

# CIRCULAR 083-22

July 18, 2022

# **SELF-CERTIFICATION**

# HOUSEKEEPING CHANGES TO THE RULES OF BOURSE DE MONTRÉAL INC.

On November 8, 2021, the Rules and Policies Committee of Bourse de Montréal Inc. (the "**Bourse**") approved amendments to articles 6.208, 6E-4, 6.500 of the Rules of the Bourse to clarify and correct the text of such rules in order to accurately reflect the current trading environment and traded products. These amendments were self-certified in accordance with the self-certification process as established in the *Derivatives Act* (CQLR, Chapter I-14.01).

These amendments, as attached, will become effective on **July 18, 2022**, after market close. Please note that the revised articles will also be available on the Bourse's website (<u>www.m-x.ca</u>).

For additional information, please contact Dima Ghozaiel, Legal Counsel, by email at <u>dima.ghozaiel@tmx.com</u>.

Dima Ghozaiel Legal Counsel Bourse de Montréal Inc.

# **ENGLISH – MODIFIED VERSION**

# Article 6.208 Exchange of Futures for Related Products

(a) <u>EFRP Transactions in general</u>. Exchanges of Futures for Related Products ("EFRP") Transactions involving Futures Contracts listed and traded on the Bourse are permitted if such Transactions are executed in accordance with the requirements of this Article. An EFRP Transaction is composed of the privately negotiated execution of a Bourse Futures Contract and the opposite, simultaneous execution of an approximately equivalent quantity or value of cash product, by-product, related product, or Over-The-Counter ("OTC") Derivative Instrument underlying the Futures Contract.

# [...]

(ix) It is prohibited to effect an EFRP Transaction for the purpose of reporting, registering or recording a non-bona fide price or entering into a Transaction which is <del>a</del> <u>"wash sale","</u> an accommodation trade or a fictitious sale.

#### [...]

# Appendix 6E-4 DESCRIPTION

# Appendix 6E-4.1 THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (BAX)

The daily Settlement Price procedure for the Three-Month Canadian Bankers' Acceptance Futures contract (BAX) is executed by a fully automated pricing algorithm which utilizes the parameters described in paragraphs (b), (c) and (d) of Appendix 6D-4.1 to ensure accuracy in the process.

#### (a) <u>Definitions</u>:

- (i) "Regular order" means Orders routed by Approved Participants to the Bourse's Trading System.
- "Implied order" means orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the Electronic Trading System.
- (iii) "Minimum Threshold" means the applicable threshold for BAX will be:
  - (1) 100 contracts for the first four quarterly contract months ("whites");
  - (2) 75 contracts for quarterly contract months 5 to 8 ("reds"); and
  - (3) 50 contracts for quarterly contract months 9 to 12 ("greens").
- (b) <u>Identification of the Front Quarterly Contract Month</u>. The automated daily settlement pricing algorithm identifies the front quarterly contract month from

the first two quarterly contract months. The front quarterly contract month is the one, among the first two quarterly contract months, that has the largest Open Interest and the required market information. In the absence of both these criteria together, then the front quarterly contract month shall be determined by Market Supervisors based on available market information.

- (c) <u>Algorithm Utilized for the Determination of the Daily Settlement Price of the</u> <u>Front Quarterly Contract Month.</u>
  - (i) Once the front quarterly contract month has been identified, the automated daily Settlement Price algorithm will determine the Settlement Price of the front quarterly contract month according to the following priorities: first, it will use the weighted average price of cumulated Trades that meet the Minimum Threshold, during the last three minute prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, on that contract month; if no such average price is available, it will then use the weighted average price of cumulated Trades for a total equal to the Minimum Threshold on that contract month for a period not exceeding the last 30 minutes prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Trades resulting from both regular and implied orders will be used in the process. If no such average price is yet available, then the least variation between the bid or offer price that is not as a result of implied orders and the previous day Settlement Price will be used.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
  - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.
- (d) <u>Procedure For The Determination Of The Daily Settlement Price Of The</u> <u>Remaining BAX Contract Months.</u>
  - (i) Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the Settlement Prices for all other BAX contract months sequentially. The daily Settlement Prices of all other BAX contract months will be based first on the last three minute outright market (resulting from regular and implied orders) prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid or offer for booked orders.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required.

- (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.
- (e) <u>Ancillary Procedure</u>. In the absence of any required items to apply the aforementioned procedure, Market Supervisors will establish the Settlement Price based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

2020.05.01, 2021.07.16

# Appendix 6E-4.2 FUTURES CONTRACTS ON S&P/TSX AND S&P/MX INDICES, AND ON THE FTSE EMERGING MARKETS INDEX

Daily Settlement Price

In the case of mini Futures Contracts on S&P/TSX or S&P/MX Indices, the Daily Settlement Price shall be the same as the standard Futures Contracts on S&P/TSX or S&P/MX Indices when such standard Futures Contracts exist.

(a) <u>Front Month</u>: The front quarterly contract month is the one, among the first two quarterly contract months, that has the largest Open Interest and the required market information. In the absence of both these criteria together, then the front quarterly contract month shall be determined by a Market Supervisor based on available market information. All the subsequent expiries are considered Back Months.

- (i) The Settlement Price shall be the weighted average of all Trades during the calculation period, which ranges from 3:59 p.m. to 4:00 p.m. ET ("the calculation period"), using a minimum quantity of 10 Contracts. If there is an unfilled order ("booked order") with a higher bid or lower offer in the front month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.
- (ii) If there are no Trades nor booked orders in the calculation period, then the last Trade before the calculation period will determine the Settlement Price only if the last Trade is at or within the sustained bid and offer at the settlement time.

