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		MCeX

CIRCULAR February 5, 2009

REQUEST FOR COMMENTS

IMPLEMENTATION OF AN IMPLIED PRICING ALGORITHM (IPA) IN THE THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (BAX)

The Rules and Policies Committee of Bourse de Montréal Inc. (the Bourse) has approved modifications to Rule Six of the Bourse's Rules as well as corresponding amendments to the relevant procedures. These modifications will allow the implementation of the IPA in the BAX and BAX spreads. The Bourse intends to implement the IPA at the end of March 2009.

Comments on the proposed implementation must be submitted within 30 days following the date of publication of the present notice, no later than March 6, 2009. 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

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, 22nd Floor P.O. Box 246, Tour de la Bourse Montréal (Quebec) H4Z 1G3 E-mail: consultation-en-cours@lautorite.qc.ca

Circular no.: 021-2009

Appendices

For your information, you will find in appendices an analysis document of the proposed implementation of the IPA, the proposed regulatory text as well as the amended procedures. The implementation date of the proposed IPA will be determined by the Bourse, in accordance with the self-certification process as established in the Derivatives Act (2008, c.24).

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 in accordance to the self-certification process as established in the Derivatives Act (2008, c.24).

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.



IMPLEMENTATION OF AN IMPLIED PRICING ALGORITHM IN THE THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (BAX)

AMENDMENTS TO ARTICLES 6303, 6381 AND 6383 TO 6385 AND ABROGATION OF ARTICLE 6382 OF RULE SIX OF BOURSE DE MONTRÉAL INC.

AND

AMENDMENTS TO THE PROCEDURES FOR THE CANCELLATION OF TRADES AS WELL AS THE DAILY SETTLEMENT PRICE PROCEDURES FOR FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS

Introduction

Presently, Bourse de Montréal Inc. (the Bourse) operates a marketplace with a central limit order book. All trades that are executed result solely from regular orders inputted by market participants and routed to the trading engine by approved participants. The purpose of the modifications proposed herein is to allow the implementation of an "implied pricing" algorithm within the SOLA trading engine for the benefit of the Three-Month Canadian Bankers' Acceptance Futures contracts (BAX) market. The Bourse intends to implement this algorithm and the related modifications to the Rules and Procedures of the Bourse at the end of the first quarter of 2009.

Definitions

For the purpose of this document when we refer to **market participants** or end users it means that all orders entered by them are **routed by approved participants to the SOLA trading engine**.

Below are definitions that are important for the purpose of this document.

Implied Pricing Algorithm (IPA): A tool within the SOLA trading engine that generates an implied order created from two individual outright regular orders that are available in the marketplace.

Regular orders: Outright orders entered through any given certified independent software vendor (ISV) or proprietary trading solution and routed by approved participants directly into the Bourse trading system.

Implied orders: Orders that are synthetically generated (derived) and registered in the order book by the trading engine using regular orders.

Implieds in: Occur when the IPA derives and generates implied orders/trades in strategies resulting from regular posted orders on individual instruments (legs). To create this type of order for a strategy, the regular orders of the individual legs to be used have to be on opposite sides. To generate an implied spread order, for example, the IPA will use the bid order on one leg and the offer order on the other leg.

Implieds out: Occur when the IPA derives and generates implied orders/trades in individual instruments (legs) resulting from regular posted orders on both a strategy and the other individual underlying leg composing the strategy.

Spread trade: is a horizontal mix transaction involving 2 expiry months of the same instrument. A spread is the price difference between those two individual contracts (expiry months). The spread can

trade as a single product in the spread market. To buy the spread between two contracts is to simultaneously buy the contract with the near expiry and sell the contract with the distant expiry. And vice versa in order to sell the spread.

Central limit order book (CLOB): Is a centralized database of limit orders.

Limit order: Is an order to buy a security at no more, or sell a security at no less, than a specific price.

PROPOSED REGULATORY AMENDMENTS

In order to allow the implementation of the IPA in the BAX and BAX spreads, the Bourse proposes to amend articles 6303, 6381 and 6383 to 6385 of Rule Six of the Bourse as well as the Procedures for the Cancellation of Trades (Cancellation Procedures) and the Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts (Daily Settlement Price Procedures). The Bourse also proposes to abrogate article 6382 which is irrelevant and outdated based on current practices.

