

# NOTICE TO MEMBERS

No. 2011 – 074 June 30, 2011

## **SELF-CERTIFICATION**

# OMNIBUS PROJECT AMENDMENTS TO SECTIONS A-102, A-801, A-803, A-804, D-601 AND D-606 OF THE RULES AND TO THE OPERATIONS MANUAL OF CDCC

On November 19, 2010, the Board of Directors of the Canadian Derivatives Clearing Corporation (CDCC) approved amendments to the Rules and to the Operations Manual of CDCC for purposes of the development of a central counterparty facility and clearing services for the Canadian fixed income market.

On November 24, 2010, CDCC published a request for comments in connection with the amendments to the Rules and to the Operations Manual of CDCC.

On March 1<sup>st</sup>, 2011, amendment to Sections A-102, A-401, A-402, A-709 and C-303 of the Rules and to the Operations Manual of CDCC to (i) remove letters of credit and bankers' acceptances as acceptable forms of margin deposits; (ii) prohibit pledging of securities of affiliates for purposes of margin deposits; and (iii) limit pledging of equity to a maximum of 15% of the total margin took effect. Additionally, amendment to CDCC Rules to clarify the definition of "Netting Cut Off Time" under Section A-102 as well as CDCC's rights relating to close-out netting under Section A-401 also took effect on that date.

Further amendments have been made pursuant to the comments received following the November 24, 2010 request for comments, which can be summarized as follows:

- 1. Definitions of "Gross Delivery Requirement" and "Gross Payment Against Delivery Requirement" were added in Section A-102;
- 2. Definitions of "Postponed Payment Obligation", "Provider of Securities" and "Rolling Delivery Obligation" in Section A-102 were modified;

Canadian Derivatives Clearing Corporation

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- 3. Clarification was made to provisions of Sections A-801, A-803 and A-804;
- 4. Definitions of "Cut-Off Time" and "Trade Date" in Section D-601 were modified;
- 5. Definitions of "Close Leg", "Deferred Settlement Transaction" and "Intra-Day Gross Settlement Cut-Off Time" were added in Section D-601;
- 6. Clarification was made to provisions of Sections D-604 and D-606; and
- 7. Clarification was made to provisions of Sections 2 (Time Frame), 5 (Open Positions), 6 (Exercises, Tenders, Assignments and Deliveries), 7 (Settlement) and of Schedule A (Risk Manual) of the Operations Manual of CDCC.

CDCC wishes to advise Clearing Members that the amendments to Sections A-102, A-801, A-803, A-804, D-601 and D-606 of the Rules and to the Operations Manual of CDCC to allow and provide for a real-time gross settlement process for fixed income cash transactions and open legs of Repo transactions have been self-certified in accordance with the self-certification process as established in the *Derivatives Act* (R.S.Q., chapter I-14.01).

Please find enclosed the amendment which will be in effect and will be incorporated in the version of the Rules of CDCC which will be available on CDCC's web site (www.cdcc.ca) in on July 4, 2011.

For any question or clarification, Clearing Members may contact the CDCC Member Services.

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# CANADIAN DERIVATIVES CLEARING CORPORATION

**RULES** 

AS OF[•] MARCH 1<sup>ST</sup>, 2011



### PART A – GENERAL

#### **RULE A-1 DEFINITIONS**

## **Section A-101 Scope of Application**

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

### **Section A-102 Definitions**

- "Acceptable Instrument Types" or "Acceptable OTCI" Over-The-Counter Instruments which are determined by the Corporation as acceptable for clearing with the Corporation.
- "Acceptable Underlying Interests" is an Underlying Interest which is determined by the Corporation as acceptable for clearing by the Corporation.
- "Acceptable Marketplace" a bilateral or multilateral marketplace, other than an Exchange, where buyers and sellers conclude transactions in Acceptable Instrument Types including bilateral trades between two Fixed Income Clearing Members and which meets any of the following requirements (i) in the case of a marketplace which is an alternative trading system ("ATS"), it has qualified as such and complies with the applicable requirements of National Instrument 21-101 Marketplace Operations ("21-101") and National Instrument 23-101 Trading Rules ("23-101") as determined by the Corporation, and (ii) in the case of an inter-dealer bond broker ("IDBB"), it has qualified as such and complies with applicable IIROC Rules including IIROC Rule 2800 and applicable requirements of 21-101 and 23-101 as determined by the Corporation, and (iii) in the case of bilateral trades between Fixed Income Clearing Members involving an SRO Clearing Member, the SRO Clearing Member complies with applicable requirements of 21-101 and 23-101 as determined by the Corporation.
- "Acceptable Security" a Security determined by the Corporation as acceptable for purposes of clearing a Transaction, a list of which is updated on a bimonthly basis by the Corporation and communicated by notice to Clearing Members.
- "Acceptance Criteria" the criteria established by the Corporation for acceptance or rejection of an OTCI in accordance with the provisions of Section D-104.
- "Additional Deposit" the additional amount which may be required to be added to a Clearing Fund deposit pursuant to Section A-606.
- "Affiliate" means, in relation to any Clearing Member, any Entity controlled, directly or indirectly, by the Clearing Member, any entity that controls, directly or indirectly, the Clearing Member, or any Entity directly or indirectly under common control with the Clearing Member. For this purpose, "control" of any Clearing Member or Entity means ownership of a majority of the voting power of the Clearing Member or Entity.
- "American Option" (or American Style Option) an Option which can be exercised at any time from issuance until its Expiration Date.



- "Application for Membership" the Application for Membership, which when completed by a Clearing Member candidate and accepted by the Corporation forms the Membership Agreement together with the Rules which are incorporated by reference in and form a part of the Membership Agreement, as such Application for Membership may from time to time be amended, changed, supplemented or replaced in whole or in part.
- "Approved Depository" a financial institution approved under Section A-613.
- "Approved Processes" any system for processing Transactions for clearing by the Corporation. CDCC may make available more than one Approved Process in respect of any clearing service.
- "Assigned Position" the position of the Clearing Member in any account for which such Clearing Member is the assigned Clearing Member in such account.
- "At-the-Money Option" a call Option or a put Option with an Exercise Price that is equal to the Market Price of the Underlying Interest.
- "Authorized Representative" a person for whom the Clearing Member has filed evidence of authority pursuant to Section A-202.
- "Bank Clearing Member" a Clearing Member that is a bank to which the Bank Act (Canada), as amended from time to time, applies.
- "Base Deposit" the minimum Clearing Fund deposit required of each Clearing Member pursuant to Section A-603.
- "Board" the Board of Directors of the Corporation.
- "Business Day" any day on which the Corporation is open for business. The term Business Day shall exclude the Expiration Date of any Options which expires on a Saturday.
- "By-laws" the By-laws of the Corporation as the same may be amended from time to time.
- "Capital Adequacy Return (CAR)" the documents specified from time to time by the Office of the Superintendent of Financial Institutions in its guidelines relating to capital adequacy requirements applicable to banks.
- "CDCC Materials" any material, data and information developed, created or compiled by the Corporation and provided by the Corporation to the Clearing Members in any form, and including software, trade-marks, logos, domain names, documentation, Approved Processes, technical information, systems, hardware and networks made available by the Corporation to the Clearing Members for the use of the clearing systems and electronic transmission systems provided by the Corporation to the Clearing Members.
- "CDS" CDS Clearing and Depository Services Inc., acting as Central Securities Depository in Canada or acting in any other capacity, or any successor thereof.
- "Central Securities Depository" any central securities depository acceptable to the Corporation, including CDS.



"Class Group" – all Options and Futures relating to the same Underlying Interest.

"Class of Futures" – all Futures covering the same Underlying Interest.

"Class of Options" – all Options of the same style within the same maturity category on the same Underlying Interest.

"Clearing Fund" – the fund established pursuant to Rule A-6 Clearing Fund Deposits.

"Clearing Member" – an applicant who has been admitted to membership in the Corporation.

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

"Client Account" – the account or accounts required to be established for Transactions of the Clearing Members' Clients pursuant to Sections B-102, B-103, C-102, C-103, D-102 and D103.

"Clients Settlement Account" – the account established by Section A-403.

"Close of Business" – the time at which the Business Day ends, as specified in the CDCC Operations Manual. The time may, at the sole discretion of the Corporation, be modified to address shortened trading days on Exchanges.

"Closing Buy Transaction" – an Exchange Transaction the result of which is to reduce or eliminate a Short Position in the Series of Futures involved in such transaction.

"Closing Purchase Transaction" – an Exchange Transaction the result of which is to reduce or eliminate a Short Position in the Series of Options involved in such transaction.

"Closing Sell Transaction" – an Exchange Transaction the result of which is to reduce or eliminate a Long Position in the Series of Futures involved in such transaction.

"Closing Writing Transaction" – an Exchange Transaction the result of which is to reduce or eliminate a Long Position in the Series of Options involved in such transaction.

"Commodity" – any agricultural product, forest product, product of the sea, mineral, metal, hydrocarbon fuel, natural gas, electric power, currency or precious stone or other gem, and any goods, article, service, right or interest, or class thereof, whether in the original or processed state.

"Confirmation Transmission" – the electronic transmission made by a Clearing Member to the Corporation confirming that the Expiry Report detailed in Section B-307 is accepted.

"Consolidated Activity Report" – daily report listing either Options, Futures or OTCI transactions.

"Contract Specifications" – the specifications prescribed by the relevant Exchange with respect to a particular Option or Future.

"Corporation or CDCC" – Canadian Derivatives Clearing Corporation.



"CUSIP/ISIN" – acronyms respectively standing for Committee on Uniform Security Identification Procedures and International Securities Identification Number, herein used to refer to a security identifier assigned by CDS to any Acceptable Security.

"Default Manual" – any manual designated as such by the Corporation, as amended from time to time.

"Delivery Agent" – the party through which the Corporation will effect the transfer of the Underlying Interest between the buyer and seller.

"Delivery Month" – the calendar month in which a Future may be satisfied by making or taking delivery.

"Deposit" – a payment, deposit or transfer, whether of cash, securities, certificates, property, Underlying Interests, Underlying Interest Equivalents or other interests or rights.

"Derivative Instrument" – means a financial instrument, the value of which derives from the value of an Underlying Interest. Without limiting the foregoing, this Underlying Interest may be a commodity or a financial instrument such as a stock, a bond, a currency, a stock or economic index or any other asset.

"Detailed Futures Consolidated Activity Report" – the report created by the Corporation on a daily basis reporting the aggregate position held by a Clearing Member, which also contains the Settlement of Gains and Losses for that Clearing Member for that day.

"Electronic Communication" – means, in respect of the Corporation, any one or more of the following: the posting of a notice, report or other information on the Corporation's website, the transmission of a notice, report or other information to a Clearing Member by means of electronic mail and the making available on the Corporation's computer, in a form accessible to a Clearing Member, a notice, report or other information.

"Emergency" – Situation resulting from i) riot, war or hostilities between any nations, civil disturbance, acts of God, fire, accidents, strikes, earthquakes, labour disputes, lack of transportation facilities, inability to obtain materials, curtailment of or failure in obtaining sufficient power, gas or fuel, computer malfunction (whether mechanical or through faulty operation), malfunction, unavailability or restriction of the payment, computer or bank wire or transfer system and any other cause of inability that is beyond the reasonable control of the Corporation; ii) any action taken by Canada, a foreign government, a province, state or local government or body, authority, agency or corporation, and any Exchange, Central Securities Depository, Acceptable Marketplace, Market Centre and Delivery Agent; iii) the bankruptcy or insolvency of any Clearing Member or the imposition of any injunction or other restraint by any government agency, court or arbitrator upon a Clearing Member which may affect the ability of that member to perform its obligations; iv) any circumstance in which a Clearing Member, a Central Securities Depository or any other Entity has failed to perform contracts, is insolvent, or is in such financial or operational condition or is conducting business in such a manner that such Entity cannot be permitted to continue in business without jeopardizing the safety of assets, of any Clearing Member or the Corporation; or v) any other unusual, unforeseeable or adverse circumstance materially affecting the Corporation's operations.

"Entity" – shall include an individual, a corporation, a partnership, a trust and an unincorporated organization or association.



"Escrow Receipts" – a receipt, in a form acceptable to the Corporation, issued by an Approved Depository.

"European Option" (or European Style Option) – an Option which can be exercised only on its Expiration Date.

"Exchange" – an exchange whose trades are guaranteed and/or cleared by the Corporation.

"Exchange Transaction" – a transaction through the facilities of an Exchange for:

- a) the purchase or writing of an Option or the reduction or elimination of a Long or Short Position in an Option; or
- b) the buying or selling of a Future or the reduction or elimination of a Long or Short Position in a Future.

"Exercise Notice" – a notice to the Corporation in the form prescribed by the Corporation, notifying the Corporation of the intent of the Clearing Member executing such notice to exercise an Option.

"Exercised Position" – the position of a Clearing Member in any account in respect of Transactions providing optionality to the holder and which may have been exercised by such Clearing Member in such account.

"Exercise Price" – the specified price per unit at which the Underlying Interest may be purchased (in the case of a call) or sold (in the case of a put) upon the exercise of an Option. (Sometimes referred to as the Strike Price).

"Exercise Settlement Amount" – the amount which must be paid by the Corporation to the Clearing Member exercising a put Option or who has been assigned a call Option, against delivery of the Underlying Interest.

"Exercise Settlement Date" – the date prescribed by the relevant Exchange within Contract Specifications of a particular Option.

"Expiration Date" – unless otherwise specified the Saturday immediately following the third Friday of the month and year in which the Option expires.

"Expiration Time" – the time on the Expiration Date, as fixed by the Corporation, at which the Option expires. Unless changed by the Corporation, the Expiration Time shall be 12:30 p.m. on the Expiration Date.

"Expiry Response Screen" – a computer display also known as the "Expiry Workspace" made available to Clearing Members in connection with Rule B-3.

"Failed Delivery" – has the meaning set out (i) in Subsection A-804(1) with respect to the delivery of an Acceptable Security, (ii) in Section B-407 with respect to the delivery under an Option, (iii) in Section C-512 with respect to the delivery under a Future of an Underlying Interest other than an Acceptable Security, or (iv) in Section D-304 with respect to the delivery under an OTCI that is not a Fixed Income Transaction.



"Firm" – a Clearing Member acting for its own account.

"Firm Account" – the account or accounts required to be established for Firm Transactions of the Clearing Members pursuant to Sections B-102, B-103, C-102, C-103, D-102 and D-103.

"Fixed Income Clearing Member" – has the meaning assigned to this term by Section D-601.

"Fixed Income Transaction" – has the meaning assigned to this term by Section D-601.

"Forward Curve" – the summary representation of the price of a commodity on a forward basis obtained by amalgamating all Reference Prices by tenor as defined in Section D-201.

"Forward Price" – the price extracted from the Forward Curve and used in the daily Mark-to-Market Valuation and margining processes as defined in Section D-202.

"Future" – a contract:

- a) in the case of a Future settled by delivery of the Underlying Interest, to make or take delivery of a specified quantity and quality, grade or size of an Underlying Interest during a designated future month at a price agreed upon when the contract was entered into on an Exchange; or
- b) in the case of a Future settled in cash, to pay to or receive from the Corporation the difference between the final settlement price and the trade price pursuant to standardized terms and conditions set forth by the Exchange where the contract is concluded and which is cleared by the Corporation.