- (iii) If the last Trade is not at or within the sustained market bid and offer, then the front month settles to the midpoint of the <u>booked-sustained</u> orders bid and offer.
- Tier 2

For all Futures contracts on S&P/TSX and S&P/MX indices, and on the FTSE Emerging markets index except the S&P/TSX60 Dividend Index Futures, if there are no Trades nor quotes during the trading sessionclosing period, the weighted average of all basis trade on close transactions (BTC) is applied to the closing price of the underlying asset and this price becomes the settlement price of the instrument. For S&P/TSX60 Dividend Index Futures, the Settlement Price will be the previous day's Settlement Price adjusted to the <u>applicable</u> qualifying bid and <u>or</u> offer.

#### Tier 3

In absence of the conditions necessary to fulfill the front month Tiers 1-2, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.

# (b) Back Months

Tier 1

- (i) The Settlement Price shall be the weighted average of all Trades, including spread strategies, during the calculation period (minimum quantity 10 contracts). If there is an unfilled order ("booked order") with a higher bid or lower offer in the back month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.
- (ii) If there are no Trades nor booked orders in the calculation period, then the last Trade before the calculation period will determine the Settlement Price only if the last Trade is at or within the sustained bid and offer at thesettlement time.
- (iii) If the last Trade is not at or within the sustained market bid and offer, then the back month settles to the midpoint of the booked sustained orders bid and offer.

#### Tier 2

If there are no Trades nor quotes during the trading session, the weighted average of all basis trade on close transactions (BTC) is applied to the closing price of the

underlying asset and this price becomes the settlement price of the instrument. This Tier does not apply to S&P/TSX60 Dividend Index Futures.

Tier 3

If no weighted average price can be determined in this manner, the Settlement Price will be the previous day's Settlement Price (or a price that represents the same net change of the prior expiry) adjusted to the <u>applicable</u> qualifying closing bid <u>and-or</u> offer.

Tier 4

In absence of the conditions necessary to fulfill the back month Tiers 1-2<u>-3</u>, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.

#### Month-end Settlement Price

The month-end Settlement Price shall be calculated on the last business day of each month using a time-weighted average price ("TWAP") and the future's related Basis Trade on Close (BTC) daily mid-market quotes average, as further detailed below. In the case of mini Futures Contracts on S&P/TSX or S&P/MX Indices, the month-end Settlement Price shall be the same as for the standard Futures Contracts on S&P/TSX or S&P/MX Indices when such standard Futures Contracts exist.

- (i) <u>TWAP calculation</u>. The price of the Index Future's last traded contract is captured at every 1-minute interval between 9:350 a.m. and 3:55 p.m. The Index Future's trading activity is measured against the underlying index value at intervals of 1 minute throughout the day. The implied basis is calculated taking the difference between the underlying index and the price of the Future contract at each minute. At 4:00 p.m., the system calculates the average of each minute's implied basis obtained throughout the day (TWAP);
- (ii) <u>TWAP conditions</u>. The following trading data conditions must be present for the TWAP to be calculated: (i) a trade must be registered on at least 50% of all minute intervals throughout the period the data is captured, (ii) there must be a minimum of one data point present every 30 minutes throughout the period the data is captured, (iii) the TSX feed must be available and its data captured between 3:00 p.m. and 3:55 p.m.;
- (iii) <u>BTC daily mid-market quotes calculation</u>. In order to obtain BTC daily mid-market quotes, the Bourse captures all bid-ask quotes posted

throughout the day at every 1-minute interval. At 4:00 p.m., the system calculates the mid-market quote average for the day;

(iv) <u>Month-end Settlement Price</u>. The month-end Settlement Price is determined by weighting the Index Future implied average basis (TWAP) and the BTC mid-market average basis. The <u>BTC mid-market</u> average basis is weighted factor is periodically reviewed according to the instrument's trading volume during the previous month and the weighting percentage is dependent on the BTC monthly volume crossing a pre-established threshold range.

#### Tier 2

Should the TWAP conditions mentioned above not be met for the calculation of the month-end Settlement Price, the Bourse shall calculate the month-end Settlement Price using the Procedures outlined in this Appendix 6E-4.2 for the calculation of the daily Settlement Price.

2020.01.30, 2021.06.21

#### Appendix 6E-4.3 GOVERNMENT OF CANADA BOND FUTURES CONTRACTS

- (a) <u>Main Procedure</u>. The Settlement Price shall be the weighted average of all Trades during the closing range. The closing range is defined as the last minute of trading prior to <u>(and including)</u>-3:00 p.m., or prior to <u>(and including)</u> 1:00 p.m. on early closing days, for all contract months.
  - (i) <u>Booked orders</u>. If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the Settlement Price obtained from the weighted average. This order must have been posted for 20 seconds or longer prior to <u>(and including)</u> 3:00 p.m., or prior to <u>(and including)</u> 1:00 p.m. on early closing days, and its size must be for 10 contracts or more.
  - (ii) <u>Last Trades</u>. If there are no Trades in the last minute of trading, then the last Trade will be taken into account while still respecting posted bids and offers in the market.
- (b) <u>First Ancillary Procedure.</u> When two contract months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.
  - (i) The front month must be settled first (the establishment of the front month is based on the month with the greatest Open Interest).
  - (ii) The spread between the two contract months must be settled next by taking into account the last minute average trading price prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early

closing days, and by examining the Trades executed during the previous 10 minutes.