II. DETAILED ANALYSIS

A – Rationale

The Bourse's current trading environment

At the moment, the only orders that are executable by the SOLA trading engine are the regular orders (as described in the Definitions section above). The recent slowdown in the financial markets has led to a drop in the liquidity of the BAX market. This translates into a smaller number of regular orders and wider bid/ask spreads. The price difference between two individual contracts and the corresponding spread market for these two contracts are directly related. The lack of regular orders and wider bid/ask spreads lead to price information in one market not being reflected in a directly related market of the same underlying instrument. This situation makes the market inefficient thus hindering its quality and can increase the risk of errors for approved participants.

Consequently the BAX market occasionally experiences situations whereby an implied spread market, resulting from regular orders of individual legs, is better priced through a regular order than in that given strategy. Such a situation creates a trading environment whereby orders are not executed at best prices available in the overall BAX market.

Let's take for example a regular order in the spread market to buy the March/June BAX spread at 3. Let's suppose that when combining individual regular orders in the March BAX (the offer side) and the June BAX (the bid side) the implied spread would result in a better offer than 3, offered at 2 for example. Thus, the approved participant bidding 3 in the spread could actually be buying the spread at a better price of 2 by transacting the individual legs as regular orders, i.e. buying the March contract and selling the June contract at a differential of 2. Based on this example, if the approved participant does not want to take the risk of working his spread through the individual contracts, he will have to wait for a counterparty to sell him the spread at 3 through the spread market.

The Bourse's trading environment with the IPA

In a market model that applies the IPA, the previous example would not have occurred. With an implied pricing algorithm, as long as there is a regular order posted in the spread (a 3 bid in the above example), the outright market on regular individual leg orders (March and June) will never be priced through this posted bid. In an implied pricing environment, the regular order in the spread would have traded at 3 (at

the most) before the occurrence of any improved implied market. The trading engine through the IPA would never allow a circumstance of a regular order to be posted at a worse price than an implied order. Instead, it would have "worked" the spread order for its buyer to get filled at the best market price with up to a maximum price of 3. One of the main characteristics of the IPA is that it achieves a more efficiently priced market, always seeking the best available price in the marketplace to fill all orders routed by approved participants.

The continued success of a market's growth is dependent on a market quality and liquidity which satisfies existing clients and attracts newcomers. As all international exchanges are competing to attract the same customers without boundaries, it is imperative for the Bourse to implement measures that are necessary to remain competitive especially in a more challenging market context.

Benchmarking

The following main international exchanges offering short term interest rate futures contracts comparable to the BAX contract operate under the implied pricing market model.

Exchange	Product	Implieds	Dissemination by exchange
CME	Eurodollars	Yes; on all strategies	Yes; of "implied in" and "implied out"
LIFFE	Euribor	Yes; on all strategies	Only of "implied out"
TFX (TIFFE)	Euroyen	Yes; on all strategies	N/A
SFE	90-Day Australian	Yes on all strategies	Yes of "implied in" and
	Futures		mpned out

According to estimates that the Bourse gathered, implied pricing on the CME accounted for about 30% of the volume in March 2008 in their short-term interest rate futures contract (Eurodollar). As per the external sources, the majority of this volume was supposedly generated by high volume traders, the equivalent of the Bourse's frequent traders.

A Summary Description of Implied Pricing

The Bourse is constantly deploying efforts to improve and enhance its products as well as market quality and integrity. As part of its market evolution strategy, the Bourse has planned an important multi-phase development initiative which will extend over a period of several years. The proposed implied pricing initiative for the BAX market, that is limited to two-leg strategies such as spreads, is the first phase (Phase 1) of the overall project.

Implied pricing results when the trading engine:

- Generates and registers in the central order book a "synthetic" (implied) order deriving from two existing regular orders.
- Works/applies synthetic (implied) orders in spreads and individual leg markets simultaneously eliminating the risk of double fills or a fill on only one leg.
- Executes transactions filling regular orders.