"Futures Margin Receipt" – a receipt, in a form acceptable to the Corporation, issued by an Approved Depository.

"Futures Sub-Accounts Consolidated Activity Report" – the report created by the Corporation on a daily basis reporting the aggregate position held by a Clearing Member in each of its sub-accounts, which also contains the Settlement of Gains and Losses for that day with respect to each sub-account.

"Good Deliverable Form" – Underlying Interests shall be deemed to be in good deliverable form for the purposes hereof only if the delivery of the Underlying Interests in such form would constitute good delivery under the Contract Specifications.

"Gross Delivery Requirement" – the quantity of Acceptable Securities required to be physically delivered through a Central Securities Depository by or to a Clearing Member, expressed on a gross basis, in accordance with Subsection D-606(10).

"Gross Payment Against Delivery Requirement" – the amount required to be paid against physical delivery through a Central Securities Depository by or to a Clearing Member, expressed on a gross basis, in accordance with Subsection D-606(10).

"Guaranteeing Delivery Agent" – a Delivery Agent who bears the responsibility of guaranteeing the acquisition or delivery of the Underlying Interest in the event of a delivery failure.



"include", "includes" and "including" – where used in these Rules, means "include", "includes" and "including", in each case, without limitation.

"Guaranteeing Delivery Agent" a Delivery Agent who bears the responsibility of guaranteeing the acquisition or delivery of the Underlying Interest in the event of a delivery failure.

"In-the-Money-Option" – a call Option with an Exercise Price that is less than the Market Price of the Underlying Interest or a put Option where the Exercise Price exceeds the Market Price of the Underlying Interest.

"Instrument" – shall mean a bill, note or cheque within the meaning of the *Bills of Exchange Act* (Canada) or any other writing that evidences a right to the payment of money and is of a type that in the ordinary course of business is transferred by delivery with any necessary endorsement or assignment, but does not include a security.

"Joint Regulatory Financial Questionnaire and Report" – the documents required under the applicable rules of the Investment Industry Regulatory Organization of Canada.

"Liquidating Settlement Account" – the account created following the default of a Clearing Member to recognize the value of all gains, losses, and expenses due to or from the Non-Conforming Member during the liquidation of positions and Margin Deposits, in accordance with Section A-402.

"Long Position" – a Clearing Member's interest as:

- a) the holder of one or more Options of a Series of Options; or
- b) the buyer of one or more Futures of a Series of Futures; or
- c) the buyer of an Over-The-Counter Instrument.

"Margin" – any and all the deposits required or made pursuant to Rule A-7 Margin Requirements.

"Margin Deposit" – means, collectively,

- a) any and all Securities, Money, Instruments, cheques, Underlying Interest, Underlying Interest Equivalent, Long Positions and Short Positions;
- any and all of the deposits required or made pursuant to Rule A-6 Clearing Fund Deposits, Rule A-7 Margin Requirements, and Rule B-4 Delivery and Payment with Respect to Options Exercised, Rule C-5 Delivery of Underlying Interest of Futures and Rule D-3 Physical Delivery of Underlying Interest on Over-the-Counter Instruments, including Margin, Base Deposit, Additional Deposit, Variable Deposit, Safe Custody Receipts, Escrow Receipts, Futures Margin Receipts, puts and any other form of deposit as from time to time are accepted by the Corporation; and
- c) any and all securities pledged or assigned to the Corporation through the facilities of a Central Securities Depository;

deposited by or on behalf of the Clearing Member with the Corporation.



"Mark-to-Market Valuation" – the value determined by the Corporation representing the liquidation value of a Transaction or account held by a Clearing Member as defined in Section D-202.

"Market Centre" – the local facility where the exchange of Underlying Interests occurs.

"Market Maker" – an individual who has been approved by the Exchange on which he trades to trade for his own account or for the account of the Exchange member or non-member by which he is employed or for which he acts as agent in Options or Futures, and may include a futures trader, an options trader, a trader member, a market maker and a market specialist.

"Market Maker Account" – the account or accounts required to be established for Exchange Transactions of the Clearing Member's Market Makers pursuant to Sections B-102, B-103, C-102 and C-103.

"Market Price" – the aggregate price of the Unit of Trading of the Underlying Interest as determined by the Exchange or Exchanges involved.

"Matured Amounts" – any financial cash flows resulting from the expiration of an OTCI.

"Maturity Date" – the date on which final obligations related to a Transaction are executed.

"Money" – means the lawful currency of Canada or its equivalent in the lawful currency of any other country of the G-8.

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

"Net Daily Premium" – when applied to any account of a Clearing Member for any Settlement Time, means the net amount payable to or by the Corporation at such Settlement Time in respect of all Exchange Transactions of the Clearing Member in Options in such account as a purchasing Clearing Member and a writing Clearing Member.

"Net Daily Settlement" – the amount shown on a report ("Daily Settlement Summary Report").

"Net Delivery Requirement" – with respect to Acceptable Securities, the quantity thereof required to be physically delivered through a Central Securities Depository by or to a Clearing Member, expressed on a net basis, in accordance with Paragraph A-801(2)(c); and with respect to any Underlying Interest of an OTCI that physically settles other than Acceptable Securities, the quantity of such Underlying Interest needed to be delivered through the relevant Delivery Agent by or to a Clearing Member, expressed on a net basis, in accordance with Section D-303.

"Net Payment Against Delivery Requirement" – the amount required to be paid against physical delivery through a Central Securities Depository by or to a Clearing Member, expressed on a net basis, in accordance with Paragraph A-801(2)(b).

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

"Netting Cut Off Time" – means, with respect to a Business Day and a Clearing Member, a time specified in the Operations Manual on such Business Day for purposes of determining, in respect of such Clearing



Member, all net payment and delivery obligations owing by or to such Clearing Member in accordance with these Rules on such Business Day.

"Non-Conforming Member" – the meaning assigned to this term by Section A-1A04.

"Notional Quantity" – the size of the OTCI transaction expressed either outright, or in accordance with the Unit of Trading and the number of contracts underlying the OTCI transaction.

"Open Interest" or "Open Position" – the position of a buyer or a seller of an Option, of a Future or of an OTCI.

"Opening Buy Transaction" – an Exchange Transaction the result of which is to create or increase a Long Position in the Series of Futures involved in such transaction.

"Opening Purchase Transaction" – an Exchange Transaction the result of which is to create or increase a Long Position in the Series of Options involved in such Exchange Transaction.

"Opening Sell Transaction" – an Exchange Transaction the result of which is to create or increase a Short Position in the Series of Futures involved in such transaction.

"Opening Writing Transaction" – an Exchange Transaction the result of which is to create or increase a Short Position in the Series of Options involved in such Exchange Transaction.

"Operations Manual" – the manual designated as such by the Corporation and any schedule to the Operations Manual including the Risk Manual, as amended from time to time.

"Option" – a contract which, unless otherwise specified, gives the buying Clearing Member the right to buy (a call) or sell (a put) a specified quantity of an Underlying Interest at a fixed price during a specified time period and which obligates the writing Clearing Member to sell (a call) or buy (a put) the Underlying Interest, pursuant to standardized terms and conditions set forth by the Exchange where the contract is concluded or to the terms determined by the Corporation as acceptable and which is cleared by the Corporation.

"Option Type" – put Option or call Option.

"Options Daily Transaction Report" – a report created by the Corporation providing the net premium payable/receivable.

"Out-of-the-Money Option" – a call Option with an Exercise Price that exceeds the Market Price of the Underlying Interest or a put Option where the Exercise Price is less than the Market Price of the Underlying Interest.

"Over-The-Counter Instrument" or "OTCI" – refers to any bilaterally negotiated transactions as well as any transactions concluded on any Acceptable Marketplaces.

"Postponed Payment Obligation" – with respect to the Corporation, the amount by which its Net Payment Against Delivery Requirement or its Gross Payment Against Delivery Requirement, as the case may be, net payment obligation in favour of a Provider of Securities has been reduced as a result of the Provider of Securities' failure to deliver Acceptable Securities on the Business Day they were due and the



payment by the Corporation of such reduction has been postponed until full delivery by the Provider of Securities in accordance with <u>SubsectionSection</u> A-804(1); and with respect to a Clearing Member who is a Receiver of Securities, the amount by which its <u>Net Payment Against Delivery Requirement or its Gross Payment Against Delivery Requirement</u>, as the case may be, net payment obligation in favour of the Corporation has been reduced as a result of the Corporation's failure to deliver Acceptable Securities on the Business Day they were due and the payment by such Clearing Member of such reduction has been postponed until full delivery by the Corporation in accordance with <u>SubsectionSection</u> A-804(2).

"President" – the person appointed by the Board as chief executive officer and chief administration officer of the Corporation.

"Product Type" – the attribute of an OTCI which describes the rights and obligations of the counterparties involved in the transaction insofar as cash flows are concerned.

"Provider of Securities" – a Clearing Member who owes to the Corporation a Net Delivery Requirement with respect to net amount of an Acceptable Security to the Corporation in accordance with Subsection D-606(3) and Paragraph A-801(2)(c) or a Gross Delivery Requirement with respect to an Acceptable Security in accordance with Subsection D-606(10), as the case may be.

"Receiver of Securities" – a Clearing Member who is owed <u>by the Corporation</u> a <u>Net Delivery Requirement with respect to net amount of</u> an Acceptable Security <u>by the Corporation</u> in accordance with Subsection D-606(3) and Paragraph A-801(2)(c) <u>or a Gross Delivery Requirement with respect to an Acceptable Security in accordance with Subsection D-606(10), as the case may be.</u>

"Reference Price" – the price determined by the Corporation in accordance with Section D-201.

"Registry" – any registry designated by the Corporation which, for the purpose of clearing Futures Contracts on Carbon Dioxide Equivalent ( $CO_2e$ ) Units, has been established in order to ensure the accurate accounting of holding, transfer, acquisition, surrender, cancellation and replacement of the Carbon Dioxide Equivalent ( $CO_2e$ ) Units.

"Risk Limits" – refers to the set of risk management limits imposed by the Corporation on Clearing Members' clearing activities as updated from time to time by the Corporation.

"Risk Manual" – the manual designated as such by the Corporation and any schedule to the Risk Manual including the Default Manual, as amended from time to time.

"Rolling Delivery Obligation" – with respect to a Clearing Member who is a Provider of Securities, the quantity of a given Acceptable Security that it has failed to deliver to the Corporation under a Net Delivery Requirement delivery obligation under ParagraphSection A-801(2)(c) or Gross Delivery Requirement under Subsection D-606(10), as the case may be, on the Business Day it was due, which is rolled into the calculation of the next Business Day's Net Delivery Requirementnet delivery obligation (and the Net Delivery Requirementnet delivery obligation of each subsequent Business Day) of such Clearing Member, in accordance with, and until such time as set out under, Subsection Section A-804(1); and with respect to the Corporation and a Clearing Member who is a Receiver of Securities, the quantity of a given Acceptable Security that the Corporation has failed to deliver to such Clearing Member under a Net Delivery Requirement under Paragraphnet delivery obligation under Section A-801(2)(c) or Gross Delivery Requirement under Subsection D-606(10), as the case may be, on the Business Day it was due (as a direct consequence of a Provider of Securities' failure to deliver all or a part of its Net Delivery



Requirement or Gross Delivery Requirement, as the case may be, net delivery obligations in respect of such Acceptable Security on such Business Day) which is rolled into the calculation of the Corporation's next Business Day's Net Delivery Requirement delivery obligation (and the Net Delivery Requirement delivery obligation of each subsequent Business Day) in favour of such Clearing Members, in accordance with, and until such time as set out under, Subsection Section A-804(2).

"Rules" – shall mean the Rules of the Corporation and the Operations Manual, as any such rules, and manual may from time to time be amended, changed, supplemented or replaced in whole or in part.

"SRO Clearing Member" – a Clearing Member that is within the audit jurisdiction of the Investment Industry Regulatory Organization of Canada.

"Safe Custody Receipt" – a receipt, in a form acceptable to the Corporation, issued by an Approved Depository.

"Security" – shall mean a document that is

- (a) issued in bearer, order or registered form;
- (b) of a type commonly dealt in upon securities exchanges or markets or commonly recognized in any area in which it is issued or dealt in as a medium for investment;
- (c) one of a class or series or by its terms is divisible into a class or series of documents; and
- (d) evidence of a share, participation or other interest in property or in an enterprise or is evidence of an obligation of the issuer;

and includes such a document, not evidenced by a certificate, the issue and any transfer of which are registered or recorded in records maintained for that purpose by or on behalf of the issuer.

"Series of Futures" – all Futures of the same class covering the same quantity of an Underlying Interest and having the same delivery month.

"Series of Options" – all Options of the same class, the same type, covering the same quantity of an Underlying Interest and having the same Exercise Price and Expiration Date.

"Settlement Accounts" – has the meaning set out in Section A-217.

"Settlement Amount" – the amount calculated in accordance with these Rules payable to the delivering Clearing Member upon delivery of or cash settlement for the Underlying Interest in respect of a Transaction.

"Settlement of Gains and Losses" – the settlement with the Corporation of the gains and losses on Open Positions in Futures pursuant to Section C-302.

"Settlement Price" – the official daily closing price of a Future, as determined in accordance with Section C-301.



"Settlement Time" – means, with respect to a Transaction and a particular Business Day, the time on such Business Day as established by the Corporation in the Operations Manual and if no Business Day is specified, the time on the Business Day immediately following a trade day, a calculation date or a Coupon Payment Date, as applicable, as established by the Corporation in the Operations Manual, by which time Settlement of Gains and Losses, premium payments, all Margin requirements and all other payments in respect of such Business Day, trade day, calculation date or Coupon Payment Date must be submitted to the Corporation.

"Short Position" – a Clearing Member's obligation as:

- a) the writer of one or more Options of a Series of Options; or
- b) the seller of one or more Futures in a Series of Futures; or
- c) the seller of an Over-The-Counter Instrument.

## "Spread Position"

- a) the situation in which there is carried in a Clearing Member's Client Account both an Option in the Short Position and an Option of the same Class of Options in the Long Position; or
- b) the situation in which there is carried in a Clearing Member's Client Account both a Long Position and a Short Position in Futures.

"Straddle Position" – an equal number of call and put Options covering the same Underlying Interest and having the same Exercise Price and Expiration Date.

"Style of Options" – the classification of an Option as either an American Option or a European Option. (Parts A and B of these Rules shall apply to both Styles of Options unless a specific Style of Option is designated).

"Tender Notice" – a notice to the Corporation in the form prescribed by the Corporation, notifying the Corporation of the intent of the Clearing Member executing such notice to deliver the Underlying Interest of the Future.

"Trade Confirmation" – the official document issued to a Clearing Member which details the attributes of the OTCI transaction and which signals the acceptance of the transaction for clearing by the Corporation.

"Trade Price" – the price agreed upon for the Future when the contract is entered into on an Exchange.

"Transactions" – All Futures, Options and Over-The-Counter Instruments which are determined by the Corporation as acceptable for clearing.

"Type of Options" – the classification of an Option as either a "put" or a "call".

"Uncovered Residual Risk" – The amount of risk determined by the Corporation to be uncovered by the Margin model, resulting from an estimation of the loss the Corporation would face in an extreme but plausible market stress test scenario. This Uncovered Residual Risk is calculated and attributed to Clearing Members through their Clearing Fund contribution.