- (iii) The Settlement Price for the back month or far month is obtained by the difference between the front month Settlement Price and the value of the spread.
- (c) <u>Second Ancillary Procedure</u>. In the absence of the items required to apply the main procedure in paragraph (a) and the ancillary procedure in paragraph (b), the following ancillary procedure will apply.
  - Market Supervisors will post a Settlement Price that will reflect the same differential that was applied on the previous business day. The Settlement Price will be adjusted accordingly to respect that contract's previous Settlement Price.
- (d) <u>Third Ancillary Procedure.</u> In the absence of the items required to apply the main procedure in paragraph (a) and the ancillary procedures in paragraph (b) and (c), the following ancillary procedure will apply.
  - (i) In this situation, Market Supervisors will establish the Settlement Price based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

# Appendix 6E-4.4 OPTIONS ON THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS

(a) <u>Main Procedure.</u>

<u>Weighted average.</u> The Settlement Price shall be the weighted average of the prices traded in the closing range (last minute of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.

- (i) Last Trades.
  - (1) If no Trade occurs during the closing range, the Market Supervisors will consider Transactions executed during the last 30 minutes of trading prior to (and including) 3:00 p.m., or prior to (and including) -1:00 p.m. on early closing days. Also, to be considered, the bids and offers shall be for a minimum of 25 contracts and shall have been posted at least one minute before (and including) 3:00 p.m., or before (and including) 1:00 p.m. on early closing days, to be considered.

- (2) If no Trade occurs in the closing range (or in the last 30 minutes of trading prior to <u>(and including)</u> 3:00 p.m., or prior to <u>(and including)</u> 1:00 p.m. on early closing days), the Settlement Price shall be the theoretical price calculated by the Bourse (as described in paragraph (b)). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.
- (b) <u>Ancillary procedure.</u> In the absence of the items required to apply the main procedure in paragraph (a), the following ancillary procedure will apply.
  - (i) The Settlement Price shall be determined by inserting the following parameters into a standard Option pricing model (Black & Scholes):
    - (1) <u>Price of the Underlying</u>. The Bourse will capture the Settlement Price of the underlying BAX Futures Contract. This will be the price of the underlying.
    - (2) <u>Interest rate.</u> The interest rate used will be the rate implied by the Settlement Price of the BAX Futures Contract nearest to expiration.
    - (3) <u>Volatility</u>: The Bourse will use the implied volatility (per contract month, for Puts and calls) obtained from the acting Market Maker. The same volatility will be applied for both Calls and Puts.
    - (4) The Exercise Price of the Options' series and the time to expiration are the other parameters that will be inserted into the model.
  - (ii) In determining the closing price, the Bourse shall take into account the information provided by the posted strategy, for example; if the SEP 9200 straddle is 98 bid, the total of the closing prices of these two series should not be inferior to 98.

# Appendix 6E-4.5 ONE-MONTH CORRA FUTURES CONTRACTS (COA)

The daily Settlement Price procedure for the One-Month CORRA Futures contract (COA) is executed by a fully automated pricing algorithm which utilizes the parameters described in paragraphs (b) and (c) and of Appendix 6D-4.5 to ensure accuracy in the process.

- (a) <u>Definitions</u>:
  - (i) "Regular order" means Orders routed by Approved Participants to the Bourse's Trading System.
  - (ii) "Implied order" means orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the Electronic Trading System.

- (iii) "Minimum Threshold" means the applicable threshold for COA will be:
  - (1) 25 contracts for all contracts.
- (b) <u>Algorithm Utilized for the Determination of the Daily Settlement Price of the</u> <u>Front Contract Month (nearest expiry)</u>.
  - (i) The automated daily Settlement Price algorithm will determine the Settlement Price of the front contract month according to the following priorities: first, it will use the weighted average price of cumulated Trades that meet the Minimum Threshold, during the last three minute prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, on that contract month; if no such average price is available, it will then use the weighted average price of cumulated Trades for a total equal to the Minimum Threshold on that contract month for a period not exceeding the last 30 minutes prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Trades resulting from both regular and implied orders will be used in the process. If no such average price is yet available, then the least variation between the bid or offer price that is not as a result of implied orders and the previous day Settlement Price will be used.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
  - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.

# (c) <u>Procedure For The Determination Of The Daily Settlement Price Of The Remaining</u> <u>COA Contract Months</u>.

- (i) Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the Settlement Prices for all other COA contract months sequentially. The daily Settlement Prices of all other COA contract months will be based first on the last three minute outright market (resulting from regular and implied orders) prior to (and including) -3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid or offer for qualified booked orders.
- (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
- (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will

be weighted at 25% relative to the orders and volumes on individual contracts.

(e) <u>Ancillary Procedure</u>. In the absence of any required items to apply the aforementioned procedure, Market Supervisors will establish the Settlement Price based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

#### 2020.06.12

#### Appendix 6E-4.6 THREE-MONTH CORRA FUTURES CONTRACTS (CRA)

The daily Settlement Price procedure for the Three-Month CORRA Futures contract (CRA) is executed by a fully automated pricing algorithm which utilizes the parameters described in paragraphs (b) and (c) of Appendix 6D-4.6 to ensure accuracy in the process.

- (a) <u>Definitions</u>:
  - (i) "Regular order" means Orders routed by Approved Participants to the Bourse's Trading System.
  - (ii) "Implied order" means orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the Electronic Trading System.
  - (iii) "Minimum Threshold" means the applicable threshold for CRA is set at 25 contracts for quarterly contract months 1 to 12.
  - (b) <u>Algorithm Utilized for the Determination of the Daily Settlement Price of the</u> <u>Front Quarterly Contract Month (nearest expiry)</u>.
    - (i) The automated daily Settlement Price algorithm will determine the Settlement Price of the front quarterly contract month according to the following priorities: first, it will use the weighted average price of cumulated Trades that meet the Minimum Threshold, during the last three minute prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, on that contract month; if no such average price is available, it will then use the weighted average price of cumulated Trades for a total equal to the Minimum Threshold on that contract month for a period not exceeding the last 30 minutes prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Trades resulting from both regular and implied orders will be used in the process. If no such average price is yet available, then the least variation between the bid or offer price that is not as a result of implied orders and the previous day Settlement Price will be used.

