Futures and Options on Futures and prices, and volumes at which each were traded. Lists number of contracts bought and sold for each Series of Futures Trade Prices.
MT60	Single Stock Futures Tenders and Assignments	Lists totals for Share Futures (SF) tendered and assigned positions including the debit and credit dollar values of the transactions.



Report Code	Report Name	Report Description
MT66	Futures Sub-Account Consolidated Activity Report	Lists Futures and Options on Futures positions with activity including Settlement of Gain and Losses and Futures Premiums respectively, for the sub-accounts of Client, Firm and Multi-Purpose.
MT70	Fixed Income Novated Transactions Report	Lists the Clearing Member's daily Fixed Income Transactions novated to CDCC in accordance with the CDCC Clearing Application.
MT71	Fixed Income Novated Trades Report	Lists the data transmitted to CDCC by the Central Securities Depository with respect to the Clearing Member's daily Fixed Income Transactions submitted for clearing.
MT74	Fixed Income Not-Novated Transactions Report	Lists the Clearing Member's daily Fixed Income Transactions that were not novated to CDCC, including all rejected and orphaned trades.
MT92	Options on Futures Exercised & Assigned Report	Lists totals for Options on Futures Exercised Positions and Assigned Positions by Series.
		(Note: Futures Options Exercised Positions and Assigned Positions value is nil.)
MT99	Detailed Futures Consolidated Activity Report	Detailed list of all Futures position with activity, including Settlement of Gains and Losses. Detailed list of all Options on Futures positions and activity including Futures Premiums.
Monthly:		
MA71	Clearing Fund Statement (monthly and intra-monthly)	Identifies the Clearing Member's (excluding LCM) Clearing Fund obligation. Lists the Clearing Member's (excluding LCM) current Deposits within the Clearing Fund and what is owed.
08AM	Supplemental Liquidity Fund Statement (monthly and intra- monthly)	Identifies the Clearing Member's (excluding LCM) Supplemental Liquidity Contributions. Lists the Clearing Member's (excluding LCM) current Supplemental Liquidity Contributions within the Supplemental Liquidity Fund and what is owed.
MB01	Monthly Clearing Fees Invoice	This report contains summarization of the monthly clearing fees in an invoice format - THIS IS NOT TO BE PAID. The system automatically includes the collection of the fees within the daily settlement on the morning of the fifth business day of the month.
MBO2	Monthly Clearing Fees Details Report	This report contains the following four sub-reports:
		"Fees" - this is product by sub-account.
		"Summary by Category" - this is summarization by product.
		"Sub-Account Summary" - this is a summary of the operational charges by sub-account irrespective of product.
		"Summary by Account Operation Type" - this is a summary of the operational charges by sub-account.



Report Code	Report Name	Report Description
MB03	Monthly Fixed Income Clearing Fees Invoice	This report details the clearing fees that are due with respect to Fixed Income Transactions by each Clearing Member.
MT40	Broker Ranking by Account Report	Individual Clearing Member ranking within CDCC for contracts, value traded and transactions (trade only) by month with year to date.
FIFO Period:		
MP56	FIFO Position Report	Lists Series of Futures with positions in chronological order, contracts in positions.
MP60	FIFO Declaration vs. Open Position Report	Lists Clearing Member's Futures positions and FIFO long positions declaration.
Options on Futur	es Expiry:	
MT51	Final Futures Daily Transaction Report	Lists trade details for all Futures and Options on Futures activity.
MX11	Futures Options Expiry Report	Lists all expiring Options on Futures with In-the-Money Options or Out-Of-the-Money Options amounts and Automatic Exercise positions for Expiry.
MX12	Futures Options Expiry Adjustments Report	Lists all trade adjustments and Open Positions changes on expiring Series only.
MX13	Futures Options Expiry Difference Report	Lists all reported changes, deletions and/or additions to exercises on the Futures Options Expiry Report (MX11).
Options Expiry (F	Friday Evening):	
MT01	Options Daily Transaction Report	Lists trade details for all expiring Option contracts for the 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).
MX01	Expiry Report	Lists all expiring Options with In-the-Money Options or Out- of-the-Money Options amounts and Automatic Exercise positions for Expiry.
MX02	List of Expiry Adjustments Report	Lists all trade adjustments and Open Positions changes on expiring Series of Options only.
MX03	Expiry Difference Report	Lists all reported changes, deletions and/or additions to exercises on the Expiry Report.
OTCI Expiry:		
MX01	Expiry Report	Lists all expiring Options with In-the-Money Options or Out- of-the-Money Options amounts and Automatic Exercise positions for Expiry.
Business Day following Expiry:		
MP11	Expired Options Positions Report	Lists the Clearing Member's balance of expired Options positions following the Friday Expiry process.
MP12	Expired Futures Options Positions Report	Lists the Clearing Member's balance of expired Futures Options positions following the Friday Expiry process.



Section 4 TRADE PROCESSING

INTRODUCTION

All Exchange Transactions are processed electronically. In all cases both the selling and buying trade data is sent to the relevant Exchange's electronic trading system, which then transmits the matched trades to CDCC. The CDCC Clearing Application verifies the trade information and, if incorrect, rejects it for correction and resubmission. If the trade information is valid, the Clearing Member's Open Positions are immediately updated. The Exchange Transaction is reported on the Options Daily Transaction Report (MT01) or on the Final Futures Daily Transaction Report (MT51), as the case may be.

OTCI Transactions (other than Fixed Income Transactions) are also submitted electronically. Clearing Members submit their individual trade details onto the trade capture screens of Converge, which will match, validate and confirm the transactional details to the submitting Clearing Members. OTCI Options are reported on the Options Daily Transaction Report (MT01). No corrections will be permitted for OTCI Transactions after CDCC issues a Trade Confirmation.

Fixed Income Transactions will be transmitted through the CDS trade matching facility routing matched trades to CDCC.

Fixed Income Transactions are reported on the Fixed Income CSD Information Report (MT71).

The SGC Repurchase Transactions will be automated through CCMS. The SGC Repurchase Transaction will be reported by CDCC to the SGC Clearing Members in the SGC Repurchase Transactions Activity Report (MA30) report MA30.

The reports referred to herein are available for SFTP Downloads on the morning of the Business Day after Transactions are submitted for clearing to CDCC. In accordance with the Rules, Clearing Members must verify that such reports are correct.

It remains the Clearing Member's responsibility to employ appropriate back office facilities and to orderly record, book, supervise and reconcile all trade transactions by 9:30 a.m. the following Business Day.



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 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 Multi-Purpose Accounts and Firm Accounts.



TRADE PROCESSING

FIXED INCOME TRANSACTIONS

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.

All Repurchase Transactions and Cash Buy or Sell Trades must be submitted for clearing to CDCC through the CDS trade matching facility routing matched trades to CDCC.

Once a Repurchase Transaction or Cash Buy or Sell Trade is received by CDCC, a variety of validations will occur. These validations ensure that all transactional details match and CDCC does not accept any Repurchase Transaction or Cash Buy or Sell Trade bearing attributes that are not acceptable for clearing.

Upon issuance of a Trade Confirmation by CDCC, the Repurchase Transaction or Cash Buy or Sell Trade is novated to CDCC, such that the original Repo or Cash Buy or Sell Trade between the two Fixed Income Clearing Members is cancelled and replaced by two equivalent Fixed Income Transactions, one between the Seller and CDCC and one between the Buyer and CDCC.



Section 5 OPEN POSITIONS

INTRODUCTION

Having accepted a Transaction, the next step in the CDCC Clearing Application is the determination of the Open Position. Each Clearing Member can view all the information related to their accounts on the Open Position File which records the open Long Position and Short Position for each Series of Options and Series of Futures, OTCI and Fixed Income Transactions for each account type, updating the information as each Transaction is accepted.

Each Clearing Member is responsible for <u>accurately</u> reconciling the information recorded on the Open Position File and all relevant reports issued by CDCC against their internal records <u>by 9:30 a.m.</u> on the following <u>Business Day. The Clearing Members must submit their position adjustments each day to CDCC following the reconciliation of positions for each of the accounts held with CDCC. If any discrepancy between CDCC and Clearing's Member records is not adjusted by the following <u>business day, the Clearing Member must inform CDCC</u>. Careful attention must be paid to account designation and whether the Transaction is coded as "opening" or "closing" in the relevant file or report. Reports are available for SFTP Download as per Section 2 of this Operations Manual.</u>

Open Interest is updated automatically as each Transaction, Exercise Notice and Tender Notice is processed.

ADJUSTMENTS OF OPEN POSITIONS

GENERAL

Occasionally the need will arise to adjust an already processed Transaction. In such cases, the adjustment will affect the Clearing Member's Open Position accordingly. For example, an adjustment designed to change the original Opening Buy Transaction (or Opening Purchase Transaction) to a Closing Buy Transaction (or Closing Purchase Transaction) will result in a decrease in the Long Position in the Series of Futures or Series of Options by the volume of the original Transaction. Any Settlement of Gains and Losses (or Premium) adjustments will be shown as adjustments on the relevant report.

Generally this situation will occur when:

- 1. The transactional details were incorrectly recorded, e.g. Clearing Member number, price, series and volume.
- 2. Information pertaining to only one side of the Transaction such as the opening/closing or account designation was erroneously reported on the original trade.
- 3. The source document of the relevant Exchange was input incorrectly.
- 4. Transfer of Open Positions from one account to another account of a Clearing Member.
- 5. Transfer of Open Positions from an account of one Clearing Member to an account of another Clearing Member.

It is the Clearing Member's responsibility to ensure that positions in each account maintained with CDCC are accurate. If any discrepancy between CDCC and the Clearing Member's records is noted, the Clearing Member must rectify the discrepancy immediately. The Clearing Members must submit their position adjustments daily following completion of the reconciliation process. Should the discrepancy remain unresolved by the following business day, the Clearing Member must inform the Corporation.



OPEN POSITIONS

Types of Adjustments

The following adjustments are acceptable for Exchange Transactions and OTCI (other than Fixed Income Transactions):

- 1. <u>Same Day Trade Corrections (T)</u>. Same day trade corrections are only permitted on account type, sub-account designation and opening/closing and no corrections are permitted on OTCI Transactions after a Trade Confirmation has been issued by CDCC.
- 2. <u>Trade Date + 1 Corrections (T+1)</u>. Modifications of any type are subject to approval by the relevant Exchange and no corrections permitted on OTCI Transactions.
- 3. <u>Open Position Changes</u>. For OTCI Transactions, these will be performed through the Position Transfer function of the CDCC Clearing Application. Note: there is a Position Transfer fee per contract.
- 4. <u>Position Transfers</u>. Specific function of the CDCC Clearing Application to move positions from one Clearing Member to another or between accounts of a same Clearing Member on a post trade basis. Note: there is a Position Transfer fee per contract.
- 5. Standard vs Mini Offset. Upon the receipt of a Request for Standard vs Mini Offset in the prescribed form, CDCC will offset (i) one or more existing Standard Contract Long Position(s) against the equivalent number of existing Mini Contract Short Positions (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Contract) having the same Delivery Month and booked in the same Clearing Member's account, or (ii) a number of existing Mini Contract Long Positions against one or more Standard Contract Short Position(s) (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Contract) having the same Delivery Month and booked in the same Clearing Member's account, based on the instructions provided in the Request for Standard vs Mini Offset. Such Long Positions and Short Positions shall be offset at the previous day's Settlement Price, with the effect of reducing the Open Positions that the Clearing Member has on the relevant Series of Futures in the relevant account. A Future may only be offset against a Future and an Option may only be offset against an Option.

Adjustments via the Gross Client Margin (GCM) Declaration File

Via submission of the GCM Declaration File, CDCC will perform a Position Change Submission ("GCM PCS") as part of the GCM Settlement Calculation. This will be performed on the CDCC Book Positions, to align the CDCC open positions with the open positions declared by the Clearing Member for (i) each Series of Futures and Futures Options, and (ii) for each client declared in the GCM Declaration File.

The position adjustment can only be performed if the CDCC net position (CDCC Long Position minus CDCC Short Position) is equal to the GCM declared net position (GCM declared Long Position - GCM declared Short Position) on the same Series of Futures or Futures Options, for a specific client declared in the GCM Declaration File. If the condition is met, CDCC will adjust both the CDCC Long Position and CDCC Short Position to what was declared in the GCM Declaration File. In the event of discrepancies between the CDCC Book Positions and net GCM declared positions, no position adjustment will be performed and the undeclared positions will be treated separately (see Additional Margin for Undeclared GCM Position Risk in the Risk Manual for more details).

Clearing Members may make use of the GCM Position Adjustment availability window to submit their GCM Declaration File to assess their declared positions with the CDCC Book Position. Clearing Members are able to submit additional GCM Declaration File(s) anytime before the GCM Position Adjustment availability window closes should they wish to make further adjustments. Only the last declared file will be considered for the GCM Settlement Calculation and therefore the GCM PCS.

Additionally, in the event a Clearing Member fails to submit their GCM Declaration File, CDCC will use the previous Business Day's GCM Declaration File. While this mitigates the impact of having all the positions as undeclared positions and margined separately, changes in positions that occurred on the day of the missed declaration may result in undeclared positions. If the GCM Declaration File is not received for a second consecutive Business Day (or any



following Business Days), CDCC will not use the previous GCM Declaration File and will treat all GCM client positions as undeclared positions in a separate Risk Account.

Conditions applicable to adjustments:

If there are any adjustments that affect another Clearing Member (on the opposite side of the original Transaction), both Clearing Members must come to an agreement as to the adjustments to be implemented. If one Clearing Member does not enter any changes through the CDCC Clearing Application, the Transaction will stay as is with respect to both Clearing Members.

Notification of all adjustments must be completed prior to the time specified in Section 2 of this Operations Manual. All completed adjustments are processed when they have been verified and validated by CDCC.



INTRODUCTION

OPTIONS

At the time of exercise of an Option, CDCC is responsible for issuing settlement records that will facilitate the delivery of the Underlying Interest to the Clearing Member who chooses to exercise that Option (in case of the exercise of a call Option) or the payment of the relevant Exercise Price (in the case of the exercise of a put Option). When a Clearing Member exercises an Option, CDCC assigns the delivery obligation to a Clearing Member who is the writer of Options in the same Series of Options in any one of its Client Account(s), Firm Account(s), or Multi-Purpose Account(s).

Assignment is made specifically to one of these accounts by CDCC. If assignment is made to a Client Account, the Clearing Member is responsible for allocating it to a specific client. If assignment is made to a Multi-Purpose Account, the Clearing Member must allocate it to the specific Multi-Purpose Account designated by CDCC.

Delivery of the Underlying Interest and payment of the Exercise Price is to be effected by Clearing Members through the settlement method instructed by CDCC.

FUTURES

All Futures which have not been closed out by the last trading day will be marked-to-market up to and including the close of the last trading day. In addition, the seller of a Future must submit a Tender Notice in the Delivery Month in accordance with applicable Contract Specifications.

When a seller of a Future submits a Tender Notice to CDCC, CDCC assigns it to a Clearing Member which is the buyer of a Future in the same Series of Futures in any one of its accounts. Assignment is made specifically to one of these accounts by CDCC. If assignment is made by CDCC to a Client Account, the Clearing Member is responsible for allocating it to a specific client. If assignment is made to a specific Multi-Purpose Account, the Clearing Member must allocate it to the specific Multi-Purpose Account designated by CDCC.

EXPIRY PROCEDURES

Operationals Notices are <u>published for sent to Clearing Members' reference</u>, setting forth the expiry procedures. <u>Itand it</u> is the responsibility of Clearing Members to ensure that they have adequate processes <u>and personnel</u> in place to meet all requirements and timelines prescribed by CDCC.

OPTIONS

For all information pertaining to the Option expiry procedures, Clearing Members should refer to the Operational Notices which are issued prior to the Expiration Date.

CDCC's Responsibilities on Expiry Friday

- 1. Review/modify Underlying Interest prices and notify the Clearing Members of any changes.
- 2. Notify Clearing Members (via e-mail) of any changes in the Production Schedule.
- 3. Notify Clearing Members (via e-mail) of the status of expiry processes.
- 4. Assist Clearing Members.

Clearing Members' Responsibilities on Expiry Friday

1. Ensure that the staff responsible for expiry is familiar with all expiry procedures and processes.



- 2. Validate entries using the Inquiry Screens or the relevant reports:
 - a. Verify that all Open Positions and adjustments match internal records, enter any new Transaction or Open Position adjustments accordingly.
 - b. Verify that the number of Options that will be automatically exercised on Expiration Date are correct.
 - c. For any changes, indicate on the Expiry Response Screen under the "Override" column the total number of Options for each Series of Options to be exercised.
 - d. Verify any OutOfTheMoney Options or At-the-Money Options to be exercised and enter the number of Options under the "Override" column.
- 3. Validate changes using the reports and/or the on-line access to CDCC Clearing Application (in accordance with timeframes set forth in Section 2 of this Operations Manual).
- 4. If required, make any allowed modifications (in accordance with timeframes set forth in Section 2 of this Operations Manual).

Daily Expirations (other than Expiry Friday)

When CDCC receives Underlying Interests' closing and opening prices from the relevant Exchange, the prices are specified on the relevant Expiry Report and are used to determine the In-the-Money Options and the Out-of-the-Money Options.

Clearing Members have until the Close of Business on any Business Day up to the Expiration Date to submit an Exercise Notice with respect to American Style Options to CDCC. European Style Options can only be exercised on their Expiration Date.

OTCI Options can expire on any Business Day.

Typically, exercise instructions must be entered online on the CDCC Clearing Application by Clearing Members. However, if unavailable, the following manual process can be used to submit Exercise Notices to CDCC:

- 1. The proper CDCC Exercise Notice form must be used.
- 2. The form must be signed by an Authorized Representative of the Clearing Member.
- 3. The properly delivered Exercise Notice will be accepted at any CDCC office.
- 4. The Exercise Notice must be properly delivered by five minutes before Close of Business.
- 5. The Clearing Member staff who deliver the Exercise Notice must be available until CDCC processes the exercise.

The CDCC Clearing Application will ensure that there are sufficient Option Open Positions of the relevant Series of Options in the relevant account of the Clearing Member for exercising the relevant Exercise Notice; if not, CDCC will reject the Exercise Notice. If there are sufficient Option Open Positions, the Clearing Member's Long Position is immediately reduced by the number of Option Open Positions exercised.

AN EXERCISE NOTICE CAN BE CANCELLED UNTIL CLOSE OF BUSINESS ON THE DAY IT IS SUBMITTED.



OPTIONS

Exercises

Delivery and payment on Exercised Positions are due on the Exercise Settlement Date.

Until Exercise Settlement Date, CDCC continues to require sufficient Margin to ensure that, if a Clearing Member defaults, any Exercise Notice submitted by it or assigned to it, as the case may be, will be completed.

Exercised Positions and Assigned Positions are reported to Clearing Members through relevant reports. A complete list of all available reports is available on CDCC's Secured Extranet Website listed in Section 3 of this Operations Manual.

Assignments

After the Close of Business on any Business Day on which an Exercise Notice is submitted to CDCC, assignment of such Exercise Notice is made on a random selection basis, in which each account of a Member is treated separately. The reason for the separation is to ensure that each Clearing Member's Client Account(s), Firm Account(s), and Multi-Purpose Account(s) have the same probability of being assigned Exercise Notices. When a Clearing Member is assigned an Exercise Notice for a given account (e.g. the Firm Account) it may not allocate that assignment to another account (e.g. a Client Account).

An attempt will be made by CDCC to assign an Exercise Notice for more than 10 Options contracts in blocks not exceeding 10 contracts in each Series of Options.

Exercise Notices assigned to a Clearing Member's Client Account shall be allocated by the Clearing Member to any of its clients based on any method which is equitable and consistent with the rules of the relevant Exchange.

Automatic Exercise - Options and Options on Futures

To safeguard Clearing Members from possible errors, CDCC has instituted an Automatic Exercise procedure for expiring Series of Options. In simple terms, all IntheMoney Options and Options on Futures over predetermined thresholds are automatically exercised by CDCC, unless Clearing Members instruct otherwise.

CDCC establishes predetermined thresholds and informs Clearing Members that every Option and Option on Future above that threshold will be automatically exercised. CDCC will not automatically exercise any At-the-Money Option. CDCC provides a method for Clearing Members to make changes to the Automatic Exercise function of the CDCC Clearing Application. This allows Clearing Members to either opt in or opt out of the Automatic Exercise with respect to the Options and Options on Future they hold. For example, a Member can choose not to exercise an Option that is above the predetermined threshold but to exercise another Option that is At-the-Money or OutoftheMoney.

Exercised and Assigned Option Contracts

a) Exercised Positions

A Clearing Member who has exercised an Option has an obligation to either deliver the Underlying Interest (in the case of a Put Option) or pay the Exercise Price (in the case of a Call Option).

b) Assigned Positions

A Clearing Member who has been assigned an Exercise Notice has the obligation to pay the Exercise Price upon delivery of the Underlying Interest (in the case of a Put Option) or to deliver the Underlying Interest against payment (in the case of a Call Option).



FUTURES

Submission of Tender Notices

Tender Notices must be submitted before Close of Business during the relevant FIFO Period (which, subject to any contract adjustment by the Exchange, shall be as follows):

CGB, CGF and CGZ	one Business Day preceding the first Business Day of the Delivery Month up to and including the last Business Day preceding the last Business Day of the Delivery Month.
LGB and MCX	before Close of Business on the last trading day.

All outstanding Short Positions in EMF, SXF, SXM, SCF, Sector Index Futures, Share Futures, and Options on Futures are automatically tendered on the last trading day, as per Contract Specifications, after Close of Business.

All outstanding Short Positions in COA and CRA are automatically tendered on the first Business Day following the last trading day, as per Contract Specifications, after Close of Business.

Assignment of Tender Notices

CDCC assigns all Tender Notices to open Long Positions on a random basis with the exception of the Government of Canada Bond Futures (CGB, CGF and CGZ). Assignments for the CGB, CGF and CGZ Futures are processed on a First-In-First-Out (FIFO) basis.

Delivery of the Underlying Interest and payment of the Settlement Price is effected by Clearing Members as instructed by CDCC.

FIRST-IN-FIRST-OUT (FIFO) ASSIGNMENT PROCESS

Description of Procedures

The Delivery Months for the CGB, CGF and CGZ Futures contracts are March, June, September and December as prescribed by the Exchange. When a Member submits a Tender Notice with respect to a Short Position, a Long Position is assigned on a First-In-First-Out (FIFO) basis. CDCC <u>publishessends out</u> an Operational Notice prior to each relevant FIFO Period to remind Clearing Members of the procedures involved.

On the sixth Business Day prior to the first Business Day of the Delivery Month, each Clearing Member holding Long Positions in the relevant Series of Futures must declare on the CDCC Clearing Application its Long Positions in chronological order for each of its accounts. The entries must include the date the position was opened, the number of contracts and the account. When CDCC assigns a Tender Notice, the Long Position with the oldest date will be assigned first and the Long Position with the most recent date will be assigned last.

During the FIFO Period, Clearing Members must ensure that they update their declarations on a daily basis before Close of Business. It is the Clearing Members' responsibility to ensure that positions in each account maintained with CDCC are accurate. If any discrepancy between the Corporation and the Clearing Member's records is noted, the Clearing Member must rectify the discrepancy immediately, and inform CDCC if any discrepancy is not resolved and corrected by the following business day.

FIXED INCOME TRANSACTIONS

CDCC acts as central counterparty to all Fixed Income Transactions that are submitted by Clearing Members to CDCC for clearing. All Fixed Income Transactions shall be submitted for clearing to CDCC through the CDS trade matching facility routing matched trades to CDCC. As a result of these Transactions being novated to CDCC, CDCC will be either the buyer or the seller of all settlement records that are sent to the Central Securities Depository.



Various transmissions of settlement records will be sent by CDCC to the Central Securities Depository on a daily basis.

Same Day Transactions gross settlement records

For Same Day Transactions, two settlement records consisting of settlement instructions (Gross Delivery Requirements and Gross Payment Against Delivery Requirements) will be sent gross to the Central Securities Depository to be settled on a real-time basis throughout the day immediately after each Same Day Transaction is novated to CDCC until the Submission Cut-Off Time specified in Section 2 of this Operations Manual.