"Underlying Interest" – Asset which underlies and determines the value of a Derivative Instrument or of an OTCI. The Underlying Interest may be a commodity or a financial instrument such as a stock, a bond, a currency, a stock or economic index or any other asset.

"Underlying Interest Equivalent" – the items specified in Section A-708.

"Unit of Trading" – in respect of any Series of Futures and Series of Options and any Fixed Income Transaction means the number of units of the Underlying Interest which has been designated by the Corporation and the Exchange on which the Derivative Instrument is traded (as applicable) as the number to be the subject of a single Future or Option contract or of the Acceptable Security, as applicable.

"Variable Deposit" – the Clearing Fund deposit which may be required in addition to a Base Deposit pursuant to Section A-603.



### **RULE A-8 DAILY SETTLEMENT**

## Section A-801 Daily Settlement Summary

- (1) Each Business Day the Corporation shall issue to each Clearing Member a report ("Daily Settlement Summary") which will summarize:
  - (a) the debit and credit premium for each account as shown on Consolidated Activity Reports;
  - (b) the net gains and losses for each account as shown on Consolidated Activity Reports;
  - (c) the net settlement for Exercised and Assigned Positions of cash settled Options;
  - (d) the net payment for Settlement Amounts resulting from OTCI;
  - (e) the debit or credit determined as necessary by the Corporation resulting from any adjustment reported by the Clearing Member;
  - (f) the net Margin required for each account as shown on a report ("Daily Margin Activity Report");
  - (g) the total Margin deposits held by the Corporation; and
  - (h) the net amount due to or from the Corporation.
- (2) For greater certainty, subject to any Rule which expressly prohibits netting, on each Business Day as of the applicable Netting Cut Off Time;
  - (a) the Corporation shall have the right to net all payments owing to a Clearing Member on such Business Day, other than payments owing to a Clearing Member which are settled through a Central Securities Depository, against all payments owing by a Clearing Member on such Business Day, other than payments owing by to a Clearing Member which are settled through a Central Securities Depository, such that one net amount shall be payable to or from such Clearing Member;
  - (b) <u>subject to Subsection D-606(10)</u>, the Corporation shall have the right to net all payments owing to a Clearing Member on such Business Day which are settled through a Central Securities Depository, <u>including without limitation</u>, any <u>due and payable Postponed Payment Obligation</u>, against all payments owing by a Clearing Member on such Business Day which are settled through that same Central Securities Depository, <u>including without limitation</u>, any <u>due and payable Postponed Payment Obligation</u>, such that one Net Payment Against Delivery Requirement shall be payable to or from such Clearing Member for settlement at such Central Securities Depository;
  - (c) <u>subject to Subsection D-606(10)</u>, the Corporation shall have the right to net all settlement obligations for the same CUSIP/ISIN number for an Acceptable Security owing to a Clearing Member on such Business Day, including without limitation, any Rolling Delivery Obligation in respect of such Acceptable Security, against all settlement obligations for such Acceptable Security owing by a Clearing Member on such Business Day, including without



limitation, any Rolling Delivery Obligation in respect of such Acceptable Security, such that one Net Delivery Requirement in respect of such Acceptable Security is owing to or from such Clearing Member;

(d) subject to Subsection A-704(2), the Corporation shall have the right to net Margin requirements owing by a Clearing Member in respect of one product on such Business Day against excess Margin delivered by such Clearing Member and available in respect of another product on such Business Day such that Margin in one net amount is required to be delivered by the Clearing Member on such Business Day or one net amount is available for withdrawal by such Clearing Member on such Business Day under Section A-704.

# **Section A-802 Daily Settlement**

- (1) On or before Settlement Time on each Business Day, as determined by the Bank of Canada to be a settlement day, each Clearing Member shall be obligated to pay the Corporation, in the Money applicable to the Transaction, by irrevocable funds transfer or any other method as may be approved by the Corporation from time to time, the amount of any Net Daily Settlement in an account shown to be due to the Corporation on a report ("Daily Settlement Summary") (notwithstanding any error in such report).
- (2) If for any reason the Daily Settlement Summary is not available to the Clearing Member, it shall be the responsibility of that Clearing Member to ascertain from the Corporation the amount of any Net Daily Settlement, so that payment may be made before Settlement Time each Business Day.
- (3) Provided all applicable conditions precedent have been satisfied, one hour after Settlement Time of each Business Day the Corporation shall be obligated to pay a Clearing Member the amount of any Net Daily Settlement in an account shown to be due from the Corporation to such Clearing Member on the Daily Settlement Summary for such account for such day. The Corporation may make such payment to the Clearing Member by uncertified cheque or electronic funds transfer in the amount of such Net Daily Settlement.
- (4) When the banks in a city where the Corporation has an office are closed on a Business Day, settlement shall nevertheless occur through the method of irrevocable funds transfer or any other method as may be approved by the Corporation from time to time on such Business Day if it has been determined by the Bank of Canada to be a settlement day.

### Section A-803 Physical Settlement

Where the Corporation will effect the transfer of Acceptable Securities (other than a stock or other equity security which is an Underlying Interest of an Exchange traded Option or of an OTCI that is an Option) through a Central Securities Depository, the Corporation shall be exclusively responsible for the communication of Net Delivery Requirements and Gross Delivery Requirements to such Central Securities Depository and will bear no responsibility for the replacement of the Acceptable Securities in the event that the Clearing Member fails to perform on the physical delivery obligation. The Corporation will, however, bear the responsibility of guaranteeing the Settlement Amounts derived from the physical delivery process up to the time a CSD Confirmation is issued, and, for greater certainty, has no liability in respect of such Settlement Amounts at any time after the issuance of such CSD Confirmation in respect of such Settlement Amounts. A "CSD Confirmation" means in respect of settlement instructions relating to a Net Delivery Requirement or a Gross Delivery Requirement, as the case may be, a trade confirmation



issued by the applicable Central Securities Depository confirming that the applicable Provider of Securities' securities account with such Central Securities Depository has been debited with Acceptable Securities in accordance with such settlement instructions; and in respect of settlement instructions relating to a Net Payment Against Delivery Requirement or a Gross Payment Against Delivery Requirement, as the case may be, a trade confirmation issued by the applicable Central Securities Depository confirming that the applicable Clearing Member's cash account with such Central Securities Depository has been debited in accordance with such settlement instructions.

#### Section A-804 Failed and Partial Deliveries

- (1) If a Clearing Member who is a Provider of Securities does not deliver Acceptable Securities (other than a stock or other equity security which is an Underlying Interest of an Exchange traded Option or of an OTCI that is an Option) as it is required to do under these Rules, or only partially delivers such Acceptable Securities required to be delivered by it pursuant to these Rules (in either case, a "Failed Delivery"), the reciprocal payment obligation of the Corporation in favour of that Clearing Member shall be reduced accordingly. The quantity of such Acceptable Securities that has not been delivered shall constitute a Rolling Delivery Obligation of the failing Clearing Member for purposes of calculating the next Business Day's Net Delivery Requirement under Section A-801(2)(c), and the Net Delivery Requirement of each subsequent Business Day, until the quantity of such Acceptable Securities due are delivered in full, at which time the Corporation's Postponed Payment Obligation shall become due and payable. Notwithstanding the foregoing, a failed or partial delivery will not be rolled beyond the maturity date of the relevant Acceptable Security.
- (2) As a direct consequence of a Clearing Member failing to deliver or partially delivering such Acceptable Securities pursuant to a Net Delivery Requirement, the Corporation will force a failed or partial delivery of the same quantity of Acceptable Securities *prorata*, in accordance with the Operations Manual, among Clearing Members who are Receivers of Securities with respect to such Acceptable Securities on the relevant Business Day from the Corporation. In the case of a Failed Delivery with respect to a Gross The reciprocal Net Payment against Delivery Requirement, the Corporation will force a failed or partial delivery of the same quantity of Acceptable Securities on the Clearing Member who is the Receiver of Securities with respect to the relevant Same Day Transaction. The reciprocal Net Payment Against Delivery Requirement or Gross Payment Against Delivery Requirement, as the case may be, of such Receivers of Securities in favour of the Corporation shall be reduced accordingly and the quantity of such Acceptable Securities that has not been delivered shall constitute a Rolling Delivery Obligation of the Corporation for purposes of calculating next Business Day's Net Delivery Requirement, and the Net Delivery Requirement of each subsequent Business Day, until the quantity of Acceptable Securities due are delivered in full, at which time the Receiver of Securities' Postponed Payment Obligation shall become due and payable.
- (3) Notwithstanding any other provision of this Section A-804, the Corporation in its sole discretion has the right to terminate the daily roll mechanic set out under Subsection A-804(1) and Subsection A-804(2) to effect a buy-in transaction under Subsection A-804(4) or to exercise any other remedies under the Rules.
- (4) Upon the exercise of its right to terminate the daily roll mechanic set out under Subsection A-804(1) and A-804(2), the Corporation may, in its sole discretion, satisfy its Net Delivery Requirement or Gross Delivery Requirement, as the case may be, to Receivers of Securities with respect to such Acceptable Securities, notwithstanding any Failed Delivery by any Provider of Securities, by purchasing the missing



quantity of such Acceptable Securities on the open market on such terms as the Corporation deems commercially reasonable in the circumstances. The difference between the price paid by the Corporation to purchase the missing quantity on the open market (including associated costs incurred) and the Purchase Price (or Repurchase Price, as the case may be) of the relevant Transaction(s) shall be charged to the Provider of Securities who was responsible for a Failed Delivery of such Acceptable Securities.

(5) If the Corporation is unable to satisfy its Net Delivery Requirement or Gross Delivery Requirement, as the case may be, to Receivers of Securities of such Acceptable Securities under Subsection A-804(4) because they are unavailable on the open market or the Corporation determines in its sole discretion, taking into account the size and nature of the Failed Delivery, the market conditions prevailing at the time, the potential market effects of purchasing the missing quantity on the open market and associated costs, and such other circumstances that the Corporation, in its sole discretion, deems relevant, that such buy-in transaction would not be in the best interest of the Corporation, other Clearing Members or the general public, the Corporation will fail to satisfy its Net Delivery Requirement or Gross Delivery Requirement, as the case may be, to Receivers of Securities of Acceptable Securities, in which case, the corresponding Net Payment Against Delivery Requirement or Gross Payment Against Delivery Requirement, as the case may be, of Receivers of Securities shall be reduced accordingly. Any direct costs (which, for greater certainty, do not include any indirect or consequential loss or damage) incurred by such Receivers of Securities as a result of the Failed Delivery by the Corporation shall be promptly assessed and notified to the Corporation who will promptly reimburse such direct costs to such Receivers of Securities and charge them to the Provider of Securities responsible for such Failed Delivery. Failure by the Provider of Securities responsible for the Failed Delivery to reimburse the Corporation shall constitute a payment default, upon which the Corporation may determine that the Clearing Member is a Non-Conforming Member and take such actions and remedies provided under these Rules against such Non-Conforming Member.

### Section A-805 Final and Irrevocable Payment

When the settlement of a payment obligation of a Clearing Member or the Corporation is made through an entry to or a payment out of an account as provided in Section A-802 or through an entry to or a payment out of an account as provided in Section A-803, such settlement of the payment obligation of a Clearing Member or the Corporation shall be final and irrevocable.



### RULE D-6 CLEARING OF FIXED INCOME TRANSACTIONS

The Sections of this Rule D-6 are applicable only to the clearing of Fixed Income Transactions by the Corporation and to those Clearing Members who are required to make a base deposit to the Clearing Fund for Fixed Income Clearing as set out in Paragraph A-601(2)(d).

### **Section D-601 Definitions**

Notwithstanding Section A-102, for the purposes of Fixed Income Clearing, the following terms are defined as follows:

"Accrued Coupon Income" – with respect to a Repurchase Transaction, the Coupon Income paid by an issuer of Purchased Securities and held by a Net Buyer under Paragraph D-606(9)(b) plus the accrued interest on such Coupon Income calculated at the Repo Rate for such Repurchase Transaction for the period from and including the date such Coupon Income was paid by such issuer up to and excluding the Repurchase Date.

"Accrued Coupon Value" – with respect to any Purchased Security, the proportion of the Coupon Income payable by the issuer of the relevant Security on the next Coupon Payment Date corresponding to the number of days that have elapsed since the immediately preceding Coupon Payment Date up to the applicable calculation date [calculated based on a calendar year of 365 days].

"Cash Buy or Sell Trade" – a transaction by which a Fixed Income Clearing Member buys (Cash Buy Trade) or sells (Cash Sell Trade) an Acceptable Security.

"Close Leg" – means, with respect to a Repurchase Transaction, the second part of a Repurchase Transaction where either (i) a Repo Party agrees to buy back Acceptable Securities from a Reverse Repo Party at a Repurchase Price to be paid by the Repo Party to the Reverse Repo Party, or (ii) a Reverse Repo Party agrees to sell back Acceptable Securities to a Repo Party at a Repurchase Price to be paid to the Reverse Repo Party by the Repo Party.

"CORRA Rate" – The weighted average of rates on overnight general collateral repo transactions conducted through designated interdealer bond brokers between 06:00 and 16:00, as determined by the Bank of Canada.

"Coupon Income" – the interest amount payable to the holder of a Security by its issuer on a Coupon Payment Date.

"Coupon Payment Date" – a date on which the issuer of a Security pays Coupon Income to the holder of the Security.

"Deferred Settlement Transaction" – means a Cash Buy or Sell Trade or an Open Leg of a Repurchase Transaction, in each case, having a Purchase Date later than the Trade Date, or a Close Leg of a Repurchase Transaction.

"Cut Off Time" — means a time specified in the Operations Manual as the deadline on any Business Day for accepting Repurchase Transactions for clearing with settlement on the same Business Day and Cash Buy or Sell Trades for a Trade Date on the same Business Day.



"Economic Terms" – means the transactional details of a Fixed Income Transaction as set out in Subsection D-603(1).

"Equivalent Security" – an Acceptable Security that is equivalent to the Purchased Security in that it is of the same issue, part of the same issue, of an identical type, nominal value, description and (except where otherwise specified by the Corporation) amount as the Purchased Security.

"Fixed Income Clearing" – the provision of clearing services by the Corporation of Fixed Income Transactions.

"Fixed Income Clearing Member" – an applicant which meets the criteria set out in Section A – 1A01 and Subsection A-301(3) and is approved by the Corporation for Fixed Income Clearing.

"Fixed Income Transaction(s)" – Repurchase Transaction(s) and/or Cash Buy or Sell Trade(s).

"Floating Price Rate" – means, in respect of a Repurchase Transaction, the overnight index swap ("OIS") rate as published by Bloomberg for a term that is the same as the Term of such Repurchase Transaction (and if an OIS rate is not available for the applicable Term, such Floating Price Rate will be determined by interpolating the OIS rate between the two terms published by Bloomberg that are closest to the applicable Term), as determined by the Corporation in accordance with its customary practices for purposes of calculating mark-to-market payments and margin payments. For the purposes of this definition, "Term" shall mean the remaining number of days between the applicable calculation date and the Repurchase Date of the relevant Repurchase Transaction.

"Intra-Day Gross Settlement Cut-Off Time" – means, in respect of Same Day Transactions, the time specified in the Operations Manual at which the Corporation cancels certain instructions sent to the Central Securities Depository with respect to Gross Delivery Requirements and/or Gross Payment Against Delivery Requirements that remain unsettled at such time, and replaces them with new instructions, in accordance with Subsection D-606(10).