- (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
- (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.
- (c) <u>Procedure For The Determination Of The Daily Settlement Price Of The Remaining CRA Contract Months</u>.
  - (i) Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the Settlement Prices for all other CRA contract months sequentially. The daily Settlement Prices of all other CRA contract months will be based first on the last three minute outright market (resulting from regular and implied orders) prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid or offer for qualified booked orders.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
  - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts. <u>This paragraph does not apply to the first contract settled.</u>
- (d) <u>Ancillary Procedure</u>. In the absence of any required items to apply the aforementioned procedure, Market Supervisors will establish the Settlement Price based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

# 2020.06.12

#### Appendix 6E-4.7 CANADIAN SHARE FUTURES CONTRACTS

(a) <u>Front Month:</u> The front quarterly contract month is the one, among the first two quarterly contract months, that has the largest Open Interest and the required market information. In the absence of both these criteria together, then the front quarterly contract month shall be determined by a Market Supervisor based on available market information. All the subsequent expiries are considered Back Months.

(i)	The Settlement Price shall be the weighted average of all Trades during the calculation period, which ranges from 3:59 p.m. to 4:00 p.m. ET ("the calculation period"), using a minimum quantity of 10 Contracts. If there is an unfilled order ("booked order") with a higher bid or lower offer in the front month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.
(ii)	If there are no Trades nor booked orders in the calculation period, then the last Trade before the calculation period will determine the Settlement Price only if the last Trade is at or within the sustained bid and offer at the settlement time.
(iii)	If the last Trade is not at or within the sustained market bid and offer, then the front month settles to the midpoint of the <b>booked</b> - <u>sustained</u> orders bid and offer.
Tier 2	If there are no Trades nor quotes during the trading session, the weighted average of all basis trade on close transactions (BTC) is applied to the closing price of the underlying asset and this price becomes the settlement price of the instrument.
Tier 3	In absence of the conditions necessary to fulfill the front month Tiers 1- 2, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.
(b) <u>Back Months</u>	
Tier 1	

- (i) The Settlement Price shall be the weighted average of all Trades, including spread strategies, during the calculation period (minimum quantity 10 contracts). If there is an unfilled order ("booked order") with a higher bid or lower offer in the back month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.
- (ii) If there are no Trades nor booked orders in the calculation period, then the last Trade before the calculation period will determine the Settlement

Price only if the last Trade is at or within the sustained bid and offer at the settlement time.

(iii) If the last Trade is not at or within the sustained market bid and offer, then the back month settles to the midpoint of the booked sustained orders bid and offer.

#### Tier 2

If there are no Trades in the calculation period, the weighted average of all basis Trade on close (BTC) transactions is applied to the closing price of the underlying asset and this price becomes the settlement price of the instrument. This price would be adjusted to the qualifying closing bid and offer.

#### Tier 3

In absence of the conditions necessary to fulfill the back month Tiers 1-2, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price. If no weighted average price can be determined in this manner, the Settlement Price will be the previous day's Settlement Price (or a price that represents the same net change of the prior expiry) adjusted to the applicable qualifying closing bid and <u>or offer</u>.

#### Tier 4

If no weighted average price can be determined using tiers 1, 2 or 3, the Settlement Price will be the previous day's Settlement Price (or a price that represents the same net change of the prior expiry) adjusted to the applicable qualifying closing bid or offer. In absence of the conditions necessary to fulfill the back month Tiers 1-2-<u>3</u>, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.

#### 2021.06.21

### Appendix 6E-4.8 OPTIONS ON GOVERNMENT OF CANADA BOND FUTURES CONTRACTS

(a) <u>Main Procedure</u>.

<u>Weighted average</u>. The Settlement Price shall be the weighted average of the prices traded in the closing range (last minute of trading prior to <u>(and including)</u> 3:00 p.m., or

prior to <u>(and including)</u> 1:00 p.m. on early closing days). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.

# (i) <u>Last Trades</u>.

(1) If no Trade occurs during the closing range, the Market Supervisors will consider Transactions executed during the last 30 minutes of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Also, to be considered, the bids and offers shall be for a minimum of 25 contracts and shall have been posted at least one minute before (and including) 3:00 p.m., or before (and including) 1:00 p.m. on early closing days, to be considered.

(2) If no Trade occurs in the closing range (or in the last 30 minutes of trading prior to <u>(and including)</u> 3:00 p.m., or prior to <u>(and including)</u> 1:00 p.m. on early closing days), the Settlement Price shall be the theoretical price calculated by the Bourse (as described in paragraph (b)). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.

(b) <u>Ancillary procedure</u>. In the absence of the items required to apply the main procedure in paragraph (a), the following ancillary procedure will apply.

(i) The Settlement Price shall be determined by inserting the following parameters into a standard Option pricing model (Black & Scholes):

(1) <u>Price of the Underlying</u>. The Bourse will capture the Settlement Price of the Underlying Government of Canada Bond Futures Contract. This will be the price of the underlying.

(2) <u>Interest rate</u>. The interest rate used will be a rate deemed appropriate for the product and it's expiry date.

(3) <u>Volatility</u>: The Bourse will use the implied volatility (per contract month, for Puts and calls) obtained from relevant market sources and deemed appropriate for the product. The same volatility will be applied for both Calls and Puts.

(4) The Exercise Price of the Options' series and the time to expiration are the other parameters that will be inserted into the model.

