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CIRCULAR December 5, 2008

# **REQUEST FOR COMMENTS**

# MODIFICATIONS TO THE DAILY SETTLEMENT PRICE PROCEDURES APPLICABLE TO THE THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACT (BAX)

The Rules and Policies Committee of Bourse de Montréal Inc. (the Bourse) approved modifications to the *Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts* (Procedures) applicable to the Three-Month Canadian Bankers' Acceptance Futures contract (BAX). The modifications made to the Daily Settlement Price Procedures for the BAX pertains to the minimum number of contracts traded during the last three (3) minutes or, as the case may be, during the last thirty (30) minutes of the trading session that is required when determining the daily settlement prices for all BAX contract months. Previously, the minimum traded volume threshold required for that purpose was at least 100 contracts. This number has been reduced to at least 50 contracts. The Bourse has implemented these modifications as of December 3, 2008.

The Bourse invoked the emergency measure outlined in section 6 of the *Procédure d'examen et d'approbation des règles de Bourse de Montréal Inc. par l'Autorité des marchés financiers* (the Protocol) for the immediate implementation of these modifications. Following their immediate implementation, these amendments are transmitted to the Autorité for approval and to the Ontario Securities Commission for information.

Comments on the implementation of the amendments to the Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts for the BAX must be submitted within 30 days following the date of publication of the present notice in the bulletin of the Autorité. Please submit your comments to:

Ms. Joëlle Saint-Arnault Vice-President, Legal Affairs and Secretary Bourse de Montréal Inc. Tour de la Bourse P.O. Box 61, 800 Victoria Square Montréal, Quebec H4Z 1A9 E-mail: legal@m-x.ca

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A copy of these comments shall also be forwarded to the Autorité to:

Ms. Anne-Marie Beaudoin
Director – Secretariat of L'Autorité
Autorité des marchés financiers
800 Victoria Square, 22<sup>nd</sup> Floor
P.O. Box 246, Tour de la Bourse
Montréal (Quebec) H4Z 1G3

E-mail: consultation-en-cours@lautorite.qc.ca

# **Appendices**

For your information, you will find in appendices an analysis document of the procedures amendments as well as the amended procedures.

# **Process for Changes to the Rules**

Bourse de Montréal Inc. is authorized to carry on business as an exchange and is recognized as a self-regulatory organization (SRO) by the Autorité des marchés financiers (the Autorité). The Board of Directors of the Bourse has delegated to the Rules and Policies Committee of the Bourse its powers to approve and amend its Rules. The Rules of the Bourse are submitted to the Autorité according to the *Procédure d'examen et d'approbation des règles de Bourse de Montréal Inc. par l'Autorité des marchés financiers*.

In its SRO capacity, the Bourse assumes market regulation and supervision responsibilities of its approved participants. The responsibility for regulating the market and the approved participants of the Bourse comes under the Regulatory Division of the Bourse (the Division). The Division carries on its activities as a distinct business unit separate from the other activities of the Bourse.

The Division is under the authority of a Special Committee appointed by the Board of Directors of the Bourse. The Special Committee is empowered to recommend to the Board of Directors the approval or amendment of some aspects of the Rules of the Bourse governing approved participants, among which, the Rules relating to margin and capital requirements. The Board of Directors has delegated to the Rules and Policies Committee of the Bourse its powers to approve or amend these Rules with recommendation from the Special Committee. These changes are submitted to the Autorité for approval.



# DAILY SETTLEMENT PRICE PROCEDURES FOR THE THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (BAX)

AMENDMENT OF THE REQUIRED TRADED VOLUME THRESHOLD IN THE DAILY SETTLEMENT PRICE PROCEDURES FOR FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS

# I. SUMMARY

#### Introduction

The recent market context has resulted in diminished overall volumes at the Bourse, as well as in the underlying cash markets, particularly in the fixed income products but more specifically in the Three-Month Canadian Bankers' Acceptance Futures contract (BAX). The purpose of the modification that is proposed in this document is to address the urgency to adjust the traded volume threshold used for the determination of daily settlement prices of the BAX futures contracts so that such prices reflect more accurately the current market conditions. The Bourse has implemented this modification on December 3, 2008.