As defined above, an implied order is a synthetically derived order that is generated by the SOLA trading engine using regular order; this derived order is registered in the order book. Thus, it is a sequence of

events carried out automatically by the trading engine. This sequence of events will only occur when the required price levels of regular orders used to generate the implied order are available in the marketplace.

Main characteristics of the first proposed phase of implied pricing

- 1) Implied pricing will only affect the first level (best bid and offer) of the order book's market (the top of the book).
- 2) As part of the introductory deployment, implied pricing will only be implemented in the BAX market and only for two-leg strategies such as spreads.
- 3) Implied pricing will be developed for all protocols supported by the Bourse: Sail (SOLA® Access Information Language), FIX (Financial Information eXchange), FIXTT (Financial Information eXchange Trading Technologies) and Stamp (Security Trading Access Message Protocol).
- 4) Implied orders will not be disseminated pre-trade by the Bourse in Phase 1. Dissemination of implied orders at a later phase is anticipated to be facilitated by ISVs, proprietary front end solutions and data vendors.
- 5) Post-trade dissemination (through the HSVF High Speed Vendor Feed) will be supported by the Bourse and available for approved participants and data vendors whereby trade data of individual legs resulting from implied orders will be marked distinctively.
- 6) The price/time priority algorithm (FIFO) will be respected at all times within the context of the implied pricing market model whereby all regular orders will always have price/time priority over implied orders.
- 7) Both "implieds in" and "implieds out" (as described in the Definitions section above) will be implemented.
- 8) For end of day settlement purposes, only regular orders will be accounted for. However trades resulting from both regular and implied orders will be taken into account for required volume computation.
- 9) For trading purposes, each instrument will keep its current price fluctuation (as determined in the contract specifications): 0.005 basis point (\$12.50 CAN) for the nearest three listed BAX contract months (including serials) and 0.01 basis point (\$25.00) for all other remaining BAX contract months.
- 10) Erroneous trades involving transactions resulting from implied orders will be addressed according to the proposed modifications of the Cancellation Procedures.

Additional contingent required implementations

In addition to the above mentioned implied pricing characteristics, the following two complementary changes in the market structure will be implemented simultaneously to enhance the flexibility and quality of the Bourse's market.

1) "Real time" leg pricing algorithm (post-trade) in the BAX contract only: Currently when a strategy trades, the leg pricing algorithm is established by using the previous day's settlement price for the front month of the BAX strategy and then adjusting the price of the subsequent leg (by adding or subtracting the price of the strategy). This particular manner of pricing individual legs of a strategy is not reflective of real market conditions. With the implementation of the IPA, a new BAX leg pricing method will be implemented in order to establish more efficiently individual leg prices. The Bourse will use a leg pricing methodology based on real time available market prices.

This planned change of the leg pricing algorithm for strategies will only affect the BAX market. Despite the fact that implied pricing will not be deployed for BAX strategies other than spreads, this

new leg pricing algorithm will apply to all BAX strategies (with two legs or more; spreads, butterflies, etc.).

However, the spread trading ("roll") activity for all other products listed at the Bourse (ex: CGB, SXF, etc.) will maintain the current pricing algorithm: by using previous day's settlement price in the front month and deriving the price of the subsequent month adjusted based on the strategy's price (the differential).

As this pricing algorithm will be using BAX real time prices, this change will mainly result in more precise evaluation of approved participants' profit and loss (P&L) records. Individual leg prices of BAX strategies will thus be registered, and cleared, based on current market prices. This will mitigate portfolio P&L swings thus resulting in more efficient risk management for approved participants.

2) Post-trade display of individual legs (part of a strategy) at trading platform level: Currently, the end users are only able to view on their trading platform the strategy's post-trade details as a whole (such as a strategy's overall price) without being able to view the individual leg prices. Approved participants have to consult the post-trade solutions (TMS, clearing API or ATR) to view and gather the trade information (such as the price) of individual legs of a strategy. With the planned modification, as part of the implied pricing initiative, end users will be able to view on their front end trading platforms the trade details (prices) of individual legs of an executed strategy separately.