Forward Settlement Transactions and Futures Contracts on an Acceptable Security net settlement records

For Forward Settlement Transactions and Futures Contracts on Acceptable Securities, settling on the next Business Day, two settlement records consisting of net settlement instructions (Net Delivery Requirements and Net Payment Against Delivery Requirements) will be sent to the Central Securities Depository on a net basis at the Netting Cut Off Time specified in Section 2 of this Operations Manual for settlement on the next Business Day.

Morning net DVP settlement process

In respect of any Pending Payment Against Delivery Requirements at the Morning Netting Cycle Timeframe specified in Section 2 of this Operations Manual, CDCC shall send new settlement records (Morning Net Payment Against Delivery Requirements) to the Central Securities Depository reducing any Pending Payment Against Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Payment Against Delivery Requirements of CDCC in favour of the same Clearing Member. The Clearing Member or its Settlement Agent shall have sufficient funds in its CDS Funds Account to settle the lesser of (i) its Morning Net Payment Against Delivery Requirement and (ii) the amount of the CDCC Daylight Credit Facility during the Morning Net DVP Settlement Timeframe specified in Section 2 of this Operations Manual.

Afternoon net DVP settlement process

In respect of any Pending Settlement Requirements at the Afternoon Netting Cycle Timeframe specified in Section 2 of this Operations Manual, CDCC shall send new settlement records (Afternoon Net DVP Settlement Requirements) to the Central Securities Depository reducing any Pending Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Delivery Requirements of CDCC in favour of the same Clearing Member in respect of the same Acceptable Security, and/or reducing any Pending Payment Against Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Payment Against Delivery Requirements of CDCC in favour of the same Clearing Member. The Clearing Member, or its Settlement Agent, shall have sufficient funds and sufficient Acceptable Securities in its CDS Funds Accounts and CDS Securities Accounts to settle its Afternoon Net DVP Settlement Requirements by the End of Day DVP Settlement Time specified in Section 2 of this Operations Manual.

Delivery

Securities delivery against payment is effected on a DVP basis through the Central Securities Depository.

In the event of a failed or partial delivery, CDCC will take appropriate action in accordance with this Manual and Section A-804 of the Rules.

CDCC shall determine the net settlement instructions by Clearing Member, CUSIP/ISIN and Settlement Date for all Transactions comprised in the Forward Settlement Transactions netting process (as specified in the above section entitled "Forward Settlement Transactions and Futures Contracts on an Acceptable Security net settlement records") submitted to CDCC for clearing as of the Netting Cut Off Time. These settlement instructions shall be submitted to the relevant Central Securities Depository on a daily basis and in the form and settlement tranche acceptable to the Central Securities Depository for this purpose.

For Same Day Transactions, CDCC shall determine the gross settlement instructions (Gross Delivery Requirements and Gross Payment Against Delivery Requirements) by Clearing Member and the applicable CUSIP/ISIN, and submit such instructions to the relevant Central Securities Depository (in the form and settlement tranche acceptable to such



Central Securities Depository) immediately after each Same Day Transaction is novated to CDCC for real-time settlement. Notwithstanding the foregoing, at the Morning Netting Cycle Timeframe, CDCC shall cancel previously issued Pending Payment Against Delivery Requirements and replace them by Morning Net Payment Against Delivery Requirements by Clearing Member (as specified in the above section entitled "Morning net DVP settlement process").

In the event of a Failed Delivery for a particular settlement tranche to a Net Delivery Requirement or to an Afternoon Net DVP Settlement Requirement consisting of an obligation to deliver Acceptable Securities by the End of Day DVP Settlement Time specified in Section 2 of this Operations Manual, CDCC shall, on a best efforts basis, attempt to coordinate a partial delivery among those Receivers of Securities for that particular settlement tranche of the relevant Acceptable Security. In the event that no partial settlement is possible, the settlement tranche will be included in the Rolling Delivery Obligation of the failing Clearing Member and CDCC shall re-attempt settlement of the failed settlement tranche on the next Business Day. In the case of a Failed Delivery with respect to a Gross Delivery Requirement resulting from a Same-Day Transaction submitted after the Afternoon Netting Cycle Timeframe and before the Submission Cut-Off Time to be settled by the End of Day DVP Settlement Time, CDCC will fail or partially deliver for the same quantity of Acceptable Securities to the Clearing Member who is the Receiver of Securities with respect to the relevant Same Day Transaction.

In the event of a Failed Payment Against Delivery at the Morning Net DVP Settlement Timeframe specified in Section 2 of this Operations Manual, CDCC shall impose a fine on the Clearing Member corresponding to the charges which are levied on CDCC for the usage of the CDCC Daylight Credit Facility as a result of this Failed Payment Against Delivery. Additionally, If the Clearing Member still does not have sufficient funds in its CDS Funds Account or that of its Settlement Agent at the Central Securities Depository to settle the relevant Morning Net Payment Against Delivery Requirement, or in the amount of the CDCC Daylight Credit Facility (whichever is less), by 11:00 a.m., the Clearing Member shall be deemed a Non-Conforming Member, in addition to any other remedies that CDCC may apply to such situation in accordance with Subsection A-806(1) of the Rules.

In the event of a Failed Payment Against Delivery at the End of Day DVP Settlement Time specified in Section 2 of this Operations Manual, the Clearing Member shall be deemed a Non-Conforming Member and shall be required to pay to CDCC any charges which are-may be levied on CDCC for the overnight financing of this Failed Payment Against Delivery, in addition to any other remedies that CDCC may apply to such situation in accordance with Subsection A-806(2) of the Rules. CDCC will assist the Clearing Member to remedy the situation so that the Clearing Member can maintain its conforming status. As DVP is not available after the End of Day DVP Settlement Time at the Central Securities Depository (CSD), the Clearing Member must deliver the funds (or acceptable equivalent) outside of the CSD's systems to CDCC prior to CDCC delivering the securities via the CSD.

Buy-In Process (excluding Fixed Income Variation Margin Buy-Ins)

For a Buy-In in respect of the Acceptable Security, the following applies. As set forth in Subsection A-804(3) of the Rules, CDCC may effect a Buy-In transaction on its own initiative or pursuant to a formal request by a Receiver of Securities affected by a Failed Delivery by purchasing the missing quantity of the relevant Acceptable Securities on the open market.

When initiated by a Receiver of Securities, the Buy-In process shall be as follows:

- The Receiver of Securities who wants to initiate a Buy-In must send to CDCC the appropriate Buy-In Scan Form (which is accessible on CDCC's Secured <u>Extranet</u> Website) duly completed, with the following information:
 - a. Clearing Member's Name;
 - b. Clearing Member's Number;
 - c. The Acceptable Security (ISIN) involved;
 - d. The total quantity of the Failed Delivery;
 - e. The quantity requested in the Buy-In;



- f. The Buy-In delivery date, which shall be the current Business Day + not less than one (1) complete Business Day.
- 2. The Buy-In Scanned Form must be submitted to CDCC in the prescribed format and signed by an Authorized Representative of the Clearing Member.
- 3. Upon receiving the duly completed Buy-In Scan Form from a Receiver of Securities, CDCC will work with the Provider(s) of Securities responsible for the Failed Delivery in order to validate if the delivery can be made within the number of Business Days specified in the Buy-In Scan Form (the "Buy-In Notice Delay").
- 4. At the expiry of the Buy-In Notice Delay, if the Provider(s) of Securities have not delivered the relevant Acceptable Securities, CDCC will initiate a cash trade on the open market.
- 5. Once delivery is received by CDCC on the cash trade, CDCC will deliver the Acceptable Securities to the Receiver of Securities that requested the Buy-In transaction.
- 6. All fees incurred to CDCC, including all costs with respect to the Buy-In transaction shall be charged to the Provider(s) of Securities responsible for the Failed Delivery. Such fees will be included on the Monthly Clearing Fees Invoice (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_Lynx or any other payment method approved by CDCC.

SGC Repurchase Transactions

An SGC Repurchase Transaction is a bilateral repurchase agreement originally entered into between an SGC Clearing Member and the Trust which is submitted to CDCC for clearing during the SGC Repurchase Transaction Submission Period, in which the SGC Clearing Member agrees to sell SGC Securities in a particular SGC Securities Basket to the Trust at a Purchase Price to be paid by the Trust to the SGC Clearing Member, with a simultaneous agreement by the SGC Clearing Member to purchase the SGC Securities or Equivalent SGC Securities in a particular SGC Securities Basket from the Trust at the Repurchase Date and by the SGC Maturity Settlement Time, at a Repurchase Price to be paid by the SGC Clearing Member to the Trust. CDCC acts as central counterparty for all SGC Repurchase Transactions: CDCC accepts and novates the bilateral repurchase transaction and its terms and conditions are replaced with the SGC Repurchase Transaction terms and conditions set out in Rule D-7 of the Rules during the clearing process.

All defined terms used in the foregoing paragraph and not defined herein are defined in Rule D-7 of the Rules.



Section 7 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, separately 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 Lynxthe-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.

All Clearing Members must have a Canadian dollar Settlement Account at a Designated Bank approved settlement bank to pay and receive all Canadian cash obligations intraday and at end of day. Additionally, at onboarding, Clearing Members must also provide an alternative Canadian dollar settlement account for use in the extreme event that an approved settlement bank in which a Clearing Member's current settlement account resides becomes unavailable. Alternative settlement accounts are subject to annual testing in which the Clearing Members must demonstrate that:

(i) the accounts can receive manual cash payments from CDCC;

(ii) Clearing Members can manually pay cash obligations directly to CDCC.

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, <u>separately</u> 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.



SETTLEMENT

End of Day Settlement

Payments for end of day settlement (Futures mark-to-market, premiums, Margin shortfalls, etc.) must be received by 8:15 a.m. the next Business Day for each Clearing Member (excluding LCMs) and 9:00 a.m. for each LCM (through non-cash collateral).

If a payment is late, CDCC will notify the Clearing Member that it is being fined. The fine structure is as follows:

Based on a rolling thirty days - if there has been a prior occurrence within the preceding thirty days, it is the second occurrence.

The fine schedule described below is subject to the Escalation Procedure applicable for operational issues detailed in Section 11 of this Manual.

For Clearing Members not in a Tri-Party Agreement

First occurrence of a late payment:

- if CDCC receives the payment in its Bank of Canada account by 8:307:55 a.m. the next Business Day, there will be no fine.
- if the payment is received by 8:4530 a.m. the next Business Day, CDCC will impose a \$1,000 fine.
- if the payment is not received by 8:59 a.m. the next Business Day, CDCC will impose a \$2,500 fine.
- if the payment is not received by 9:300 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

On the second or more occurrences of a late payment:

- if CDCC receives the payment in its Bank of Canada account by 8:307:55 a.m. the next Business Day, CDCC will impose a \$1,000 fine
- if the payment is received <u>by after 7:55 a.m. but before 8:4530</u> a.m. the next Business Day, CDCC will impose a \$5,000 fine.
- if the payment is received by after 9:008:30 a.m. but before 9:298:59 a.m. the next Business Day, CDCC will impose a \$10,000 fine.
- if the payment is not received by 9:300 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

For Clearing Members (excluding LCMs) in a Tri-Party Agreement - Margin Shortfalls only

First occurrence of a late payment or delivery:

- if CDCC receives the payment in its Bank of Canada account or if CDCC has evidence that the securities have been received in the appropriate account by 8:307:55 a.m. the next Business Day, there will be no fine.
- if the payment or delivery is received by 8:4530 a.m. the next Business Day, CDCC will impose a \$1,000 fine.
- if the payment or delivery is received by 9:298:59 a.m. the next Business Day, CDCC will impose a \$2,500 fine.



SETTLEMENT

• if the payment or delivery is not received by 9:<u>3</u>00 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

On the second or more occurrences of a late payment or delivery:

- if CDCC receives the payment in its Bank of Canada account or if CDCC has evidence that the securities have been received in the appropriate account by 8:307:55 a.m. the next Business Day, CDCC will impose a \$24,000 fine
- if the payment or delivery is received by after 7:55 a.m. but before 8:4530 a.m. the next Business Day, CDCC will impose a \$5,000 fine.
- if the payment or delivery is received by after 9:008:30 a.m. but before 9:298:59 a.m. the next Business Day, CDCC will impose a \$10,000 fine.
- if the payment or delivery is not received by 9:<u>3</u>00 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

For LCMs - Margin Shortfalls only

First occurrence of a late payment or delivery:

- if CDCC receives the payment in CDCC's Bank of Canada account designated for such Limited Clearing Member or if CDCC has evidence that the securities have been received in the appropriate account by 9:150 a.m. the next Business Day, there will be no fine.
- if the payment or delivery is received by $9:\underline{3045}$ a.m. the next Business Day, CDCC will impose a $\underline{24}$,000 fine.
- if the payment or delivery is received by 10:14 a.m. the next Business Day, CDCC will impose a \$2,500 fine.
- if the payment or delivery is not received by 10:15 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

On the second or more occurrences of a late payment or delivery:

- if CDCC receives the payment in CDCC's Bank of Canada account designated for such Limited Clearing Member
 or if CDCC has evidence that the securities have been received in the appropriate account by 9:150 a.m. the
 next Business Day, CDCC will impose a \$1,000 fine
- if the payment or delivery is received after by 9:10 a.m. but before 9:45 a.m. the next Business Day, CDCC will impose a \$5,000 fine.
- if the payment or delivery is received by after 9:3045 a.m. but before 10:14 a.m. the next Business Day, CDCC will impose a \$10,000 fine.
- if the payment or delivery is not received by 10:15 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

SGC Securities Adjustment Threshold

The Corporation may determine, from time to time and for the purpose of Section D-707 of the Rules, the amount of a minimum threshold to be applied to SGC Securities Adjustment once calculated by the Corporation.



SETTLEMENT

If the SGC Securities Adjustment calculated pursuant to Section D-707 of the Rules is equal to or exceeds the threshold, the Corporation may require the SGC Clearing Member to make available SGC Securities for the entire amount of the SGC Securities Adjustment (disregarding the threshold) within the given timeline.

If the SGC Clearing Member does not make available sufficient SGC Securities for sale in the entire amount of the SGC Securities Adjustment within the given timeline, CDCC may impose the following fines:

- if the sale of the intra-day SGC Securities Adjustment is made more than 2 hours after but less than 2 hours and 15 minutes from notification, CDCC may impose a \$500 fine;
- if the sale of the intra-day SGC Securities Adjustment is made more than 2 hours and 15 minutes but less than 2 hours and 30 minutes from notification, CDCC may impose a \$1,000 fine.
- If at the end of day, an SGC Securities Adjustment is made more than 15 minutes _, but less than 30 minutes after the SGC Securities Adjustment Settlement Time, CDCC may impose a \$500 fine;
- If at the end of day, an SGC Securities Adjustment is made more than 15 minutes, but less than 30 minutes after the SGC Securities Adjustment Settlement Time, CDCC may impose a \$1000 fine.

If the SGC Clearing Member does not make available sufficient SGC Securities for sale in the entire amount of SGC Securities Adjustment, the Corporation may take any action or measure provided in Section D-707(4).



Section 8 MARGIN, <u>CLEARING AND PROCESSING</u> - SUPPLEMENTAL LIQUIDITY FUND

MARGIN FUND ACCOUNTS

Margin Fund Accounts are 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 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, however, 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, 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 Asset previously deposited in the Margin Fund Accounts to the Corporation. The Clearing Member must first pledge deposit equivalent securities/cash and withdraw the existing securities/cash subject to substitution. The value of the equivalent securities/cash so deposited must be equal to or in excess of the Assets 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 Assets subject to substitution do not create deficits in the Clearing Member's Margin Fund Accounts. CDCC will respond within the specified time set forth in Section 2 and, on a best effort basis, approve the substitution in CDCC Clearing Application.

Cash deposit

Cash deposited in the Margin Fund Accounts must be sent to the relevant CDCC bank account. After performing all the validation processes, CDCC confirms within the CDCC Clearing Application the Clearing Member's deposits and/or withdrawals.



Deposits, withdrawals and changes thereto will be reflected on the immediately following Business Day's Deposits and Withdrawals Report (MA01). In accordance with the Rules, any discrepancies that the Clearing Member notices against its own records should be reported to CDCC immediately.

Pledging (Securities / CDS)

Securities pledges in the Margin Fund Accounts must be performed through CDS' Clearing and Settlement SystemX 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 <u>an electronic</u> document, <u>as presented in Exhibit A of Schedule B in this Manual</u>, <u>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.</u>

After performing all the validation processes, CDCC confirms within the CDCC Clearing Application the Clearing Member's deposits and/or withdrawals.

Deposits, withdrawals and changes thereto will be reflected on the immediately following Business Day's Deposits and Withdrawals Report (MAO1). In accordance with the Rules, any discrepancies that the Clearing Member notices against its own records should be reported to CDCC immediately.

Pledging (Securities / Tri Party - Securities Account with an Approved Custodian)

Subject to certain conditions, the Corporation may allow Clearing Members to pledge non-cash collateral for the purpose of meeting their Margin requirements pursuant to Rule A-7 (excluding Net Variation Margin Requirements and any other Margin which can otherwise only be cash settled) to a securities account maintained at a third party securities intermediary. The securities intermediary must enter into an Account Control Agreement with respect to the securities account and be an Approved Custodian, each as defined in the Rules.

Use of the Securities Account

- 1. The securities account shall only be maintained by a securities intermediary which is an Approved Custodian, as defined in the Rules.
- 2. Any securities held in the securities account maintained by the Approved Custodian, in the name of the Clearing Member, shall be subject to an Account Control Agreement.
- 3. The Account Control Agreement is a standard agreement that meets certain requirements, as prescribed in the Rules.
- 4. The securities account may not be used for Net Variation Margin Requirements or for settlement purposes.
- 5. The respective rights and obligations of the Clearing Member and CDCC with respect to the securities collateral held in the securities account are subject to the Rules, including:
 - a. All deposits, withdrawals and substitutions in the securities account are subject to the timeline described in Section 2 of this Manual and to the collateral policy described in Section 3 (Eligible Collateral) of the Risk Manual;
 - All deposits, withdrawals and substitutions made in the securities account shall also be entered in CDCC Clearing Application in accordance with the timeline described in Section 2 of this Manual and to the collateral policy described in Section 3 (Eligible Collateral) of the Risk Manual;



- c. Any withdrawal of securities held in the securities account is subject to CDCC's approval. The withdrawal must be entered in CDCC Clearing Application by the Clearing Member. A withdrawal authorization form must be signed by an Authorized Representative of the Clearing Member and must be transmitted to CDCC. CDCC will then, within the specified time to respond to a withdrawal request specified in Section 2, sign and transmit the a withdrawal authorization form to the Custodian to proceed with the withdrawal;
- d. Any substitution is subject to the deposit by the Clearing Member of the replacement securities in the securities account before the withdrawal of the replaced securities. Both the deposit and the withdrawal shall also be entered in CDCC Clearing Application by the Clearing Member. A substitution authorization form must be signed by an Authorized Representative of the Clearing Member and must be transmitted to CDCC. CDCC will—then, within the specified time to respond to a substitution request specified in Section 2, sign and transmit a the substitution authorization form to the Custodian to proceed with both the deposit and the withdrawal portion of the substitution.

Intra-Day Margin Calls

CDCC encourages its Clearing Members to cover Intra-Day Margin Calls with collateral other than cash.

The fine schedule described below is subject to the Escalation Procedure applicable for operational issues detailed in Section 11 of this Manual.

Clearing Members (excluding LCMs) have one (1) hour from notification to cover an Intra-Day Margin Call. If the payment or delivery is late, the following fines shall apply:

- if the payment or delivery is received more than 1 hour after but less than 1 hour and 15 minutes from notification, CDCC will impose a \$500 fine.
- if the payment or delivery is received more than 1 hour and 15 minutes but less than 1 hour and 30 minutes from notification, CDCC will impose a \$1,000 fine.
- if the payment or delivery is not received by 1 hour and 30 minutes from notification, CDCC will deem the Clearing Member (excluding LCMs) a Non-Conforming Member.

LCMs have two (2) hours from notification or until such Settlement Time as may be provided in Section 2 to cover an Intra-Day Margin Call. If the payment or delivery is late, the following fines shall apply:

- if the payment or delivery is received more than 2 hours after but less than 2 hours and 15 minutes from notification, CDCC will impose a \$500 fine.
- if the payment or delivery is received more than 2 hours and 15 minutes but less than 2 hours and 30 minutes from notification, CDCC will impose a \$1,000 fine.
- if the payment or delivery is not received within 2 hours and 30 minutes from notification, CDCC will deem the LCM a Non-Conforming Member

Overnight Margin Calls

CDCC offers its Clearing Members two (2) ways to cover Overnight Margin Calls:

- Eligible currencies deposited through an approved bank;
- Securities pledged through CDS or other approved third-party securities intermediary(see CDS document "PLEDGE AND SETTLEMENT PROCEDURES" Section 1.8).



Clearing Members (excluding LCMs) have two hours from notification to cover an Overnight Margin Call. If the payment or delivery is late or insufficient, the Clearing Member may be deemed a Restricted Clearing Member by CDCC and the following fines shall apply:

- if the payment or delivery is received more than 2 hours after but less than 2 hours and 15 minutes from notification, CDCC will impose a \$500 fine.
- if the payment or delivery is received more than 2 hours and 15 minutes but less than 2 hours and 30 minutes from notification, CDCC will impose a \$1,000 fine.

(FIXED INCOME) VARIATION MARGIN ACCOUNT

The Fixed Income Variation Margin Account is the CDCS record provided to each Clearing Member listing all Margin deposits made by such Clearing Member to CDCC for (Fixed Income) Net Variation Margin Requirement purposes only, in accordance with Section D-607 of the Rules, or otherwise as set forth in Section 8 hereof.

(Fixed Income) Net Variation Margin Requirement Settlement

In order to meet a (Fixed Income) Net Variation Margin Requirement, Clearing Members are required to pledge, through CDS's Clearing and Settlement SystemX, to CDCC's (Fixed Income) Variation Margin Account, Margin deposits 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, to cover any positive variation of the (Fixed Income) Net Variation Margin Requirement owed by a Clearing Member to CDCC.

While the Eligible Collateral must be delivered and pledged to CDCC through CDS' Clearing and Settlement SystemX, each Clearing Member must in parallel record in its (Fixed Income) Variation Margin Account such pledge, or any pledge release, to match the entries. The (Fixed Income) Variation Margin Account is solely used to record the pledges or pledge releases, as the case may be, of Margin deposits for (Fixed Income) Net Variation Margin Requirement purposes.

Delivery of the (Fixed Income) Net Variation Margin Requirement

On any given Business Day, each Clearing Member must deliver to the Corporation in CDCC's account at CDS, Eligible Collateral for (Fixed Income) Net Variation Margin Requirement purposes, taking into consideration any shortfall resulting from the variation of the (Fixed Income) Net Variation Margin Requirement, as compared to the (Fixed Income) Net Variation Margin Requirement calculated on the previous Business Day, and the fluctuation of the market value of the Eligible Collateral previously pledged by such Clearing Member to meet its (Fixed Income) Net Variation Margin Requirement.

Upon accepting Eligible Collateral that has been pledged to it through CDS' Clearing and Settlement SystemX, CDCC may re-pledge and deliver the Eligible Collateral to a receiving Clearing Member, subject to CDCC's first ranking pledge, and the receiving Clearing Member shall be entitled to re-pledge or re-hypothecate the Eligible Collateral delivered to it.

Each Clearing Member is also required to return to the Corporation the same CUSIP/ISIN that had been allocated and pledged to it by the Corporation as part of the (Fixed Income) Net Variation Margin Requirement delivery, in an amount sufficient to meet the (Fixed Income) Net Variation Margin Requirement shortfalls as indicated on the MS10 report. Clearing Members must return the same CUSIP/ISIN in accordance with the (Fixed Income) Net Variation Margin Requirement Settlement Times. If a Clearing Member fails to return to the Corporation the specific CUSIP/ISIN securities listed on the report but returns equivalent securities instead (a "Fixed Income Variation Margin Delivery Failure"), the Clearing Member will be subject to fines as described below.

Distribution of the (Fixed Income) Net Variation Margin Requirement Collateral

The Corporation will transfer to each Clearing Member being owed a net amount resulting from a change in such Clearing Member's (Fixed Income) Net Variation Margin Requirement or from the fluctuation of the market value of



the Eligible Collateral previously pledged by such Clearing Member to meet its (Fixed Income) Net Variation Margin Requirement, the Variation Margin securities received by the Corporation as part of the (Fixed Income) Net Variation Margin Requirement. The Corporation will in priority return the same CUSIP/ISIN previously pledged to the Corporation by such Clearing Member, subject to the specific procedures described below in the event of a Fixed Income Variation Margin Delivery Failure or of a substitution request.