# II. **DETAILED ANALYSIS**

#### A – Rationale

# Current daily settlement price procedures in the BAX

Prior to the implementation of the modification on December 3, 2008, the Bourse's Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts (the Procedures) for the BAX stipulated the use of an average price\* of transactions executed during the last 3 minutes of trading at a minimum of 100 contracts. If such average price was not available, the average price was determined on the basis of the transactions executed during the last 30 minutes and represented a minimum volume of 100 contracts. If no such average price was available, then the least variation between the bid or offer price and previous day settlement price was used. The objective of the aforementioned Procedures is to ensure a fair and orderly market close and valid daily settlement prices for participants to mark-to-market their positions for margin purposes.

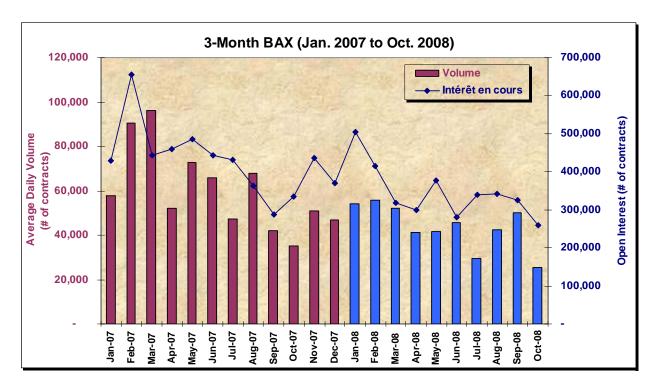
\* There was an omission in the Procedures: in two places, the expression "average price" should have read "weighted average price". Throughout the rest of the Procedures in the sections pertaining to the other derivatives, settlement price is defined as the weighted average of all trades.

In an active and less volatile market, the previously established parameters in the Procedures provided an accurate daily settlement price for the BAX. However, in a more volatile and less liquid market as is currently the case, these parameters needed to be temporarily readjusted.

# Market context and analysis

The current volatile market context filled with uncertainty such as counterparty risks has had a negative impact on the activity of our market participants who, in the recent months compared to last year, have reduced their trading activity in the fixed income products listed on the Bourse and more particularly in the BAX.

The following chart illustrates the yearly and more recent decline in market activity for the BAX.



As is illustrated in the above diagram, during the past 2 years, the BAX volumes and open interest have decreased. As a result of the diminished trading activity and liquidity (particularly near the close), the average bid-ask spread has widened and the posted size of the bid and ask of the BAX has decreased, adding difficulty to the process of establishing the end of day settlement prices.

These observations confirm the necessity to propose a reduction of the traded volume threshold used to determine the daily price settlement for the BAX market, which was established at "at least 100 contracts", in order to be more consistent with the current dynamics of the market.

# Market impact

The reduced liquidity had an impact on the determination of the Daily Settlement Price Procedures as the required traded volume threshold was too high given the current market liquidity available. Current daily settlement prices reflected less precisely market conditions which resulted in much less accurate daily settlement prices, and thus negatively impacted market participants active in the BAX market.

# Reduced trading activity

More specifically, this situation was affecting market participants' trading activity and the overall valuation of their profits and losses. If a market participant wanted to initiate a trade in the farther expiries of the BAX with lesser liquidity, particularly the "reds" (5<sup>th</sup> to 8<sup>th</sup> quarterly expiry contract months) and "greens" (9<sup>th</sup> to 12<sup>th</sup> quarterly expiry contract months) or a strategy, he faced an increased risk that the initiated less liquid contract settled based on the previous day's settlement price. Such pricing, which has occurred recently, was not necessarily an accurate indication of the current market value of the BAX. In that context, and in order to avoid less accurate profit and loss valuations, the market participants have consistently reduced their trading activities in the BAX.