(ii) In determining the closing price, the Bourse shall take into account the information provided by the posted strategy.

2021.05.28

[...]

# Article 6.500 Reports of Accumulated Positions

- [...]
- (i) The reporting thresholds established by the Bourse are as follows:
- [...]
- (ii) For Futures Contracts and the related Options on Futures Contracts:
  - 300 contracts, in the case of Futures Contracts and Options on Futures Contracts on Three-Month Canadian Bankers' Acceptance Futures (BAX and OBX), by aggregating positions on Options on Futures Contracts and positions in the underlying Futures Contract. In this case, one Options contract (OBX)-is equal to one Futures Contract (BAX);

[...]

# **ENGLISH – CLEAN VERSION**

# Article 6.208 Exchange of Futures for Related Products

(a) <u>EFRP Transactions in general</u>. Exchanges of Futures for Related Products ("EFRP") Transactions involving Futures Contracts listed and traded on the Bourse are permitted if such Transactions are executed in accordance with the requirements of this Article. An EFRP Transaction is composed of the privately negotiated execution of a Bourse Futures Contract and the opposite, simultaneous execution of an approximately equivalent quantity or value of cash product, by-product, related product, or Over-The-Counter ("OTC") Derivative Instrument underlying the Futures Contract.

# [...]

(ix) It is prohibited to effect an EFRP Transaction for the purpose of reporting, registering or recording a non-bona fide price or entering into a Transaction which is an accommodation trade or a fictitious sale.

# [...]

# Appendix 6E-4 DESCRIPTION

# Appendix 6E-4.1 THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (BAX)

The daily Settlement Price procedure for the Three-Month Canadian Bankers' Acceptance Futures contract (BAX) is executed by a fully automated pricing algorithm which utilizes the parameters described in paragraphs (b), (c) and (d) of Appendix 6D-4.1 to ensure accuracy in the process.

# (a) <u>Definitions</u>:

- (i) "Regular order" means Orders routed by Approved Participants to the Bourse's Trading System.
- (ii) "Implied order" means orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the Electronic Trading System.
- (iii) "Minimum Threshold" means the applicable threshold for BAX will be:
  - (1) 100 contracts for the first four quarterly contract months ("whites");
  - (2) 75 contracts for quarterly contract months 5 to 8 ("reds"); and
  - (3) 50 contracts for quarterly contract months 9 to 12 ("greens").
- (b) <u>Identification of the Front Quarterly Contract Month</u>. The automated daily settlement pricing algorithm identifies the front quarterly contract month from the first two quarterly contract months. The front quarterly contract month is the

one, among the first two quarterly contract months, that has the largest Open Interest and the required market information. In the absence of both these criteria together, then the front quarterly contract month shall be determined by Market Supervisors based on available market information.

- (c) <u>Algorithm Utilized for the Determination of the Daily Settlement Price of the</u> Front Quarterly Contract Month.
  - Once the front quarterly contract month has been identified, the (i) automated daily Settlement Price algorithm will determine the Settlement Price of the front quarterly contract month according to the following priorities: first, it will use the weighted average price of cumulated Trades that meet the Minimum Threshold, during the last three minute prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, on that contract month; if no such average price is available, it will then use the weighted average price of cumulated Trades for a total equal to the Minimum Threshold on that contract month for a period not exceeding the last 30 minutes prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Trades resulting from both regular and implied orders will be used in the process. If no such average price is yet available, then the least variation between the bid or offer price that is not as a result of implied orders and the previous day Settlement Price will be used.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
  - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.
- (d) <u>Procedure For The Determination Of The Daily Settlement Price Of The</u> <u>Remaining BAX Contract Months.</u>
  - (i) Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the Settlement Prices for all other BAX contract months sequentially. The daily Settlement Prices of all other BAX contract months will be based first on the last three minute outright market (resulting from regular and implied orders) prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid or offer for booked orders.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required.

- (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.
- (e) <u>Ancillary Procedure</u>. In the absence of any required items to apply the aforementioned procedure, Market Supervisors will establish the Settlement Price based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

2020.05.01, 2021.07.16

# Appendix 6E-4.2 FUTURES CONTRACTS ON S&P/TSX AND S&P/MX INDICES, AND ON THE FTSE EMERGING MARKETS INDEX

Daily Settlement Price

In the case of mini Futures Contracts on S&P/TSX or S&P/MX Indices, the Daily Settlement Price shall be the same as the standard Futures Contracts on S&P/TSX or S&P/MX Indices when such standard Futures Contracts exist.

(a) <u>Front Month</u>: The front quarterly contract month is the one, among the first two quarterly contract months, that has the largest Open Interest and the required market information. In the absence of both these criteria together, then the front quarterly contract month shall be determined by a Market Supervisor based on available market information. All the subsequent expiries are considered Back Months.

- (i) The Settlement Price shall be the weighted average of all Trades during the calculation period, which ranges from 3:59 p.m. to 4:00 p.m. ET ("the calculation period"), using a minimum quantity of 10 Contracts. If there is an unfilled order ("booked order") with a higher bid or lower offer in the front month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.
- (ii) If there are no Trades nor booked orders in the calculation period, then the last Trade before the calculation period will determine the Settlement Price only if the last Trade is at or within the sustained bid and offer at settlement time.

(iii) If the last Trade is not at or within the sustained market bid and offer, then the front month settles to the midpoint of the sustained orders bid and offer.

# Tier 2

For all Futures contracts on S&P/TSX and S&P/MX indices, and on the FTSE Emerging markets index except the S&P/TSX60 Dividend Index Futures, if there are no Trades nor quotes during the closing period, the weighted average of all basis trade on close transactions (BTC) is applied to the closing price of the underlying asset and this price becomes the settlement price of the instrument. For S&P/TSX60 Dividend Index Futures, the Settlement Price will be the previous day's Settlement Price adjusted to the applicable qualifying bid or offer.