Substitution of Pledged Securities Collateral for the (Fixed Income) Variation Margin Account

1. (Fixed Income) Variation Margin Account Collateral substitution request:

A Clearing Member may request to substitute a specific CUSIP/ISIN previously pledged in the (Fixed Income) Variation Margin Account to the Corporation. The request for substitution must be received by the Corporation before 11:00 a.m. for same day settlement. Clearing Members 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. Substitution of a specific CUSIP/ISIN requested for same day settlement will be completed by 3:00 p.m. by the Corporation, subject to the Buy-In process below.

2. (Fixed Income) Variation Margin Account Securities Collateral substitution notice:

The Corporation will inform by 12:00 p.m. (noon) any Clearing Member subject to a substitution request (the "Holder of securities") for a same day settlement. The Holder of securities will have until 3.00 p.m. to deliver the securities to CDCC's (Fixed Income) Variation Margin Account. Failure to deliver by the Holder of securities by the cut-off time will be considered a Fixed Income Variation Margin Delivery Failure and will result in fines being applied to the Holder of securities as described below.

FIXED INCOME VARIATION MARGIN DELIVERY FAILURE

Fines

CDCC will apply fines for failure to return distributed securities.

CDCC will apply fines for failure to return securities subject to a substitution notice, by the appropriate deadline.

For each day between the day of the original return obligation and the delivery date (the "Fail Period") a fine will be applied (Fail fees). The Fail fee is based on a rate equal to CORRA, applied daily. CDCC shall immediately notify the Clearing Member to which a fine is imposed.

Throughout the Fail Period, CDCC will require to receive Eligible Collateral of a value equivalent to the value of the unreturned securities and CDCC will deliver such replacement securities to the receiving Clearing Member (the "Replacement Securities"). At the end of the Fail Period, the Replacement Securities will be returned from the receiving Clearing Member to the delivering Clearing Member.

The fines described above are subject to the Escalation Procedure applicable for operational issues detailed in Section 11 of this Manual.

Collection of Fines

CDCC will collect any applicable fines with the month-end clearing fee billing.

Fixed Income Variation Margin Buy-In process for Fixed Income Variation Margin Delivery Failure

The Receiver of securities affected by a Fixed Income Variation Margin Delivery Failure may request that the Corporation execute a Buy-In on the day following the market standard settlement $(T+\frac{12}{2})$, where T is the day of the original date of the request).



Same day settlement will be executed by CDCC on a best efforts basis. In the event of a failure to deliver by the counterparty to the Buy-In transaction on the same day, CDCC will execute the Buy-In transaction the following day without liability.

The Corporation shall only execute a Buy-In transaction pursuant to a formal request by a Receiver of securities affected by a Failed Delivery, by purchasing on the open market the collateral of the specified quantity and CUSIP/ISIN.

When initiated by a Receiver of securities, the Buy-In process shall be as follows:

- The Receiver of securities who wants to initiate a Buy-In must send to the Corporation the appropriate Buy-In Scanned Form (which is accessible on CDCC's Secured <u>Extranet</u> Website) duly completed with the following information:
 - a. Clearing Member's Name;
 - b. Clearing Member's Number
 - c. The specific securities (Eligible Collateral) (ISIN) involved;
 - d. The total quantity of the Failed Delivery;
 - e. The quantity requested in the Buy-In;
 - f. The Buy-In delivery date, which shall be the current Business Day + no less than two (2) complete Business Days.

The Buy-In Scanned Form must be submitted to CDCC in the prescribed format and must be signed by an Authorized Representative of the Clearing Member before 10:00 a.m.

- Upon receiving the duly completed Buy-In Scanned Form from a Receiver of securities, the Corporation will work
 with the Holder(s) of securities responsible for the Failed Delivery in order to validate if the delivery can be
 made within the number of Business Days specified in the Buy-In Scan Form (the "Buy-In Notice Delay").
- 2. At the expiry of the Buy-In Notice Delay, if the Provider(s) of securities has not delivered the relevant securities, the Corporation will initiate a cash trade on the open market.
- 3. Upon receipt of the securities, CDCC will deliver the requested securities to the Receiver that initiated the Buy-In transaction.
- 4. All fees incurred by the Corporation, including all costs with respect to the Buy-In transaction shall be charged to the Provider(s) of securities responsible for the Failed Delivery. Such fees will be included on the Monthly Clearing Fees Details Report (MB01) produced on the second Business Day of each month as a separate pay figure, payable to the Corporation on the fifth Business Day of each month through LynxLVTS or any other payment method approved by the Corporation.

Delay of start of End of Day Batch

A Clearing Member may request to delay the start of the 5:30 p.m. End of Day Batch. The request must be submitted to CDCC in writing by 5:00 p.m., and authorized by an Authorized Representative of the Clearing Member. If approved, the End of Day Batch will be delayed for a single 15- minute window to allow the Clearing Members to complete any necessary tasks. CDCC will advise all Clearing Members by broadcast email of the delay in advance, and the requesting Clearing Member will be charged.



Delay of start of GCM Batch

A Clearing Member may request to delay the start of the 9:00 p.m. GCM Batch. The request must be submitted to CDCC in writing by 8:30 p.m., and authorized by an Authorized Representative of the Clearing Member. If approved, the GCM Batch will be delayed for a single 15-minute window to allow the Clearing Members to complete any necessary tasks. CDCC will advise all Clearing Members by broadcast email of the delay in advance, and the requesting Clearing Member will be charged

CLEARING FUND

Each Clearing Member (excluding LCMs) approved to clear Exchange Transactions and/or OTCI Transactions and/or Fixed Income Transactions shall maintain a deposit in the Clearing Fund of the amounts from time to time required by CDCC in accordance with Rule A-6. The Clearing Fund has been established to protect CDCC and its Clearing Members (including their Affiliate(s)) from potential defaults and other market events and shall be used for the purposes set out in Section A-609 and Subsection A-701(2) of the CDCC Rules.

Each Clearing Member's (excluding LCMs) contribution includes a required Base Deposit and a Variable Deposit. The details of the Base and Variable Deposits are set forth in Rule A-6.

Clearing Fund Statement Report

On the first Business Day of each calendar month, CDCC shall issue to each Clearing Member (excluding LCMs) a Clearing Fund statement that shall list the current amount of such Clearing Member's deposits to the Clearing Fund and the amount of deposit, which is based on the monthly calculation of the Variable Deposit, required of such Clearing Member. CDCC will also issue a Clearing Fund statement (MA71) intra-monthly if an increase to the Variable Deposit is necessary. Any deficit between the amounts held on deposit and the deposit required to be made by a Clearing Member must be satisfied on the next Business Day (T+1) before 10:00 a.m. (no same-day deposits for amounts in excess of \$10MM).

Deposits

Deposits to the Clearing Fund shall be in the form of <u>CAD</u> Cash. Deposits to the Clearing Fund are made and valued in the same manner and are subject to the same deadlines as for Margin deposits, as set forth in Section 2 of this Operations Manual.

Withdrawals

Clearing Members (excluding LCMs) may request to withdraw any surplus amount from the Clearing Fund, subject to applicable deadlines, as set forth in Section 2 of this Operations Manual.

Pledges

Pledges of Cash must be performed in accordance with Rule A-6.



SUPPLEMENTAL LIQUIDITY FUND

Each Clearing Member (excluding LCMs) approved to clear Transactions shall maintain Supplemental Liquidity Contributions in the Supplemental Liquidity Fund of the amounts from time to time required by CDCC in accordance with Rule A-6A of CDCC Rule and the Risk Manual. The Supplemental Liquidity Fund has been established to protect CDCC from potential liquidity obligations or exposure that CDCC may suffer and shall be used for the purposes set out in Rule A-6A of CDCC Rules.

Supplemental Liquidity Fund Statement

On the first Business Day of each calendar month, CDCC shall issue to each Clearing Member (excluding LCMs) a Supplemental Liquidity Fund statement that shall list the current amount of such Clearing Member's Supplemental Liquidity Contributions to the Supplemental Liquidity Fund and the amount of Supplemental Liquidity Contributions required of such Clearing Member. CDCC will also issue a Supplemental Liquidity Fund statement (MA80) intra-monthly if an increase to the Supplemental Liquidity Contributions is necessary. Any deficit between the Supplemental Liquidity Contributions held in the Supplemental Liquidity Fund and the Supplemental Liquidity Contributions required to be made by a Clearing Member must be satisfied on the next Business Day (T+1) before 10:00 a.m. (no same-day deposits for amounts in excess of \$10MM).

Supplemental Liquidity Contributions

Supplemental Liquidity Contributions to the Supplemental Liquidity Fund shall be in the form of <u>CAD</u> Cash. Supplemental Liquidity Contributions to the Supplemental Liquidity Fund are valued in the manner set forth in the Risk Manual.

Withdrawals

Clearing Members (excluding LCMs) may request to withdraw any surplus amount from the Supplemental Liquidity Fund.

Pledges

Pledges of Cash must be performed in accordance with Rule A-6A.



Section 9 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 https://www.cdcc.ca/f_en/cdcc_fees.pdf 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 LynxLVTS 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 <u>Extranet</u> Website. CDCC issues a statement on a monthly basis for these services. The fees are collected as per the date on the statement through <u>LynxLVTS</u> 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 CDS' <u>Clearing and Settlement System</u>* (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 <u>Lynx</u>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 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).



Section 10 <u>AUTHORIZED REPRESENTATIVES AND SECURITY OFFICERS</u>

Authorized Representatives

Clearing Members shall designate at least three (3) individuals within their firm with the proper authority to sign documents necessary for conducting business with CDCC, in accordance with Rule A-202. The designation of Authorized Representatives is achieved by filing a completed Certified List of Authorized Representatives with CDCC, which form shall be reviewed annually by each Clearing Member, and any updates provided to CDCC. It is the Clearing Member's responsibility to ensure that any changes to their Certified List of Authorized Representatives are timely reported to CDCC outside of this annual review exercise.

Security Officers

Clearing Members shall designate at least three (3) individuals within their firm who will be responsible for handling the Clearing Member's User Profiles ("Security Officers"). The designation of Security Officers is achieved by filing a completed Security Officer Identification Form with CDCC, which form shall be reviewed annually by each Clearing Member, and any updates provided to CDCC. It is the Clearing Member's responsibility to ensure that any changes to their Security Officers list are timely reported to CDCC outside of this annual review exercise.

Access to CDCC's Clearing System

Once duly designated, a Security Officer may submit a CDCS Clearing User Profile Request form (accessible in CDCC's Secured Extranet Website) instructing CDCC to add, modify or delete a User Profile. Completed forms must be submitted to the Business Operations group e-mail address: cdcc-ops@tmx.com (or to cdcc-extendedhours-ops@tmx.com, if the change is requested during the overnight clearing session).

<u>Upon receipt of the form, CDCC will process, as requested by a Clearing Member, the addition / modification or deletion.</u>



Section 11 ESCALATION PROCEDURE

PAYMENT FAILURE ESCALATION PROCEDURE

A failure by a Clearing Member to meet a payment, transfer, deposit, delivery, or acceptance of delivery when such obligation becomes due under the Rules (for the purpose of this Section 11 - Escalation Procedure, a "Payment Failure") as a result of an operational issue, including any material systems failure, malfunction, or delay encountered by a Clearing Member or its securities intermediary, including its Settlement Agent, Approved Depository, or Approved Custodian, (an "Operational Issue") shall be managed by the Corporation in accordance with the following procedure, (the "Escalation Procedure").

1. Communication

- a. For the purposes of this Payment Failure Escalation Procedure:
 - (i) a CDCC Level 1 contact shall be Manager or a Director Operations, or its equivalent;
 - (ii) a CDCC Level 2 contact shall be a Vice-President Operations, or its equivalent;
 - (iii) a CDCC Level 3 contact shall be the President Chief Operating Officer and Chief Clearing Officer or Vice-President and or Chief Risk Officer;
 - (iv) a Clearing Member Level 1 <u>CDCC eC</u>ontact shall be a <u>Manager or Director of Operations</u>, or its equivalent;
 - (v) a Clearing Member Level 2 <u>CDCC ∈C</u>ontact shall be a Vice-President Operations, or its equivalent; and
 - (vi) a Clearing Member Level 3 €Contact shall be a senior executive reporting directly to the president of the Clearing Member, or to its equivalent in the absence of a senior executive of the Clearing Member bearing the title "president".
- b. The CDCC Level 1 contact shall, immediately upon acquiring actual knowledge or confirmation of a Payment Failure by a Clearing Member, notify the Clearing Member Level 1 contact of the Payment Failure. The Clearing Member Level 1 contact shall, within a reasonable period of time, confirm the nature of the issue that caused the Payment Failure and, promptly upon providing such confirmation, proceed to provide the Corporation with the required information in accordance with the Operational Issue Resolution Notice defined below.
- c. In the event that (i) the Clearing Member Level 1 contact fails to respond to the CDCC Level 1 contact within a reasonable period of time, (ii) the Clearing Member Level 1 contact cannot confirm the nature of the issue that caused the Payment Failure, or (iii) the information provided by the Clearing Member Level 1 contact regarding the nature of the Operational Issue that caused the Payment Failure is deemed unsatisfactory by the Corporation, the CDCC Level 2 contact shall immediately contact the Clearing Member Level 2 contact. The Clearing Member Level 2 contact shall, promptly upon being contacted in accordance with this subsection, proceed to provide the Corporation with the required information in accordance with the Operational Issue Resolution Notice defined below.
- d. In the event that (i) the CDCC Level 2 contact fails to reach the Clearing Member Level 2 contact within a reasonable period of time, (ii) the Clearing Member Level 2 contact cannot confirm the nature of the Operational Issue that caused the Payment Failure, or (iii) the information provided by the Clearing Member Level 2 contact regarding the nature of the Operational Issue that caused the Payment Failure is deemed unsatisfactory by the Corporation, the CDCC Level 3 contact shall immediately contact the Clearing Member Level 3 contact. The Clearing Member Level 3 contact shall, within an hour after being contacted in accordance with this subsection, proceed to provide the Corporation with the required information in accordance with the Operational Issue Resolution Notice defined below.



ESCALATION PROCEDURE

2. Operational Issue Resolution Notice

- a. Upon receiving notification by the Corporation of the Payment Failure in accordance with Section 1 of this Escalation Procedure, if the Clearing Member Level 1, 2, or 3 contact, as the case may be, confirms in accordance with Subsection 1 that the Payment Failure is solely due to an Operational Issue, such Clearing Member Level 1, 2, or 3 contact, as the case may be, shall provide the Corporation with a written confirmation of the nature of the Operational Issue that caused the Payment Failure and a detailed description of the steps proposed to be taken by the Clearing Member to resolve the Operational Issue (together, the "Operational Issue Resolution Notice"). Where the Operational Issue affects the Clearing Member's securities intermediary (including its Settlement Agent, Approved Depository or Approved Custodian), the Clearing Member shall immediately provide the Corporation with the contact details for the relevant representative of such securities intermediary's and include such representative in every communication with the Corporation related to the Operational Issue until the full resolution of the Operational Issue.
- b. The Operational Issue Resolution Notice shall be re-issued by the Clearing Member Level 3 contact, to the Corporation on each day on which the Payment Failure persists, until there is a full resolution of the Operational Issue to the satisfaction of the Corporation.

3. Mitigation Tools

Immediately upon the occurrence of a Payment Failure, the Clearing Member shall use its best efforts to resolve the Operational Issue, and to mitigate the Payment Failure by the use of the following mitigation tools (the "Mitigation Tools") before 3:45 p.m., where necessary:

- a. The Exception Process Request after the start of CDS payment exchange, where applicable, or
- The Payment Delay Request.

4. Delayed Resolution

On any Business Day on which an Operational Issue Resolution Notice remains in effect, in the event that the Corporation is of the view that the Operational Issue is expected, or likely, to persist until the next following Business Day,

- a. The Corporation may determine that no Transaction shall be cleared by the Corporation for such Clearing Member until resolution; and
- b. The Clearing Member Level 3 contact shall provide written confirmation that the Payment Failure is solely due to an Operational Issue and that the Clearing Member has used its best efforts to use the Mitigation Tools, and requests, if necessary, no later than 3:45 p.m. on the Business Day on which the first notification of the Payment Failure has been made, by a Payment Delay Request that the Corporation funds the Clearing Member's obligations of payment to the Corporation until the next following Business Day. The Clearing Member shall, upon request by the Corporation, represent and warrant to each of the Corporation's lender, acknowledging and confirming that each of the Corporation and the lender is relying on such representations and warranties without independent inquiry, that the Payment Failure is solely due to an Operational Issue and that no financial condition is affecting the Clearing Member in such a way that the provision of temporary funding in accordance with this section could jeopardize the interest of the Corporation or other Clearing Members. In the event that temporary funding is provided in accordance with this section, all fees and costs incurred by the Corporation in connection with such funding shall be added to and become part of the payment obligation owed by the Clearing Member to the Corporation and will become due immediately.

5. Non-Conforming

a. If no Mitigation Tool has been successfully implemented by the Clearing Member by the end of the Business Day on which the first notification of the Payment Failure has been made, the Corporation may declare the



ESCALATION PROCEDURE

Clearing Member a Non-Conforming Member provided that the President & Chief Clearing Officer (or its designate) of the Corporation, prior to such designation, notifies the appropriate senior officer of the Bank of Canada in accordance with the Bank of Canada communication requirements.

b. If a Mitigation Tool has successfully been used by the Clearing Member but the Corporation is not satisfied with the information provided pursuant to the Operational Issue Resolution Notice, or considers that the steps proposed to be taken by the Clearing Member to resolve the Operational Issue expose the Corporation to an unacceptable level of risk, the Corporation may declare the Clearing Member a Non-Conforming Member, provided that the President & Chief Clearing Officer (or designate) of the Corporation prior to such designation notifies the appropriate senior officer of the Bank of Canada in accordance with the Bank of Canada communication requirements. The Corporation shall not exercise this discretion without having first performed the Escalation Procedure pursuant to Section 11 within a reasonable timeframe upon acquiring actual knowledge or confirmation of a Payment Failure by a Clearing Member and will not exercise this discretion before 10:00 a.m. on the day following the receipt of the Level-3 Operational Issue Resolution Notice, unless the Clearing Member has not confirmed that the Payment Failure results from an Operational Issue.



ESCALATION PROCEDURE

OVERNIGHT UNCOVERED RISK EXPOSURE

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

The Threshold will only apply if at least one position movement is captured during the Overnight Clearing Cycle, allowing the Clearing Member to be considered inactive as long as positions remain static ("Position-based trigger"). In other words, a Clearing Member will be considered inactive until one position movement is captured, after which such Clearing Member will be considered active for the rest of the Overnight Clearing Cycle.

The Threshold will trigger different actions depending on the Clearing Member's established overnight collateral solution (i.e. Pre-funding solution or Payment solution, see additional details in Section 12 below). Consequently, CDCC uses the following terminology for the Threshold:

- "Margin Call threshold" Applicable to the Payment solution. If the Clearing Member reaches the Margin Call threshold, an Overnight Margin Call is issued and needs to be fulfilled within the given timeline. If the Clearing Member doesn't fulfill its payment obligation or the payment capabilities are not enough to fulfill the obligation, CDCC may deem such Clearing Member as a Restricted Clearing Member.
- "Trading threshold" Applicable to the Pre-funding solution. If the Clearing Member reaches the Trading threshold, CDCC may deem such Clearing Member as a Restricted Clearing Member.

Additionally, CDCC will use the below terminology to address Live margin check breaches:

• "Warning threshold" - Should only the Live margin check be breached, a warning is communicated to the Clearing Member.

Overnight Uncovered Risk Exposure Escalation procedure:

- a) the Overnight contact list for the purposes of the "Overnight Uncovered Risk Exposure" Escalation Procedure:
 - (i) a CDCC Level 1 contact shall be an Operations Specialist, its equivalent or higher;
 - (ii) a CDCC Level 2 contact shall be a Senior-Manager, its equivalent or higher;
 - (iii) a CDCC Level 3 contact shall be the President, <u>Chief Operating Officer</u> or <u>Chief Clearing Officer or Vice-President and Chief Risk Officer</u>;
 - (iv) a Clearing Member Level 1 CDCC €Contact shall be an Operation Specialist, its equivalent or higher;
 - (v) a Clearing Member Level 2 CDCC cContact shall be a Senior Manager, its equivalent or higher; and
 - (vi) a Clearing Member Level 3 <u>CDCC €C</u>ontact shall be a senior executive reporting directly to the president of the Clearing Member, or to its equivalent in the absence of a senior executive of the Clearing Member bearing the title "president".
- b) The CDCC Level 1 contact shall, immediately upon acquiring confirmation of a Warning threshold breach by a Clearing Member, notify the Clearing Member Level 1 contact of the "Warning threshold" breach.



ESCALATION PROCEDURE

- c) The CDCC Level 1 contact shall, immediately upon acquiring confirmation of a Margin Call threshold breach by a Clearing Member, notify the Clearing Member Level 1 contact of the breach and that an Overnight Margin Call will be issued.
- d) The CDCC Level 2 contact shall, immediately upon acquiring confirmation of a Trading threshold breach or that the Clearing Member didn't fulfill its payment obligation following the issuance of an Overnight Margin Call, notify the Clearing Member Level 2 contact of the situation and that the Clearing Member may be deemed a Restricted Clearing Member by CDCC.
- e) The CDCC Level 3 contact shall, immediately upon acquiring actual knowledge or confirmation that a Clearing Member may be or was deemed a Restricted Clearing Member, communicate with the Clearing Member Level 3 contact.



Section 12 OVERNIGHT CLEARING CYCLE REQUIREMENTS

During the Overnight Clearing Cycle, Clearing Members are assigned to one of the following solution based on their payment capabilities:

- Pre-funding solution (i.e. Overnight Clearing Cycle eligible collateral payment capabilities not available)
- Payment solution (i.e. Overnight Clearing Cycle eligible collateral payment capabilities available)

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

- "Asian hours" i.e. 8:00 p.m. to 1:00 a.m. ET in a selection of eligible Non-CAD currencies.
- "European hours" i.e. 1:00 a.m. to 8:15 a.m. ET in a selection of eligible currencies until 7:00 a.m. ET or any form of eligible collateral pledged through CDS' Clearing and Settlement SystemX.

Clearing Members opting to qualify for the Payment solution during either the Asian hours, European hours or both will automatically be considered as part of the Payment solution at the 1:00 a.m. ET monitoring snapshot (juncture of Asian and European hours).

CDCC will conduct routine testing of the Payment solution from time to time to ensure that operational readiness is maintained by Clearing Members. Should a Clearing Member fail such tests, it will be reassigned to the Pre-funding solution.

CDCC will allow Clearing Members under the Pre-funding solution to enter the Payment solution at any time after the required certification requirements are passed.

APPENDIX A CLEAN VERSION

CANADIAN DERIVATIVES CLEARING CORPORATION RULES

2025

PART A - GENERAL

RULE A-1 – DEFINITIONS

[...]

Section A-102 – Definitions

[...]

"Authenticator" – means a factor intended to provide assurance that a person or an entity is who they claim to be, as evidenced by an associated credential linked to that factor. Factors may include: physical or virtual card, certificate or token, challenge, image, password, PIN, fingerprint or an iris scan.

"Authorized Representative" – means a person for whom the Clearing Member has filed evidence of authority pursuant to Section A-202.

[...]

"CDCC Contact" – means any key personnel or staff member employed by the Clearing Member that is required to conduct business with the Corporation during Business Hours.

"CDCC Daylight Credit Facility" – means the daylight credit facility of the Corporation, the amount of which is subject to change from time to time, with prior notice to Clearing Members.

[...]

"CDS Clearing and Settlement System" – means the clearing and settlement system comprising the Depository Service and the Settlement Service (each as defined in the CDS Participant Rules) of CDS.

"Central Securities Depository" – means any central securities depository acceptable to the Corporation, including CDS.

[...]

"Clearing Message" – means electronic messages sent by the Corporation to Clearing Members for their respective accounts reflecting the activities performed in CDCC services.

"Client" – means those customers of a Clearing Member who are not Market Makers or trading on behalf of a broker.

[...]