# Less accurate mark-to-market valuation

Under these circumstances, a market participant, who had an exposure in the farther expiries of the BAX with lesser liquidity and thus with less accurate daily settlement prices, saw his margin calculation deviate from a fair mark-to-market value. This argument clearly indicates that the parameters of the Procedures, that existed prior to the amendment's implementation on December 3, 2008, hindered our market participants' trading activity in the domestic short-term fixed income exchange traded derivatives marketplace and thus maintained the momentum of decreasing liquidity in the BAX.

# Liquidity in the financial markets

Also, in the context of the various central banks in the world trying to stimulate liquidity in the financial markets, it was illogical that the Bourse would leave in place an artificial obstacle which hindered market participants' trading activities. The Bourse needs to be able to adjust this type of operational parameters to be able to continue providing an accurate and fair mark-to-market valuation for the market and its participants' needs.

# Urgency

Not having acted immediately could have had important repercussions in the market, thus the urgency to correct the situation. As the daily settlement price parameters are directly interrelated with liquidity, it was unrealistic to wait for the market conditions to re-establish themselves to more normal levels at this time. As the liquidity problem is felt worldwide resulting from the current financial turmoil with predictions of worsening conditions, the Bourse had to act rapidly to resolve this less accurate end-of-day pricing problem in order to maintain market participant confidence and integrity of the BAX.

# **B** – Proposed modifications

The Bourse proposed that, for the benefit of the entire marketplace, the current traded volume threshold that is specified in the *Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts*, which is necessary for the daily settlement price process of the BAX, be modified without delay. The Bourse implemented the proposed modification on December 3, 2008.

The proposed modification is to lower the current required traded volume threshold from a minimum of 100 contracts to a minimum of 50 contracts for the BAX contract (as indicated in the attached modified Procedures). This modification will be a temporary measure and the threshold will be re-adjusted to a higher level when the BAX market, along with other global short term interest rate futures, recover from the current financial crisis. Any such readjustment deemed appropriate by the Bourse will be communicated beforehand to market participants.

Also, to correct an omission in the text of the Procedures, the Bourse proposed to add the word "weighted" in two places to harmonise the section with the rest of the Procedures and to correctly reflect the actual practice.

# III. OBJECTIVES OF THE PROPOSED MODIFICATIONS AND CONSEQUENCES

# A – Objectives

The Bourse considers the matter to be of urgent and material importance as the traded volume threshold specified in the Procedures, that existed prior to the amendment's implementation on December 3, 2008, posed certain risks in terms of threatened market liquidity for the market participants and the overall marketplace, as well as diminished accuracy of market participants' profits and losses valuations. The situation has been observed particularly in the last few months, notably in the last month. As a result, the Bourse invoked the extraordinary emergency measure as set out in article 6 of the "Procédure d'examen et d'approbation des règles de Bourse de Montréal Inc. par l'Autorité des marchés financiers", annexed to the decision No. 2008-PDG-0102, dated April 10, 2008 (the Protocol) to implement on December 3, 2008 the proposed modification to the Procedures for the BAX by modifying the established traded volume threshold of at least 100 contracts required to calculate the daily settlement price to at least 50 contracts.

The overall objective of this request is for the Bourse to continue offering to market participants a fairly valued BAX marketplace, given the current market conditions.

# **B** – Consequences of the proposed modifications

The proposed modifications will allow for a more precise end-of-day pricing which will be reflected in more accurately valued BAX contracts. This will have a positive impact in terms of accuracy of market valuation and of market participants' determination of profits and losses.

#### C – Other alternatives considered

No other alternatives have been considered and the status quo is not an acceptable option under the current market circumstances of considerably diminishing liquidity.

# D – Impact of the proposed modifications on the systems

The proposed modifications will have no impact on the systems of the Bourse or CDCC.

# E – Financial markets' interest

The Bourse had received increasing requests from market participants in this regard. The modifications will result in an improved quality of the BAX market, and of the domestic derivatives marketplace as a whole, as these exchange-traded derivative instruments also serve customarily as the basis valuation for OTC derivatives, such as swaps and forward rate agreements.