"Market Value" – with respect to any Purchased Securities as of any time on any date, the current price as of such date for the relevant Purchased Securities as determined by the Corporation on the basis of then available price source quotations or alternative market information, as determined by the Corporation plus the Accrued Coupon Value in respect of such Purchased Securities to the extent not included in such current price.

"MTM Repo Rate Payment" – represents a mark-to-market payment made in respect of a change in the current Floating Price Rate and means, in respect of a Repurchase Transaction, an amount that is payable to the Corporation by a Fixed Income Clearing Member that is a party to such Repurchase Transaction, or by the Corporation to a Fixed Income Clearing Member that is a party to such Repurchase Transaction, due to changes in the Floating Price Rate from the last time a MTM Repo Rate Payment was calculated (the "Previous Floating Price Rate") in respect of such Repurchase Transaction (or, in the case of the first such calculation, due to changes in the Repo Rate initially agreed between the parties), by comparing the Previous Floating Price Rate or the Repo Rate, as the case may be, to the then current Floating Pricing Rate.

"N-Day Term Repurchase Transaction" – means a Repurchase Transaction with a term longer than one Business Day.



"Net Buyer" – a Fixed Income Clearing Member whose aggregate net sum of Net Funds Transfer Requirement, Net Funds Reversal Requirement, any applicable Postponed Payment Obligation(s) and any other payment obligation against delivery of an Acceptable Security due by such Fixed Income Clearing Member to the Corporation on a given Business Day are greater than the aggregate net sum of Net Funds Transfer Requirement, Net Funds Reversal Requirement, any applicable Postponed Payment Obligation(s) and any other payment obligation against delivery of an Acceptable Security due by the Corporation to such Fixed Income Clearing Member on such Business Day, as determined by the Corporation pursuant to Paragraph A-801(2)(b).

"Net Delivery Obligation" – in respect of a Fixed Income Clearing member, the quantity of a given Acceptable Security which is the aggregate net quantity of any Net Securities Transfer Requirement deliverable by or to such Fixed Income Clearing Member to or by the Corporation and any Net Securities Reversal Requirement deliverable by or to such Fixed Income Clearing Member to or by the Corporation, and any Rolling Delivery Obligation deliverable by or to such Fixed Income Clearing Member to or by the Corporation, as the case may be, with respect to such Acceptable Security, on a given Business Day, calculated in accordance with Subsection D-606(3).

"Net Funds Transfer Requirement" – the amount which is the aggregate net sum of Purchase Prices payable by a Fixed Income Clearing Member to the Corporation or by the Corporation to a Fixed Income Clearing Member, as the case may be, calculated in accordance with Subsection D-606(1).

"Net Funds Reversal Requirement" – the amount which is the aggregate net sum of Repurchase Prices payable by a Fixed Income Clearing Member to the Corporation or by the Corporation to a Fixed Income Clearing Member, as the case may be, calculated in accordance with Subsection D-606(2).

"Net MTM Repo Rate Payment" – means, on any day the amount which is the aggregate net sum of all MTM Repo Rate Payments payable by a Fixed Income Clearing Member to the Corporation or by the Corporation to a Fixed Income Clearing Member, as the case may be, calculated in accordance with Subsection D-606(5).

"Net MTM Reversal Requirement" – means in respect of a Fixed Income Clearing Member on any day, the amount which is the aggregate net sum of (i) all Net MTM Repo Rate Payments made by such Fixed Income Clearing Member in respect of its Repurchase Transactions, net of (ii) all Net MTM Repo Rate Payments made to such Fixed Income Clearing Member in respect of its Repurchase Transactions.

"Net OCF MTM Payment" – means, on any day, the amount which is the aggregate net sum of all OCF MTM Payments payable by a Fixed Income Clearing Member to the Corporation or by the Corporation to a Fixed Income Clearing Member, as the case may be, calculated in accordance with Subsection D-606(7).

"Net Payment Obligation" – in respect of a Fixed Income Clearing Member, the amount which is the aggregate net sum of any Net Funds Transfer Requirement payable by or to such Fixed Income Clearing Member to or by the Corporation and any Net Funds Reversal Requirement payable by or to such Fixed Income Clearing Member to or by the Corporation, and any Postponed Payment Obligation due and payable by or to such Fixed Income Clearing Member to or by the Corporation, as the case may be, on a given Business Day, calculated in accordance with Subsection D-606(3).

"Net Seller" – a Fixed Income Clearing Member whose aggregate net quantity of Net Securities Transfer Requirement, Net Securities Reversal Requirement, any applicable Rolling Delivery Obligation(s) and



any other delivery obligation in respect of a given Acceptable Security due by such Fixed Income Clearing Member to the Corporation on a given Business Day are greater than the aggregate net quantity of Net Securities Transfer Requirement, Net Securities Reversal Requirement, any applicable Rolling Delivery Obligation(s) and any other delivery obligation in respect of a given Acceptable Security due by the Corporation to such Fixed Income Clearing Member on such Business Day, as determined by the Corporation pursuant to Paragraph A-801(2)(c).

"Net Securities Transfer Requirement" – the aggregate net quantity of an Acceptable Security due by a Fixed Income Clearing Member to the Corporation or by the Corporation to a Fixed Income Clearing Member, as the case may be, calculated in accordance with Subsection D-606(1).

"Net Securities Reversal Requirement" – the aggregate net quantity of an Acceptable Security due by a Fixed Income Clearing Member to the Corporation or by the Corporation to a Fixed Income Clearing Member, as the case may be, calculated in accordance with Subsection D-606(2).

"OCF MTM Payment" – represents an opportunity cost of funds payment in respect of an MTM Repo Rate Payment made and means, with respect to any Repurchase Transaction on any calculation date and in respect of all MTM Repo Rate Payments made by or to a Fixed Income Clearing Member in respect of such Repurchase Transaction, an amount equal to one day's interest, calculated by the applying the CORRA Rate determined on such calculation date (provided if such calculation date is not a Business Day, on the immediately following Business Day) to such MTM Repo Rate Payment on a 365 day basis, provided that if such Fixed Income Clearing Member had to pay an MTM Repo Rate Payment, the interest amount calculated in respect of such MTM Repo Rate Payment shall be payable by the Corporation to the Fixed Income Clearing Member, and if such Fixed Income Clearing Member received an MTM Repo Rate Payment, the interest amount calculated in respect of such MTM Repo Rate Payment shall be payable by the Fixed Income Clearing Member to the Corporation.

"Open Leg" – means, with respect to a Repurchase Transaction, the first part of a Repurchase Transaction where either (i) a Repo Party agrees to sell Acceptable Securities to a Reverse Repo Party at a Purchase Price to be paid by the Reverse Repo Party to the Repo Party, or (ii) a Reverse Repo Party agrees to buy Acceptable Securities from a Repo Party at a Purchase Price to be paid to the Repo Party by the Reverse Repo Party.

"OTCI Clearing Platform" – the dedicated trade input screens for clearing and settlement of OTCI operated and/or used by the Corporation.

"Price Differential" – with respect to any Repurchase Transaction, an amount payable by the Repo Party equal to an amount obtained by application of the Repo Rate for such Repurchase Transaction to the Purchase Price for such Repurchase Transaction (on a 365 day basis), for the actual number of days of the term of such Repurchase Transaction.

"Purchase Date" – with respect to any Repurchase Transaction, the date on which Purchased Securities are sold by the Repo Party to the Corporation and by the Corporation to the Reverse Repo Party; and with respect to any Cash Buy or Sell Trade, the date on which it settles, provided that if such date is not a Business Day, the Purchase Date shall be the immediately following day.

"Purchase Price" – with respect to any Fixed Income Transaction, the amount at which the Purchased Securities are sold or to be sold by the Seller to the Corporation and by the Corporation to the Buyer.



"Purchased Securities" – with respect to any Fixed Income Transaction, the Acceptable Securities sold or to be sold by the Seller to the Corporation and by the Corporation to the Buyer.

"Quantity of Purchased Securities" – with respect to a Fixed Income Transaction, an amount equal to the Purchase Price for such Fixed Income Transaction on the Trade Date of such Fixed Income Transaction divided by the Market Value per dollar of the Specified Denomination of the relevant Purchased Securities, rounded up to the nearest whole number.

"Repurchase Transaction" – A) a trade originally entered into between two Fixed Income Clearing Members which is submitted to the Corporation for clearing in which either (i) a Repo Party agrees to sell Acceptable Securities to a Reverse Repo Party at a Purchase Price to be paid by the Reverse Repo Party to the Repo Party, with a simultaneous agreement by the Repo Party to purchase Equivalent Securities from the Reverse Repo Party at a future date at a Repurchase Price to be paid to the Reverse Repo Party by the Repo Party, or (ii) a Reverse Repo Party agrees to buy Acceptable Securities from a Repo Party at a Purchase Price to be paid to the Repo Party by the Reverse Repo Party, with a simultaneous agreement by the Reverse Repo Party to sell Equivalent Securities to the Repo Party at a future date at a Repurchase Price to be paid by the Repo Party to the Reverse Repo Party, and, as appropriate in the circumstances, B) the Transaction resulting from the novation of the trade described in A) pursuant to Section D-605 of the Rules..

"Repo Party" or "Seller" – in respect of a Fixed Income Clearing Member, such Fixed Income Clearing Member who is the seller under a Fixed Income Transaction and who becomes the seller to the Corporation upon acceptance of the Fixed Income Transaction by the Corporation, and in respect of the Corporation, the Corporation when it has assumed the position of the seller under a Fixed Income Transaction pursuant to Section D-605. The term "Repo Party" will be used when referring specifically to a Repurchase Transaction, whereas the term "Seller" will be used when referring to a Cash Buy or Sell Trade or to Fixed Income Transactions generally.

"Repo Rate" – with respect to any Repurchase Transaction, the per annum fixed pricing rate agreed by the Repo Party and the Reverse Repo Party.

"Repurchase Date" – with respect to any Repurchase Transaction, a day on which Equivalent Securities are to be sold by a Reverse Repo Party to the Corporation and by the Corporation to a Repo Party, in accordance with Section D-606; provided that if such date is not a Business Day, the Repurchase Date shall be the immediately following Business Day.

"Repurchase Price" – with respect to any Repurchase Transaction, the sum of the Purchase Price and the Price Differential.

"Reverse Repo Party" or "Buyer" – in respect of a Fixed Income Clearing Member, such Fixed Income Clearing Member who is the buyer of a Fixed Income Transaction and who becomes the buyer to the Corporation upon acceptance of the Fixed Income Transaction by the Corporation, and in respect of the Corporation, the Corporation when it has assumed the position of the buyer under a Fixed Income Transaction pursuant to Section D-605. The term "Reverse Repo Party" will be used when referring specifically to a Repurchase Transaction, whereas the term "Buyer" will be used when referring to a Cash Buy or Sell Trade or to Fixed Income Transactions generally.

"Specified Denomination" – with respect to an Acceptable Security, the denomination in which it was issued.



"Same Day Transaction" – means a Cash Buy or Sell Trade or an Open Leg of a Repurchase Transaction, in each case, having the same Trade Date and Purchase Date.

<u>"Submission Cut-Off Time" – means a time specified in the Operations Manual as the deadline on any Business Day for submitting Same-Day Transactions for clearance to the Corporation.</u>

"Trade Date" – the date on which a Fixed Income Transaction is submitted to the Corporation for clearance provided that (i) for a Deferred Settlement Transaction, if such date is not a Business Day or the Fixed Income Transaction is submitted after the Netting Cut-Off Time on that Business Day, the Trade Date shall be deemed to be the immediately following Business Day; and (ii) for a Same Day Transaction, if such date is not a Business Day or the Same Day Transaction is submitted after the Submission Cut-Off Time on a date that is a Business Day, the Corporation will not accept the Same Day Transaction for clearing.

Any capitalized term used in this Rule D-6 that is not defined in this Section D-601 shall have the meaning assigned to it in Section A-102.

# **Section D-602 Paramountcy**

In the event of any inconsistency between the provisions of this Rule D-6 and the other provisions of the Rules, the provisions of this Rule D-6 will prevail.

#### Section D-603 Essential Terms of Fixed Income Transactions

- (1) In addition to and not in lieu of the Acceptance Criteria set forth in Section D-104, the following Economic Terms of a Fixed Income Transaction shall be required to be submitted to the Corporation:
  - Seller
  - Buyer
  - Purchased Securities (CUSIP/ISIN)
  - Quantity of Purchased Securities
  - Trade Date
  - Purchase Price
  - Purchase Date
  - Repurchase Date (as applicable)
  - Repo Rate (as applicable)
  - Substitution (indicate whether applicable or not)



- Coupon Income (indicate whether payable when received, or payable only on Repurchase Date).
- (2) Subject to conditions set forth herein, once a Trade Confirmation has been issued by the Corporation, the Corporation shall assume the position of the Seller and become a seller to Buyer and shall assume the position of the Buyer and become the buyer to Seller under all Fixed Income Transactions in each case, as principal to such Fixed Income Transactions, as a result of the novation process set forth in Subsection D-605(3).
- (3) On the Purchase Date of each Fixed Income Transaction, the Seller shall transfer the Purchased Securities on such Purchase Date against payment of the Purchase Price by the Buyer. On the Repurchase Date of each Repurchase Transaction, the Reverse Repo Party shall transfer the Equivalent Securities against payment of the Repurchase Price by the Repo Party. The transfer and payment obligations referred to in this provision shall be subject to netting and settlement processes set forth in Section D-606.
- (4) Notwithstanding the use of expressions such as "Repurchase Date", "Repurchase Price", "margin" and "substitution" or any other Rule, all right, title and interest (free from liens, claims, charges, encumbrances) in and to the Purchased Securities and Equivalent Securities and money transferred or paid under these Rules shall pass to the party receiving such Purchased Securities, Equivalent Securities and money upon transfer or payment, and no security interest or hypothec is created in the Purchased Securities and Equivalent Securities and money transferred or paid. Each Fixed Income Clearing Member shall execute and deliver all necessary documents and take all necessary steps to procure that all right, title and interest in any Purchased Securities and in any Equivalent Securities shall pass to the party to which transfer is being made upon transfer of the same in accordance with these Rules, free from all liens, claims, charges and encumbrances, and such transfer will not violate any agreement to which such Fixed Income Clearing Member may be a party or by which such Fixed Income Clearing Member's property may be bound.
- (5) For purposes of the *Interest Act* (Canada), if any rate of interest payable under any Fixed Income Transaction is expressed to be calculated on the basis of a period less than a full calendar year, the yearly rate of interest to which such rate is equivalent is the product obtained by multiplying such rate by a fraction, the numerator of which is the actual number of days in the calendar year and the denominator of which is the number of days comprising such other basis.