"Platform" – means the application, software, web-site, and/or other means of access, including all modules, functions, programs, data files, databases, database content, data and other related information, and all technology resources and infrastructure (including all hardware and software), interfaces, visual expressions, screen formats, report formats and other design features of, supporting, or incorporated into the Platform made available to the Clearing Member by the Corporation. The Platform includes all updates, releases, enhancements, developments, modifications, improvements, and corrections thereto from time to time.



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

[...]

"Reconnection Attestation" – means a form prescribed by the Corporation signed by a Clearing Member's Authorized Representative, which describes the measures taken by the Clearing Member to remediate the Security Incident. This includes such representations required as determined by the Corporation to provide assurance of controls implemented to prevent recurring Security Incidents.

Reconnection Checklist" means a checklist prescribed by the Corporation with the required remediation measures deemed necessary, to address the Security Incident.

"Recovery Event" – has the meaning attributed thereto in Section A-1002(1).

[...]

"Security Incident" means an event in the normal operation of the Clearing Member's system(s) that results in the loss of the Corporation's data or system integrity, unauthorized disclosure of sensitive information related to the Corporation, or the inability of the Corporation to conduct essential clearing and settlement functions.

"Securities Intermediary" – has the meaning assigned to this term by the QSTA.

RULE A-1A - MEMBERSHIP IN THE CORPORATION

Section A-1A01 - Eligibility for Membership

- (a) In order to apply for membership and subject to Subsection A-1A01(b), an applicant must be:
 - (i) a member or approved participant in good standing with an exchange recognized in a Canadian province or a dealer member in good standing with the Canadian Investment Regulatory Organization; or
 - (ii) a bank or an authorized foreign bank to which the *Bank Act* (Canada), as amended from time to time, applies; or



Section A-1A02 - Standards of Membership

Every applicant to become a Clearing Member must meet such standards as may be adopted from time to time by the Board, including the following:

- (a) the applicant must meet the minimum financial resilience requirements then in effect, in accordance with Section A-301 or, in the case of an applicant to become a Limited Clearing Member, the minimum financial resilience requirements for admission as a Limited Clearing Member then in effect, in accordance with Section A-1B04;
- (b) the applicant must be engaged, or propose to engage, in the clearance of Options or Futures which are the subject of Exchange Transactions or in the clearance of Fixed Income Transactions or other OTCI transactions through the facilities of the Corporation;
- (c) the applicant shall demonstrate to the Corporation that it maintains adequate operations facilities and staff and has sufficient and competent personnel for the expeditious and orderly transactions of business with the Corporation and other Clearing Members (including the ability to process the expected volumes and values of transactions it intends to clear in a timely manner required, including during peak hours and days), and to meet the requirements of these Rules;
- (d) unless the applicable Entity is applying to become a Limited Clearing Member, the applicant has deposited with the Corporation its initial deposit with the Clearing Fund in the amount and at the time required by the Rules and has signed and delivered to the Corporation an agreement in such form as the Board shall require; and
- (e) unless the applicable Entity is applying to become a Limited Clearing Member, the applicant has provided the Corporation with its initial Supplemental Liquidity Contributions to the Supplemental Liquidity Fund in the amount and at the time required by the Rules and the Risk Manual.
- (f) The applicant shall fulfill within reasonable the time frame established by the Corporation, any operational and risk testing requirements (the scope of such testing to be determined by the Corporation in its sole discretion) and related reporting requirements (such as reporting the test results to the Corporation in a manner specified by the Corporation) that may be imposed by the Corporation to ensure operational and risk management capabilities of the applicant.
- (g) the applicant must meet the cybersecurity requirements then in effect and shall complete and deliver to the Corporation such confirmation as required by these Rules.

Section A-1A03 - Admission Procedure

[...]

Nothing contained herein shall be construed as derogating or attempting to derogate from the right of any applicant whose application has been disapproved to avail itself of any right of appeal which is provided to such applicant by applicable law.



If the Board approves the application, a Clearing Member must fulfill all conditions attached to its approval and commence operations within six months of being notified of its approval, unless the Corporation agrees to extend this delay. Failing this, the Corporation may, at its sole discretion, consider the granting of the approval to have expired and may therefore inform the potential Clearing Member that it will be asked to provide additional information, after which the request will be submitted for reapproval.

Section A-1A04 - Non-Conforming Member

(1) A Clearing Member who is or may become insolvent or unable to meet its obligations shall immediately notify the Corporation of its situation by telephone. Such notice shall be confirmed by the Clearing Member by notice in writing to the Corporation sent by email transmission within the next business day.

[...]

(5) If a Clearing Member is late in making a payment at Settlement Time, the Corporation shall impose fines and may deem that Clearing Member a Non-Conforming Member, in accordance with the Operations Manual. Additionally disciplinary measures as set forth in Rule A-5 against the Non-Conforming Member.

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Section A-1A11 - Reinstatement of Membership

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RULE A-2 - MISCELLANEOUS REQUIREMENTS

Section A-202- Evidence of Authority

(1) Every Clearing Member shall file with the Corporation a certified list of the signatures of the representatives ("Authorized Representatives") of such Clearing Member (including partners and officers) who are authorized to sign certificates, cheques, agreements, receipts, orders and other papers necessary for conducting business with the Corporation, together with an executed copy of the powers of attorney, resolutions or other instruments giving such authority. Clearing Members shall promptly notify the Corporation by email whenever there is a change to Section A-202(1).

Section A-205 – Records

- (2) Each Clearing Member shall:
- (a) prepare, maintain and keep adequate accounting systems, internal accounting controls, and procedures for safeguarding client and Clearing Member assets (this includes, but is not limited to, preparing and maintaining complete and accurate reconciliations of all accounts on a daily basis and submitting position changes to the Corporation each trading day not later than the time specified in the Operations Manual;



- (b) Clearing Members shall advise the Corporation by telephone (confirmed in writing), email or hand delivered notice on the Business Day on which a report is deemed to have been received or the Expiration Date of any item requiring change for any reason and the failure to report any such required change by such time shall constitute a waiver of the Clearing Member's right to have such item changed;
- (c) submit to the Corporation reports, financial statements or other information as the Corporation may reasonably require, from time to time.
- (3) 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. ET 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.

Section A-206- Notices and Reports

(1) Unless otherwise specifically provided for in any other Rule, the Corporation may give notice to a Clearing Member in such manner as the Corporation deems appropriate in the circumstances of the notice being given, including by telephone, by hand delivery and by Electronic Communication.

[...]

- (4) The Corporation may from time to time prescribe the form of reports to be given by the Corporation to Clearing Members. These reports may be sent by hand delivery or Electronic Communication.
- (5) Each Clearing Member shall maintain and upgrade their computer system, network, software and communication technology with the standards and protocols established by the Corporation from time to time. Each Clearing Member should ensure that it is capable of receiving Electronic Communications and Clearing Messages and shall have the obligation to retrieve and review them daily. Each Clearing Member shall be responsible for the distribution of such information to appropriate departments and other interested parties, including third-party service providers. Clearing Members shall notify the Corporation as soon as practicable if it is unable to communicate reliably with CDCS (CDCC Clearing System) and accessing Clearing Messages and Electronic Communication.

- (7) Subject to Subsection A-206(8):
 - (a) a notice given by telephone shall be deemed to have been received by a Clearing Member as of and to be effective from the time of the telephone call to an individual in accordance with



Paragraph A-206(2) or Subsection A-206(9), as the case may be, as recorded in the relevant Notice File, unless the notice or another Rule specifically provides otherwise;

- (b) a notice given or report sent email shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received as of and, unless otherwise stated, to be effective from and after the time of the email on the day it is sent, unless the notice or another Rule specifically provides otherwise;
- (c) a notice or report given by Electronic Communication shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received on and to be effective as of the day it is sent, unless the notice or another Rule specifically provides otherwise; and
- (d) a notice given by mail shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received and to be effective on the fifth day after mailing and a notice given or report sent by hand delivery shall be addressed to one or more of the CDCC Contacts and shall be deemed to have been received and to be effective on the earlier of when it actually is received by the Clearing Member and the next Business Day immediately following the date it was sent.
- (8) Where a notice is given or a report is sent by any means out of Business Hours or on a day that is not a Business Day, the notice or the report, as the case may be, shall be deemed to have been received on the earlier of
 - (a) the time the Corporation confirms it has actually been communicated to a responsible individual with the Clearing Member; and
 - (b) the beginning of the Business Hours on the next following Business Day.

The Corporation shall maintain a list of emergency contact telephone numbers; and email addresses of not less than three responsible individuals employed by each Clearing Member with whom the Corporation can communicate at all times during the Business Hours if the Corporation determines such communication is necessary or advisable. It shall be the responsibility of each Clearing Member to ensure that the individuals so selected can be readily contacted during all Business Hours, and that the contact numbers for them are kept current.

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Section A-210- Distribution of Information, Confidentiality and Use of CDCC Materials

- (3) Use of CDCC Materials
 - (a) The Corporation grants each Clearing Member a limited, non-exclusive, revocable and non-transferable license to use CDCC Materials only for uses directly related to the Clearing Member's use of CDCS. The Clearing Member will not use CDCC Materials or any information obtained or derived from CDCC Materials except in accordance with this license. The Clearing Member acknowledges and agrees that all ownership right in the CDCC Materials belongs to the Corporation or its suppliers.



- (b) If a Clearing Member (with CDCC's permission) discloses CDCC Materials or any information obtained or derived from CDCC Materials to a client (including to any of its Affiliates) receiving services from a Clearing Member, the Corporation may require the Clearing Member to obtain an undertaking from such client to comply with Section A-210 in its use of CDCC Materials or any information obtained or derived from CDCC Materials.
- (c) Except as provided in Paragraphs (a) and (b) of this Subsection A-210(3), a Clearing Member will not: (i) copy or modify the CDCC Materials; (ii) sell, sublicense or otherwise transfer the CDCC Materials to any third party; (iii) reverse engineer or create derivative works based on the CDCC Materials; or (iv) use, disclose or communicate CDCC Materials or any information obtained or derived from CDCC Materials to or for the benefit of any third party or any Affiliate of the Clearing Member by any means whatsoever whether as a service bureau, outsourcer, or wholesaler to any third party or Affiliate of the Clearing Member or for the benefit of any joint venture or partnership to which the Clearing Member is a party.
- (d) If a Clearing Member provides access or discloses CDCC Materials or any information obtained or derived from CDCC Materials to a third party service provider or service bureau, the Corporation will require the third party service provider or service bureau to enter into a written agreement requiring such third party service provider or service bureau to comply with the Corporation requirements in its use of CDCC Materials and any information obtained or derived from CDCC Materials.

[...]

Section A-213 – Accounts with Financial Institutions

Every Clearing Member shall at the commencement of its clearing activities and throughout its participation, establish, maintain, designate and operate:

- (a) an account or accounts with a financial institution acceptable to the Corporation (Designated Bank) for each currency of the Transactions that it enters into.
- (b) Canadian dollar contingency payment account with a financial institution other than the Designated Bank in order to meet compliance with all obligations in the event of the failure of the Designated Bank(s).

Clearing Members may be required to provide evidence of compliance on an ongoing basis, as requested by the Corporation from time to time.

[...]

Section - A-217- Corporation as Agent Re Settlement Accounts

Each Clearing Member will establish a separate Canadian dollar bank account, and if a Clearing Member clears Options, Futures, or Options and Futures, a separate United States of America dollar Bank account at its Designated Bank, for settling Transactions in this currency (the "Settlement Accounts"). Each Clearing Member hereby appoints the Corporation to act as its agent, and the Corporation hereby accepts such appointment upon the terms and conditions hereof, solely for the purpose of effecting, on behalf of such Clearing Member, electronic payment instructions from the Settlement Accounts for the purpose of paying all amounts owing by the Clearing Member to CDCC. Nothing herein shall abrogate a Clearing



Member's obligations hereunder to maintain sufficient funds in the Settlement Accounts for the purposes of ensuring complete and timely settlement of the Clearing Member's obligations hereunder.

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Section A-221- Contact Information

Each Clearing Member shall upon approval of the application of the Board and thereafter be responsible to:

- (1) maintain and provide to the Corporation accurate names and full contact information for its Clearing Member Level 1, Clearing Member Level 2 and Clearing Member Level 3 CDCC Contact, as set forth in the Operations Manual;
- (2) maintain and provide to the Corporation accurate names and full contact information of its key operational personnel in a form acceptable to the Corporation;
- (3) ensure that CDCC Contacts are easily accessible during all Business Hours and that their contact details are up to date;
- (4) Promptly notify the Corporation in writing whenever a change is made to Subsection A-221 (1) and (2).

[...]

Section A-225 - Platform access

If the Corporation determines that Clearing Members are required to have access to a Platform, the Clearing Members shall comply with the Corporation's requirements which will be provided from time to time.

Section A-226 - Clearing Operations

Each Clearing Member shall be responsible for:

- (1) conducting its clearing operations in a manner which does not disrupt CDCS processes;
- (2) employing a sufficient number of personnel or maintain proper contractual arrangements with third-party service providers with appropriate experience and expertise
- (3) maintain adequate supervisory authority over all internal personnel conducting business with the Corporation or over the activities and functions performed by third-party service providers;
- (4) each Clearing Member shall inform the Corporation in writing before changing its service bureau used to process its trades and operational activities
- (5) having and maintaining a written business resilience related to policies and procedures, including disaster recovery and business continuity plan and are tested on a periodic basis. These policies and procedures should be designed to enable a Clearing Member to continue its activities during an emergency or significant business disruption. Such procedures must be reasonably designed to enable the Clearing Members to stay in business in the event of a significant business disruption in order to meet obligations to its clients and counterparts and must be derived from the Clearing Member's assessment of its critical business functions and required levels of operation during and following a disruption. Clearing Members shall promptly provide to the Corporation, upon request, confirmation of the existence, currency, and testing of its business resilience policies, procedures and practices and disaster recovery and business continuity plans;



Section A-227 Security Information

- 1. The CDCS system confirms the validity of the Authenticator before accepting any communication, transaction, authorization or instruction. Access is used by the Clearing Member directly through its own systems or on the Clearing Member's behalf by other persons authorized by the Clearing Member (including service bureaus and third -party service providers).
- 2. Clearing Members must take appropriate measures to protect the security of their access and prevent the unauthorized use thereof. A Clearing Member must immediately notify the Corporation if it has reason to believe that any Authenticator has been compromised and take such other security measures as may be necessary or appropriate.

Section A-228 – Operational Risk Management

Each Clearing Member shall:

- 1. have and maintain written risk management policies, procedures and controls in support of the Clearing Member's ability at all relevant times, to oversee their unique operational risk profile and operational risks;
- 2. promptly provide to the Corporation, upon request, information and documents regarding its risk management policies, procedures and practices, including, without limitation, information and documents relating to the liquidity of its financial resources, settlement procedures operational issues;
- 3. provide the Corporation with adequate assurances regarding its financial responsibility and operational capacity to manage the prompt and accurate clearing, settlement and processing of transactions;
- 4. have the capacity to fulfill collateral, payment, and delivery obligations as required by the Corporation;
- 5. be able participate in risk management activities as it may be defined and requested by the Corporation from time to time

Section A-229 - Testing Requirements

- 1. The Corporation may, from time to time, determine Clearing Members that shall be required to fulfill, within the time frames established by the Corporation :
- a. certain operational and risk testing requirements and related reporting requirements that may be imposed by the Corporation to ensure the continuing operational and risk management capabilities of the Clearing Member;
- b. certain risk management testing and reporting, including, but not limited to, default management and operational recovery testing;



- c. certain disaster recovery and other related business continuity testing scenarios including but not limited to cybersecurity.
- 2. The Corporation may, from time to time, determine Clearing Members that shall be required to participate in annual business continuity testing that the Corporation reasonably determines are necessary for the maintenance of fair and orderly markets in the event that business continuity plans are required to be activated.
- 3. Upon notification that a Clearing Member has been designated to participate as described in subsection A-227 (1) and (2), Clearing Member shall:
 - a. fulfill, within the timeframes established by the Corporation, certain testing requirements (the scope of such testing to be determined by the Corporation in its sole discretion) and related reporting requirements (such as reporting the test results to the Corporation in a manner specified by the Corporation) that may be imposed by the Corporation; and
 - b. appoint an individual that will serve as a liaison between the internal Clearing Members' organization and the Corporation to ensure adequate communication and coordination on testing activities and other requirements.

Section A-230 - Cybersecurity Requirements

A Clearing Member must maintain specific cybersecurity standards and requirement in order to be qualified to use access and receive services. Clearing Members will be required to demonstrate that they meet the following qualification criteria and the standards provided in these Rules.

A Clearing Member must (a) update its cybersecurity program and framework operational processes periodically based on a risk assessment or changes to technology, business activities, the threat environment, and/or regulatory environment and; (b) ensure appropriate protection of the interface and/or connectivity between its systems and those of CDCC, in order to prevent the interruption or contamination of CDCC's systems in the event of a Security Incident at the Clearing Member.

Each Clearing Member shall complete and deliver a written document in a form prescribed by the Corporation that confirms the existence of an information system cybersecurity program and includes the representations listed below ("Cybersecurity Attestation") to the Corporation at least every two years, on a date that is set by the Corporation. The Corporation may request the Clearing Member to provide an additional confirmation in the event of a cybersecurity incident.

Each Cybersecurity Confirmation shall (1) be on a form provided by the Corporation; (2) be signed by an Authorized Representative; and (3) include the following representations, made with respect to the two years prior to the date of the Cybersecurity Confirmation:

1. The Clearing Member or applicant has defined and maintains a comprehensive cybersecurity program and framework that considers potential cyber threats that impact their organization and protects the confidentiality, integrity and availability requirements of their systems and information.



- 2. The Clearing Member or applicant has implemented and maintains a written cybersecurity policy or policies approved by senior management or the organization's board of directors, and the organization's cybersecurity framework is in alignment with standard industry best practices and guidelines, as indicated in the form of Cybersecurity Confirmation.
- 3. If using a third party service provider or service bureau(s) to connect or transact business or to manage the connection with the Corporation, the Clearing Member or applicant has an appropriate policy program to (a) evaluate the potential cyber risks and impact of these third-parties, and (b) review the third-party insurance reports.
- 4. The cybersecurity program and framework protect the segment (s) of the Clearing Member or applicant's system that connects to and/or interacts with the Corporation.
- 5. The Clearing Member or applicant has in place an established process to remediate cyber issues identified to fulfill the Clearing Member or applicant's regulatory and/or statutory requirements.
- 6. The cybersecurity program's risk management processes are updated periodically based on a Clearing Member internal risk assessment or changes to technology, business, threat environment, and/or regulatory environment.
- 7. A review of the Clearing Member's or applicant's cybersecurity program has been conducted by and is deemed acceptable to any one of the following:
 - A regulator who assesses the program against a designated cybersecurity framework or industry standard, including, but not limited to those that are listed on the form of the Cybersecurity Confirmation and in a notice issued by the Corporation from time to time;
 - An independent external entity with cybersecurity domain expertise; and
 - An independent internal audit group reporting directly to the board of directors or designated board of directors committee of the Clearing Member or applicant, such that the findings of that review are shared with these governance bodies.

Section A- 231 - Security Incident Reporting, Disconnection and Reconnection

A. Occurrence of a Security Incident.

A Clearing Member shall immediately notify the Corporation, and promptly thereafter confirm such Security Incident writing, if it becomes aware of a Security Incident that has occurred, or a Security Incident is occurring, involving a cyber-related disruption or intrusion of the Clearing Member's system(s) that is reasonably likely to pose an imminent risk or threat to the Corporation's operations or the operations of the Canadian financial markets.

Upon receiving such notice, or if the Corporation has a reasonable grounds to believe that a Security Incident has occurred, or is occurring, the Corporation may take any actions reasonably necessary to mitigate any effects to its operations, including the right to disconnect access, or to modify the scope and specifications of access, of the Clearing Member to the Corporation's information and data systems. In determining whether to disconnect a Clearing Member, the Corporation will evaluate all relevant information and circumstances related to the Security Incident. The Corporation may take into consideration a number of factors, including, but not



limited to, the potential loss of control by a Clearing Member of its internal system(s), the potential disclosure of the Corporation's confidential data, the potential inability of the Clearing Member or Corporation to perform clearing and settlement functions, and the overall severity of the threat to the security and operations of the Corporation. If the Corporation determines that disconnection of a Clearing Member is necessary, the Clearing Member must continue to meet its obligations to the Corporation, notwithstanding disconnection from the Corporation's systems.

- B. Procedure for Connecting Following a Security Incident that Results in Disconnection.

 In the event the Corporation disconnects a Clearing Member that has reported a Security Incident, the Clearing Member must complete and submit a Reconnection Attestation and Reconnection Checklist form in the timeframe established and required by the Corporation.
 - (1) Reconnection and functionality restoration attestation.

The Reconnection Attestation must be signed by an Authorized Representatives of the Clearing Member which shall attest to the following required representations therein, including, but not limited to:

- A full, complete, comprehensive and accurate information in response to all requests made by the Corporation regarding the Security Incident, including all requests contained in the Reconnection Checklist.
- ii. A full, complete, comprehensive and accurate information regarding any data or systems of the Corporation that were potentially compromised consequent to the Security Incident, including any potential exposure of credentials used to access the Corporation's systems. The Clearing Member will immediately notify the Corporation if it later becomes or is made aware of a previously undetected or unreported compromise of data or systems of the Corporation during the Security Incident.
- iii. An identification of failed or circumvented controls by its employees or service providers ("Failed Controls"). In a manner approved by the Corporation, the Clearing Member has communicated Failed Controls to the Corporation and is remediating or has remediated all Failed Controls.
- iv. Implemented technical and operational changes, or planned changes, both preventative and detective, with the intent to prevent future recurrence of the Security Incident. The Clearing Member must provide written summaries of such technical and operational changes to the Corporation.
- (2) Information Requirements in the Reconnection Checklist.

The Reconnection Checklist may require information including, but not limited to, the following:

- i. whether the disconnection was the result of a cybersecurity-related incident; the nature of the incident; in sufficient detail to permit the Corporation to adequately evaluate impacts to its systems and operations, and the steps taken to contain the incident;
- ii. the data of the Corporation, if any, that was compromised during the incident;
- iii. the systems of the Corporation, if any, that were impacted during the incident;



- iv. whether there was any risk of exposure of credentials used to access the systems of the Corporation, and if so, whether the credentials were reissued;
- v. the controls that were circumvented or failed that led to the incident occurring; the changes, preventative and detective, that were implemented to prevent a reoccurrence;
- vi. details on how data integrity has been preserved and what data checks have been performed;
- vii. whether third-parties, including Clearing Member's applicable self-regulatory organization or regulatory or governmental agency, have been notified; and any additional details relevant to reconnection.

RULE A-4 - ENFORCEMENT

Section A-401 - Action Against A Non-Conforming Or Suspended 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 Non-Conforming Clearing Member, the Corporation will use all reasonable efforts to primarily take the action contemplated in Subsection A-401(3)(b) if it deems it is appropriate in the circumstances. In addition, each Clearing Member shall be required to inform its clients of the applicable requirements under Subsection A-401 (3)(b) in accordance with the Corporation's procedures (including informing the client to name a Receiving Clearing Member). The application of this requirement and of Subsection 205 (1) (f) will be monitored by the Corporation;
 - (c) terminating, closing out or liquidating any or all of the Clearing Member Transactions or Open Positions, and upon such close out, converting all amounts into Canadian currency and calculating one net amount (taking into account the Corporation's rights with respect to the Margin Deposit of such Clearing Member) owing to such Clearing Member by the Corporation or by such Clearing Member to the Corporation.



RULE A-5 - DISCIPLINARY PROCEEDINGS

Section A-502- Procedures

Except as provided for in the Operations Manual, a description of the nature of any sanction sought (whether monetary or non-monetary), including the quantum of any fine or penalty or sanction, shall be furnished to the Non-Conforming Member in a concise written statement of the charges for each violation. The written statement of charges shall also contain any provision of the Application for Membership which is alleged to have been violated, the facts alleged and intended to be relied upon by the Corporation.