# F - Public interest

It is in the public's interest to maintain a liquid, accurate, fairly valued and priced pool of instruments as part of the domestic capital markets. In order to achieve that objective, the Bourse requested urgent implementation of this modification to the Daily Settlement Procedures of the BAX.

# IV. PROCESSUS

The first step of the approval process for the amendments to the Procedures that are proposed in this analysis has consisted in having them approved by the Rules and Policies Committee of the Bourse. Following such approval, the Bourse has implemented these modifications as of the December 3, 2008, Circular No. 232-2008. The Bourse invoked the emergency measure outlined in section 6 of the Protocol for the immediate implementation of these modifications. Following their immediate implementation, these amendments are transmitted to the Autorité des marchés financiers for approval and to the Ontario Securities Commission for information.



# DAILY SETTLEMENT PRICE PROCEDURES FOR FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS

#### 1 RULE

Article 6390 of the Rules of Bourse de Montréal Inc. (the Bourse) stipulates that:

"The daily settlement price or the closing quotation are determined according to the procedures established by the Bourse for each derivative instrument."

#### 2 SUMMARY

# 2.1 FUTURES CONTRACT AND OPTIONS ON FUTURES CONTRACT DAILY SETTLEMENT PRICES

- These markets use an average price during the last minutes of trading to establish a single settlement price. These calculations are executed manually by market officials or, as the case may be, by an automated algorithm using pre-established guidelines for each product.
- The prices at which block trades, Exchange for Physical (EFP), Exchange for Risk (EFR) or Substitution transactions are arranged shall not be used to establish the open, high, low or daily settlement price.

#### 3 OBJECTIVES

The objectives of establishing daily settlement prices are:

- Ensure a fair and orderly market close and pricing for approved participants so that they can properly mark-to-market their positions for margin calculations and back office processing, including the clearing and settlement of their transactions;
- Ensure that the Canadian Derivatives Clearing Corporation (CDCC) and all market participants are informed of the settlement prices.

# 4 DESCRIPTION

# 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 sections 4.1.1, 4.1.2 and 4.1.3 to ensure accuracy in the process.

# 4.1.1 IDENTIFICATION OF THE FRONT QUARTERLY CONTRACT MONTH

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.

# 4.1.2 ALGORITHM UTILIZED FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE FRONT QUARTERLY CONTRACT MONTH

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 last three minute weighted average price of cumulated trades amounting to at least 50 contracts on that contract month; if no such average price is available, it will then use the last 30 minute weighted average price of cumulated trades amounting to at least 50 contracts on that contract month and if no such average price is yet available, then the least variation between the bid or offer price and the previous day settlement price will be used.

Once the daily settlement price for the front quarterly contract month has been established, it will be verified against the booked orders and if there is a better outright bid or offer, the latter will take precedence over the daily settlement price calculated as described in the paragraph above.

# 4.1.3 PROCEDURE FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE REMAINING BAX CONTRACT MONTHS

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 and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid and offer for booked orders.

# 4.2 S&P CANADA 60 INDEX FUTURES CONTRACTS (SXF)

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 the trading session for all contract months.

#### 4.2.1 MAIN PROCEDURE

#### Booked Orders

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. The 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.

#### • Last Trade

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.

#### 4.2.2 FIRST ANCILLARY PROCEDURE

When two contract months and the spread are trading (quarterly calendar roll), the ancillary procedure of this section will apply.

- The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- The spread between the two contract months must be settled next by taking into account the last minute average trading price and by examining the trades executed during the previous 10 minutes.
- 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.

#### 4.2.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.2.1 and the ancillary procedure in 4.2.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous day settlement. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

#### 4.2.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.2.1 and the ancillary procedures in 4.2.2 and in 4.2.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

# 4.3 TEN-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACTS (CGB)

#### 4.3.1 MAIN PROCEDURE

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 the trading session for all contract months.

#### • Booked Orders

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 the close and its size must be for 10 contracts or more.

#### • Last Trade

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.

#### 4.3.2 FIRST ANCILLARY PROCEDURE

When two contracts months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.