# Section D-604 Trade Reception and Validation

- (1) Any Repurchase Transaction or Cash Buy or Sell Trade must be submitted for clearing to the Corporation through an Acceptable Marketplace (whether bilateral or multilateral) or through the CDS trade matching facility. The Corporation may require evidence as it deems reasonably acceptable that a Fixed Income Clearing Member is a duly authorized participant of any multilateral Acceptable Marketplace. The Corporation shall not bear any responsibility or liability for any error, delay, misconduct, negligence, or any other act or omission, by the multilateral Acceptable Marketplace or the CDS trade matching facility, as applicable.
- (2) Once a Repurchase Transaction or Cash Buy or Sell Trade is received by the Corporation, a variety of validations will occur in accordance with the OTCI Clearing Platform procedure. These validations are designed to ensure that all Economic Terms match and all Acceptance Criteria set forth in Section D-104 are satisfied, and the Corporation does not accept any Repurchase Transaction or Cash Buy or Sell Trade bearing attributes that are determined by the Corporation as not acceptable for clearing.



The Corporation will not accept a Repurchase Transaction with a Repurchase Date later than the maturity date of the applicable Purchased Securities.

- (3) Any Same Day If a Repurchase Transaction submitted is received for clearing by the Corporation after the Submission Cut-Off Time specified in the Operations Manual, the Purchase Date of the Repurchase Transaction shall not be accepted by the Corporation for clearance the next Business Day, and may be submitted if a Cash Buy or Sell Trade is received for clearing by Fixed Income Clearing Members to the Central Securities Depository independently without being novated to the Corporation. Any Deferred Settlement Transaction submitted after the Netting Cut-Off Time specified in the Operations Manual, the Trade Date shall be deemed received by the Corporation for clearance on the following next Business Day.
- (4) If the Acceptable Marketplace used for submitting a Repurchase Transaction or Cash Buy or Sell Trade for clearing is a multilateral facility, each Fixed Income Clearing Member transacting as Buyer or Seller shall be responsible for timely affirming the Fixed Income Transactions on the OTCI Clearing Platform, as directed by the Corporation.

### **Section D-605 Confirmation and Novation**

- (1) Once all validations have occurred and the Fixed Income Transactions are either (i) duly affirmed by the Fixed Income Clearing Members on the OTCI Clearing Platform or (ii) received for clearing by the Corporation from the CDS trade matching facility, the Corporation shall issue a Trade Confirmation with respect to each individual Fixed Income Transaction and send it to the transacting Fixed Income Clearing Members. A Fixed Income Clearing Member shall be bound by the terms of a Fixed Income Transaction for which the Corporation has issued a Trade Confirmation in its name. The Corporation shall not bear any responsibility or liability for any error, delay, misconduct, negligence or other act or omission by the CDS trade matching facility.
- (2) The Corporation shall reject the Repurchase Transaction or Cash Buy or Sell Trade if (i) Economic Terms listed in Section D-603 are determined by the Corporation in its sole discretion as incorrect or incomplete when the Repurchase Transaction or Cash Buy or Sell Trade is submitted to the Corporation by or on behalf of a Fixed Income Clearing Member, or (ii) the Economic Terms submitted by or on behalf of the two Fixed Income Clearing Members that are parties to a Repurchase Transaction or Cash Buy or Sell Trade do not match, or (iii) any other Acceptance Criteria set forth in Section D-104 is not met. Such Repurchase Transaction or Cash Buy or Sell Trade will remain in effect solely between the persons party thereto in accordance with any terms agreed between them, and the Corporation shall have no further obligation or liability with respect to such Repurchase Transaction or Cash Buy or Sell Trade.
- Upon the issuance of a Trade Confirmation by the Corporation under Subsection D-605(1) and notwithstanding the fact that the transacting Fixed Income Clearing Members may not have received such Trade Confirmation, the Repurchase Transaction or Cash Buy or Sell Trade shall be automatically novated to the Corporation, such that the original Repurchase Transaction 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 the Corporation where the Corporation is substituted as the Buyer, and one between the Buyer and the Corporation where the Corporation is substituted as the Seller. In respect of the Economic Terms, the Fixed Income Clearing Member that is a Seller under such original Repurchase Transaction or Cash Buy or Sell Trade shall have the same rights against, and owe the same obligations to, the Corporation under such Repurchase Transaction or such Cash Buy or Sell



Trade to which it is a party as the selling party had and owed in respect of its counterparty under the original Repurchase Transaction or Cash Buy or Sell Trade, as the case may be. For purposes hereof, a reference to the "same" rights or obligations is a reference to rights or obligations falling due for exercise or performance after the time at which a Trade Confirmation is issued in respect of a Fixed Income Transaction, and which are the same in nature and character as the rights or obligations arising from the Economic Terms of the original Repurchase Transaction or Cash Buy or Sell Trade (it being assumed, for this purpose, that such Repurchase Transaction or Cash Buy or Sell Trade was a legal, valid, binding and enforceable obligation of the parties thereto and that the Economic Terms thereof were as presented to the Corporation for clearing), notwithstanding the substitution in the person entitled to them or obliged to perform them and subject to any changes thereto as a result of the operation of these Rules.

- (4) Fixed Income Clearing by the Corporation is subject to, and contingent upon, the occurrence of the novation described in Subsection 605(3) above. Effective as at the time of such novation, Fixed Income Clearing Members that were parties to the original Repurchase Transaction or Cash Buy or Sell Trade shall be released and discharged from their respective obligations to each other and the resulting Fixed Income Transactions shall be governed by these Rules.
- (5) If a Repurchase Transaction or a Cash Buy or Sell Trade is revoked, voided or otherwise declared invalid for any reason after the Economic Terms of it have been accepted by the Corporation for clearing, that revocation, avoidance or invalidity shall not affect any Fixed Income Transaction arising out of this Section D-605.

### **Section D-606 Transfers and Payments**

- In respect of any Deferred Settlement Transaction, excluding a Close Leg of a Repurchase Transaction, at At the applicable Netting Cut Off Time on a Purchase Date, the Corporation shall calculate with respect to each Fixed Income Clearing Member (i) the Net Securities Transfer Requirement with respect to each Acceptable Security by aggregating the Purchased Securities of such Acceptable Security due by each Fixed Income Clearing Member on such Purchase Date and netting them against the Purchased Securities of such Acceptable Security due by the Corporation to such Fixed Income Clearing Member on such Purchase Date, and (ii) the Net Funds Transfer Requirements by aggregating all Purchase Prices due by each Fixed Income Clearing Member to the Corporation and netting them against all Purchase Prices due by the Corporation to such Fixed Income Clearing Member across all its Fixed Income Transactions.
- In respect of any Close Leg of a Repurchase Transaction, at the applicable Netting Cut Off Time on each Repurchase Date, the Corporation shall calculate with respect to each Fixed Income Clearing Member (i) the Net Securities Reversal Requirements with respect to each Acceptable Security by aggregating the Equivalent Securities of such Acceptable Security due by each Fixed Income Clearing Member on such Repurchase Date and netting them against the Equivalent Securities of such Acceptable Security due by the Corporation to such Fixed Income Clearing Member on such Repurchase Date; and (ii) the Net Funds Reversal Requirements by aggregating all Repurchase Prices less all Accrued Coupon Income deductible pursuant to Paragraph D-606(9)(b), due by each Fixed Income Clearing Member to the Corporation and netting them against all Repurchase Prices less all Accrued Coupon Income deductible pursuant to Paragraph D-606(9)(b), due by the Corporation to such Fixed Income Clearing Member across all of its Repurchase Transactions.
- (3) At the applicable Netting Cut Off Time on each Business Day, for each Fixed Income Clearing Member, the Corporation shall calculate (i) the Net Delivery Obligation with respect to an Acceptable D-29



Security by aggregating and netting the Net Securities Transfer Requirement, the Net Securities Reversal Requirement, and any Rolling Delivery Obligation, as applicable, owing to or by the Fixed Income Clearing Member with respect to such Acceptable Security on such Business Day (which Net Delivery Obligation shall be subject to further netting pursuant to Paragraph A-801(2)(c) and the other provisions of Rule A-8 to determine the Net Delivery Requirement); and (ii) the Net Payment Obligation by aggregating and netting the Net Funds Transfer Requirement, the Net Funds Reversal Requirement, any Coupon Income payable pursuant to Paragraph D-606(9)(a), and any Postponed Payment Obligation, as applicable, owing to or by the Fixed Income Clearing Member, provided, however, these amounts shall not be netted against any other payment owing to or by a Fixed Income Clearing Member other than as prescribed permitted under Paragraph A-801(2)(b) and the other provisions of Rule A-8 to determine the Net Payment Against Delivery Requirement.

- (4) At the applicable Netting Cut Off Time on each Business Day, the Net Delivery Obligations and the Net Payment Obligations will be netted against all other payment and delivery obligations with respect to Acceptable Securities to determine the Net Delivery Requirements and the Net Payment Against Delivery Requirements pursuant to Paragraphs (b) and (c) of Subsection A-801(2), and communicated by the Corporation to Fixed Income Clearing Members that are Net Sellers with respect to a given Acceptable Security and/or Net Buyers. Fixed Income Clearing Members are responsible for ensuring that there are sufficient funds and sufficient Acceptable Securities in their cash and securities accounts at CDS to satisfy their Net Delivery Requirement and/or Net Payment Against Delivery Requirement, as applicable, as they become due in accordance with the rules of the Central Securities Depository.
- (5) At the end of each Business Day, the Corporation shall calculate the Net MTM Repo Rate Payment for each Fixed Income Clearing Member, which shall be due and payable at Settlement Time, by aggregating all MTM Repo Rate Payments due by each Fixed Income Clearing Member to the Corporation and netting them against all MTM Repo Rate Payments due by the Corporation to such Fixed Income Clearing Member across all its Repurchase Transactions provided that a MTM Repo Rate Payment shall not be calculated in respect of a Repurchase Transaction where such Business Day is the Repurchase Date of such Repurchase Transaction.
- (6) At the end of each Business Day, an amount in respect of the Net MTM Reversal Requirement will be calculated, which shall be due and payable at Settlement Time to a Fixed Income Clearing Member by the Corporation if the amount in clause (i) of the definition of "Net MTM Reversal Requirement" is greater than the amount in clause (ii) of such definition, and will be paid by such Fixed Income Clearing Member to the Corporation if the amount in clause (ii) of such definition is greater than the amount in clause (i) of such definition; provided that this Subsection D-606(6) shall not apply if such Fixed Income Clearing Member is a Non-Conforming Member.
- (7) (a) The payment of MTM Repo Rate Payments on a daily basis potentially distorts the pricing mechanisms for a Repurchase Transaction and in order to minimize the impact of such MTM Repo Rate Payments, the Corporation will, for each Fixed Income Clearing Member that is a party to a Repurchase Transaction, either charge interest on such MTM Repo Rate Payments received or pay interest on such MTM Repo Rate Payments paid, as determined pursuant to Paragraph D-606(7)(b).
  - (b) At the end of each Business Day, an amount in respect of the Net OCF MTM Payment will be calculated, which shall be due and payable at Settlement Time (i) to a Fixed Income Clearing



Member by the Corporation if it is determined on such day that a Net MTM Reversal Requirement is payable to such Fixed Income Clearing Member by the Corporation, or (ii) by a Fixed Income Clearing Member to the Corporation if it is determined on such day that a Net MTM Reversal Requirement is payable by such Fixed Income Clearing Member to the Corporation. The amount of such Net OCF MTM Payment shall be determined by aggregating all OCF MTM Payments due by each Fixed Income Clearing Member to the Corporation in respect of its Repurchase Transactions and netting them against all OCF MTM Payments due by the Corporation to such Fixed Income Clearing Member in respect of its Repurchase Transactions.

- (8) Notwithstanding anything to the contrary herein, all payments to be made hereunder to a Fixed Income Clearing Member or to the Corporation in respect of a Net MTM Repo Rate Payment, a Net OCF MTM Payment, and a Net MTM Reversal Requirement which are due and payable at the same Settlement Time, shall be aggregated and netted against each other such that only one net payment shall be made either to a Fixed Income Clearing Member by the Corporation or to the Corporation by a Fixed Income Clearing Member in respect of such amounts, as may be further netted in accordance with, and otherwise subject to, Paragraph A-801(2)(a) and the other provisions of Rule A-8.
- (9) (a) In respect of any Repurchase Transaction where the parties have agreed on the Trade Date that Coupon Income will be paid to a Seller as it is received, in each case, any Coupon Income paid by an issuer of Purchased Securities that has been transferred by a Net Seller to the Corporation and by the Corporation to a Net Buyer shall be paid on the Coupon Payment Date by the Net Buyer to the Corporation and by the Corporation to the Net Seller.
  - (b) In respect of any Repurchase Transaction where the parties have agreed on the Trade Date that Coupon Income will not be paid to a Seller as it is received, any Coupon Income paid by an issuer of Purchased Securities that has been transferred by a Net Seller to the Corporation, and by the Corporation to a Net Buyer, shall be held by the Net Buyer until the applicable Repurchase Date. On such Repurchase Date, the Repurchase Price otherwise payable by a Net Seller to the Corporation and by the Corporation to a Net Buyer in respect of such Repurchase Transaction shall be reduced by the Accrued Coupon Income.
- (10) In respect of any Same Day Transaction, payment of the Purchase Price by the Buyer and delivery of the Quantity of Purchased Securities by the Seller will be settled on a gross basis on the applicable Trade Date immediately following the novation of each Same Day Transaction under Subsection D-605(3). Fixed Income Clearing Members who submit Same Day Transactions are responsible for ensuring that there are sufficient funds and sufficient Acceptable Securities in their cash and securities accounts at CDS to satisfy their Gross Delivery Requirement and/or Gross Payment Against Delivery Requirement, as applicable, as they become due in accordance with the rules of the Central Securities Depository. Notwithstanding the foregoing, in respect of Gross Delivery Requirement(s) and/or Gross Payment Against Delivery Requirement(s) that have not been settled at the Intra-Day Gross Settlement Cut-Off Time, the Corporation shall send new settlement instructions to the Central Securities Depository reducing any Gross Delivery Requirement of a Fixed Income Clearing Member in favour of the Corporation pursuant to a Same Day Transaction by any Gross Delivery Requirement of the Corporation in favour of the same Fixed Income Clearing Member in respect of the same Acceptable Security pursuant to another Same Day Transaction, and/or reducing any Gross Payment



Against Delivery Requirement of a Fixed Income Clearing Member in favour of CDCC pursuant to a Same Day Transaction by any Gross Payment Against Delivery Requirement of CDCC in favour of the same Fixed Income Clearing Member pursuant to another Same Day Transaction.

## **Section D-607 Margin Requirements**

- (1) In respect of all Repurchase Transactions to which a Fixed Income Clearing Member is a party, on each day that is a Business Day, the Corporation shall determine whether, due to changes in the Market Value of the Purchased Securities, additional Margin is required to be delivered by such Fixed Income Clearing Member by the Settlement Time on such Business Day.
- (2) In respect of all Repurchase Transactions to which a Fixed Income Clearing Member is a party, on each day that is a Business Day, the Corporation shall determine whether, due to changes in the Floating Price Rate and taking into account rate volatility and expected liquidation periods as determined in the Corporation's sole discretion, additional Margin is required to be delivered by such Fixed Income Clearing Member by the Settlement Time on such Business Day.
- (3) In respect of all Cash Buy or Sell Trades to which a Fixed Income Clearing Member is a party, on each Business Day commencing on the applicable Trade Date and ending on (but excluding) the applicable Purchase Date, the Corporation shall determine whether, due to changes in the Market Value of the applicable Acceptable Security, additional Margin is required to be delivered by such Fixed Income Clearing Member by the Settlement Time on such Business Day.
- (4) The delivery of Margin under this Section D-607 shall be subject to the netting provisions of Paragraph A-801(2)(d) and to Rule A-7 and the other provisions of Rule A-8.