- (1) In the event that a Non-Conforming Member commits a breach contemplated under any provision of the Application for Membership, that Non-Conforming Member is subject to sanctions, penalties and fines. If the Non-Conforming Member denies allegations, said sanctions, penalties and fines shall not be imposed against such Non-Conforming Member until a hearing is held pursuant to Subsection A-502(3).
- (2) The Non-Conforming Member shall have 10 days after the delivery of a statement under Subsection 502(1) to file a written answer thereto. The answer shall admit or deny each allegation contained in the statement of charges and may also contain any defence which the Non-Conforming Member wishes to submit. If a Non-Conforming Member denies an allegation, the Disciplinary Committee shall schedule a hearing as soon as reasonably practicable. The Non-Conforming Member shall be given not less than 10 days' advance notice of the place and time of such hearing. The notice of hearing shall contain a statement of the date, time and place of the hearing; a reference to the authority under which the hearing is being held; and the facts alleged and intended to be relied upon by the Corporation and the conclusions drawn by the Corporation based on the alleged facts. At the hearing, the Non-Conforming Member shall be afforded the opportunity to be heard and may be represented by counsel. A Non-Conforming Member shall be deemed to have waived its right to contest the imposition of any sanctions and/or fines and/or penalties if it fails to file a defence and shall be deemed to have accepted any allegations and/or fines and/or penalties contained in the statement of charges which are not denied. As soon as practicable after the conclusion of the hearing, the Disciplinary Committee shall furnish the Non-Conforming Member with a written statement of its decision, which shall be final, conclusive and binding on the Non-Conforming Member.
- (3) The Disciplinary Committee shall consist of not less than three officers of the Corporation. In the event an action is taken by the Disciplinary Committee, the Board will review upon a motion filed by any person directly affected within ten days after the Disciplinary Committee has rendered its final decision. The Board will, afford the Non-Conforming Member a further opportunity to be heard or to present evidence as stipulated in the By-laws of the Corporation. A majority of the members of the Disciplinary Committee shall be Resident Canadians.
- (4) Any time limit set forth in this Section may be extended by the Board, the Disciplinary Committee, or by any officer acting pursuant to authorization of the Board.

[...]

Section A806 -- Failed and Partial Payments Against Delivery



- (1) If a Clearing Member does not have sufficient funds in its CDS Funds Account to satisfy its payment against delivery obligation pursuant to Subsection A-801(3), or only partially settles such payment against delivery obligation (in either case, a "Failed Payment Against Delivery") at the Morning Net DVP Settlement Timeframe, the Corporation shall impose a fine and may determine that the Clearing Member is a Non-Conforming Member, in accordance with Section 6 of the Operations Manual. Additional disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.
- (2) If a Clearing Member does not have sufficient funds in its CDS Funds Account to satisfy its Afternoon Net DVP Settlement Requirement pursuant to Subsection A-801(5)(ii) or any Gross Payment Against Delivery Requirement by the End of Day DVP Settlement Time or only partially settles such payment against delivery obligation (also, in either case, a Failed Payment Against Delivery), the Clearing Member shall automatically be determined by the Corporation to be a Non-Conforming Member in accordance with the Operations Manual and additional disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.

[...]

RULE B-1- CLEARING OF EXCHANGE TRANSACTIONS IN OPTIONS

[...]

Section B-109- Payment to the Corporation

[...]

(2) If a Clearing Member is late in making a payment at Settlement Time, the Corporation shall impose fines and may deem that Clearing Member a Non-Conforming Member, in accordance with the Operations Manual. Additional disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.

[...]

PART C - FUTURES

RULE C-1- CLEARING OF EXCHANGE TRANSACTIONS RESPECTING FUTURES

[...]

Section C-109- Payment of Credit Balances

 $[\ldots]$

(2) If a Clearing Member is late in making a payment at Settlement Time, the Corporation shall impose fines and may deem that Clearing Member a Non-Conforming Member, in accordance with the Operations Manual. Additional disciplinary measures can be imposed as set forth in Rule A-5 against the Non-Conforming Member.



[...]

Section C-1004 - Delivery Through the Corporation

[...]

(3) If delivery of the Underlying Interest by the delivering Clearing Member, or payment therefor by the assigned Clearing Member, is not effected by the time provided in Subsection C-1004(2), such Non-Conforming Clearing Member must inform the Corporation of such failure of the Non-Conforming Member no later than 3:00 p.m. on the Day of Delivery. The Non-Conforming Clearing Member shall notify the Corporation of the default of the Non-Conforming Member by telephone, with written notification sent by electronic mail to be provided as soon as possible.

[...]

Section C-1809 - Delivery Through the Corporation

[...]

(4) If delivery of the Underlying Interest by the delivering Clearing Member, or payment thereof by the assigned Clearing Member, is not effected by the time provided in Subsection C-1809(2), such Non-Conforming Clearing Member must inform the Corporation of such failure of the Non-Conforming Member no later than 3:00 p.m. on the Day of Delivery. The Non-Conforming Clearing Member shall notify the Corporation of the default of the Non-Conforming Member by telephone, together with written notification sent by electronic mail to be provided as soon as possible.

[...]

Section C1904 – Delivery Through the Corporation

[...]

(4) If delivery of the Underlying Interest by the delivering Clearing Member, or payment thereof by the assigned Clearing Member, is not effected by the time provided in Subsection C-1904(2), such Non-Conforming Clearing Member must inform the Corporation of such failure of the Non-Conforming Member no later than 3:00 p.m. on the Day of Delivery. The Non-Conforming Clearing Member shall notify the Corporation of the default of the Non-Conforming Member by telephone, together with written notification sent by electronic mail to be provided as soon as possible.

[...]

PART D- OVER-THE-COUNTER INSTRUMENTS ("OTCI")

RULE D3- PHYSICAL DELIVERY OF UNDERLYING INTEREST ON OVER-THE-COUNTER INSTRUMENTS



Section D-305- Penalties and Restrictions

(1) The Board shall set by resolution, from time to time, the penalties payable in the event that a Clearing Member fails to make delivery or fails to accept delivery and make payment when required to do so in accordance with these Rules; provided, however, that the penalty for any single failure shall not exceed \$250,000. The amount of these penalties shall be in addition to any other sanctions that may be imposed by the Corporation under the Rules in respect of such a default. If a Clearing Member fails to make delivery or accept delivery and make payment, as required under these Rules, such penalty shall be assessed against it commencing as of the Time of Delivery and continuing until the Non-Conforming Member's obligations to the Corporation are fulfilled or the Non-Conforming Member is suspended, whichever is the sooner.



CANADIAN DERIVATIVES CLEARING CORPORATION CORPORATION CANADIENNE DE COMPENSATION DE PRODUITS DÉRIVÉS OPERATIONS MANUAL



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Section 1 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) margin, clearing and supplemental liquidity funds 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.

"Automatic Exercise" - a process by which CDCS will exercise In-the-Money Options at a predetermined threshold.

"Assets" - Securities pledged and cash deposited by the Clearing Member to the CDCC.

"CAD" - Canadian Dollars.

"CDCC Clearing Application" - CDCS and all the processes associated with it, as may be supplemented or otherwise changed from time to time.

"Certified List of Authorized Representatives" - a document to be completed by each Clearing Member, in the form prescribed by CDCC, to identify all individuals within their organization who are designated as Authorized Representatives in accordance with the Section A-202 of CDCC Rules.

"Closing Transaction" - any Transaction that is either a Closing Buy Transaction, a Closing Purchase Transaction, a Closing Sell Transaction or a Closing Writing Transaction, as such terms are defined in the Rules, and in all cases that reduces or eliminates the Clearing Member's Open Interest.

"Contingency Form" - Form to be completed by a Clearing Member, in the form prescribed by CDCC, in the event a Clearing Member is unable to perform a specific instruction or action, and is requesting to have CDCC perform it on their behalf. All such forms can be found in a dedicated section of the Secured Extranet Website, where Clearing Members can download the relevant form to complete and submit.



- "Converge" marketing brand of the portion of the CDCC Clearing Application that captures and processes OTCI Transactions, including Fixed Income Transactions.
- "Eligible Collateral" collateral which may be deposited with the Corporation for the purpose of fulfilling Margin requirements and which meets certain criteria described in the Risk Manual.
- "Exerciser" a Clearing Member that holds a Long Position in a particular Series of Options and submits an Exercise Notice to CDCC.
- **"Expiry Friday"** the third Friday of the month, unless that Friday is not a Business Day, then the Business Day preceding the third Friday of the month.
- **"FIFO Period"** the quarterly delivery period for Futures contracts on Government of Canada bonds (with the exception of the LGB), in accordance with Contract Specifications of the relevant Exchange.
- "Forward Repurchase Transaction" a Repurchase Transaction in respect of which the Open Leg has not settled yet at the time of the relevant report.
- "SFTP Downloads" Clearing Member's access to files and reports on an SFTP (Secure File Transfer Protocol) server that is part of the CDCC Clearing Application.
- "Inquiry Screen" Graphical User Interface (GUI) view of the CDCC Clearing Application.
- "LYNX" the Real Time Gross Settlement ("RTGS") electronic wire system used by Payments Canada to facilitate the transfer of irrevocable payments in Canadian dollars across Canada.
- "Limited Clearing Member (LCM)" has the meaning given thereto in Section A-102 of the Rules.
- "Margin Fund Accounts" the CDCS record provided to each Clearing Member containing all Margin deposited by such Clearing Member to CDCC, in respect to the Firm Margin Accounts, GCM Regime Margin Accounts and Non-GCM Regime Margin Accounts for any of the following: (1) Base Initial Margin (or Adjusted Base Initial Margin, as the case may be), (2) Additional Margin for Market Liquidity Risk, (3) Additional Margin for Specific Wrong-Way Risk, (4) Additional Margin for Mismatched 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 hereof.
- "Mini Contract" a Future or an Option that has the same Underlying Interest as a Standard Contract but having a Unit of Trading that is a ratio of the Standard Contract in accordance with applicable Contract Specifications.
- "Net Settlement Position" all the future Net Delivery Requirements and Net Payment Against Delivery Requirements of a Clearing Member, as reported by CDCC on a daily basis, taking into account all Fixed Income Transactions that have settled during the day and all new Fixed Income Transactions that have been novated to CDCC.
- "Net Variation Margin Requirement" has the meaning given thereto in Section D-601 of the Rules. Reference will be made to (Fixed Income) Net Variation Margin Requirement in this Manual.
- "Open Position File" database of the CDCC Clearing Application which compiles the Open Positions of all Clearing Members. Each Clearing Member can access the information pertaining to his accounts only, not to other Clearing Members' accounts.
- "Opening Transaction" any Transaction that is either an Opening Buy Transaction, an Opening Purchase Transaction, an Opening Sell Transaction or an Opening Writing Transaction as set forth in Section A-102 of the Rules.



- "Operational Notices" formal notifications to the Clearing Members, representing items that are not published on CDCC's website. These documents are available on the CDCC Secured Extranet Website.
- "OTCI Equity Options" over the counter options on an equity, bearing characteristics that differ from Exchange traded Options and are cleared by CDCC through Converge.
- "Overnight Clearing Cycle" clearing cycle starting at 8:00pm (t-1) and ending at 8:15 a.m. ET.
- "Position Transfer" the CDCC Clearing Application function to move a position from one Clearing Member to another.
- "Production Schedule" all of the timelines that are followed by CDCC, as set forth in Section 2 of this Operations Manual.
- "Regular Clearing Cycle" clearing cycle starting at 8:15am and ending at 5:30pm ET.
- "Request for Standard vs Mini Offset" the request by a Clearing Member, in the form prescribed by CDCC, to offset one (1) or more Long Position(s) on a Standard Contract against the equivalent number of Short Positions on the corresponding Mini Contract (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Contract), having the same Delivery Month and booked in the same Clearing Member's account, or the other way around.
- "Running Repurchase Transaction" a Repurchase Transaction in respect of which the Open Leg has already settled at the time of the relevant report.
- "Secured Website" Clearing Members only secured web site that requires a sign on and password, where CDCC publishes Operational Notices as well as documents that are meant only for the Clearing Members.
- "Security Officer" any individuals designated by each Clearing Member with the authority to instruct CDCC to make user access changes to CDCC's Clearing Application, including creating profiles and updating passwords. Formally identified by means of the "Security Officer Identification Form" template form.
- "Security Officer Identification Form" template in the form prescribed by CDCC (accessible in CDCC's Secured Extranet Website) completed by Clearing Members with the purpose of identifying all individuals within their organization that are designated as "Security Officers".
- "Specific Deposit" a Put Escrow Receipt, a Call Underlying Interest Deposit or a Futures Underlying Interest Deposit which are accepted by CDCC as Underlying Interest Equivalent to cover a specific Short Position.
- "Standard Contract" a Future or Option in relation to which a Mini Contract exists.
- "Tenderer" a Clearing Member that holds a Short Position in a particular Series of Futures and submits a Tender Notice, or is deemed to do so in accordance with the Rules, to CDCC.
- "Unsettled Item" any delivery of the Underlying Interest that has not been settled at the Central Securities Depository.
- "(Fixed Income) Variation Margin Account" the CDCS record provided to each Clearing Member containing all Margin deposits made by such Clearing Member to CDCC for (Fixed Income) Net Variation Margin Requirement purposes only, in accordance with Section D-607 of the Rules, or otherwise as set forth in Section 8 hereof.
- "Weekly Options" Options that expire on any Friday, other than Expiry Friday. Only monthly Options expire on Expiry Friday.



Section 2 TIME FRAMES

ON-LINE ACCESS

Each Clearing Member must be connected to the CDCC Clearing Application using its PC terminals to perform a variety of functions. (Clearing Members must supply their own PC terminals and Internet connection, at their own cost).

All instructions (corrections, Open Position changes, Position Transfers, Deposits, contributions, withdrawals, and submission of Exercise Notices and Tender Notices) must be entered on-line.

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

Should a Clearing Member not have electronic access to the CDCC Clearing Application during Business Hours, CDCC can perform instructions on behalf of the Clearing Member. This requires that the appropriate Contingency Form (available for download from the Secured Extranet Website) be duly completed and e-mailed to CDCC. Such forms must be signed by an Authorized Representative of the Clearing Member.

With respect to operational activity related to Options with an Expiration Date on Expiry Friday, CDCC staff members are continuously available from 8:00 a.m. to fifteen (15) minutes after delivery of the Options Exercised and Assigned Report (MT02).



SETTLEMENT TIME FOR EVERY BUSINESS DAY

Activity	Time Frames	Activity Type
Beginning of Clearing Day and Overnight Clearing Cycle	8:00 p.m. (t-1)	System Activity
Clearing Member's (excluding LCMs) Overnight Margin Calculation & Notification	Every hour from 10:00 p.m. (t-1) to 7:00 a.m. and 8:15 a.m. (t)	System Activity/Notification
Deadline to settle Overnight Margin Call notification	2 hours after	Obligation Deadline
Beginning of Settlement Day at CDS	5:30 a.m.	System Activity
Assets Concentration Limits breach notification	7:30 a.m.	Notification
End of Overnight Clearing Cycle	8:15 a.m.	System Activity
Beginning of Regular Clearing Cycle	8:15 a.m.	System Activity
Deadline for Clearing Members (excluding LCMs) for payments for overnight settlement	8:15 a.m.	Obligation Deadline
Fixed Income Transactions - Netting Cycle Timeframe in respect of any Pending Settlement Requirements - 15 minutes cycle	8:30 a.m.	System Activity
Deadline for LCMs for payments for overnight settlement	9:00 a.m.	Obligation Deadline
Deadline for Clearing Members (excluding LCMs) to receive EOD Amount due from CDCC	9:15 a.m.	Obligation Deadline
Deadline for Clearing Members to complete reconciliation and submit position changes	9:30 a.m.	Obligation Deadline
Fixed Income Transactions - Morning Netting Cycle Timeframe in respect of any Pending Payment Against Delivery Requirements (Morning Net Payment Against Delivery Requirements sent to CDS for settlement during the Morning Net DVP Settlement Timeframe) - 15 minutes cycle	10:00 a.m.	System Activity
Morning Net DVP Settlement Calculation	10:15 a.m.	System Activity/Notification
Final Morning Net DVP Requirement	10:30 a.m.	System Activity/Notification
Clearing Member's (excluding LCMs) Morning Intra- Day Margin Calculation & Notification	10:30 a.m.	System Activity/Notification
Deadline to settle Morning Intra-Day Margin Call for Clearing Members (excluding LCMs)	1 hour after notification	Obligation Deadline
Deadline for Morning Net DVP Settlement	11:00 a.m.	Obligation Deadline
Assets Concentration Limit breach correction deadline	11:45 a.m.	Obligation Deadline
for Clearing Members (excluding LCMs) Deadline for Morning Net DVP Settlement Assets Concentration Limit breach correction	11:00 a.m.	Obligation Deadline



Activity	Time Frames	Activity Type
Fixed Income Transactions - Netting Cycle Timeframe in respect of any Pending Settlement Requirements - 15 minutes cycle	12:15 p.m.	System Activity
Clearing Member's Afternoon Intra-Day Margin Calculation & Notification	12:45 p.m.	System Activity/Notification
Deadline to settle Afternoon Intra-Day Margin Call for Clearing Members (excluding LCMs)	1 hour after notification	Obligation Deadline
Specific Deposits (same day withdrawal)	12:45 p.m.	Operational Deadline
Deadline to settle Intra-Day Margin Call and Additional Margins for LCMs	2 hours after notification	Obligation Deadline
Fixed Income Transactions - Netting Cycle Timeframe in respect of any Pending Settlement Requirements - 15 minutes cycle	2:00 p.m.	System Activity
CAD Deposits - \$10,000,000 and under (same day deposit)	2:45 p.m.	Operational Deadline
CAD Deposits - over \$10,000,000 (2 Business Days notice)	2:45 p.m.	Operational Deadline
CAD withdrawal requests - \$10,000,000 and under (same day withdrawal)	2:45 p.m.	Operational Deadline
CAD withdrawal requests - over \$10,000,000 (2 Business Days notice)	2:45 p.m.	Operational Deadline
Fixed Income Transactions - (Same Day Transactions) - Submission Cut-Off Time	3:30 p.m.	Operational Deadline
Clearing Members (excluding LCMs) - All Assets deposits other than cash (Margin deposits)	3:30 p.m.	Operational Deadline
Clearing Members - All Assets withdrawal requests other than cash (Margin deposits) for same day withdrawal	3:30 p.m.	Operational Deadline
Clearing Members - All Assets substitution requests other than cash (Margin deposits) for same day substitution	3:30 p.m.	Operational Deadline
Foreign currency withdrawal requests deadline	3:30 p.m.	Operational Deadline
Fixed Income Transactions - Afternoon Netting Cycle Timeframe in respect of any Pending Settlement Requirements (Afternoon Net DVP Settlement Requirements sent to CDS for settlement by End of Day DVP Settlement Time) - 5 minutes cycle	3:35 p.m.	System Activity
CDS Payment Exchange, Net Wire Payment	4:00 p.m.	System Activity
End of Day DVP Settlement Time	4:00 p.m.	Obligation Deadline
Unsettled Item (Options Underlying deliveries only): Confirmation of settled items to be sent to CDCC	4:15 p.m.	Operational Deadline



Activity	Time Frames	Activity Type
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
Deadline for Clearing Members to request 15- minute delay to start of EOD Batch	5:00 p.m.	Operational Deadline
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)	6:15 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
End of Regular Clearing Cycle and 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 Position Adjustment availability	7:00 p.m.	System Activity
GCM Position Adjustment end of availability	8:45 p.m.	Operational Deadline
GCM Declaration File - Submission-	Before 9:00 p.m.	Operational Deadline
GCM Settlement Calculation	9:00 p.m.	System Activity



SETTLEMENT TIME FOR (FIXED INCOME) VARIATION MARGIN FOR EVERY BUSINESS DAY

Activity	Time Frames	Activity Type
Deadline to deliver securities to CDCC to settle Net Variation Margin Requirement	9:30 a.m.	Obligation Deadline
Deadline to submit to CDCC a (Fixed Income) Buy-In request for same day settlement	10:00 a.m.	Operational Deadline
Deadline to deliver securities to Clearing Members by CDCC to settle (Fixed Income) Variation Margin payout amount	10:30 a.m.	Obligation Deadline
Deadline to submit substitutions for same day settlement	11:00 a.m.	Operation Deadline
Deadline for CDCC to submit substitution instructions to Clearing Members for same day settlement	12:00 (noon)	Operational Deadline
Deadline to deliver same day settlement substitution to CDCC	3:00 p.m.	Obligation Deadline
Deadline for CDCC to deliver same day substitutions For (Fixed Income) Variation Margin	4:00 p.m.	Obligation Deadline
EOD Net Variation Margin Requirement Computation and Notification	4:30 p.m.	System Activity/ Notification



SETTLEMENT TIME FOR SECURED GENERAL COLLATERAL (SGC) NOTES FOR EVERY BUSINESS DAY

Activity	Time Frames	Activity Type
ACV Securities Requirement Delivery - Deadline on any given day pursuant to an Open Leg or Close Leg of the SGC Repurchase Transaction	8:30 a.m.	Obligation Deadline
Start of the SGC Close Leg process	8:30 a.m.	Operational Activity/Notification
End of Day SGC Securities Adjustment Requirements and SGC Initial Securities Adjustments compliance Settlement Time	9:30 a.m.	Obligation Deadline
SGC Concentration Limits compliance Settlement Time	9:30 a.m.	Obligation Deadline
SGC Maturity De-Collateralization Settlement Time	10:30 a.m.	Obligation Deadline
End of the SGC Close Leg process and Deadline for SGC Clearing Members to cover payment obligations	10:30 a.m.	Obligation Deadline
SGC Clearing Members - Beginning of SGC Repurchase Transaction Submission Period - Sale of SGC Securities (3 Business Days' Prior Notice)	11:00 a.m.	Operational Activity/Notification
SGC Intraday Securities Adjustment Requirement and SGC Initial Securities Adjustments Calculation and Notification	12:45 p.m.	System Activity/Notification
SGC Intraday Securities Adjustment and SGC Initial Securities Adjustments Settlement Time	2 hours after notification	Obligation Deadline
SGC Clearing Members - End of SGC Repurchase Transaction Submission Period (3 Business Days' Prior Notice)	3:00 p.m.	Operational Deadline
ACV Securities (same day withdrawal)	4:00 p.m.	Operational Deadline
End of Day SGC Securities Adjustment Requirement and SGC Initial Securities Adjustments Calculation and Notification	4:30 p.m.	System Activity/Notification
SGC Concentration Limits breach notification	4:30 p.m.	Notification



SETTLEMENT TIME FOR MONTHLY EXPIRY

Activity	Time Frames	Activity Type
Reports available (SFTP Download):	7:15 p.m.	Publication
Expiry Report (MX01)		
Expiry Options Daily Transaction Report (MT01)		
List of Options/Cash Adjustments (MT03)		
CDCC Clearing Application available for:	7:15 to 9:15 p.m.	Operational Deadline
Trade corrections		
Open Position changes		
Position Transfers		
Changes to Automatic Exercises		
Exercise Notices input		
Cancel / correct Friday's exercises		
CDCC Clearing Application shutdown:	9:15 p.m.	Operational Deadline
CDCC processes expiry entries	·	•
Reports available (SFTP Download):	9:30 p.m.	Publication
List of Expiry Adjustments Report (MX02)	·	
Expiry Difference Report (MX03)		
CDCC Clearing Application available again for:	9:30 to 9:45 p.m.	Operational Deadline
Review of expiry entries		·
Corrections to expiry entries		
CDCC Clearing Application shutdown	9:45 p.m.	Operational Deadline
Close of Business	·	
Reports available (SFTP Download):	10:30 p.m.	Publication
Options Exercised and Assigned Report (MT02)	·	
Other reports and files also available		



SETTLEMENT TIME FOR WEEKLY EXPIRY

Activity	Time Frames	Activity Type
CDCC Clearing Application available for:	7:00 to 8:00 p.m.	Operational Deadline
Trade corrections		
Open Position changes		
Position Transfers		
Changes to Automatic Exercises		
CDCC Clearing Application shutdown:	8:00 p.m.	Operational Deadline
Close of Business		
Reports available (SFTP Download):	9:45 p.m.	Operational Deadline
Options Exercised and Assigned Report (MT02)		
Other reports and files also available		



ADDITIONAL NET DVP SETTLEMENT PROCESS

In respect of any Pending Payment Against Delivery Requirements at the Netting Cycle Timeframe(s) specified in Section 2 of this Operations Manual, CDCC shall send new settlement records (Net Payment Against Delivery Requirements) to the Central Securities Depository reducing any Pending Payment Against Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Payment Against Delivery Requirements of CDCC in favour of the same Clearing Member.