This change will apply to all instruments listed on the Bourse. This change will offer end users active in strategies, more precision, flexibility and ease of access to post trade information in terms of a strategy's individual legs' specific prices.

Implementation of the IPA - Market impact

There has been considerable market interest from both existing clients as well as from prospective ones to have implied pricing imbedded in the BAX market. This market improvement feature for the BAX contract has been greatly anticipated by approved participants and in the current market conditions (with reduced liquidity) is more needed than ever as it will contribute to improve BAX market liquidity and quality providing new trading opportunities.

Applying the IPA in the BAX market, in Phase 1, will result in the following main benefits:

- **Improved market quality (more efficient BAX market):** Market and pricing inefficiencies will be eliminated as a result of the new IPA. Automatically generated implied orders by the trading engine will tighten the actual bid/ask spread in the BAX market. The trading engine will always make the best possible market (price) available for trading. Thus, an end user wishing to trade at a given price may actually get filled at an improved price resulting from the implied orders.
- **Improved market depth and liquidity:** Pending regular orders on individual legs will create implied spread orders, and regular spread orders will be automatically "worked" by the trading engine resulting in additional implied orders in the individual legs market.
- **Increased traded volumes**: Having implied orders automatically accounted for by the trading engine will result in additional trading activity and thus increased traded volumes.
- **Transfer of spread trading risks (working/"legging" spreads through individual legs):** The fact, that the trading engine will automatically "work" implied orders (on behalf of end users) to

fill regular spread orders, will alleviate the execution risk associated with outright spread trading ("legging") for approved participants.

- Attracting new entrants into the BAX market: Certain "algorithmic trading firms" require implied pricing to be inherent in a marketplace as a pre-requisite to their entry in the market.
- **Improved end of day settlement prices:** Due to the elimination of market pricing inefficiencies, the resulting increase in trading activity will have a positive impact on the daily settlement price process which will better meet the requirements to establish end of day pricing, i.e. meeting required traded BAX threshold in the last three or 30 minutes as per the existing procedure.

The Bourse does not plan, in this first phase of implied pricing to disseminate the implied orders for individual legs or spreads in the central order book. It is intended for this feature to be facilitated by the ISVs, proprietary front end solutions and data vendors. Currently, most ISVs, proprietary front end solutions and data vendors. Currently, most ISVs, proprietary front end solutions and data vendors. Currently, most ISVs, proprietary front end solutions and data vendors already ensure the dissemination of implied pricing of various other global markets for the benefit of their clients. Dissemination of implied orders requires a considerable amount of bandwidth for an exchange. Some of the Bourse's peers such as the CME and the SFE disseminate both "implieds in" and "implieds out". LIFFE on the other hand only disseminates the "implieds out" without disseminating "implieds in" (thus displaying implied orders on individual contracts deriving from strategies without displaying implied orders on strategies deriving from individual contracts). The dissemination of implied pricing is already planned by the Bourse as part of its second phase of the overall implied pricing initiative.

B – **Proposed modifications**

Based on the aforementioned advantages of the proposed changes, the Bourse considers that it is for the benefit of the entire marketplace to implement the following modifications in its trading systems:

- 1) Implied pricing algorithm ("in" and "out") in the BAX instrument (limited to two-leg calendar spread strategies).
- 2) Post-trade "real time" leg pricing algorithm: limited to the BAX strategies only.
- 3) Post-trade display of individual legs (part of a strategy) trading parameters (price) at the trading platform level for all listed instruments.

The Bourse plans to implement the above proposed modifications on or around March 27, 2009.

III. SUMMARY OF THE PROPOSED AMENDEMENTS TO THE RULES AND PROCEDURES OF THE BOURSE

The Bourse proposes the following amendments of the Rules of the Bourse as referred to in the annexed Procedures for the Cancellation of Trades (Cancellation Procedures) and the Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts (Daily Settlement Price Procedures). The purpose of these modifications is to update pertinent articles of the Rules of the Bourse so that they accurately reflect the actual practices of the Bourse regarding trade cancellations, and more specifically to address erroneous transactions within an implied pricing market model context in the BAX.