### Section D-608 Substitution

In respect of a Repurchase Transaction that is an N-Day Term Repurchase Transaction, where the parties have agreed on the Trade Date that the Repo Party shall have the right, upon providing notice to the Corporation, to substitute Purchased Securities for another Acceptable Security, such Repurchase Transaction may be varied in accordance with the provisions of the Operations Manual by the transfer by the Reverse Repo Party to the Repo Party of Equivalent Securities in exchange for the transfer by the Repo Party to the Reverse Repo Party of New Purchased Securities, being securities having a Market Value at the date of the variation at least equal to the Purchase Price. Such Repurchase Transaction varied under this Section shall thereafter continue in effect as though the Purchased Securities in respect of such Repurchase Transaction consisted of the New Purchased Securities instead of the securities in respect of which Equivalent Securities were transferred to the Repo Party.



# CANADIAN DERIVATIVES CLEARING CORPORATION CORPORATION CANADIENNE DE COMPENSATION DE PRODUITS DÉRIVÉS

**OPERATIONS MANUAL** 

AS OF MAY 6[•], 2011



Section: 2 - 1

#### TIME FRAMES

#### **ON-LINE ACCESS**

Clearing Members must be connected to the CDCC Clearing Application using their 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, 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 from 6:00 a.m. to 3:00 p.m. every day using the FTP Download function.

Should a Clearing Member not have electronic access (due to technical issues) to the CDCC Clearing Application, CDCC can perform instructions on behalf of the Clearing Member. This requires a phone call from the Clearing Member to CDCC, along with the appropriate form faxed or scanned and e-mailed to CDCC. Such form must be authorized with the approved Clearing Member's stamp.

The regular business hours of CDCC are 7:00 a.m. to 5:30 p.m. on every Business Day.

With respect to operational activity related to Options with an Expiration Date on Saturday, CDCC staff members are on-site from 8:00 a.m. to forty-five (45) minutes after delivery of the Options Exercised and Assigned Report (MT02).



Section: 2 - 2

# TIME FRAMES

# TIME FRAMES FOR ON-LINE ACCESS

# ON EVERY BUSINESS DAY

	Activity	Deadlines
	Payments for overnight settlement	7:45 a.m.
	Intra-day margin call	10:30 a.m.
	Fixed Income Transactions – <u>(</u> Same <del>day trades</del>	1:30 p.m.
	Fixed Income Day Transactions—Revisions for items that settle on current Business Day p.m.	1:30
	Fixed Income Transactions Netting) – Intra-Day Gross Settlement Cut_Off Time (Pre-settlement net in respect of any Unsettled Items (Netted settlement instructions of Unsettled Items sent to CD settlement)  ———————————————————————————————————	
ļ	Intra-day margin call process – Specific Deposits (same-day valuation)	1:30 p.m.
	Cash Deposits (Margin and Clearing Fund) – under \$2,000,000 (same day deposit)	2:45 p.m.
	Cash Deposits (Margin and Clearing Fund) – of and over \$2,000,000 (2 Business Days notice)	2:45 p.m.
	Cash withdrawal requests – under \$2,000,000 (same day withdrawal)	2:45 p.m.
	Cash withdrawal requests – of and over \$2,000,000 (2 Business Days notice)	2:45 p.m.
ĺ	Fixed Income Transactions – Netting (Same Day Transactions) – Submission Cut—Off Time (Second pre settlement netting	
	commences for trades entered between 1:30 p.m. and this second cut off time) and Cut Off Time (Netted settlement instructions sent to CDS for same day settlement)	3:30 p.m.
	All assets deposits (other than cash)	3:30 p.m.
	All assets withdrawal requests (other than cash) for same day withdrawal	3:30 p.m.
	Failed and partial deliveries – CDCC intervention starts	3:00 p.m.
	Failed and partial deliveries – CDCC intervention ends	3:55 p.m.
	Specific Deposits (overnight valuation)	3:30 p.m.
	OTCI (other than Fixed Income Transactions) – Unmatched entry	4:00 p.m.
	Position Transfers	5:25 p.m.
	Trade corrections	5:30 p.m.



Section: 2 - 3

# TIME FRAMES

Open Position changes 5:30 p.m.

<u>Fixed Income Transactions (Deferred Settlement Transactions) – Netting Cut Off Time (Netted settlement instructions (Net Delivery Requirements and</u>

Net Payment Against Delivery Requirements)

sent to CDS for settlement on the next business day) 5:30 p.m.



# TIME FRAMES

# TIME FRAMES FOR ON-LINE ACCESS (continued)

# **ON EVERY BUSINESS DAY (continued)**

Activity	Deadlines
Futures – Request for Standard vs Mini Offset	5:00 p.m.
Futures – Tender Notices submission	5:30 p.m.
Options – Exercise Notices submission	5:30 p.m.
CDCC Clearing Application shutdown – Close of Business	5:30 p.m.
Fixed Income Transactions – available (next Business Day start)	7:00 p.m.
Unsettled Item  Confirmation of settled items to be sent to CDCC	4:15 p.m.
Daily Capital Margin Monitoring Calls	
CDCC notifies Clearing Members of additional Margin required	9:30 a.m.
Clearing Member's obligation to cover any deficit	12:00 (noon)

TIME FRAMES FOR ON-LINE ACCESS (continued on next page)



# TIME FRAMES

# TIME FRAMES FOR ON-LINE ACCESS (continued)

# **EXPIRY SATURDAY**

Activity	Deadlines
Reports available (FTP Download):  Expiry Report (MX01)  Expiry Options Daily Transaction Report (MT01)  List of Options/Cash Adjustments (MT03)	6:00 a.m.
CDCC Clearing Application available for:  Trade corrections  Open Position changes  Position Transfers  Changes to Automatic Exercises  Exercise Notices input  Cancel / correct previous (Friday) exercises	6:00 a.m. to 10:00 a.m.
CDCC Clearing Application shutdown:  CDCC processes expiry entries	10:01 a.m.
Reports available (FTP Download):  List of Expiry Adjustments Report (MX02)  Expiry Difference Report (MX03)	10:15 a.m. to 11:30 a.m.
CDCC Clearing Application available again for:  ➤ Review of expiry entries  ➤ Corrections to expiry entries	10:15 a.m. to 10:30 a.m.
CDCC Clearing Application shutdown <ul><li>Close of Business</li></ul>	10:30 a.m.
Reports available (FTP Download): <ul> <li>Options Exercised and Assigned Report (MT02)</li> <li>Other reports and files also available</li> </ul>	11:45 a.m.

TIME FRAMES FOR ON-LINE ACCESS (continued on next page)



### TIME FRAMES

### TIME FRAMES FOR ON-LINE ACCESS (continued)

#### FIFO PERIOD

Activity	Deadlines
Daily reporting by Clearing Members of the Long Positions in each of their accounts in chronological order	5:30 p.m.
Submission of Tender Notices	5:30 p.m.

#### **PLEDGING**

Clearing Members must input requests for deposit or withdrawal of Acceptable Collateral on the pledging screen of the CDCC Clearing Application.

CDCC monitors the pledging screens between 9:00 a.m. and 3:30 p.m. on Business Days.

CDCC verifies the validity of each deposit made by Clearing Members and ensures that withdrawals do not create deficits in the Clearing Members' accounts (Margin, Clearing Fund or Difference Fund). Any request for the withdrawal of a Specific Deposit should be entered prior to when the intra-day margin call process runs as deposits are valued at this time. Any withdrawal of this type entered after such time will not be processed as such withdrawal cannot be properly valued.

The entries on the pledging screen of the CDCC Clearing Application are matched by CDCC to corresponding entries on the reporting system of the relevant Central Securities Depository.

In some cases an exchange of document at a CDCC Office by the Clearing Members (accompanied by a screen print of the entry bearing the Clearing Member's stamp) 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 Members' deposits and/or withdrawals.

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



#### **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 reconciling the information recorded on the Open Position File and all relevant reports issued by CDCC against their internal records. 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 FTP 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 and in the Short Position in the Series of Futures (or Series of Options) involved equal to 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.
- Transfer of Open Positions from an account of one Clearing Member to an account of another Clearing Member.

### **Types of Adjustments**

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

- 1. <u>Same Day Trade Adjustment (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 Adjustment (T+1)</u>. Modifications of any type are subject to approval by the relevant Exchange and no corrections permitted on OTCI Transactions.



#### **OPEN POSITIONS**

- 3. <u>Open Position Change</u>. For OTCI Transactions, these will be performed through the Position Transfer function of the CDCC Clearing Application.
- 4. <u>Position Transfers.</u> Specific function of the CDCC Clearing Application to move positions from one Clearing Member to another on a post trade basis.
- 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 Futures Contract Long Position(s) against the equivalent number of existing Mini Futures Contract Short Positions (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Futures Contract) having the same Delivery Month and booked in the same Clearing Member's account, or (ii) a number of existing Mini Futures Long Positions against one or more Standard Futures Short Position(s) (totalling the same quantity of the Underlying Interest in accordance with the ratio prescribed in the Contract Specifications of the Mini Futures 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's 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.

The following adjustments are acceptable for Fixed Income Transactions:

- 1. <u>Same Day Trade Date Adjustment (T)</u>. Same day trade corrections are permitted on all fields except the identity of the opposite Clearing Member. These corrections cannot be made to impact a <u>Same Day Transaction—that settles that day after Netting Cut Off Time.</u>
- 2. <u>Trade Date + 1 Adjustment (T+1)</u>. Corrections are permitted on all fields except the identity of the opposite Clearing Members. These corrections cannot be made to impact a <u>Deferred Settlement Transaction</u> that settles that day after Netting Cut-Off Time.
- 3. <u>Open Position Change</u>. These will be performed through the Position Transfer function of the CDCC Clearing Application.
- 4. <u>Position Transfers.</u> Specific function of the CDCC Clearing Application to move positions from one Clearing Member to another on a post trade basis.

### **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.



#### EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

### 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.



#### EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

### **EXPIRY PROCEDURES**

Operations Notices are sent to Clearing Members setting forth the expiry procedures and it is the responsibility of Clearing Members to ensure that they have adequate processes in place to meet 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 approximately two (2) weeks prior to the Expiration Date.

### CDCC's Responsibilities on Expiry Saturday

- 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 Saturday

- 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 Out-Of-The-Money 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 Saturday)**

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:



#### EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

- 1. The proper CDCC Exercise Notice form must be used.
- 2. The authorization stamp of the Clearing Member must be affixed on the form.
- 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 Options 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 Options, the Clearing Member's Long Position is immediately reduced by the number of Options exercised.

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



#### EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

### **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 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 In-the-Money 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 Out-of-the-Money.



## EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

# **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).



#### EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

### **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 LGB three Business Days prior to the first Business Day of the Delivery Month up to and including

the fourth to last Business Day of the Delivery Month.

CGZ two Business Days prior to the first Business Day of the Delivery Month up to and including

the third to last Business Day of the Delivery Month.

MCX before Close of Business on the last trading day.

All outstanding Short Positions in BAX, SXF, SXM, SCF, Sectorial Indices, Options on Futures are automatically tendered on the last trading day, as per Contract Specifications, after Close of Business.

All outstanding Short Positions in ONX are automatically tendered on the first Business Day of the contract month, 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, LGB, CGF and CGZ). Assignments for the CGB, LGB, 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, LGB 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 sends out 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.



## EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

During the FIFO Period, Clearing Members must ensure that they update their declarations on a daily basis before Close of Business.

#### 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 an Acceptable Marketplace or 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 batches of settlement records will be sent by CDCC to the Central Securities Depository on a daily basis. Two settlement records consisting of net settlement instructions will be sent at the first Netting Cut Off Time and at the second Netting Cut Off Time, and any Fixed Income Transaction entered after the second Netting Cut Off Time will be sent to the Central Securities Depository without CDCC performing any pre-settlement netting.

### 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 to the Central Securities Depository on a gross 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.

#### **Unsettled Items intra-day process**

In respect of any Unsettled Items of Same Day Transactions, at the Intra-Day Gross Settlement Cut-Off Time specified in Section 2 of this Operations Manual, CDCC shall send new settlement records to the Central Securities Depository reducing any Gross Delivery Requirement of a Clearing Member in favour of CDCC pursuant to a Same Day Transaction by any Gross Delivery Requirement of CDCC in favour of the same Clearing Member in respect of the same Acceptable Security pursuant to another Same Day Transaction, and/or reducing any Gross Payment Against Delivery Requirement of a Clearing Member in favour of CDCC pursuant to a Same Day Transaction by any Gross Payment Against Delivery Requirement of CDCC in favour of the same Clearing Member pursuant to another Same Day Transaction.

# **Deferred Settlement Transactions net settlement records**

For Deferred Settlement Transactions, 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.

### **Pre-settlement netting process**

With respect to each Fixed Income—Clearing Member who submits Deferred Settlement Transactions, CDCC determines the Net Delivery Obligation(s) and/or the Net Payment Obligation as set forth in Subsection D-606(3) of the Rules. Any other delivery and payment obligation between a Clearing Member and CDCC under any Futures contract settling at the relevant Central Securities Depository will be aggregated to and netted against the Net Delivery Obligation(s) and/or the Net Payment Obligation as set forth in paragraphs (b) and (c) of Subsection A-801(2) of the Rules, such that CDCC shall send to the relevant Central Securities Depository netted settlement instructions (Net Delivery Requirements and Net Payment Against Delivery Requirements) at relevant the Netting Cut Off Times.



#### EXERCISES, TENDERS, ASSIGNMENTS AND DELIVERIES

# **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 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 pre-settlement netting process (as specified in the above section entitled as such) submitted to CDCC for clearing as of the relevant. 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.

In the event of a Failed Delivery for a particular settlement tranche, 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 event that a Clearing Member who is Receiver of Securities fails to take receipt of a portion, or all of the settlement tranche as determined by CDCC's net settlement instructions. 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 Intra-Day Gross Settlement Cut-Off Time, CDCC shall cancel previously issued gross settlement instructions and replace them by off-setted settlement instructions by Clearing Member and the applicable CUSIP/ISIN for all Unsettled Items comprised in the Unsettled Items intra-day process (as specified in the above section entitled as such).

In the event of a Failed Delivery for a particular settlement tranche to a Net Delivery Requirement, or a Gross Delivery Requirement, as the case may be, 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, CDCC will force a failed or partial delivery of the same quantity of Acceptable Securities on the Clearing Member who is the Receiver of Securities with respect to the relevant Same Day Transaction.

In the event that a Clearing Member who is Receiver of Securities fails to take receipt of a portion or all of the settlement tranche as determined by a Net Payment Against Delivery Requirement or a Gross Payment Against Delivery Requirement, as the case may be, the Clearing Member determined by CDCC to be in a fail to receive position shall be required to pay to CDCC any charges which are levied on CDCC for the overnight financing of this failed to receive position, in addition to any other remedies that CDCC may apply to such situation in accordance with the Rules.