Section 3 REPORTS

REPORT REFERENCES

Clearing Member reports contain the following information:

Transactions	Reports relating to Clearing Member's Transactions such as trade entries, trade corrections, trade rejections and exercises/tenders. These reports start with the alpha code MT.
Fees	Report relating to the collection of service fees from the Clearing Member. These reports start with the alpha code MB.
Settlements	Reports relating to Premiums, Settlement of Gains and Losses, and Margin. These reports start with the alpha code MS.
Assets	Reports relating to the maintenance of Clearing Member's assets as well as depository information. These reports start with the alpha code MA.
Delivery	Reports relating to delivery obligations and unsettled deliveries. These reports start with the alpha code MD.
Positions	Reports relating to positions held by Clearing Members separately for Futures, Options, OTCI and Fixed Income Transactions. These reports start with the alpha code MP.
Expiry	Reports used by Clearing Members to verify expiring positions and automatic exercises. These reports start with the alpha code MX.
Risk	Reports relating to risk management. These reports start with the alpha code MR.







Section 4 TRADE PROCESSING

INTRODUCTION

All Exchange Transactions are processed electronically. In all cases both the selling and buying trade data is sent to the relevant Exchange's electronic trading system, which then transmits the matched trades to CDCC. The CDCC Clearing Application verifies the trade information and, if incorrect, rejects it for correction and resubmission. If the trade information is valid, the Clearing Member's Open Positions are immediately updated. The Exchange Transaction is reported on the Options Daily Transaction Report (MT01) or on the Final Futures Daily Transaction Report (MT51), as the case may be.

OTCI Transactions (other than Fixed Income Transactions) are also submitted electronically. Clearing Members submit their individual trade details onto the trade capture screens of Converge, which will match, validate and confirm the transactional details to the submitting Clearing Members. OTCI Options are reported on the Options Daily Transaction Report (MT01). No corrections will be permitted for OTCI Transactions after CDCC issues a Trade Confirmation.

Fixed Income Transactions will be transmitted through the CDS trade matching facility routing matched trades to CDCC.

Fixed Income Transactions are reported on the Fixed Income CSD Information Report (MT71).

The SGC Repurchase Transactions will be automated through CCMS. The SGC Repurchase Transaction will be reported by CDCC to the SGC Clearing Members in the SGC Repurchase Transactions Activity Report (MA30).

The reports referred to herein are available for SFTP Downloads on the morning of the Business Day after Transactions are submitted for clearing to CDCC. In accordance with the Rules, Clearing Members must verify that such reports are correct.

It remains the Clearing Member's responsibility to employ appropriate back office facilities and to orderly record, book, supervise and reconcile all trade transactions by 9:30 a.m. the following Business Day.



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 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 Multi-Purpose Accounts and Firm Accounts.



TRADE PROCESSING

FIXED INCOME TRANSACTIONS

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.

All Repurchase Transactions and Cash Buy or Sell Trades must be submitted for clearing to CDCC through the CDS trade matching facility routing matched trades to CDCC.

Once a Repurchase Transaction or Cash Buy or Sell Trade is received by CDCC, a variety of validations will occur. These validations ensure that all transactional details match and CDCC does not accept any Repurchase Transaction or Cash Buy or Sell Trade bearing attributes that are not acceptable for clearing.

Upon issuance of a Trade Confirmation by CDCC, the Repurchase Transaction or Cash Buy or Sell Trade is novated to CDCC, such that the original Repo or Cash Buy or Sell Trade between the two Fixed Income Clearing Members is cancelled and replaced by two equivalent Fixed Income Transactions, one between the Seller and CDCC and one between the Buyer and CDCC.



Section 5 OPEN POSITIONS

INTRODUCTION

Having accepted a Transaction, the next step in the CDCC Clearing Application is the determination of the Open Position. Each Clearing Member can view all the information related to their accounts on the Open Position File which records the open Long Position and Short Position for each Series of Options and Series of Futures, OTCI and Fixed Income Transactions for each account type, updating the information as each Transaction is accepted.

Each Clearing Member is responsible for accurately reconciling the information recorded on the Open Position File and all relevant reports issued by CDCC against their internal records by 9:30 a.m. on the following Business Day. The Clearing Members must submit their position adjustments each day to CDCC following the reconciliation of positions for each of the accounts held with CDCC. If any discrepancy between CDCC and Clearing's Member records is not adjusted by the following business day, the Clearing Member must inform CDCC. Careful attention must be paid to account designation and whether the Transaction is coded as "opening" or "closing" in the relevant file or report. Reports are available for SFTP Download as per Section 2 of this Operations Manual.

Open Interest is updated automatically as each Transaction, Exercise Notice and Tender Notice is processed.

ADJUSTMENTS OF OPEN POSITIONS

GENERAL

Occasionally the need will arise to adjust an already processed Transaction. In such cases, the adjustment will affect the Clearing Member's Open Position accordingly. For example, an adjustment designed to change the original Opening Buy Transaction (or Opening Purchase Transaction) to a Closing Buy Transaction (or Closing Purchase Transaction) will result in a decrease in the Long Position in the Series of Futures or Series of Options by the volume of the original Transaction. Any Settlement of Gains and Losses (or Premium) adjustments will be shown as adjustments on the relevant report.

Generally this situation will occur when:

- 1. The transactional details were incorrectly recorded, e.g. Clearing Member number, price, series and volume.
- 2. Information pertaining to only one side of the Transaction such as the opening/closing or account designation was erroneously reported on the original trade.
- 3. The source document of the relevant Exchange was input incorrectly.
- 4. Transfer of Open Positions from one account to another account of a Clearing Member.
- 5. Transfer of Open Positions from an account of one Clearing Member to an account of another Clearing Member.

It is the Clearing Member's responsibility to ensure that positions in each account maintained with CDCC are accurate. If any discrepancy between CDCC and the Clearing Member's records is noted, the Clearing Member must rectify the discrepancy immediately. The Clearing Members must submit their position adjustments daily following completion of the reconciliation process. Should the discrepancy remain unresolved by the following business day, the Clearing Member must inform the Corporation.



OPEN POSITIONS

Types of Adjustments

The following adjustments are acceptable for Exchange Transactions and OTCI (other than Fixed Income Transactions):

- 1. <u>Same Day Trade Corrections (T)</u>. Same day trade corrections are only permitted on account type, sub-account designation and opening/closing and no corrections are permitted on OTCI Transactions after a Trade Confirmation has been issued by CDCC.
- 2. <u>Trade Date + 1 Corrections (T+1)</u>. Modifications of any type are subject to approval by the relevant Exchange and no corrections permitted on OTCI Transactions.
- 3. <u>Open Position Changes</u>. For OTCI Transactions, these will be performed through the Position Transfer function of the CDCC Clearing Application. Note: there is a Position Transfer fee per contract.
- 4. <u>Position Transfers</u>. Specific function of the CDCC Clearing Application to move positions from one Clearing Member to another or between accounts of a same Clearing Member on a post trade basis. Note: there is a Position Transfer fee per contract.
- 5. Standard vs Mini Offset. Upon the receipt of a Request for Standard vs Mini Offset in the prescribed form, CDCC will offset (i) one or more existing Standard Contract Long Position(s) against the equivalent number of existing Mini Contract Short Positions (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Contract) having the same Delivery Month and booked in the same Clearing Member's account, or (ii) a number of existing Mini Contract Long Positions against one or more Standard Contract Short Position(s) (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Contract) having the same Delivery Month and booked in the same Clearing Member's account, based on the instructions provided in the Request for Standard vs Mini Offset. Such Long Positions and Short Positions shall be offset at the previous day's Settlement Price, with the effect of reducing the Open Positions that the Clearing Member has on the relevant Series of Futures in the relevant account. A Future may only be offset against a Future and an Option may only be offset against an Option.

Adjustments via the Gross Client Margin (GCM) Declaration File

Via submission of the GCM Declaration File, CDCC will perform a Position Change Submission ("GCM PCS") as part of the GCM Settlement Calculation. This will be performed on the CDCC Book Positions, to align the CDCC open positions with the open positions declared by the Clearing Member for (i) each Series of Futures and Futures Options, and (ii) for each client declared in the GCM Declaration File.

The position adjustment can only be performed if the CDCC net position (CDCC Long Position minus CDCC Short Position) is equal to the GCM declared net position (GCM declared Long Position - GCM declared Short Position) on the same Series of Futures or Futures Options, for a specific client declared in the GCM Declaration File. If the condition is met, CDCC will adjust both the CDCC Long Position and CDCC Short Position to what was declared in the GCM Declaration File. In the event of discrepancies between the CDCC Book Positions and net GCM declared positions, no position adjustment will be performed and the undeclared positions will be treated separately (see Additional Margin for Undeclared GCM Position Risk in the Risk Manual for more details).

Clearing Members may make use of the GCM Position Adjustment availability window to submit their GCM Declaration File to assess their declared positions with the CDCC Book Position. Clearing Members are able to submit additional GCM Declaration File(s) anytime before the GCM Position Adjustment availability window closes should they wish to make further adjustments. Only the last declared file will be considered for the GCM Settlement Calculation and therefore the GCM PCS.

Additionally, in the event a Clearing Member fails to submit their GCM Declaration File, CDCC will use the previous Business Day's GCM Declaration File. While this mitigates the impact of having all the positions as undeclared positions and margined separately, changes in positions that occurred on the day of the missed declaration may result in undeclared positions. If the GCM Declaration File is not received for a second consecutive Business Day (or any



CDCC-Reports

following Business Days), CDCC will not use the previous GCM Declaration File and will treat all GCM client positions as undeclared positions in a separate Risk Account.

Conditions applicable to adjustments:

If there are any adjustments that affect another Clearing Member (on the opposite side of the original Transaction), both Clearing Members must come to an agreement as to the adjustments to be implemented. If one Clearing Member does not enter any changes through the CDCC Clearing Application, the Transaction will stay as is with respect to both Clearing Members.

Notification of all adjustments must be completed prior to the time specified in Section 2 of this Operations Manual. All completed adjustments are processed when they have been verified and validated by CDCC.



INTRODUCTION

OPTIONS

At the time of exercise of an Option, CDCC is responsible for issuing settlement records that will facilitate the delivery of the Underlying Interest to the Clearing Member who chooses to exercise that Option (in case of the exercise of a call Option) or the payment of the relevant Exercise Price (in the case of the exercise of a put Option). When a Clearing Member exercises an Option, CDCC assigns the delivery obligation to a Clearing Member who is the writer of Options in the same Series of Options in any one of its Client Account(s), Firm Account(s), or Multi-Purpose Account(s).

Assignment is made specifically to one of these accounts by CDCC. If assignment is made to a Client Account, the Clearing Member is responsible for allocating it to a specific client. If assignment is made to a Multi-Purpose Account, the Clearing Member must allocate it to the specific Multi-Purpose Account designated by CDCC.

Delivery of the Underlying Interest and payment of the Exercise Price is to be effected by Clearing Members through the settlement method instructed by CDCC.

FUTURES

All Futures which have not been closed out by the last trading day will be marked-to-market up to and including the close of the last trading day. In addition, the seller of a Future must submit a Tender Notice in the Delivery Month in accordance with applicable Contract Specifications.

When a seller of a Future submits a Tender Notice to CDCC, CDCC assigns it to a Clearing Member which is the buyer of a Future in the same Series of Futures in any one of its accounts. Assignment is made specifically to one of these accounts by CDCC. If assignment is made by CDCC to a Client Account, the Clearing Member is responsible for allocating it to a specific client. If assignment is made to a specific Multi-Purpose Account, the Clearing Member must allocate it to the specific Multi-Purpose Account designated by CDCC.

EXPIRY PROCEDURES

Operational Notices are published for Clearing Members' reference, setting forth the expiry procedures. It is the responsibility of Clearing Members to ensure that they have adequate processes and personnel in place to meet all requirements and timelines prescribed by CDCC.

OPTIONS

For all information pertaining to the Option expiry procedures, Clearing Members should refer to the Operational Notices which are issued prior to the Expiration Date.

CDCC's Responsibilities on Expiry Friday

- 1. Review/modify Underlying Interest prices and notify the Clearing Members of any changes.
- 2. Notify Clearing Members (via e-mail) of any changes in the Production Schedule.
- 3. Notify Clearing Members (via e-mail) of the status of expiry processes.
- 4. Assist Clearing Members.

Clearing Members' Responsibilities on Expiry Friday

1. Ensure that the staff responsible for expiry is familiar with all expiry procedures and processes.



- 2. Validate entries using the Inquiry Screens or the relevant reports:
 - a. Verify that all Open Positions and adjustments match internal records, enter any new Transaction or Open Position adjustments accordingly.
 - b. Verify that the number of Options that will be automatically exercised on Expiration Date are correct.
 - c. For any changes, indicate on the Expiry Response Screen under the "Override" column the total number of Options for each Series of Options to be exercised.
 - d. Verify any OutOfTheMoney Options or At-the-Money Options to be exercised and enter the number of Options under the "Override" column.
- 3. Validate changes using the reports and/or the on-line access to CDCC Clearing Application (in accordance with timeframes set forth in Section 2 of this Operations Manual).
- 4. If required, make any allowed modifications (in accordance with timeframes set forth in Section 2 of this Operations Manual).

Daily Expirations (other than Expiry Friday)

When CDCC receives Underlying Interests' closing and opening prices from the relevant Exchange, the prices are specified on the relevant Expiry Report and are used to determine the In-the-Money Options and the Out-of-the-Money Options.

Clearing Members have until the Close of Business on any Business Day up to the Expiration Date to submit an Exercise Notice with respect to American Style Options to CDCC. European Style Options can only be exercised on their Expiration Date.

OTCI Options can expire on any Business Day.

Typically, exercise instructions must be entered online on the CDCC Clearing Application by Clearing Members. However, if unavailable, the following manual process can be used to submit Exercise Notices to CDCC:

- 1. The proper CDCC Exercise Notice form must be used.
- 2. The form must be signed by an Authorized Representative of the Clearing Member.
- 3. The properly delivered Exercise Notice will be accepted at any CDCC office.
- 4. The Exercise Notice must be properly delivered by five minutes before Close of Business.
- 5. The Clearing Member staff who deliver the Exercise Notice must be available until CDCC processes the exercise.

The CDCC Clearing Application will ensure that there are sufficient Option Open Positions of the relevant Series of Options in the relevant account of the Clearing Member for exercising the relevant Exercise Notice; if not, CDCC will reject the Exercise Notice. If there are sufficient Option Open Positions, the Clearing Member's Long Position is immediately reduced by the number of Option Open Positions exercised.

AN EXERCISE NOTICE CAN BE CANCELLED UNTIL CLOSE OF BUSINESS ON THE DAY IT IS SUBMITTED.



OPTIONS

Exercises

Delivery and payment on Exercised Positions are due on the Exercise Settlement Date.

Until Exercise Settlement Date, CDCC continues to require sufficient Margin to ensure that, if a Clearing Member defaults, any Exercise Notice submitted by it or assigned to it, as the case may be, will be completed.

Exercised Positions and Assigned Positions are reported to Clearing Members through relevant reports. A complete list of all available reports is available on CDCC's Secured Extranet Website.

Assignments

After the Close of Business on any Business Day on which an Exercise Notice is submitted to CDCC, assignment of such Exercise Notice is made on a random selection basis, in which each account of a Member is treated separately. The reason for the separation is to ensure that each Clearing Member's Client Account(s), Firm Account(s), and Multi-Purpose Account(s) have the same probability of being assigned Exercise Notices. When a Clearing Member is assigned an Exercise Notice for a given account (e.g. the Firm Account) it may not allocate that assignment to another account (e.g. a Client Account).

An attempt will be made by CDCC to assign an Exercise Notice for more than 10 Options contracts in blocks not exceeding 10 contracts in each Series of Options.

Exercise Notices assigned to a Clearing Member's Client Account shall be allocated by the Clearing Member to any of its clients based on any method which is equitable and consistent with the rules of the relevant Exchange.

Automatic Exercise - Options and Options on Futures

To safeguard Clearing Members from possible errors, CDCC has instituted an Automatic Exercise procedure for expiring Series of Options. In simple terms, all IntheMoney Options and Options on Futures over predetermined thresholds are automatically exercised by CDCC, unless Clearing Members instruct otherwise.

CDCC establishes predetermined thresholds and informs Clearing Members that every Option and Option on Future above that threshold will be automatically exercised. CDCC will not automatically exercise any At-the-Money Option. CDCC provides a method for Clearing Members to make changes to the Automatic Exercise function of the CDCC Clearing Application. This allows Clearing Members to either opt in or opt out of the Automatic Exercise with respect to the Options and Options on Future they hold. For example, a Member can choose not to exercise an Option that is above the predetermined threshold but to exercise another Option that is At-the-Money or OutoftheMoney.

Exercised and Assigned Option Contracts

a) Exercised Positions

A Clearing Member who has exercised an Option has an obligation to either deliver the Underlying Interest (in the case of a Put Option) or pay the Exercise Price (in the case of a Call Option).

b) Assigned Positions

A Clearing Member who has been assigned an Exercise Notice has the obligation to pay the Exercise Price upon delivery of the Underlying Interest (in the case of a Put Option) or to deliver the Underlying Interest against payment (in the case of a Call Option).



FUTURES

Submission of Tender Notices

Tender Notices must be submitted before Close of Business during the relevant FIFO Period (which, subject to any contract adjustment by the Exchange, shall be as follows):

CGB, CGF and CGZ	one Business Day preceding the first Business Day of the Delivery Month up to and including the last Business Day preceding the last Business Day of the Delivery Month.
LGB	before Close of Business on the last trading day.

All outstanding Short Positions in EMF, SXF, SXM, SCF, Sector Index Futures, Share Futures, and Options on Futures are automatically tendered on the last trading day, as per Contract Specifications, after Close of Business.

All outstanding Short Positions in COA and CRA are automatically tendered on the first Business Day following the last trading day, as per Contract Specifications, after Close of Business.

Assignment of Tender Notices

CDCC assigns all Tender Notices to open Long Positions on a random basis with the exception of the Government of Canada Bond Futures (CGB, CGF and CGZ). Assignments for the CGB, CGF and CGZ Futures are processed on a First-In-First-Out (FIFO) basis.

Delivery of the Underlying Interest and payment of the Settlement Price is effected by Clearing Members as instructed by CDCC.

FIRST-IN-FIRST-OUT (FIFO) ASSIGNMENT PROCESS

Description of Procedures

The Delivery Months for the CGB, CGF and CGZ Futures contracts are March, June, September and December as prescribed by the Exchange. When a Member submits a Tender Notice with respect to a Short Position, a Long Position is assigned on a First-In-First-Out (FIFO) basis. CDCC publishes an Operational Notice prior to each relevant FIFO Period to remind Clearing Members of the procedures involved.

On the sixth Business Day prior to the first Business Day of the Delivery Month, each Clearing Member holding Long Positions in the relevant Series of Futures must declare on the CDCC Clearing Application its Long Positions in chronological order for each of its accounts. The entries must include the date the position was opened, the number of contracts and the account. When CDCC assigns a Tender Notice, the Long Position with the oldest date will be assigned first and the Long Position with the most recent date will be assigned last.

During the FIFO Period, Clearing Members must ensure that they update their declarations on a daily basis before Close of Business. It is the Clearing Members' responsibility to ensure that positions in each account maintained with CDCC are accurate. If any discrepancy between the Corporation and the Clearing Member's records is noted, the Clearing Member must rectify the discrepancy immediately, and inform CDCC if any discrepancy is not resolved and corrected by the following business day.

FIXED INCOME TRANSACTIONS

CDCC acts as central counterparty to all Fixed Income Transactions that are submitted by Clearing Members to CDCC for clearing. All Fixed Income Transactions shall be submitted for clearing to CDCC through the CDS trade matching facility routing matched trades to CDCC. As a result of these Transactions being novated to CDCC, CDCC will be either the buyer or the seller of all settlement records that are sent to the Central Securities Depository.



Various transmissions of settlement records will be sent by CDCC to the Central Securities Depository on a daily basis.

Same Day Transactions gross settlement records

For Same Day Transactions, two settlement records consisting of settlement instructions (Gross Delivery Requirements and Gross Payment Against Delivery Requirements) will be sent gross to the Central Securities Depository to be settled on a real-time basis throughout the day immediately after each Same Day Transaction is novated to CDCC until the Submission Cut-Off Time specified in Section 2 of this Operations Manual.

Forward Settlement Transactions and Futures Contracts on an Acceptable Security net settlement records

For Forward Settlement Transactions and Futures Contracts on Acceptable Securities, settling on the next Business Day, two settlement records consisting of net settlement instructions (Net Delivery Requirements and Net Payment Against Delivery Requirements) will be sent to the Central Securities Depository on a net basis at the Netting Cut Off Time specified in Section 2 of this Operations Manual for settlement on the next Business Day.

Morning net DVP settlement process

In respect of any Pending Payment Against Delivery Requirements at the Morning Netting Cycle Timeframe specified in Section 2 of this Operations Manual, CDCC shall send new settlement records (Morning Net Payment Against Delivery Requirements) to the Central Securities Depository reducing any Pending Payment Against Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Payment Against Delivery Requirements of CDCC in favour of the same Clearing Member. The Clearing Member or its Settlement Agent shall have sufficient funds in its CDS Funds Account to settle the lesser of (i) its Morning Net Payment Against Delivery Requirement and (ii) the amount of the CDCC Daylight Credit Facility during the Morning Net DVP Settlement Timeframe specified in Section 2 of this Operations Manual.

Afternoon net DVP settlement process

In respect of any Pending Settlement Requirements at the Afternoon Netting Cycle Timeframe specified in Section 2 of this Operations Manual, CDCC shall send new settlement records (Afternoon Net DVP Settlement Requirements) to the Central Securities Depository reducing any Pending Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Delivery Requirements of CDCC in favour of the same Clearing Member in respect of the same Acceptable Security, and/or reducing any Pending Payment Against Delivery Requirements of a Clearing Member in favour of CDCC by any Pending Payment Against Delivery Requirements of CDCC in favour of the same Clearing Member. The Clearing Member, or its Settlement Agent, shall have sufficient funds and sufficient Acceptable Securities in its CDS Funds Accounts and CDS Securities Accounts to settle its Afternoon Net DVP Settlement Requirements by the End of Day DVP Settlement Time specified in Section 2 of this Operations Manual.

Delivery

Securities delivery against payment is effected on a DVP basis through the Central Securities Depository.

In the event of a failed or partial delivery, CDCC will take appropriate action in accordance with this Manual and Section A-804 of the Rules.

CDCC shall determine the net settlement instructions by Clearing Member, CUSIP/ISIN and Settlement Date for all Transactions comprised in the Forward Settlement Transactions netting process (as specified in the above section entitled "Forward Settlement Transactions and Futures Contracts on an Acceptable Security net settlement records") submitted to CDCC for clearing as of the Netting Cut Off Time. These settlement instructions shall be submitted to the relevant Central Securities Depository on a daily basis and in the form and settlement tranche acceptable to the Central Securities Depository for this purpose.

For Same Day Transactions, CDCC shall determine the gross settlement instructions (Gross Delivery Requirements and Gross Payment Against Delivery Requirements) by Clearing Member and the applicable CUSIP/ISIN, and submit such instructions to the relevant Central Securities Depository (in the form and settlement tranche acceptable to such



Central Securities Depository) immediately after each Same Day Transaction is novated to CDCC for real-time settlement. Notwithstanding the foregoing, at the Morning Netting Cycle Timeframe, CDCC shall cancel previously issued Pending Payment Against Delivery Requirements and replace them by Morning Net Payment Against Delivery Requirements by Clearing Member (as specified in the above section entitled "Morning net DVP settlement process").

In the event of a Failed Delivery for a particular settlement tranche to a Net Delivery Requirement or to an Afternoon Net DVP Settlement Requirement consisting of an obligation to deliver Acceptable Securities by the End of Day DVP Settlement Time specified in Section 2 of this Operations Manual, CDCC shall, on a best efforts basis, attempt to coordinate a partial delivery among those Receivers of Securities for that particular settlement tranche of the relevant Acceptable Security. In the event that no partial settlement is possible, the settlement tranche will be included in the Rolling Delivery Obligation of the failing Clearing Member and CDCC shall re-attempt settlement of the failed settlement tranche on the next Business Day. In the case of a Failed Delivery with respect to a Gross Delivery Requirement resulting from a Same-Day Transaction submitted after the Afternoon Netting Cycle Timeframe and before the Submission Cut-Off Time to be settled by the End of Day DVP Settlement Time, CDCC will fail or partially deliver for the same quantity of Acceptable Securities to the Clearing Member who is the Receiver of Securities with respect to the relevant Same Day Transaction.