# Tier 3

In absence of the conditions necessary to fulfill the front month Tiers 1-2, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.

# (b) Back Months

Tier 1

- (i) The Settlement Price shall be the weighted average of all Trades, including spread strategies, during the calculation period (minimum quantity 10 contracts). If there is an unfilled order ("booked order") with a higher bid or lower offer in the back month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.
- (ii) If there are no Trades nor booked orders in the calculation period, then the last Trade before the calculation period will determine the Settlement Price only if the last Trade is at or within the sustained bid and offer at settlement time.
- (iii) If the last Trade is not at or within the sustained market bid and offer, then the back month settles to the midpoint of the sustained bid and offer.

#### Tier 2

If there are no Trades nor quotes during the trading session, the weighted average of all basis trade on close transactions (BTC) is applied to the closing price of the underlying asset and this price becomes the settlement price of the instrument. This Tier does not apply to S&P/TSX60 Dividend Index Futures.

#### Tier 3

If no weighted average price can be determined in this manner, the Settlement Price will be the previous day's Settlement Price (or a price that represents the same net change of the prior expiry) adjusted to the applicable qualifying closing bid or offer.

Tier 4

In absence of the conditions necessary to fulfill the back month Tiers 1-2-3, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.

#### Month-end Settlement Price

The month-end Settlement Price shall be calculated on the last business day of each month using a time-weighted average price ("TWAP") and the future's related Basis Trade on Close (BTC) daily mid-market quotes average, as further detailed below. In the case of mini Futures Contracts on S&P/TSX or S&P/MX Indices, the month-end Settlement Price shall be the same as for the standard Futures Contracts on S&P/TSX or S&P/MX Indices when such standard Futures Contracts exist.

- (i) <u>TWAP calculation</u>. The price of the Index Future's last traded contract is captured at every 1-minute interval between 9:35 a.m. and 3:55 p.m. The Index Future's trading activity is measured against the underlying index value at intervals of 1 minute throughout the day. The implied basis is calculated taking the difference between the underlying index and the price of the Future contract at each minute. At 4:00 p.m., the system calculates the average of each minute's implied basis obtained throughout the day (TWAP);
- (ii) <u>TWAP conditions</u>. The following trading data conditions must be present for the TWAP to be calculated: (i) a trade must be registered on at least 50% of all minute intervals throughout the period the data is captured, (ii) there must be a minimum of one data point present every 30 minutes throughout the period the data is captured, (iii) the TSX feed must be available and its data captured between 3:00 p.m. and 3:55 p.m.;
- (iii) <u>BTC daily mid-market quotes calculation</u>. In order to obtain BTC daily mid-market quotes, the Bourse captures all bid-ask quotes posted throughout the day at every 1-minute interval. At 4:00 p.m., the system calculates the mid-market quote average for the day;

(iv) <u>Month-end Settlement Price</u>. The month-end Settlement Price is determined by weighting the Index Future implied average basis (TWAP) and the BTC mid-market average basis. The weight factor is periodically reviewed according to the instrument's trading volume during the previous month and the weighting percentage is dependent on the BTC monthly volume crossing a pre-established threshold range.

### Tier 2

Should the TWAP conditions mentioned above not be met for the calculation of the month-end Settlement Price, the Bourse shall calculate the month-end Settlement Price using the Procedures outlined in this Appendix 6E-4.2 for the calculation of the daily Settlement Price.

2020.01.30, 2021.06.21

### Appendix 6E-4.3 GOVERNMENT OF CANADA BOND FUTURES CONTRACTS

- (a) <u>Main Procedure</u>. The Settlement Price shall be the weighted average of all Trades during the closing range. The closing range is defined as the last minute of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, for all contract months.
  - (i) <u>Booked orders</u>. If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the Settlement Price obtained from the weighted average. This order must have been posted for 20 seconds or longer prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and its size must be for 10 contracts or more.
  - (ii) <u>Last Trades</u>. If there are no Trades in the last minute of trading, then the last Trade will be taken into account while still respecting posted bids and offers in the market.
- (b) <u>First Ancillary Procedure.</u> When two contract months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.
  - (i) The front month must be settled first (the establishment of the front month is based on the month with the greatest Open Interest).
  - (ii) The spread between the two contract months must be settled next by taking into account the last minute average trading price prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and by examining the Trades executed during the previous 10 minutes.

- (iii) The Settlement Price for the back month or far month is obtained by the difference between the front month Settlement Price and the value of the spread.
- (c) <u>Second Ancillary Procedure</u>. In the absence of the items required to apply the main procedure in paragraph (a) and the ancillary procedure in paragraph (b), the following ancillary procedure will apply.
  - Market Supervisors will post a Settlement Price that will reflect the same differential that was applied on the previous business day. The Settlement Price will be adjusted accordingly to respect that contract's previous Settlement Price.
- (d) <u>Third Ancillary Procedure.</u> In the absence of the items required to apply the main procedure in paragraph (a) and the ancillary procedures in paragraph (b) and (c), the following ancillary procedure will apply.
  - (i) In this situation, Market Supervisors will establish the Settlement Price based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

# Appendix 6E-4.4 OPTIONS ON THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS

(a) <u>Main Procedure.</u>

<u>Weighted average.</u> The Settlement Price shall be the weighted average of the prices traded in the closing range (last minute of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.