#### SETTLEMENT

### INTRODUCTION

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

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

### SETTLEMENT COMPUTATION

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

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

- (i) Total Margin required and any additional margin requirements for each account is compared with Margin Deposits.
- (ii) The premiums, gains and losses, exercise/assignment Settlement Amounts, and cash adjustment for each account type (Client Account(s), Firm Account(s) and Multi-Purpose Account(s)) are netted to a single pay or collect figure.
- (iii) If additional margin is required, CDCC will instruct the Clearing Member to facilitate payment to CDCC.
- (iv) Miscellaneous charges such as clearing fees are also included on a monthly basis. In addition, applicable fines or any other amounts due would be collected on a monthly basis.

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 discourage Clearing Members from being late in the performance of their payment obligations.



#### SETTLEMENT

## **Overnight Settlement**

Payments for overnight settlement (mark-to-market, premiums, margin shortfalls etc.) must be received by 7:45 a.m. the next Business Day.

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.

If the late payment is caused by an infrastructure problem, fines will not be imposed.

#### First occurrence of a late payment:

- if CDCC has the payment in its Bank of Canada account by 7:55 a.m. the next Business Day, there will be no fine.
- if the payment is received by 8:30 a.m. the next Business Day, CDCC will impose a \$1,000 fine.
- if the payment is received by 8:59 a.m. the next Business Day, CDCC will impose a \$2,500 fine.
- if the payment is not received by 9:00 a.m. the next Business Day, CDCC will deem the Clearing Member Nonconforming

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

- if CDCC has the payment in its Bank of Canada account by 7:55 a.m. the next Business Day, CDCC will impose a \$1,000 fine
- if the payment is received after 7:55 a.m. but before 8:30 a.m. the next Business Day, CDCC will impose a \$5.000 fine.
- if the payment is received by after 8:30 a.m. but before 8:59 a.m. the next Business Day, CDCC will impose a \$10,000 fine.
- if the payment is not received by 9:00 a.m. the next Business Day, CDCC will deem the Clearing Member Non-conforming.

### **Intraday Margin Calls**

CDCC encourages its Clearing Members to cover intraday Margin calls with collateral other than cash.

Clearing Members have one (1) hour from notification to cover an intraday Margin call. If the payment is late, the following fines shall apply:

- if the payment is received later than 1 hour after but before 1 hour and 15 minutes from notification, CDCC will impose a \$500 fine.
- if the payment is received later than 1 hour and 15 minutes but before 1 hour and 30 minutes from notification, CDCC will impose a \$1,000 fine.
- if the payment is not received by 1 hour and 30 minutes from notification, CDCC will deem the Clearing Member Non-conforming

#### **Collection of Fines**

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



## SCHEDULE A RISK MANUAL

### **SUMMARY**

CDCC applies rigorous risk management methods that aim to protect the Clearing Members.

The following are the main aspects of risk management at CDCC:

- The standards of membership that Clearing Members must meet;
- The Margin calls that occur when a Clearing Member's potential loss exceeds Margin Deposit and the monitoring of each Clearing Member's credit risk by daily tracking of Margin and capital;
- The Clearing Members' contributions to the Clearing Fund;
- Management of the securities accepted for Margin Deposit and calculation of the safety margins that apply to these assets;
- The default process;
- The adjustment process; and
- Periodic analysis of the acceptability of underlying securities.



### SCHEDULE A RISK MANUAL

## 1. MEMBERSHIP IN THE CORPORATION AND CAPITAL REQUIREMENTS

- The standards of membership imposed on the Clearing Members are set out in Rule A-1A.
- The capital requirements the candidates must satisfy are set out in Rule A-3.

The purpose of these provisions is to verify if a new Clearing Member's financial condition is adequate and to assess its capacity to provide capital. This process is a control measure to minimize the risk that a Clearing Member may become unable to meet its obligations.

#### 2. MARGIN

As set out in Rule A-7, CDCC requires each Member to make a Margin Deposit with CDCC, which CDCC determines.

The purpose of these provisions is to cover potential losses that may occur as a result of market fluctuations. CDCC bases its application of Rule A-7 on the following elements:

### Calculation of the Margin Intervals

Margin intervals are derived from the historical volatility of the daily price returns of underlying securities. The Margin interval calculations are generally re-evaluated once a month. However, the Corporation may update the Margin intervals more frequently at its discretion. The Margin intervals are used to calculate the Margin required for each derivative instrument.

Margin intervals are used to calculate the Margin required to cover potential price fluctuations for derivative instruments. This Margin represents the difference between the current market value of an instrument and its most adverse projected liquidation value obtained by varying the values of the instrument according to different scenarios.

The following variables are taken into account to calculate Margin intervals:

- The daily price returns of the derivative instruments or their Underlying Interests;
- The maximum standard deviation of the daily price returns over 20, 90 and 260 days;
- A variable liquidation period; and
- A confidence interval over 99% obtained by using 3 standard deviations (according to the assumption of the normal law).

The Margin intervals are calculated by using the following formula:

$$\sqrt{n} \times 3 \times Max \left[ \sigma_{20 \, days}, \sigma_{90 \, days}, \sigma_{260 \, days} \right]$$

Where n is the number of days of liquidation and  $\sigma$  is the standard deviation of the daily returns over the reference period.



### SCHEDULE A RISK MANUAL

The formula set out above will not be applied if market conditions do not so permit. For these situations, the Corporation will decide what Margin interval to use.

### • Calculation of the Liquidity Intervals

To calculate the OTCI Margin intervals, CDCC may apply a variable number of liquidation days.

CDCC also accounts for a liquidity interval only when calculating OTCI Margin intervals with physical delivery.

The assumptions on which liquidity risk is calculated are similar to the assumptions CDCC uses to calculate market risk, i.e., that the confidence interval over 99% is obtained by using 3 standard deviations (based on the assumption of the normal law). This interval is calculated based on the historical deviation between the purchase price and the selling price of the Underlying Interest according to the same formula as Margin intervals.

## • Calculation of the Margin on Matched or Correlated Positions

Generally, the different Series of Futures have correlated returns: for example, a portfolio composed of a long position and a short position of the same Class of Futures, but different maturities, will be less risky than the sum of the two positions taken individually. Margins on matched positions aim to address this fact by reducing the required Margin. Margins on matched positions are calculated each month only for Futures. The Margin calculation system automatically nets the long positions on Futures maturing in one month with the short positions on Futures maturing in another month.

Margin on matched positions is a dollar amount based on the expected price variations between the maturity dates of different contracts.

Similarly, CDCC considers the correlation that exists between different Futures when calculating Margin. For example, different interest rate Futures are likely to react to the same market indicators, but to different degrees. Accordingly, a portfolio composed of a long position and a short position on two different Futures will be potentially less risky than the sum of the two positions taken individually.

CDCC regularly performs an analysis to determine the Margin required for a long position combined with a short position on two different Futures that have a certain correlation between them.

#### • Daily Capital Margin Calls

As prescribed in Section A-710 of the Rules, CDCC may call for a capital Margin from the Clearing Members that are under capitalized in relation to their respective required Margin. CDCC compares the Clearing Member's capital amount to its Margin on a daily basis and requires, if applicable, that the Clearing Member make up any difference in the form of acceptable collateral. Each Clearing Member's capital is analyzed and updated monthly. Any deterioration in financial position is analyzed carefully by CDCC and the regulatory authorities, as the case may be.

### • Clearing of Fixed Income Transactions

Description

Conventional Repo

A conventional Repurchase Transaction (also known as a Repo) is a two-legged transaction whereby the Repo Party (also known as the Seller) agrees to sell Securities immediately to a Reverse Repo Party (also known as the Buyer)



### SCHEDULE A RISK MANUAL

and simultaneously agrees to buy the same Securities from the Reverse Repo Party at a fixed price at some later date. As such, a Repo is equivalent to a cash transaction combined with a forward contract. The cash transaction results in the transfer of money by the Buyer to the Seller in exchange for legal transfer of the Securities by the Seller to the Buyer, while the forward contract ensures repayment of the money to the Buyer and return of the Securities to the Seller. The difference between the forward price and the spot price is the interest accrued on the money transferred to the Seller until the settlement date of the forward contract, which is the Repurchase Date of the Repo. CDCC is the Buyer to every Seller and the Seller to every Buyer of the Repurchase Transactions accepted for clearing in accordance with the Rules.

### Cash Buy or Sell Trade

A fixed income Security can be sold at any time before its maturity date. When a buyer and a seller conclude a Cash Buy or Sell Trade, the Security is physically settled (delivery versus payment) after on the Trade Date or 1, 2 or 3 days thereafter depending on its maturity date. CDCC is the Buyer to every Seller and the Seller to every Buyer of the Cash Buy or Sell Trades accepted for clearing in accordance with the Rules.

### Margin Interval

For the Securities underlying the Repurchase Transaction and the Securities involved in a Cash Buy or Sell Trade the following variables are considered to calculate the Margin intervals:

- The yield variation of the Security;
- The duration;
- The maximum standard deviation of the yield of 20, 90 and 260 days;
- A liquidation period that goes from 1 to n days, depending on the Security and the market condition;
- A confidence interval over 99% obtained by using 3 standard deviations (according to the assumption of the normal law).

The Margin intervals are calculated using the following formula:

$$\sqrt{n} \times 3 \times Max \left[\sigma_{20~days}^{Yield}, \sigma_{90~days}^{Yield}, \sigma_{260~days}^{Yield}\right] \times Duration$$

Being n the number of days of liquidation, and  $\sigma^{Yield}$  the standard deviation of the daily yield variation over the reference period.

When the market condition does not allow it, this formula will not be applied and CDCC will decide in its sole discretion which Margin interval to use instead.

#### Margin

# Conventional Repo

As for other products cleared by CDCC, Clearing Members are required to pledge collateral in favour of CDCC to cover the potential losses that could occur as a result of market movements with respect to their Repurchase Transactions. The Margin requirement is valued at night and during the day using the SPAN® software. The Margin requirement for Repurchase Transactions is comprised of various pieces to assure that Fixed Income Clearing is supported by a sound risk management foundation. They are the following:



## SCHEDULE A RISK MANUAL

- Unsettled Items Margin (UI)
- Mark-to-Market of the outstanding open position (MTM)
- Potential Future Exposure (PFE)

### Unsettled Items Margin (UI)

Settlement of the first leg of a Repurchase Transaction occurs by an exchange of the Purchase Price against the Purchased Securities at CDS. CDCC is exposed on either side of the Repurchase Transaction with respect to the value of the Purchased Securities during the term of the Repurchase Transaction. It is exposed to the Reverse Repo Party if and when the value of the Purchased Securities increases, and to the Repo Party if and when the value of the Purchased Securities decreases.

The amount of Unsettled Items Margin is the difference at any given time a valuation is made by CDCC between the Market Value of the Purchased Securities and the Purchase Price and shall be credited to the Repo Party's Margin Deposits (in the account where the relevant Repurchase Transaction resides) and debited from the Reverse Repo Party's Margin Deposits (in the account where the relevant Repurchase Transaction resides) if and when the current Market Value exceeds the Purchase Price, and the other way around if and when the Purchase Price exceeds the current Market Value.

### Mark-to-Market of the Outstanding Open Position (MTM)

In order to minimize the credit risk borne by CDCC, the mark-to-market (MTM) process is used to ensure that the spread between the Repo Rate and the current CORRA rate is zero at the end of each trading day. The MTM Repo Rate Payments essentially transfer any losses due to market movements in repo rates from one party to another. Each Open Position will need to be marked-to-market on a daily basis with the resulting net cash movements settling during the following morning settlement cycle (consistent with current processing).

The MTM Repo Rate Payment calculation works as follows: during the term of a Repurchase Transaction, if the CORRA Rate decreases, the Repo Party has to pay the difference of the initial (or previous) Repo Rate and the new CORRA Rate; whereas if the CORRA Rate increases, the Reverse Repo Party has to pay the difference of the new CORRA Rate and the initial (or previous) Repo Rate. At the end of each Business Day, CDCC calculates with respect to each Fixed Income Clearing Member, the Net MTM Repo Rate Payment which is due or payable in accordance with Subsection D-606(5).

At the end of the Business Day preceding the Repurchase Date of a Repurchase Transaction, the Net MTM Reversal Requirement is calculated in accordance with Subsection D-606(6) of the Rules, and the Net OCF MTM Payment (which compensates the Clearing Member that paid more MTM Repo Rate Payments over the life of a given Repurchase Transaction) is calculated in accordance with Subsection D-606(7) of the Rules.

This MTM process serves to ensure that in the event a Clearing Member becomes Non-Conforming, CDCC will be able to replace the Non-Conforming Clearing Member's Repurchase Transaction(s) without incurring additional losses beyond the current valuation.

## Potential Future Exposure (PFE)

In order to properly quantify the PFE (or Margin requirement) with SPAN®, it is necessary to translate the Repurchase Transactions into their Futures contract equivalents. In order to accomplish this and obtain margin results which are representative of the net Open Position, the following process needs to be followed:



## SCHEDULE A RISK MANUAL

- Define the specifications of the "Virtual Futures Contract(s)" (VFC(s)) that will be used to model the Repurchase Transaction;
- Use a "bucketing" process for the future cash flows on the Repurchase Transaction. In other words the Repurchase Transaction will be divided in one of more equivalent VFC(s), depending on the term of the Repurchase Transaction;
- Determine the forward rates that are consistent with the dates assigned to each VFC during the "bucketing process";
- Determine the net position in the VFC(s) that will be sent to SPAN® on a daily basis.

After the Futures contract equivalency has been determined for a Repurchase Transaction, the SPAN® records need to be created for the VFCxx, with xx being the month of the VFC. The business need is to be able to call for Margin Deposits on the following basis:

- Outright futures position on each created VFCxx
- Intra-Commodity spreads for VFCxx (spreads on long-short combinations for VFCxx positions on different days)
- Inter-Commodity spreads for VFCxx and other contracts listed at the Montreal Exchange like ONX or BAX

These calculations will follow the same processes the CDCC currently has in place for the Exchange Transactions (Margin intervals and the application to the Margin Deposits and Clearing Fund).

Besides the VFC valuations set forth above, CDCC will also calculate the risk associated to the Security being exchanged. The procedure to calculate this risk will be the same used for "Cash Buy or Sell Transactions", section "Potential Future Exposure" below.

#### Cash Buy or Sell Trades

Because settlement of Cash Buy or Sell Trades takes place the same day or 1, 2 or 3 Business Days after the Trade Date, depending on the characteristics of the Security being cleared through CDCC, there is a risk that one or both Clearing Members involved in the trade will default and not be able to fulfill their settlement obligations. To mitigate this risk, CDCC will ask the Clearing Members to deposit Margin between the Trade Date and the relevant Settlement Time. The amount of Margin is composed of two parts:

- Unsettled Items (UI): The difference between the Market Value of the Security and the Purchase Price needs to be collateralized.
- Potential Future Exposure (PFE): This is the SPAN component and it deals with potential movements in the Fixed Income Security's price for the time it would take CDCC to liquidate the entire position in the market.

# <u>Unsettled Items Margin</u>

The same process as set forth above in the "Unsettled Items Margin" section of Conventional Repo, Unsettled Items Margin shall apply to Cash Buy or Sell Trades between the Trade Date and the date on which it settles (i.e. 1, 2 or 3 Business Days later). It shall be calculated daily as the difference between the Purchase Price and the current Market Value of the Purchased Securities and shall be payable by the Seller to CDCC (which in turn shall credit such amount in favour of the Buyer) if the Market Value goes up or by the Buyer to CDCC (which in turn shall credit such amount in favour of the Seller) if the Market Value goes down.