In the event of a Failed Payment Against Delivery at the Morning Net DVP Settlement Timeframe specified in Section 2 of this Operations Manual, CDCC shall impose a fine on the Clearing Member corresponding to the charges which are levied on CDCC as a result of this Failed Payment Against Delivery. Additionally, if the Clearing Member still does not have sufficient funds in its CDS Funds Account or that of its Settlement Agent at the Central Securities Depository to settle the relevant Morning Net Payment Against Delivery Requirement, or in the amount of the CDCC Daylight Credit Facility (whichever is less), the Clearing Member shall be deemed a Non-Conforming Member, in addition to any other remedies that CDCC may apply to such situation in accordance with Subsection A-806(1) of the Rules.

In the event of a Failed Payment Against Delivery at the End of Day DVP Settlement Time specified in Section 2 of this Operations Manual, the Clearing Member shall be deemed a Non-Conforming Member and shall be required to pay to CDCC any charges which may be levied on CDCC for the overnight financing of this Failed Payment Against Delivery, in addition to any other remedies that CDCC may apply to such situation in accordance with Subsection A-806(2) of the Rules. CDCC will assist the Clearing Member to remedy the situation so that the Clearing Member can maintain its conforming status. As DVP is not available after the End of Day DVP Settlement Time at the Central Securities Depository (CSD), the Clearing Member must deliver the funds (or acceptable equivalent) outside of the CSD's systems to CDCC prior to CDCC delivering the securities via the CSD.

Buy-In Process (excluding Fixed Income Variation Margin Buy-Ins)

For a Buy-In in respect of the Acceptable Security, the following applies. As set forth in Subsection A-804(3) of the Rules, CDCC may effect a Buy-In transaction on its own initiative or pursuant to a formal request by a Receiver of Securities affected by a Failed Delivery by purchasing the missing quantity of the relevant Acceptable Securities on the open market.

When initiated by a Receiver of Securities, the Buy-In process shall be as follows:

- 1. The Receiver of Securities who wants to initiate a Buy-In must send to CDCC the appropriate Buy-In Scan Form (which is accessible on CDCC's Secured Extranet Website) duly completed, with the following information:
 - a. Clearing Member's Name;
 - b. Clearing Member's Number;
 - c. The Acceptable Security (ISIN) involved;
 - The total quantity of the Failed Delivery;
 - e. The quantity requested in the Buy-In;



- f. The Buy-In delivery date, which shall be the current Business Day + not less than one (1) complete Business Day.
- 2. The Buy-In Scanned Form must be submitted to CDCC in the prescribed format and signed by an Authorized Representative of the Clearing Member.
- 3. Upon receiving the duly completed Buy-In Scan Form from a Receiver of Securities, CDCC will work with the Provider(s) of Securities responsible for the Failed Delivery in order to validate if the delivery can be made within the number of Business Days specified in the Buy-In Scan Form (the "Buy-In Notice Delay").
- 4. At the expiry of the Buy-In Notice Delay, if the Provider(s) of Securities have not delivered the relevant Acceptable Securities, CDCC will initiate a cash trade on the open market.
- 5. Once delivery is received by CDCC on the cash trade, CDCC will deliver the Acceptable Securities to the Receiver of Securities that requested the Buy-In transaction.
- 6. All fees incurred to CDCC, including all costs with respect to the Buy-In transaction shall be charged to the Provider(s) of Securities responsible for the Failed Delivery. Such fees will be included on the Monthly Clearing Fees Invoice (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 Lynx or any other payment method approved by CDCC.

SGC Repurchase Transactions

An SGC Repurchase Transaction is a bilateral repurchase agreement originally entered into between an SGC Clearing Member and the Trust which is submitted to CDCC for clearing during the SGC Repurchase Transaction Submission Period, in which the SGC Clearing Member agrees to sell SGC Securities in a particular SGC Securities Basket to the Trust at a Purchase Price to be paid by the Trust to the SGC Clearing Member, with a simultaneous agreement by the SGC Clearing Member to purchase the SGC Securities or Equivalent SGC Securities in a particular SGC Securities Basket from the Trust at the Repurchase Date and by the SGC Maturity Settlement Time, at a Repurchase Price to be paid by the SGC Clearing Member to the Trust. CDCC acts as central counterparty for all SGC Repurchase Transactions: CDCC accepts and novates the bilateral repurchase transaction and its terms and conditions are replaced with the SGC Repurchase Transaction terms and conditions set out in Rule D-7 of the Rules during the clearing process.

All defined terms used in the foregoing paragraph and not defined herein are defined in Rule D-7 of the Rules.



Section 7 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, separately 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 Lynx, 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.

All Clearing Members must have a Canadian dollar Settlement Account at a Designated Bank approved settlement bank to pay and receive all Canadian cash obligations intraday and at end of day. Additionally, at onboarding, Clearing Members must also provide an alternative Canadian dollar settlement account for use in the extreme event that an approved settlement bank in which a Clearing Member's current settlement account resides becomes unavailable. Alternative settlement accounts are subject to annual testing in which the Clearing Members must demonstrate that:

- (i) the accounts can receive manual cash payments from CDCC;
- (ii) Clearing Members can manually pay cash obligations directly to CDCC.

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, separately 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.



SETTLEMENT

End of Day Settlement

Payments for end of day settlement (Futures mark-to-market, premiums, Margin shortfalls, etc.) must be received by 8:15 a.m. the next Business Day for each Clearing Member (excluding LCMs) and 9:00 a.m. for each LCM (through non-cash collateral).

If a payment is late, CDCC will notify the Clearing Member that it is being fined. The fine structure is as follows:

Based on a rolling thirty days - if there has been a prior occurrence within the preceding thirty days, it is the second occurrence.

The fine schedule described below is subject to the Escalation Procedure applicable for operational issues detailed in Section 11 of this Manual.

For Clearing Members not in a Tri-Party Agreement

First occurrence of a late payment:

- if CDCC receives the payment in its Bank of Canada account by 8:30 a.m. the next Business Day, there will be no fine.
- if the payment is received by 8:45 a.m. the next Business Day, CDCC will impose a \$1,000 fine.
- if the payment is not received by 8:59 a.m. the next Business Day, CDCC will impose a \$2,500 fine.
- if the payment is not received by 9:30 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

On the second or more occurrences of a late payment:

- if CDCC receives the payment in its Bank of Canada account by 8:30 a.m. the next Business Day, CDCC will impose a \$1,000 fine
- if the payment is received by 8:45 a.m. the next Business Day, CDCC will impose a \$5,000 fine.
- if the payment is received by after 9:00 a.m. but before 9:29 a.m. the next Business Day, CDCC will impose a \$10,000 fine.
- if the payment is not received by 9:30 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

For Clearing Members (excluding LCMs) in a Tri-Party Agreement - Margin Shortfalls only

First occurrence of a late payment or delivery:

- if CDCC receives the payment in its Bank of Canada account or if CDCC has evidence that the securities have been received in the appropriate account by 8:30 a.m. the next Business Day, there will be no fine.
- if the payment or delivery is received by 8:45 a.m. the next Business Day, CDCC will impose a \$1,000 fine.
- if the payment or delivery is received by 9:29 a.m. the next Business Day, CDCC will impose a \$2,500 fine.
- if the payment or delivery is not received by 9:30 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.



SETTLEMENT

On the second or more occurrences of a late payment or delivery:

- if CDCC receives the payment in its Bank of Canada account or if CDCC has evidence that the securities have been received in the appropriate account by 8:30 a.m. the next Business Day, CDCC will impose a \$2,000 fine
- if the payment or delivery is received by 8:45 a.m. the next Business Day, CDCC will impose a \$5,000 fine.
- if the payment or delivery is received by after 9:00 a.m. but before 9:29 a.m. the next Business Day, CDCC will impose a \$10,000 fine.
- if the payment or delivery is not received by 9:30 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

For LCMs - Margin Shortfalls only

First occurrence of a late payment or delivery:

- if CDCC receives the payment in CDCC's Bank of Canada account designated for such Limited Clearing Member
 or if CDCC has evidence that the securities have been received in the appropriate account by 9:15 a.m. the next
 Business Day, there will be no fine.
- if the payment or delivery is received by 9:30 a.m. the next Business Day, CDCC will impose a \$2,000 fine.
- if the payment or delivery is received by 10:14 a.m. the next Business Day, CDCC will impose a \$2,500 fine.
- if the payment or delivery is not received by 10:15 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

On the second or more occurrences of a late payment or delivery:

- if CDCC receives the payment in CDCC's Bank of Canada account designated for such Limited Clearing Member or if CDCC has evidence that the securities have been received in the appropriate account by 9:15 a.m. the next Business Day, CDCC will impose a \$1,000 fine
- if the payment or delivery is received by 9:10 a.m., CDCC will impose a \$5,000 fine.
- if the payment or delivery is received by after 9:30 a.m. but before 10:14 a.m. the next Business Day, CDCC will impose a \$10,000 fine.
- if the payment or delivery is not received by 10:15 a.m. the next Business Day, CDCC will deem the Clearing Member a Non-Conforming Member.

SGC Securities Adjustment Threshold

The Corporation may determine, from time to time and for the purpose of Section D-707 of the Rules, the amount of a minimum threshold to be applied to SGC Securities Adjustment once calculated by the Corporation.

If the SGC Securities Adjustment calculated pursuant to Section D-707 of the Rules is equal to or exceeds the threshold, the Corporation may require the SGC Clearing Member to make available SGC Securities for the entire amount of the SGC Securities Adjustment (disregarding the threshold) within the given timeline.

If the SGC Clearing Member does not make available sufficient SGC Securities for sale in the entire amount of the SGC Securities Adjustment within the given timeline, CDCC may impose the following fines:



SETTLEMENT

- if the sale of the intra-day SGC Securities Adjustment is made more than 2 hours after but less than 2 hours and 15 minutes from notification, CDCC may impose a \$500 fine;
- if the sale of the intra-day SGC Securities Adjustment is made more than 2 hours and 15 minutes but less than 2 hours and 30 minutes from notification, CDCC may impose a \$1,000 fine.
- If at the end of day, an SGC Securities Adjustment is made more than 15 minutes after the SGC Securities Adjustment Settlement Time, CDCC may impose a \$500 fine;
- If at the end of day, an SGC Securities Adjustment is made more than 15 minutes, but less than 30 minutes after the SGC Securities Adjustment Settlement Time, CDCC may impose a \$1000 fine.

If the SGC Clearing Member does not make available sufficient SGC Securities for sale in the entire amount of SGC Securities Adjustment, the Corporation may take any action or measure provided in Section D-707(4).



Section 8 MARGIN, CLEARING AND SUPPLEMENTAL LIQUIDITY FUND

MARGIN FUND ACCOUNTS

Margin Fund Accounts are 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 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, however, 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, 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 Asset previously deposited in the Margin Fund Accounts to the Corporation. The Clearing Member must first pledge deposit equivalent securities/cash and withdraw the existing securities/cash subject to substitution. The value of the equivalent securities/cash so deposited must be equal to or in excess of the Assets 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 Assets subject to substitution do not create deficits in the Clearing Member's Margin Fund Accounts. CDCC will respond within the specified time set forth in Section 2 and, on a best effort basis, approve the substitution in CDCC Clearing Application.

Cash deposit

Cash deposited in the Margin Fund Accounts must be sent to the relevant CDCC bank account. After performing all the validation processes, CDCC confirms within the CDCC Clearing Application the Clearing Member's deposits and/or withdrawals.



Deposits, withdrawals and changes thereto will be reflected on the immediately following Business Day's Deposits and Withdrawals Report (MA01). In accordance with the Rules, any discrepancies that the Clearing Member notices against its own records should be reported to CDCC immediately.

Pledging (Securities / CDS)

Securities pledges in the Margin Fund Accounts must be performed through CDS' Clearing and Settlement System 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 an electronic document, as presented in Exhibit A of Schedule B in this Manual, may be accepted by CDCC as constituting a physical deposit or withdrawal.

After performing all the validation processes, CDCC confirms within the CDCC Clearing Application the Clearing Member's deposits and/or withdrawals.

Deposits, withdrawals and changes thereto will be reflected on the immediately following Business Day's Deposits and Withdrawals Report (MA01). In accordance with the Rules, any discrepancies that the Clearing Member notices against its own records should be reported to CDCC immediately.

Pledging (Securities / Tri Party - Securities Account with an Approved Custodian)

Subject to certain conditions, the Corporation may allow Clearing Members to pledge non-cash collateral for the purpose of meeting their Margin requirements pursuant to Rule A-7 (excluding Net Variation Margin Requirements and any other Margin which can otherwise only be cash settled) to a securities account maintained at a third party securities intermediary. The securities intermediary must enter into an Account Control Agreement with respect to the securities account and be an Approved Custodian, each as defined in the Rules.

Use of the Securities Account

- 1. The securities account shall only be maintained by a securities intermediary which is an Approved Custodian, as defined in the Rules.
- 2. Any securities held in the securities account maintained by the Approved Custodian, in the name of the Clearing Member, shall be subject to an Account Control Agreement.
- 3. The Account Control Agreement is a standard agreement that meets certain requirements, as prescribed in the Rules.
- 4. The securities account may not be used for Net Variation Margin Requirements or for settlement purposes.
- 5. The respective rights and obligations of the Clearing Member and CDCC with respect to the securities collateral held in the securities account are subject to the Rules, including:
 - a. All deposits, withdrawals and substitutions in the securities account are subject to the timeline described in Section 2 of this Manual and to the collateral policy described in Section 3 (Eligible Collateral) of the Risk Manual;
 - All deposits, withdrawals and substitutions made in the securities account shall also be entered in CDCC Clearing Application in accordance with the timeline described in Section 2 of this Manual and to the collateral policy described in Section 3 (Eligible Collateral) of the Risk Manual;
 - c. Any withdrawal of securities held in the securities account is subject to CDCC's approval. The withdrawal must be entered in CDCC Clearing Application by the Clearing Member. CDCC will within the specified time



to respond to a withdrawal request specified in Section 2, sign and transmit a withdrawal authorization form to the Custodian to proceed with the withdrawal;

d. Any substitution is subject to the deposit by the Clearing Member of the replacement securities in the securities account before the withdrawal of the replaced securities. Both the deposit and the withdrawal shall also be entered in CDCC Clearing Application by the Clearing Member. CDCC will, within the specified time to respond to a substitution request specified in Section 2, sign and transmit a the substitution authorization form to the Custodian to proceed with the withdrawal portion of the substitution.

Intra-Day Margin Calls

CDCC encourages its Clearing Members to cover Intra-Day Margin Calls with collateral other than cash.

The fine schedule described below is subject to the Escalation Procedure applicable for operational issues detailed in Section 11 of this Manual.

Clearing Members (excluding LCMs) have one (1) hour from notification to cover an Intra-Day Margin Call. If the payment or delivery is late, the following fines shall apply:

- if the payment or delivery is received more than 1 hour after but less than 1 hour and 15 minutes from notification, CDCC will impose a \$500 fine.
- if the payment or delivery is received more than 1 hour and 15 minutes but less than 1 hour and 30 minutes from notification, CDCC will impose a \$1,000 fine.
- if the payment or delivery is not received by 1 hour and 30 minutes from notification, CDCC will deem the Clearing Member (excluding LCMs) a Non-Conforming Member.

LCMs have two (2) hours from notification or until such Settlement Time as may be provided in Section 2 to cover an Intra-Day Margin Call. If the payment or delivery is late, the following fines shall apply:

- if the payment or delivery is received more than 2 hours after but less than 2 hours and 15 minutes from notification, CDCC will impose a \$500 fine.
- if the payment or delivery is received more than 2 hours and 15 minutes but less than 2 hours and 30 minutes from notification, CDCC will impose a \$1,000 fine.
- if the payment or delivery is not received within 2 hours and 30 minutes from notification, CDCC will deem the LCM a Non-Conforming Member

Overnight Margin Calls

CDCC offers its Clearing Members two (2) ways to cover Overnight Margin Calls:

- Eligible currencies deposited through an approved bank;
- Securities pledged through CDS or other approved third-party securities intermediary.

Clearing Members (excluding LCMs) have two hours from notification to cover an Overnight Margin Call. If the payment or delivery is late or insufficient, the Clearing Member may be deemed a Restricted Clearing Member by CDCC and the following fines shall apply:

• if the payment or delivery is received more than 2 hours after but less than 2 hours and 15 minutes from notification, CDCC will impose a \$500 fine.



• if the payment or delivery is received more than 2 hours and 15 minutes but less than 2 hours and 30 minutes from notification, CDCC will impose a \$1,000 fine.

(FIXED INCOME) VARIATION MARGIN ACCOUNT

The Fixed Income Variation Margin Account is the CDCS record provided to each Clearing Member listing all Margin deposits made by such Clearing Member to CDCC for (Fixed Income) Net Variation Margin Requirement purposes only, in accordance with Section D-607 of the Rules, or otherwise as set forth in Section 8 hereof.

(Fixed Income) Net Variation Margin Requirement Settlement

In order to meet a (Fixed Income) Net Variation Margin Requirement, Clearing Members are required to pledge, through CDS's Clearing and Settlement System, to CDCC's (Fixed Income) Variation Margin Account, Margin deposits 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, to cover any positive variation of the (Fixed Income) Net Variation Margin Requirement owed by a Clearing Member to CDCC.

While the Eligible Collateral must be delivered and pledged to CDCC through CDS' Clearing and Settlement System, each Clearing Member must in parallel record in its (Fixed Income) Variation Margin Account such pledge, or any pledge release, to match the entries. The (Fixed Income) Variation Margin Account is solely used to record the pledges or pledge releases, as the case may be, of Margin deposits for (Fixed Income) Net Variation Margin Requirement purposes.

Delivery of the (Fixed Income) Net Variation Margin Requirement

On any given Business Day, each Clearing Member must deliver to the Corporation in CDCC's account at CDS, Eligible Collateral for (Fixed Income) Net Variation Margin Requirement purposes, taking into consideration any shortfall resulting from the variation of the (Fixed Income) Net Variation Margin Requirement, as compared to the (Fixed Income) Net Variation Margin Requirement calculated on the previous Business Day, and the fluctuation of the market value of the Eligible Collateral previously pledged by such Clearing Member to meet its (Fixed Income) Net Variation Margin Requirement.

Upon accepting Eligible Collateral that has been pledged to it through CDS' Clearing and Settlement System, CDCC may re-pledge and deliver the Eligible Collateral to a receiving Clearing Member, subject to CDCC's first ranking pledge, and the receiving Clearing Member shall be entitled to re-pledge or re-hypothecate the Eligible Collateral delivered to it.

Each Clearing Member is also required to return to the Corporation the same CUSIP/ISIN that had been allocated and pledged to it by the Corporation as part of the (Fixed Income) Net Variation Margin Requirement delivery, in an amount sufficient to meet the (Fixed Income) Net Variation Margin Requirement shortfalls as indicated on the MS10 report. Clearing Members must return the same CUSIP/ISIN in accordance with the (Fixed Income) Net Variation Margin Requirement Settlement Times. If a Clearing Member fails to return to the Corporation the specific CUSIP/ISIN securities listed on the report but returns equivalent securities instead (a "Fixed Income Variation Margin Delivery Failure"), the Clearing Member will be subject to fines as described below.

Distribution of the (Fixed Income) Net Variation Margin Requirement Collateral

The Corporation will transfer to each Clearing Member being owed a net amount resulting from a change in such Clearing Member's (Fixed Income) Net Variation Margin Requirement or from the fluctuation of the market value of the Eligible Collateral previously pledged by such Clearing Member to meet its (Fixed Income) Net Variation Margin Requirement, the Variation Margin securities received by the Corporation as part of the (Fixed Income) Net Variation Margin Requirement. The Corporation will in priority return the same CUSIP/ISIN previously pledged to the Corporation by such Clearing Member, subject to the specific procedures described below in the event of a Fixed Income Variation Margin Delivery Failure or of a substitution request.



Substitution of Pledged Securities Collateral for the (Fixed Income) Variation Margin Account

1. (Fixed Income) Variation Margin Account Collateral substitution request:

A Clearing Member may request to substitute a specific CUSIP/ISIN previously pledged in the (Fixed Income) Variation Margin Account to the Corporation. The request for substitution must be received by the Corporation before 11:00 a.m. for same day settlement. Clearing Members 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. Substitution of a specific CUSIP/ISIN requested for same day settlement will be completed by 3:00 p.m. by the Corporation, subject to the Buy-In process below.

2. (Fixed Income) Variation Margin Account Securities Collateral substitution notice:

The Corporation will inform by 12:00 p.m. (noon) any Clearing Member subject to a substitution request (the "Holder of securities") for a same day settlement. The Holder of securities will have until 3.00 p.m. to deliver the securities to CDCC's (Fixed Income) Variation Margin Account. Failure to deliver by the Holder of securities by the cut-off time will be considered a Fixed Income Variation Margin Delivery Failure and will result in fines being applied to the Holder of securities as described below.

FIXED INCOME VARIATION MARGIN DELIVERY FAILURE

Fines

CDCC will apply fines for failure to return distributed securities.

CDCC will apply fines for failure to return securities subject to a substitution notice, by the appropriate deadline.

For each day between the day of the original return obligation and the delivery date (the "Fail Period") a fine will be applied (Fail fees). The Fail fee is based on a rate equal to CORRA, applied daily. CDCC shall immediately notify the Clearing Member to which a fine is imposed.

Throughout the Fail Period, CDCC will require to receive Eligible Collateral of a value equivalent to the value of the unreturned securities and CDCC will deliver such replacement securities to the receiving Clearing Member (the "Replacement Securities"). At the end of the Fail Period, the Replacement Securities will be returned from the receiving Clearing Member to the delivering Clearing Member.

The fines described above are subject to the Escalation Procedure applicable for operational issues detailed in Section 11 of this Manual.

Collection of Fines

CDCC will collect any applicable fines with the month-end clearing fee billing.

Fixed Income Variation Margin Buy-In process for Fixed Income Variation Margin Delivery Failure

The Receiver of securities affected by a Fixed Income Variation Margin Delivery Failure may request that the Corporation execute a Buy-In on the day following the market standard settlement (T+1, where T is the day of the original date of the request).

Same day settlement will be executed by CDCC on a best efforts basis. In the event of a failure to deliver by the counterparty to the Buy-In transaction on the same day, CDCC will execute the Buy-In transaction the following day without liability.



The Corporation shall only execute a Buy-In transaction pursuant to a formal request by a Receiver of securities affected by a Failed Delivery, by purchasing on the open market the collateral of the specified quantity and CUSIP/ISIN.

When initiated by a Receiver of securities, the Buy-In process shall be as follows:

- 1. The Receiver of securities who wants to initiate a Buy-In must send to the Corporation the appropriate Buy-In Scanned Form (which is accessible on CDCC's Secured Extranet Website) duly completed with the following information:
 - a. Clearing Member's Name;
 - b. Clearing Member's Number
 - c. The specific securities (Eligible Collateral) (ISIN) involved;
 - d. The total quantity of the Failed Delivery;
 - e. The quantity requested in the Buy-In;
 - f. The Buy-In delivery date, which shall be the current Business Day + no less than two (2) complete Business Days.

The Buy-In Scanned Form must be submitted to CDCC in the prescribed format and must be signed by an Authorized Representative of the Clearing Member before 10:00 a.m.

- 1. Upon receiving the duly completed Buy-In Scanned Form from a Receiver of securities, the Corporation will work with the Holder(s) of securities responsible for the Failed Delivery in order to validate if the delivery can be made within the number of Business Days specified in the Buy-In Scan Form (the "Buy-In Notice Delay").
- 2. At the expiry of the Buy-In Notice Delay, if the Provider(s) of securities has not delivered the relevant securities, the Corporation will initiate a cash trade on the open market.
- 3. Upon receipt of the securities, CDCC will deliver the requested securities to the Receiver that initiated the Buy-In transaction.
- 4. All fees incurred by the Corporation, including all costs with respect to the Buy-In transaction shall be charged to the Provider(s) of securities responsible for the Failed Delivery. Such fees will be included on the Monthly Clearing Fees Details Report (MB01) produced on the second Business Day of each month as a separate pay figure, payable to the Corporation on the fifth Business Day of each month through Lynx or any other payment method approved by the Corporation.