- (i) Last Trades.
  - (1) If no Trade occurs during the closing range, the Market Supervisors will consider Transactions executed during the last 30 minutes of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Also, to be considered, the bids and offers shall be for a minimum of 25 contracts and shall have been posted at least one minute before (and including) 3:00 p.m., or before (and including) 1:00 p.m. on early closing days, to be considered.
  - If no Trade occurs in the closing range (or in the last 30 minutes of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days), the Settlement Price shall be the theoretical price calculated by

the Bourse (as described in paragraph (b)). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.

- (b) <u>Ancillary procedure.</u> In the absence of the items required to apply the main procedure in paragraph (a), the following ancillary procedure will apply.
  - (i) The Settlement Price shall be determined by inserting the following parameters into a standard Option pricing model (Black & Scholes):
    - (1) <u>Price of the Underlying</u>. The Bourse will capture the Settlement Price of the underlying BAX Futures Contract. This will be the price of the underlying.
    - (2) <u>Interest rate.</u> The interest rate used will be the rate implied by the Settlement Price of the BAX Futures Contract nearest to expiration.
    - (3) <u>Volatility</u>: The Bourse will use the implied volatility (per contract month, for Puts and calls) obtained from the acting Market Maker. The same volatility will be applied for both Calls and Puts.
    - (4) The Exercise Price of the Options' series and the time to expiration are the other parameters that will be inserted into the model.
  - (ii) In determining the closing price, the Bourse shall take into account the information provided by the posted strategy, for example; if the SEP 9200 straddle is 98 bid, the total of the closing prices of these two series should not be inferior to 98.

#### Appendix 6E-4.5 ONE-MONTH CORRA FUTURES CONTRACTS (COA)

The daily Settlement Price procedure for the One-Month CORRA Futures contract (COA) is executed by a fully automated pricing algorithm which utilizes the parameters described in paragraphs (b) and (c) and of Appendix 6D-4.5 to ensure accuracy in the process.

- (a) <u>Definitions</u>:
  - (i) "Regular order" means Orders routed by Approved Participants to the Bourse's Trading System.
  - (ii) "Implied order" means orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the Electronic Trading System.
  - (iii) "Minimum Threshold" means the applicable threshold for COA will be:
    - (1) 25 contracts for all contracts.

- (b) <u>Algorithm Utilized for the Determination of the Daily Settlement Price of the</u> <u>Front Contract Month (nearest expiry).</u>
  - (i) The automated daily Settlement Price algorithm will determine the Settlement Price of the front contract month according to the following priorities: first, it will use the weighted average price of cumulated Trades that meet the Minimum Threshold, during the last three minute prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, on that contract month; if no such average price is available, it will then use the weighted average price of cumulated Trades for a total equal to the Minimum Threshold on that contract month for a period not exceeding the last 30 minutes prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Trades resulting from both regular and implied orders will be used in the process. If no such average price is yet available, then the least variation between the bid or offer price that is not as a result of implied orders and the previous day Settlement Price will be used.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
  - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.
- (c) <u>Procedure For The Determination Of The Daily Settlement Price Of The Remaining</u> <u>COA Contract Months</u>.
  - (i) Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the Settlement Prices for all other COA contract months sequentially. The daily Settlement Prices of all other COA contract months will be based first on the last three minute outright market (resulting from regular and implied orders) prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid or offer for qualified booked orders.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
  - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts.
- (e) <u>Ancillary Procedure</u>. In the absence of any required items to apply the aforementioned procedure, Market Supervisors will establish the Settlement Price

based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

#### 2020.06.12

#### Appendix 6E-4.6 THREE-MONTH CORRA FUTURES CONTRACTS (CRA)

The daily Settlement Price procedure for the Three-Month CORRA Futures contract (CRA) is executed by a fully automated pricing algorithm which utilizes the parameters described in paragraphs (b) and (c) of Appendix 6D-4.6 to ensure accuracy in the process.

- (a) <u>Definitions</u>:
  - (i) "Regular order" means Orders routed by Approved Participants to the Bourse's Trading System.
  - (ii) "Implied order" means orders generated by the implied pricing algorithm (using regular orders) and registered in the order book by the Electronic Trading System.
  - (iii) "Minimum Threshold" means the applicable threshold for CRA is set at 25 contracts for quarterly contract months 1 to 12.
  - (b) <u>Algorithm Utilized for the Determination of the Daily Settlement Price of the</u> <u>Front Quarterly Contract Month (nearest expiry)</u>.
    - (i) The automated daily Settlement Price algorithm will determine the Settlement Price of the front quarterly contract month according to the following priorities: first, it will use the weighted average price of cumulated Trades that meet the Minimum Threshold, during the last three minute prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, on that contract month; if no such average price is available, it will then use the weighted average price of cumulated Trades for a total equal to the Minimum Threshold on that contract month for a period not exceeding the last 30 minutes prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Trades resulting from both regular and implied orders will be used in the process. If no such average price is yet available, then the least variation between the bid or offer price that is not as a result of implied orders and the previous day Settlement Price will be used.
    - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
    - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will

be weighted at 25% relative to the orders and volumes on individual contracts.

- (c) <u>Procedure For The Determination Of The Daily Settlement Price Of The Remaining CRA Contract Months</u>.
  - (i) Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the Settlement Prices for all other CRA contract months sequentially. The daily Settlement Prices of all other CRA contract months will be based first on the last three minute outright market (resulting from regular and implied orders) prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days, and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid or offer for qualified booked orders.
  - (ii) The Settlement Price must be within the bid/offer price of the individual contract provided that the bid or offer meets the Minimum Threshold of volumes required within the specified timeframe.
  - (iii) All volumes and orders on a spread will be weighted at 50% relative to the orders and volumes on individual contracts, whereas a butterfly spread will be weighted at 25% relative to the orders and volumes on individual contracts. This paragraph does not apply to the first contract settled.
- (d) <u>Ancillary Procedure</u>. In the absence of any required items to apply the aforementioned procedure, Market Supervisors will establish the Settlement Price based on available market information. They may also disregard any event (Trade, bid or offer) which occurs close to 3:00 p.m., or close to 1:00 p.m. on early closing days, and which is not compatible with a given Settlement Price. In this situation, Market Supervisors will keep a record of the criteria used to establish the Settlement Price.