- The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- The spread between the two contract months must be settled next by taking into account the last minute average trading price and by examining the trades executed during the previous 10 minutes.
- 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.

# 4.3.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.3.1 and the ancillary procedure in 4.3.2, the following ancillary procedure will apply.

Market officials 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.

#### 4.3.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.3.1 and the ancillary procedures in 4.3.2 and 4.3.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

# 4.4 THIRTY-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACTS (LGB)

#### 4.4.1 MAIN PROCEDURE

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 the trading session for all contract months.

#### • Booked Orders

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 the close and its size must be for 10 contracts or more.

#### • Last Trade

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.

# 4.4.2 FIRST ANCILLARY PROCEDURE

When two contracts months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.

- The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- The spread between the two contract months must be settled next by taking into account the last minute average trading price and by examining the trades executed during the previous 10 minutes.
- 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.

# 4.4.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.4.1 and the ancillary procedure in 4.4.2, the following ancillary procedure will apply.

Market officials 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.

# 4.4.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.4.1 and the ancillary procedures in 4.4.2 and 4.4.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

# 4.5 OPTIONS ON THREE - MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (OBX)

# 4.5.1 MAIN PROCEDURE

#### 4.5.1.1 Weighted Average

The settlement price shall be the weighted average of the prices traded in the closing range (last minute of trading). 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.

#### 4.5.1.2 *Last Trades*

If no trade occurs during the closing range, the market officials will consider transactions executed during the last 30 minutes of trading. 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 the close to be considered.

If no trade occurs in the closing range (or in the last 30 minutes of trading), the settlement price shall be the theoretical price calculated by the Bourse (as described in section 4.5.2). 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.

#### 4.5.2 ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.5.1, the following ancillary procedure will apply.

The settlement price shall be determined by inserting the following parameters into a standard option pricing model (Black & Scholes):

# Price of the underlying:

o The Bourse will capture the settlement price of the underlying BAX futures contract. This will be the price of the underlying.

#### Interest rate:

O The interest rate used will be the rate implied by the settlement price of the BAX futures contract nearest to expiration.

#### Volatility:

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.

The strike price of the options' series and the time to expiration are the other parameters that will be inserted into the model.

In determining the closing price, the Bourse shall take into account the information provided by the spread market, 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.

#### 4.6 30-DAY OVERNIGHT REPO RATE FUTURES CONTRACTS (ONX)

# 4.6.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last three minutes of the trading session for all contract months.

#### 4.6.1.1 Weighted Average of closing range trades

The weighted average will be derived from trades that occurred in the outright months during the closing range. The total volume traded in each outright month must be for 25 or more contracts.

# 4.6.1.2 Booked Orders

If there is an unfilled order with a higher bid price or lower offer price in a month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been

posted for 15 seconds or longer prior to the close and its size must be for a total of 25 or more contracts in each of the months.

# 4.6.1.3 Remaining Balances of Booked Orders Partially Executed at the close

In the case of a booked order as stipulated in paragraph 4.6.1.2 above, which would be only partially executed, the trades during the closing period as well as the remaining balance of booked orders will be considered to establish the settlement price.

Example 1: If there is a booked order for 25 ONX contracts at 97.92 and 15 of those contracts are executed, the 10 remaining contracts, if they are still present on the market at the same price, will be considered to establish the required minimum of 25 contracts.

Example 2: If there is a trade of 15 ONX contracts during the closing period at 97.92 and there is a booked order bid for 10 ONX contracts at 97.91 (respecting the required time limit), the bid will be considered in addition to the trades in the closing period to establish a settlement price.

# 4.6.1.4 Strips and Spreads

All trades and unfilled booked orders for strips and spreads related to any expiry months will be ignored.

#### 4.6.2 FIRST ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1, the following ancillary procedure will apply.

# 4.6.2.1 Weighted Average of trades on strategies

The settlement price shall be the weighted average of the trades on the strategies traded during the last five minutes provided the volume for the strategy taken into account was of 25 or more contracts.