Delay of start of End of Day Batch

A Clearing Member may request to delay the start of the 5:30 p.m. End of Day Batch. The request must be submitted to CDCC in writing by 5:00 p.m., and authorized by an Authorized Representative of the Clearing Member. If approved, the End of Day Batch will be delayed for a single 15- minute window to allow the Clearing Members to complete any necessary tasks. CDCC will advise all Clearing Members by broadcast email of the delay in advance, and the requesting Clearing Member will be charged.

Delay of start of GCM Batch



A Clearing Member may request to delay the start of the 9:00 p.m. GCM Batch. The request must be submitted to CDCC in writing by 8:30 p.m., and authorized by an Authorized Representative of the Clearing Member. If approved, the GCM Batch will be delayed for a single 15-minute window to allow the Clearing Members to complete any necessary tasks. CDCC will advise all Clearing Members by broadcast email of the delay in advance, and the requesting Clearing Member will be charged

CLEARING FUND

Each Clearing Member (excluding LCMs) approved to clear Exchange Transactions and/or OTCI Transactions and/or Fixed Income Transactions shall maintain a deposit in the Clearing Fund of the amounts from time to time required by CDCC in accordance with Rule A-6. The Clearing Fund has been established to protect CDCC and its Clearing Members (including their Affiliate(s)) from potential defaults and other market events and shall be used for the purposes set out in Section A-609 and Subsection A-701(2) of the CDCC Rules.

Each Clearing Member's (excluding LCMs) contribution includes a required Base Deposit and a Variable Deposit. The details of the Base and Variable Deposits are set forth in Rule A-6.

Clearing Fund Statement Report

On the first Business Day of each calendar month, CDCC shall issue to each Clearing Member (excluding LCMs) a Clearing Fund statement that shall list the current amount of such Clearing Member's deposits to the Clearing Fund and the amount of deposit, which is based on the monthly calculation of the Variable Deposit, required of such Clearing Member. CDCC will also issue a Clearing Fund statement (MA71) intra-monthly if an increase to the Variable Deposit is necessary. Any deficit between the amounts held on deposit and the deposit required to be made by a Clearing Member must be satisfied on the next Business Day (T+1) before 10:00 a.m. (no same-day deposits for amounts in excess of \$10MM).

Deposits

Deposits to the Clearing Fund shall be in the form of CAD Cash. Deposits to the Clearing Fund are made and valued in the same manner and are subject to the same deadlines as for Margin deposits, as set forth in Section 2 of this Operations Manual.

Withdrawals

Clearing Members (excluding LCMs) may request to withdraw any surplus amount from the Clearing Fund, subject to applicable deadlines, as set forth in Section 2 of this Operations Manual.

Pledges

Pledges of Cash must be performed in accordance with Rule A-6.



SUPPLEMENTAL LIQUIDITY FUND

Each Clearing Member (excluding LCMs) approved to clear Transactions shall maintain Supplemental Liquidity Contributions in the Supplemental Liquidity Fund of the amounts from time to time required by CDCC in accordance with Rule A-6A of CDCC Rule and the Risk Manual. The Supplemental Liquidity Fund has been established to protect CDCC from potential liquidity obligations or exposure that CDCC may suffer and shall be used for the purposes set out in Rule A-6A of CDCC Rules.

Supplemental Liquidity Fund Statement

On the first Business Day of each calendar month, CDCC shall issue to each Clearing Member (excluding LCMs) a Supplemental Liquidity Fund statement that shall list the current amount of such Clearing Member's Supplemental Liquidity Contributions to the Supplemental Liquidity Fund and the amount of Supplemental Liquidity Contributions required of such Clearing Member. CDCC will also issue a Supplemental Liquidity Fund statement (MA80) intra-monthly if an increase to the Supplemental Liquidity Contributions is necessary. Any deficit between the Supplemental Liquidity Contributions held in the Supplemental Liquidity Fund and the Supplemental Liquidity Contributions required to be made by a Clearing Member must be satisfied on the next Business Day (T+1) before 10:00 a.m. (no same-day deposits for amounts in excess of \$10MM).

Supplemental Liquidity Contributions

Supplemental Liquidity Contributions to the Supplemental Liquidity Fund shall be in the form of CAD Cash. Supplemental Liquidity Contributions to the Supplemental Liquidity Fund are valued in the manner set forth in the Risk Manual.

Withdrawals

Clearing Members (excluding LCMs) may request to withdraw any surplus amount from the Supplemental Liquidity Fund.

Pledges

Pledges of Cash must be performed in accordance with Rule A-6A.



Section 9 CLEARING FEES

Clearing services fees

Clearing fees are charged to 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 https://www.cdcc.ca/f_en/cdcc_fees.pdf 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 Lynx 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 Extranet Website. CDCC issues a statement on a monthly basis for these services. The fees are collected as per the date on the statement through Lynx 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 CDS' Clearing and Settlement System (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 Lynx or any other payment method approved by CDCC.



Section 10 AUTHORIZED REPRESENTATIVES AND SECURITY OFFICERS

Authorized Representatives

Clearing Members shall designate at least three (3) individuals within their firm with the proper authority to sign documents necessary for conducting business with CDCC, in accordance with Rule A-202. The designation of Authorized Representatives is achieved by filing a completed Certified List of Authorized Representatives with CDCC, which form shall be reviewed annually by each Clearing Member, and any updates provided to CDCC. It is the Clearing Member's responsibility to ensure that any changes to their Certified List of Authorized Representatives are timely reported to CDCC outside of this annual review exercise.

Security Officers

Clearing Members shall designate at least three (3) individuals within their firm who will be responsible for handling the Clearing Member's User Profiles ("Security Officers"). The designation of Security Officers is achieved by filing a completed Security Officer Identification Form with CDCC, which form shall be reviewed annually by each Clearing Member, and any updates provided to CDCC. It is the Clearing Member's responsibility to ensure that any changes to their Security Officers list are timely reported to CDCC outside of this annual review exercise.

Access to CDCC's Clearing System

Once duly designated, a Security Officer may submit a CDCS Clearing User Profile Request form (accessible in CDCC's Secured Extranet Website) instructing CDCC to add, modify or delete a User Profile. Completed forms must be submitted to the Business Operations group e-mail address: cdcc-ops@tmx.com (or to cdcc-extendedhours-ops@tmx.com, if the change is requested during the overnight clearing session).

Upon receipt of the form, CDCC will process, as requested by a Clearing Member, the addition / modification or deletion.



Section 11 ESCALATION PROCEDURE

PAYMENT FAILURE ESCALATION PROCEDURE

A failure by a Clearing Member to meet a payment, transfer, deposit, delivery, or acceptance of delivery when such obligation becomes due under the Rules (for the purpose of this Section 11 - Escalation Procedure, a "Payment Failure") as a result of an operational issue, including any material systems failure, malfunction, or delay encountered by a Clearing Member or its securities intermediary, including its Settlement Agent, Approved Depository, or Approved Custodian, (an "Operational Issue") shall be managed by the Corporation in accordance with the following procedure, (the "Escalation Procedure").

1. Communication

- a. For the purposes of this Payment Failure Escalation Procedure:
 - (i) a CDCC Level 1 contact shall be Manager or a Director Operations, or its equivalent;
 - (ii) a CDCC Level 2 contact shall be a Vice-President Operations, or its equivalent;
 - (iii) a CDCC Level 3 contact shall be the President Chief Operating Officer or Chief Risk Officer;
 - (iv) a Clearing Member Level 1 CDCC Contact shall be a Manager or Director of Operations, or its equivalent;
 - a Clearing Member Level 2 CDCC Contact shall be a Vice-President Operations, or its equivalent;
 and
 - (vi) a Clearing Member Level 3 Contact shall be a senior executive reporting directly to the president of the Clearing Member, or to its equivalent in the absence of a senior executive of the Clearing Member bearing the title "president".
- b. The CDCC Level 1 contact shall, immediately upon acquiring actual knowledge or confirmation of a Payment Failure by a Clearing Member, notify the Clearing Member Level 1 contact of the Payment Failure. The Clearing Member Level 1 contact shall, within a reasonable period of time, confirm the nature of the issue that caused the Payment Failure and, promptly upon providing such confirmation, proceed to provide the Corporation with the required information in accordance with the Operational Issue Resolution Notice defined below.
- c. In the event that (i) the Clearing Member Level 1 contact fails to respond to the CDCC Level 1 contact within a reasonable period of time, (ii) the Clearing Member Level 1 contact cannot confirm the nature of the issue that caused the Payment Failure, or (iii) the information provided by the Clearing Member Level 1 contact regarding the nature of the Operational Issue that caused the Payment Failure is deemed unsatisfactory by the Corporation, the CDCC Level 2 contact shall immediately contact the Clearing Member Level 2 contact. The Clearing Member Level 2 contact shall, promptly upon being contacted in accordance with this subsection, proceed to provide the Corporation with the required information in accordance with the Operational Issue Resolution Notice defined below.
- d. In the event that (i) the CDCC Level 2 contact fails to reach the Clearing Member Level 2 contact within a reasonable period of time, (ii) the Clearing Member Level 2 contact cannot confirm the nature of the Operational Issue that caused the Payment Failure, or (iii) the information provided by the Clearing Member Level 2 contact regarding the nature of the Operational Issue that caused the Payment Failure is deemed unsatisfactory by the Corporation, the CDCC Level 3 contact shall immediately contact the Clearing Member Level 3 contact. The Clearing Member Level 3 contact shall, within an hour after being contacted in accordance with this subsection, proceed to provide the Corporation with the required information in accordance with the Operational Issue Resolution Notice defined below.



2. Operational Issue Resolution Notice

- a. Upon receiving notification by the Corporation of the Payment Failure in accordance with Section 1 of this Escalation Procedure, if the Clearing Member Level 1, 2, or 3 contact, as the case may be, confirms in accordance with Subsection 1 that the Payment Failure is solely due to an Operational Issue, such Clearing Member Level 1, 2, or 3 contact, as the case may be, shall provide the Corporation with a written confirmation of the nature of the Operational Issue that caused the Payment Failure and a detailed description of the steps proposed to be taken by the Clearing Member to resolve the Operational Issue (together, the "Operational Issue Resolution Notice"). Where the Operational Issue affects the Clearing Member's securities intermediary (including its Settlement Agent, Approved Depository or Approved Custodian), the Clearing Member shall immediately provide the Corporation with the contact details for the relevant representative of such securities intermediary and include such representative in every communication with the Corporation related to the Operational Issue until the full resolution of the Operational Issue.
- b. The Operational Issue Resolution Notice shall be re-issued by the Clearing Member Level 3 contact, to the Corporation on each day on which the Payment Failure persists, until there is a full resolution of the Operational Issue to the satisfaction of the Corporation.

3. Mitigation Tools

Immediately upon the occurrence of a Payment Failure, the Clearing Member shall use its best efforts to resolve the Operational Issue, and to mitigate the Payment Failure by the use of the following mitigation tools (the "Mitigation Tools") before 3:45 p.m., where necessary:

- a. The Exception Process Request after the start of CDS payment exchange, where applicable, or
- b. The Payment Delay Request.

4. Delayed Resolution

On any Business Day on which an Operational Issue Resolution Notice remains in effect, in the event that the Corporation is of the view that the Operational Issue is expected, or likely, to persist until the next following Business Day,

- a. The Corporation may determine that no Transaction shall be cleared by the Corporation for such Clearing Member until resolution; and
- b. The Clearing Member Level 3 contact shall provide written confirmation that the Payment Failure is solely due to an Operational Issue and that the Clearing Member has used its best efforts to use the Mitigation Tools, and requests, if necessary, no later than 3:45 p.m. on the Business Day on which the first notification of the Payment Failure has been made, by a Payment Delay Request that the Corporation funds the Clearing Member's obligations of payment to the Corporation until the next following Business Day. The Clearing Member shall, upon request by the Corporation, represent and warrant to each of the Corporation's lender, acknowledging and confirming that each of the Corporation and the lender is relying on such representations and warranties without independent inquiry, that the Payment Failure is solely due to an Operational Issue and that no financial condition is affecting the Clearing Member in such a way that the provision of temporary funding in accordance with this section could jeopardize the interest of the Corporation or other Clearing Members. In the event that temporary funding is provided in accordance with this section, all fees and costs incurred by the Corporation in connection with such funding shall be added to and become part of the payment obligation owed by the Clearing Member to the Corporation and will become due immediately.

5. Non-Conforming

a. If no Mitigation Tool has been successfully implemented by the Clearing Member by the end of the Business Day on which the first notification of the Payment Failure has been made, the Corporation may declare the



Clearing Member a Non-Conforming Member provided that the President & Chief Clearing Officer (or its designate) of the Corporation, prior to such designation, notifies the appropriate senior officer of the Bank of Canada in accordance with the Bank of Canada communication requirements.

b. If a Mitigation Tool has successfully been used by the Clearing Member but the Corporation is not satisfied with the information provided pursuant to the Operational Issue Resolution Notice, or considers that the steps proposed to be taken by the Clearing Member to resolve the Operational Issue expose the Corporation to an unacceptable level of risk, the Corporation may declare the Clearing Member a Non-Conforming Member, provided that the President (or designate) of the Corporation prior to such designation notifies the appropriate senior officer of the Bank of Canada in accordance with the Bank of Canada communication requirements. The Corporation shall not exercise this discretion without having first performed the Escalation Procedure pursuant to Section 11 within a reasonable timeframe upon acquiring actual knowledge or confirmation of a Payment Failure by a Clearing Member and will not exercise this discretion before 10:00 a.m. on the day following the receipt of the Level-3 Operational Issue Resolution Notice, unless the Clearing Member has not confirmed that the Payment Failure results from an Operational Issue.



OVERNIGHT UNCOVERED RISK EXPOSURE

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

The Threshold will only apply if at least one position movement is captured during the Overnight Clearing Cycle, allowing the Clearing Member to be considered inactive as long as positions remain static ("Position-based trigger"). In other words, a Clearing Member will be considered inactive until one position movement is captured, after which such Clearing Member will be considered active for the rest of the Overnight Clearing Cycle.

The Threshold will trigger different actions depending on the Clearing Member's established overnight collateral solution (i.e. Pre-funding solution or Payment solution, see additional details in Section 12 below). Consequently, CDCC uses the following terminology for the Threshold:

- "Margin Call threshold" Applicable to the Payment solution. If the Clearing Member reaches the Margin Call threshold, an Overnight Margin Call is issued and needs to be fulfilled within the given timeline. If the Clearing Member doesn't fulfill its payment obligation or the payment capabilities are not enough to fulfill the obligation, CDCC may deem such Clearing Member as a Restricted Clearing Member.
- "Trading threshold" Applicable to the Pre-funding solution. If the Clearing Member reaches the Trading threshold, CDCC may deem such Clearing Member as a Restricted Clearing Member.

Additionally, CDCC will use the below terminology to address Live margin check breaches:

• "Warning threshold" - Should only the Live margin check be breached, a warning is communicated to the Clearing Member.

Overnight Uncovered Risk Exposure Escalation procedure:

- a) the Overnight contact list for the purposes of the "Overnight Uncovered Risk Exposure" Escalation Procedure:
 - (i) a CDCC Level 1 contact shall be an Operations Specialist, its equivalent or higher;
 - (ii) a CDCC Level 2 contact shall be a Manager, its equivalent or higher;
 - (iii) a CDCC Level 3 contact shall be the President, Chief Operating Officer or Chief Risk Officer;
 - (iv) a Clearing Member Level 1 CDCC Contact shall be an Operation Specialist, its equivalent or higher;
 - (v) a Clearing Member Level 2 CDCC Contact shall be a Manager, its equivalent or higher; and
 - (vi) a Clearing Member Level 3 CDCC Contact shall be a senior executive reporting directly to the president of the Clearing Member, or to its equivalent in the absence of a senior executive of the Clearing Member bearing the title "president".
- b) The CDCC Level 1 contact shall, immediately upon acquiring confirmation of a Warning threshold breach by a Clearing Member, notify the Clearing Member Level 1 contact of the "Warning threshold" breach.



- c) The CDCC Level 1 contact shall, immediately upon acquiring confirmation of a Margin Call threshold breach by a Clearing Member, notify the Clearing Member Level 1 contact of the breach and that an Overnight Margin Call will be issued.
- d) The CDCC Level 2 contact shall, immediately upon acquiring confirmation of a Trading threshold breach or that the Clearing Member didn't fulfill its payment obligation following the issuance of an Overnight Margin Call, notify the Clearing Member Level 2 contact of the situation and that the Clearing Member may be deemed a Restricted Clearing Member by CDCC.
- e) The CDCC Level 3 contact shall, immediately upon acquiring actual knowledge or confirmation that a Clearing Member may be or was deemed a Restricted Clearing Member, communicate with the Clearing Member Level 3 contact.



Section 12 OVERNIGHT CLEARING CYCLE REQUIREMENTS

During the Overnight Clearing Cycle, Clearing Members are assigned to one of the following solution based on their payment capabilities:

- Pre-funding solution (i.e. Overnight Clearing Cycle eligible collateral payment capabilities not available)
- Payment solution (i.e. Overnight Clearing Cycle eligible collateral payment capabilities available)

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

- "Asian hours" i.e. 8:00 p.m. to 1:00 a.m. ET in a selection of eligible Non-CAD currencies.
- "European hours" i.e. 1:00 a.m. to 8:15 a.m. ET in a selection of eligible currencies until 7:00 a.m. ET or any form of eligible collateral pledged through CDS' Clearing and Settlement System.

Clearing Members opting to qualify for the Payment solution during either the Asian hours, European hours or both will automatically be considered as part of the Payment solution at the 1:00 a.m. ET monitoring snapshot (juncture of Asian and European hours).

CDCC will conduct routine testing of the Payment solution from time to time to ensure that operational readiness is maintained by Clearing Members. Should a Clearing Member fail such tests, it will be reassigned to the Pre-funding solution.

CDCC will allow Clearing Members under the Pre-funding solution to enter the Payment solution at any time after the required certification requirements are passed.

Summarized comments received from Clearing Members on April 7, 2025 and responses from CDCC

#	Summary of comments	Summary of responses			
	PART A - GENERAL				
1	Section A-206- Notices and Reports A definition of the 3rd party service provider should be included in the CDCC rules.	This term, which is not defined in the rules, as is the case in other clearing houses, has a standard and usual meaning.			
2	Section A-210- Distribution of Information, Confidentiality and Use of CDCC Materials A definition of a service bureau should be included in the CDCC rules.	This term, which is not defined in the rules, as is the case in other clearing houses, has a standard and usual meaning.			
3	Section A-228 –Operational Risk Management Further clarity should be provided regarding the nature and scope of documentation related to liquidity and add". Corporation may reasonably require".	As a Central Counterparty, CDCC must regularly assess the financial and operational capabilities of its Clearing Members. This ensures that Members can meet their obligations to both CDCC and other Members, while minimizing the risk of default. Given the diverse nature of its Clearing Members, CDCC does not prescribe a specific list of required documents. Instead, it will employ a case-by-case approach, utilizing relevant documentation to evaluate each Member's financial standing, operational efficiency, and overall resilience.			
4	Section A-230 - Cybersecurity Requirements Section A- 231 - Security Incident Reporting, Disconnection and Reconnection	Compliance with the requirements detailed in Sections 230 and 231 of the CDCC Rules is expected of all Clearing Members.			

- A. Occurrence of a Security Incident.
- B. Procedure for Connecting Following a Security Incident that Results in Disconnection.

Further clarification is required with respect to evidence needed for Members to demonstrate compliance to the proposed rules.

CDCC OPERATIONS MANUAL

5 Section 5 OPEN POSITIONS

Further clarity should be provided w.r.t. the nature of the discrepancies that are required to be reported by the following business day, the contact information of the individual at CDCC, who at CDCC should receive the report on the discrepancies, and the nature of the communication that should be sent (email, online, etc.). Please clarify on whether the transaction coded as "opening" or "closing" would also apply to Firm and/or Client positions.

The nature of the discrepancy is limited to open positions. Any discrepancy between the beneficial owners' positions and the positions reflected at CDCC should be corrected as soon as reasonably possible to avoid CDCC reporting incorrect open interest values to the market.

The Clearing Member determines how their client and firm accounts are set up at CDCC. Firm transactions are processed in netted accounts both at the Clearing Member and at CDCC, therefore the open/close indicators will be ignored and positions netted. The Clearing Member could also select to set-up individual client accounts on a netted basis, in which case the open/close indicator will be ignored as above. In this case the Clearing Member must reconcile the positions held for that specific client against the specific client account held at CDCC. For client accounts held on a gross basis, CDCC will adjust the position according to the open/close indicator. These accounts

		are often referred to as Omnibus accounts and carry positions for multiple client accounts at CDCC. In this case the Clearing Member must reconcile the total long and short positions held on behalf of the beneficial owners against that omnibus client account. Clearing members requiring further details should reach out to CDCC's Business Operations. It is important to remember that resolving discrepancies falls under the Clearing Member's purview.
6	ADJUSTMENTS OF OPEN POSITIONS GENERAL Further clarity should be provided w.r.t. the nature of the discrepancies that are required to be reported by the following business day, the contact information of the individual at CDCC, who at CDCC should receive the report on the discrepancies, and the nature of the communication that should be sent (email, online, etc.)	The nature of the discrepancy is limited to open positions. Any discrepancy between the beneficial owners' positions and the positions corrected at CDCC should be reported because the open interest reported by CDCC to the market place would be incorrect. Clearing members requiring further details should reach out to CDCC's Business Operations. It is important to remember that resolving discrepancies falls under the Clearing Member's purview.
7	Section 6 EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES FUTURES FIRST IN-FIRST OUT (FIFO) ASSIGNMENT PROCESS Please clarify the nature of the discrepancies that need to be reported, the contact information of the individual at CDCC, who at CDCC should receive the report of the discrepancies, and the nature of the communication	The nature of the discrepancy is limited to the FIFO process. Any discrepancy between the beneficial owners' positions and the positions reflected at CDCC should be reported to avoid CDCC reporting incorrect open interest values to the market.

	that should be sent (email, online, etc.)	Clearing members requiring further details should reach out to CDCC's Business Operations. It is important to remember that resolving discrepancies falls under the Clearing Member's purview.
8	Section 8 MARGIN, CLEARING AND PROCESSING – SUPPLEMENTAL LIQUIDITY FUND MARGIN PROCESSING – SUPPLEMENTAL LIQUIDITY FUND We feel that the 15-minute delay should be extended to 30 minutes. A 15-minute delay does not allow a Clearing Member sufficient time to resolve issues, which if left unresolved, could have significant margin impact.	Any delay beyond 15 minutes may cause delay and interference to other critical operational and system processes. Considering that no request for delay currently exists, 15 minutes is both reasonable and feasible.
9	CLEARING FUND Clearing Fund Statement Report Further clarity is required on the definition of "sameday deposits" and the circumstances or scenario under which a Clearing Member might need to send a same day deposit over 10MM.	Same-day deposits are deposits that are input and settled on the same day without advanced notice. An example of a same-day deposit over \$10MM without notice is coverage of an intraday margin obligation, in which the Clearing Member is unable to provide collateral other than cash. For Clearing Fund obligations, which can only be met with cash, coverage is due the following business day, allowing for advanced notice should the obligation amount exceed \$10MM.
10	SUPPLEMENTAL LIQUIDITY FUND Further clarity is required on the definition of "sameday deposits" and the circumstances or scenario under which a Clearing Member might need to send a same day deposit over 10MM.	Same-day deposits are deposits that are input and settled on the same day without advanced notice. An example of a same-day deposit over \$10MM without notice is coverage of an intraday margin obligation, in which the Clearing Member is

	unable to provide collateral other than cash. For Supplemental Liquidity Fund obligations, which can only be met with cash, coverage is due the following business day, allowing for advanced notice should the obligation amount exceed \$10MM.
Section 9 CLEARING FEES Clearing Services Further details should be provided surrounding the specific settlement costs that CDCC may incur within the CDS clearing and settlement systems.	The clearing fees are specific to settlement costs incurred by CDCC to settle the Fixed Income SNS transactions received from Clearing Members. The transactions submitted to CDCC by the Clearing Member settle at CDS and both parties of the transaction will be charged by CDS. This fee was introduced at the inception of the Fixed Income service.