A – Article 6381 of Rule Six – Cancellation of Trades

The Bourse proposes to modify article 6381 by changing the means required to communicate the erroneous trade to a Market Supervisor by approved participants. The article will be modified by

replacing the requirement to use of "a standard form" by a requirement to communicate the request for cancellation verbally (by phone). This modification will reflect more accurately the actual practices in such circumstances.

B - Article 6382 of Rule Six – Warning Message

The Bourse proposes to abrogate article 6382 pertaining to the "warning message" as this feature is not coherent with the actual practices of the Bourse with respect to the communication process when dealing with transaction cancellations. Originally when trading was transferred from the trading floor to an electronic environment, it was the intent of the Bourse to maintain this practice in conjunction with the use of the RFQ (request for quote) functionality by approved participants. As this functionality is not used, there is no practical purpose for this article therefore justifying its abrogation.

C - Articles 6384 and 6385 of Rule Six – Delays of Decision and Notifications

The Bourse proposes to modify article 6384 to clarify the language used in the section as well as to further detail the circumstances when a trade will not be cancelled.

The Bourse proposes to modify article 6385 by eliminating, as is proposed in article 6381, the reference to a standard form. It also proposes to eliminate the provision to the effect that the trade will be maintained in the absence of notification of the decision by the Market Supervisor because the decision is always communicated to the concerned market participant either to confirm the cancellation or adjustment of the trade or, as the case may be, that the trade is maintained. Also, given the proposed abrogation of article 6382 discussed above, it is proposed to eliminate in article 6385 the reference to the distribution of the decision through a "warning message".

D- Articles 6303 and 6383 of Rule Six

The Bourse proposes to modify articles 6303 and 6383 to update and harmonize the terminology used throughout its Rules.

E - Procedures for the Cancellation of Trades

The Bourse proposes to amend its Cancellation Procedures in order for these procedures to be harmonised with articles 6303, 6381, 6383, 6384 and 6385 of the Rules of the Bourse and that they take into account the new proposed implied pricing algorithm for the BAX contract.

In order to facilitate the application of this procedure in light of the new implied pricing market model, it is proposed that the increment level (in the procedure's table) be harmonized for all maturity contracts and set at 10 basis points across the entire BAX strip. It is also proposed that the level of the regular spread orders be established at 5 basis points. Both levels are at the image of the CME' practices. As the IPA will result in implied orders (adding liquidity and tighter bid/ask spreads) in conjunction to the regular orders, it should mitigate potential erroneous transactions. In addition, the Bourse proposes that a particular increment (10 to 20 basis points) be established for erroneous trades on implied spread orders. The amended procedure would also include a brief explanation of the methodology to establish the increment for implied spread orders (new Section 4.3 - Implied Spread Orders). Furthermore, a description of the procedure's implications for the initiator of the erroneous trade would be added in Section 4.5 (Trade Price outside No Cancel Range).

The Bourse proposes to add a specification in Section 4.2 (Validation – No Cancel Range) stating that one of Market Operations' roles is to ensure market integrity. Therefore, as stipulated, any trade outside

of the No Cancel Range will be processed and adjusted by Market Supervisors within the prescribed range. An additional paragraph would also be added in section 4.8 (Decision) giving precision on the implications of re-entering an order after a transaction has been cancelled.

Various additional proposed modifications throughout the procedure and related articles are for the purpose of clarification adding more precision without constituting material changes to the text's content. These additional clarifying modifications are for the benefit of the procedure's audience and end-users.

F - Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts.

In addition, the Bourse proposes to amend its Daily Settlement Price Procedures in order for these procedures to be harmonised with article 6390 of the Rules of the Bourse and that they take into account the new proposed implied pricing algorithm for the BAX contract.

The modifications state that for the purpose of daily settlements of the BAX contract, only regular orders posted in the order book will be taken into consideration. However all trades resulting from both regular and implied orders will be taken into account.

Overall, the purpose of the Bourse's proposed amendments to the above-mentioned Procedures and articles is to clarify, update and harmonize these procedures and rules with the current practices. Following approval of the proposed modifications, the Bourse intends to make this procedure publicly available on its Web site, as it does for other trading procedures.