#### 2020.06.12

### Appendix 6E-4.7 CANADIAN SHARE FUTURES CONTRACTS

(a) <u>Front Month:</u> The front quarterly contract month is the one, among the first two quarterly contract months, that has the largest Open Interest and the required market information. In the absence of both these criteria together, then the front quarterly contract month shall be determined by a Market Supervisor based on available market information. All the subsequent expiries are considered Back Months.

Tier 1

(i) The Settlement Price shall be the weighted average of all Trades during the calculation period, which ranges from 3:59 p.m. to 4:00 p.m. ET ("the calculation period"), using a minimum quantity of 10 Contracts. If there is

an unfilled order ("booked order") with a higher bid or lower offer in the front month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more. If there are no Trades nor booked orders in the calculation period, then (ii) the last Trade before the calculation period will determine the Settlement Price only if the last Trade is at or within the sustained bid and offer at settlement time. (iii) If the last Trade is not at or within the sustained market bid and offer, then the front month settles to the midpoint of the sustained bid and offer. Tier 2 If there are no Trades nor quotes during the trading session, the weighted average of all basis trade on close transactions (BTC) is applied to the closing price of the underlying asset and this price becomes the settlement price of the instrument. Tier 3 In absence of the conditions necessary to fulfill the front month Tiers 1-2, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.

(b) Back Months

- (i) The Settlement Price shall be the weighted average of all Trades, including spread strategies, during the calculation period (minimum quantity 10 contracts). If there is an unfilled order ("booked order") with a higher bid or lower offer in the back month, this bid or offer will override the Settlement Price obtained from the weighted average. A booked order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.
- (ii) If there are no Trades nor booked orders in the calculation period, then the last Trade before the calculation period will determine the Settlement Price only if the last Trade is at or within the sustained bid and offer at settlement time.
- (iii) If the last Trade is not at or within the sustained market bid and offer, then the back month settles to the midpoint of the sustained bid and offer.

Tier 2	
	If there are no Trades in the calculation period, the weighted average of all basis Trade on close (BTC) transactions is applied to the closing price of the underlying asset and this price becomes the settlement price of the instrument.
Tier 3	
	In absence of the conditions necessary to fulfill the back month Tiers 1-2, Market Supervisors will establish the Settlement Price based on available market information and/or a theoretical model. They may also disregard any event (Trade, bid or offer) which occurs near the end of the Trading Day and which is not compatible with a given Settlement Price. In this situation, the Market Operations Department will keep a record of the criteria used to establish the Settlement Price.
Tier 4	
	If no weighted average price can be determined using tiers 1, 2 or 3, the Settlement Price will be the previous day's Settlement Price (or a price that represents the same net change of the prior expiry) adjusted to the applicable qualifying closing bid or offer.

2021.06.21

# Appendix 6E-4.8 OPTIONS ON GOVERNMENT OF CANADA BOND FUTURES CONTRACTS

(a) <u>Main Procedure</u>.

<u>Weighted average</u>. The Settlement Price shall be the weighted average of the prices traded in the closing range (last minute of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.

#### (i) <u>Last Trades</u>.

(1) If no Trade occurs during the closing range, the Market Supervisors will consider Transactions executed during the last 30 minutes of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days. Also, to be considered, the bids and offers shall be for a minimum of 25 contracts and shall have been posted at least one minute before (and including) 3:00 p.m., or before (and including) 1:00 p.m. on early closing days, to be considered.

(2) If no Trade occurs in the closing range (or in the last 30 minutes of trading prior to (and including) 3:00 p.m., or prior to (and including) 1:00 p.m. on early closing days), the Settlement Price shall be the theoretical price calculated by the Bourse (as described in paragraph (b)). If there is, at the close, a higher bid or lower offer than the Settlement Price so obtained, that bid or offer shall be the Settlement Price.

(b) <u>Ancillary procedure</u>. In the absence of the items required to apply the main procedure in paragraph (a), the following ancillary procedure will apply.

(i) The Settlement Price shall be determined by inserting the following parameters into a standard Option pricing model (Black & Scholes):

(1) <u>Price of the Underlying</u>. The Bourse will capture the Settlement Price of the Underlying Government of Canada Bond Futures Contract. This will be the price of the underlying.

(2) <u>Interest rate</u>. The interest rate used will be a rate deemed appropriate for the product and it's expiry date.

(3) <u>Volatility</u>: The Bourse will use the implied volatility (per contract month, for Puts and calls) obtained from relevant market sources and deemed appropriate for the product. The same volatility will be applied for both Calls and Puts.

(4) The Exercise Price of the Options' series and the time to expiration are the other parameters that will be inserted into the model.

(ii) In determining the closing price, the Bourse shall take into account the information provided by the posted strategy.

2021.05.28

[...]

#### Article 6.500 Reports of Accumulated Positions

[...]

(i) The reporting thresholds established by the Bourse are as follows:

[...]

- (ii) For Futures Contracts and the related Options on Futures Contracts:
  - 300 contracts, in the case of Futures Contracts and Options on Futures Contracts on Three-Month Canadian Bankers' Acceptance Futures, by aggregating positions on Options on Futures Contracts and positions in the underlying Futures Contract. In this case, one Options contract is equal to one Futures Contract;

[...]