#### 4.6.2.2 Booked Orders

If there is an unfilled order with a higher bid or lower offer, this bid or offer will override the settlement obtained from the weighted average described in 4.6.2.1. It has to have been posted for three minutes or longer prior to the close and the size must be for 25 or more contracts.

# 4.6.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1 and the ancillary procedure in 4.6.2, the following ancillary procedure will apply.

# 4.6.3.1 Differential with the previous contract month's settlement price

The settlement price will be defined by a price that reflects an appropriate differential with the settlement price of the previous contract month always starting with the contract month closest to expiry.

# 4.6.3.2 Conflicts between spreads

If two spreads are in conflict, the calendar spread closest to expiry will have priority.

#### 4.6.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1 and the ancillary procedures in 4.6.2 and 4.6.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on the available market information. They may also disregard any event (trade, bid or offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

# 4.7 TWO-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACT (CGZ)

# 4.7.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last three minutes of the trading session for all contracts months.

#### • Booked Orders

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 30 seconds or longer prior to the close and its size must be for 20 contracts or more.

#### • Remaining Balances of Booked Orders

In the case of a booked order as stipulated in the above paragraph which would only be partially executed during the closing period and if no other trade has occurred during the closing period, the remaining unexecuted balance of this order will be considered to establish the closing price.

In the absence of an average price during the closing range, the reference period will be extended to the last 10 minutes of the trading session.

# 4.7.2 FIRST ANCILLARY PROCEDURE

When two contracts months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.

The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).

The spread between the two contracts months must be settled next by taking into account the last three minutes average trading price and by examining the trades executed during the previous 10 minutes.

#### • Booked Orders

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 30 seconds or longer prior to the close and its size must be for 20 contracts or more.

# • Remaining Balances of Booked Orders

In the case of a booked order as stipulated in the above paragraph which would only be partially executed during the closing period and if no other trade has occurred during the closing period, the remaining unexecuted balance of this order will be considered to establish the closing price.

The settlement price for the back month is obtained by the difference between the front month settlement price and the value of the spread.

#### 4.7.3 SECOND ANCILLARY PROCEDURE

In the absence of any trade during the last 10 minutes of the trading session, the following ancillary procedure will apply.

The settlement price for the front month will be the median of the market posted at the closing of the market. Bids and offers have to have been posted for 30 seconds or longer prior to the close and the size of each such bids and offers must be for 20 contracts or more.

The value of the spread will be either the settlement price of the previous trading day or the weighted average of all trades during the closing range as defined above in the first ancillary procedure.

The settlement price for the back month is obtained by the difference between the front month settlement price and the value of the spread.

#### 4.7.4 THIRD ANCILLARY PROCEDURE

In the absence of the elements required to apply the previous procedures, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occur near the end of the regular trading session and which is not compatible with a given settlement price.

Usually, the settlement price for the back month is always adjusted depending on the settlement prices obtained for the front month and the spread.

# 4.8 FUTURES CONTRACT ON CARBON DIOXIDE EQUIVALENT (CO2e) UNITS

#### 4.8.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all traded prices during the closing range. The closing range is defined as the last fifteen minutes of the trading session for all contract expiries.

#### • Booked Orders

If there is an unfilled order with a higher bid or lower offer in a particular contract expiry, 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 the close and its size must be for 10 contracts or more.

# • Last Trade

If there are no trades in the last fifteen minutes of trading, then the last trade will be taken into account while still respecting posted bids and offers in the market.

#### 4.8.2 FIRST ANCILLARY PROCEDURE

When two contracts expiries and the spread are trading (calendar roll), the following ancillary procedure will apply.

- The contract having the earliest expiry must be settled first.
- The spread between the two contracts must be settled next by taking into account the last fifteen minutes average trading price and by examining the trades executed during the previous 30 minutes.
- The settlement price for the far-dated contracts corresponds to the difference between the settlement price of the contract having the earliest expiry and the value of the spread.

# 4.8.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.8.1 and the ancillary procedure in 4.8.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous trading day. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

#### 4.8.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.8.1 and the ancillary procedures in 4.8.2 and 4.8.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (a trade, a bid or an offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.