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## Potential Future Exposure

Potential Future Exposure (PFE) is used to mitigate the liquidation risk that exists with respect to the number of days it could take to liquidate a given position in the markets. To simplify calculations and allow spreads between Securities, as specified in "Spreads for Fixed Income Securities" below, CDCC will create different buckets of Securities that have similar characteristics. In other words if the buckets are defined as: **Bucket 1:** 0-1 year to maturity date, **Bucket 2:** 1-3 years to maturity date, **Bucket 3:** 3-7 years to maturity date, and **Bucket 4:** 7 and more years to maturity date, and the Security underlying the Repurchase Transaction has a maturity of 3.5 years, then the Security will belong to **Bucket 3**.

Therefore all the bonds within one bucket will be treated as if they were one. Margin intervals will be calculated for each bucket, instead of each Security, and the PFE will be equal to the Margin interval, multiplied by the price of the Security.

### Spreads for Fixed Income Securities (Inter-commodity Spread)

For Fixed Income Clearing, every Security will be assigned to one bucket. Thus, CDCC will calculate and give a spread (as a percentage) for any combination of a Long Position with a Short Position that belong to two different buckets. Therefore for one Clearing Member having a Long Position on **Bucket 1** and a Short Position on **Bucket 2** the Margin requirement will be equal to:

(PFE<sub>Bucket1</sub>+PFE<sub>Bucket2</sub>)\*(1-Spread). The Spread is based on the correlation between the relevant buckets.

## Spreads for Fixed Income Securities (Intra-commodity Spread)

For Fixed Income Clearing, CDCC will also apply a spread to Securities within one bucket. Therefore for a Long Position in Security A and a Short Position in Security B both belonging to the same bucket, CDCC will charge a dollar amount of X which is based on the correlation of all the Securities within the bucket.

### 3. CLEARING FUND DEPOSITS

The Clearing Fund deposits are set out in Rule A-6.

These provisions aim to distribute each Clearing Member's concentration risk adequately. The Clearing Fund is a reserve fund put in place to respond to the deficit that occurs when the collateral deposited by a defaulting Clearing Member (according to the provisions of Part 5 of this Manual) no longer cover its market exposure. The Clearing Fund is an obligation shared by all the Clearing Members and is designed to mitigate the Uncovered Residual Risk ("URR"). The URR accounts for the fact that extreme market conditions could generate a major loss for certain Clearing Members, causing the potential default of a Clearing Member.

# • Base Deposits

As prescribed in Section A-601 of the Rules, CDCC imposes Base Deposits in the Clearing Fund, varying according to the Clearing Member's type of activities. For Clearing Members trading more than one type of Derivative Instrument, the amounts prescribed in Section A-601 are cumulative.

# • Contribution



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For the purposes of application of Rule A-6, CDCC issues a Clearing Fund Margin Call to each Clearing Member on the basis of a monthly re-evaluation of the following elements:

Each Clearing Member's Contribution is determined by subjecting its portfolio to a market-based financial soundness test and calculating the difference between its uncovered residual risk and the average of its Margin requirements over 60 Business Days.

• The contribution to the Clearing Fund is calculated each day for each Clearing Member for the last 60 Business Days. Then, the average of these 60 values will be determined for each Clearing Member.

$$\mu_{Clearing\ Member's\ Uncovered\ Residual\ Risk_{i}} = \frac{\sum_{t=1}^{60} \textit{Uncovered}\ \textit{Residual}\ \textit{Risk}_{t}}{60}$$

 CDCC determines the total amount of the Clearing Fund based on the maximum uncovered residual risk of all Clearing Members.

Amount of the Clearing Fund = 
$$\max_{i=1}^{n} \left( \mu_{Member's Uncovered Residual Risk_i} \right)$$

Where n equals the number of Clearing Members

• Each Clearing Member's contribution to the Clearing Fund is determined according to the weight of its respective uncovered residual risk in relation to the sum of the uncovered residual risk of all Clearing Members.

$$\frac{\mu_{\textit{Member's Uncovered Residual Risk }_i}}{\sum_{i=1}^n \mu_{\textit{Member's Uncovered Residual Risk }_i}}$$

Clearing Member's contribution  $i = \text{Amount of the fund }^*$ 

## • Stress Scenarios

CDCC uses five stress scenarios to evaluate the biggest loss that could occur in order to guide the selection of the size of the Clearing Fund. This size must be, at a minimum, at least equal to the greatest deficit that may be incurred by the Clearing Members. The deficit is equal to the difference between the greatest loss incurred under the stress scenarios, minus the required and available Margin of the Clearing Member in question.

CDCC applies a stress factor to the Margin intervals to calculate the Stress Margins that will be used to calculate the URRs for each Clearing Member.

The five stress scenarios currently used by the CDCC are: Black Monday (1987), the technology bubble (2000), the bond market crash (1994), the Russian default (1998) and the Lehman's Brothers bankruptcy (2008). CDCC regularly assesses whether it is appropriate to add other stress scenarios to the existing scenarios.



## SCHEDULE A RISK MANUAL

The procedure to value the size of the Clearing Fund and the contributions of each Clearing Member is performed at each month end, as follows:

- Application of the historical variations of the stress scenarios in order to determine the greatest deficit recorded by the Clearing Members;
- Simulation to determine the stress factor that will be applied at the beginning of the next month; and
- Calculation and verification of the adequacy of the size of the Clearing Fund in relation to the greatest loss recorded under a stress scenario.

The first step consists of calculating, at month end, the Margin intervals of the main derivative instruments.

The second step consists of selecting a stress factor a<sup>1</sup>, depending on the level of the Margin intervals in force and the stress factors selected in the previous month. The selected stress factor will be used to calculate the Stress Margins. Once the simulated Stress Margin is calculated, the value of the URR makes it possible to determine the size of the Clearing Fund, according to the above-mentioned formula, and verify whether this size is sufficient to cover the greatest deficits (biggest losses – required Margin deposited) recorded for each stress scenario.

The stress factor<sup>2</sup> will be adjusted in accordance with the simulation results. The stress factor generally is revised each month and depends, in particular, on the Clearing Members' positions (risk profile of each Clearing Member) that vary each day, and the Margin intervals (market conditions) that generally vary each month.

After selecting and setting the stress factor on the first Business Day of the month, the third step is to monitor and control the growth of the Clearing Fund throughout the month. This monitoring essentially serves to ensure that the stress factor set at the beginning of the month was the right choice.

To prevent a negative or zero URR, the stress factor the CDCC uses to determine the size of the Clearing Fund generally does not have a value less than 1, which means that the URR will never be negative.

#### 4. FORMS OF COLLATERAL

➤ The forms of collateral that may be deposited with CDCC are prescribed in Section A-709 of the Rules.

The different forms of collateral are valued by accounting for their potential loss in the event that liquidation is required. Accordingly, the value of the Margin Deposits is discounted in relation to their market value. This discount, commonly called the margin of safety, applies to Valued Securities and government securities, as prescribed in Section A-709 of the Rules.

For the purposes of application of the provisions of Section A-709 of the Rules, CDCC proceeds as follows:

## Cash

Cash amounts are accepted only in Canadian dollars.

<sup>&</sup>lt;sup>1</sup> The stress factor generally has a value of 1.5, 2, 2.5 or 3.

<sup>&</sup>lt;sup>2</sup> The stress factor generally is adjusted by 50% intervals.



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### Government Securities

CDCC accepts Government of Canada and United States Government bonds, in addition to the bonds of certain Canadian provinces, as Margin Deposits. For each issue accepted in advance, a concentration limit equal to \$250 million or 10% of the total issue outstanding, whichever is less, applies to each Clearing Member. Acceptance of the issues is conditional on the availability of a price from a source that CDCC determines to be acceptable and reliable. The government securities accepted as Margin are reviewed by CDCC on a regular basis.

# Calculating the margins of safety for government securities

The margins of safety are calculated based on the following methodology and assumptions:

- Valuation of the market, credit, liquidity and foreign exchange risks based on historical daily returns;
- Confidence interval over 99% obtained by using 3 standard deviations, and the assumption that the bond can be liquidated at a reasonable price in N days. (N will be determined according to the type of products and prevailing market conditions);
- Liquidity risk valued according to the bid-ask spread of the issues (if this spread is unavailable, the liquidation window will be expanded and will depend on market conditions); and
- Bonds of the same issuer and comparable maturities<sup>3</sup>.

Once the quantitative analysis is performed, CDCC reserves the right to increase the margins of safety based on qualitative criteria, such as:

- Comparative analysis of CDCC's margins of safety in relation to the margins of safety of the Bank of Canada;
- Comparative analysis of CDCC's margins of safety in relation to the margins of safety of other clearing houses:
- The congruence of the different margins of safety to the credit rating spreads of the different issuers;
- Any other factor considered relevant.

### Margin of Safety Policy

The margins of safety are reviewed at least semi-annually and may be reviewed on an *ad hoc* basis if any event occurs. The Clearing Members will be informed of these reviews by written notice.

# **5. DEFAULT PROCESS**

The Default Manual is intended to summarize the Rules of the Corporation and confirm certain details concerning the actions the Corporation can take with respect to Clearing Members in financial difficulty and potentially in default. This manual describes the Corporation's possible course of action, including management of a default situation, authority, communication with a Clearing Member and implementation.

A fundamental objective of a central counterparty is to ensure the integrity of payments and processes, even if a Clearing Member defaults. Since the default of one or more Clearing Members may have an impact on the continuity

<sup>&</sup>lt;sup>3</sup> CDCC classifies an issuer's bonds according to their maturities. Any bonds classified in the same category then have a "similar maturity" and will share the same margin of safety. This includes real return Canadian bonds and inflation-indexed US bonds.



### SCHEDULE A RISK MANUAL

of clearing operations, the Corporation must ensure that efficient mechanisms and processes are in place, capable of limiting the adverse impacts of such an event, with respect to monitoring and the determination of a Clearing Member's Non-Conforming status and a Clearing Member's suspension. A Clearing Member's default can result in losses and pressure on liquidity. The Corporation must have adequate financial resources and be able to respond quickly and appropriately to preserve the confidence of the Clearing Members and financial markets.

First, the Corporation must ensure that the Clearing Members meet all standards of membership. Such oversight permits the Corporation to ensure that Clearing Members are able to honour their obligations and allows the Corporation to react to early warning signals of the financial deterioration of one of its Clearing Members.

Beyond this oversight stage and the potential actions that may be taken, if a Clearing Member breaches its commitments, the Corporation may declare that Clearing Member to be Non-Conforming or suspend the Clearing Member. However, suspension status must be ratified by the Board.

To deal with these potential situations, the Corporation has mechanisms and resources that allow it to minimize the losses that could be incurred in a Non-Conforming or suspension situation. The Clearing Members make Margin Deposits with the Corporation in order to be in a position to react to potential difficulties.

- Base Margin (including the capital Margin for certain Clearing Members);
- The Clearing Member's Clearing Fund;
- The Clearing Fund of Clearing Members which are not in difficulty;
- The Corporation's financial resources (capital and line of credit).

The Margin Deposits made directly by the Clearing Member may be used in any manner the Corporation deems appropriate. In the event that the defaulting Clearing Member's resources are inadequate, the Corporation may call on the Clearing Fund of the Clearing Members which are not in difficulty and on the Corporation's financial resources.

The measures stipulated in the Rules regarding Non-Conforming or Suspended Clearing Members may be taken in the order as the Corporation deems appropriate.

The Corporation regularly updates a list of the Clearing Members' contacts and the other entities that may be involved in case of default. The Clearing Members must be reachable from 8:00 a.m. to 5:30 p.m. Monday to Friday.

CDCC has produced a Default Manual as Appendix 1 to this Risk Manual, which details the actions it can take regarding Non-Conforming or Suspended Clearing Members.

### **6. ADJUSTMENTS**

> Section A-902 of the Rules prescribes the cases in which an adjustment may be made.

CDCC is responsible for monitoring and identifying the corporate events that may result in an adjustment. It interprets the information and communicates it to the members of the Adjustments Committee as soon as possible. The Adjustments Committee acts in accordance with the provisions of Rule A-9. A meeting of the Adjustments Committee is called by CDCC, whenever circumstances require. The Committee is responsible for preparing the draft notices to the Clearing Members which, once approved by the Committee members, are published to the attention of the Clearing Members and the market participants.



### SCHEDULE A RISK MANUAL

#### 7. CRITERIA OF ELIGIBILITY AND DEFICIENCY OF UNDERLYING INTERESTS

### Eligibility of Underlying Interests of Exchange-Traded Derivatives

- > Section B-603 of the Rules sets out the criteria for eligibility of stock options.
- > Section B-604 of the Rules sets out the deficiency criteria for stock options.

CDCC reviews and publishes quarterly on its website a list of the stock options eligible for CDCC's clearing services.

### Acceptability of OTCI underlying assets

> Section D-104 of the Rules sets out the acceptance criteria for OTCI Underlying Interests.

CDCC reviews and publishes quarterly on its website a list of OTCI Underlying Interests acceptable for CDCC's clearing services.

Between the quarterly publication for the list of acceptable Underlying Interests, a Clearing Member wishing to clear OTCI transactions for which an Underlying Interest is not included on the list must obtain the Corporation's prior authorization. The Underlying Interest must at least meet the acceptance criteria prescribed in Section D-104 of the Rules.

### Eligibility of OTCI Underlying Foreign Currencies

For the application of the provisions of Section D-104 of the Rules, the OTCI Underlying Foreign Currencies must meet the following criteria:

- Be the currency of one of the G7 member countries, Australia or Switzerland;
- Have at least an AA credit rating issued by a rating agency which CDCC determines to be acceptable;
- Be the currency of a country with a relatively clear and stable monetary policy; and
- Be the object of a floating exchange rate policy.

## Eligibility of Securities as Underlying Interests of Cash Buy or Sell Trades

For the application of Sections D-104 and D-603 of the Rules, Securities are eligible for Cash Buy or Sell Trades clearing if they meet the following criteria:

- The issuer must be eligible, which includes the following issues:
  - o Bonds and Treasury bills issued by the Government of Canada, including real return issues;
  - o Canada Mortgage and Housing Corporation debt securities;
  - o Canada mortgage bonds;
  - o Bonds issued by Business Development Bank of Canada;
  - o Bonds issued by Export Development Canada;
  - o Bonds issued by Farm Credit Canada;
  - o Bonds issued by Canada Post; and
  - o Bonds issued by the Canadian Wheat Board;
- The bonds must be repayable at maturity;
- The bonds must be denominated in Canadian dollars:



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- The coupon type must be fixed, real return or zero (Treasury bills are eligible);
- The net amount outstanding must be greater than or equal to \$250 million;
- The bonds must have a price issued by a source that CDCC will determine is acceptable.

# Eligibility of Securities as Underlying Interests of Repurchase Transactions

For the application of the provisions of Sections D-104 and D-603 of the Rules, Securities are eligible for clearing of Repurchase Transactions if they meet the following criteria:

- The security must be an acceptable bond;
- The starting date of the Repurchase Agreement must be no earlier than the date of the transaction; and
- The expiry date of the Repurchase Agreement must not be more than 365 days later than the starting date of the Repurchase Agreement and must be no later than the maturity date of the Underlying Interest.

<sup>4</sup> The net outstanding amount is defined as the outstanding amount issued on the market minus the stripped coupon bonds and issuer repurchases.