IV. OBJECTIVES OF THE PROPOSED MODIFICATIONS AND CONSEQUENCES

A – Objectives

The objectives of the proposed amendments to articles 6303, 6381, 6383, 6384 and 6385 of Rule Six of the Bourse as well as to the Cancellation Procedures and the Daily Settlement Price Procedures and of the proposed abrogation of article 6382 are to:

- i) Allow the implementation of an implied pricing algorithm in the BAX contract (in the spreads as part of Phase 1)
- ii) Harmonize the current rules and procedures with the actual practices during the trade cancellation process.

B – Consequences of the proposed modifications

The proposed amendments to Rule Six and to the related procedures will allow the Bourse to implement the implied pricing algorithm in the BAX contract to enhance its market quality and liquidity and to further meet end users' demands and expectations.

The purpose of the proposed amendments to the above-mentioned Rules and Procedures is also to update them so that they reflect in a better way the current practices with regards to the cancellation of trades.

C – Other alternatives considered

No other alternatives have been considered to achieve the same objective.

D – Impact of the proposed modifications on the systems

The proposed modifications will have technical impacts on the systems of the Bourse as the required development affects directly the trading engine and its related gateways and their respective components. The front end protocols (SAIL, FIX, FIXTT and Stamp) will also be impacted as well as the post trade components displaying market participants' individual post-trading data. The Canadian Derivatives Clearing Corporation (CDCC) systems will not be impacted.

E – Financial markets' interest

With implied pricing, end users active in the BAX contract will have a more efficient, liquid, active and fairly priced (intra day and end of day) marketplace. In addition, with the implementation of the implied pricing market model, the Bourse will attract new entrants who consider implied pricing as a market entry pre-requisite. All this will further extend and improve the existing pool of liquidity in the BAX contract.

F – **Public interest**

The suggested modifications will result in an improved quality of the BAX contract market which is at the heart of the public's interest. Maintaining a liquid, accurate, fairly valued and priced pool of instruments as part of the domestic capital markets is the Bourse's main objective. In order to achieve that objective, the Bourse considers that the proposed implementation of an implied pricing market model for the BAX contract and the related amendments of the relevant Rules and Procedures are of public interest.

G - Documents attached

- Rule Six: amendments to articles 6803, 6381, 6383, 6384 and 6385
- Rule Six: abrogation of article 6382
- Procedures for the Cancellation of Trades
- Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts.

V. PROCESSUS

The proposed amendments to Rule Six of the Bourse as well as to the procedures were approved by the Rules and Policies Committee of the Bourse. They are submitted to the Autorité des marchés financiers (AMF) for self-certification purposes and published for a 30-day comment period. The modifications are also transmitted to the Ontario Securities Commission (OSC) for information.

6303 Validation, alteration or cancellation of a trade

(10.10.91, 25.05.01, 00.00.00)

If certain urgent events require it or if certain extraordinary market conditions exist, and in order to maintain a fair and equitable market for all participants, a vice-president or senior vice-president of the Bourse can validate, alter or cancel_any trade and such trade will be <u>validatedrecorded</u>, altered or cancelled.

Furthermore, the vice-president or the senior vice-president of the Bourse may disallow any trade which he deems unreasonable.

These decisions are final and cannot be appealed.

In the case of a cancellation, the trade will have no standing whatsoever and shall be expunged from the records.

6381 Cancellation of Trades

(25.09.00, 24.09.01, 29.10.01, 00.00.00)

- a) A trade on the electronic trading system resulting from an input error can be cancelled by the parties agreeing to it within 15 minutes following its execution. A standard form must be remitted The error and the request to cancel the resulting transaction must be verbally communicated (by telephone) by the approved participant to a Market Supervisor of the Bourse for approval.
- b) The Bourse may at any time cancel a trade if it is judged to be detrimental to the normal operation or quality of the market or in any circumstance judged appropriate by a Market Supervisor.

The decisions are final and cannot be appealed.

6382 Warning Message

(25.09.00, 24.09.01, 29.10.01, 00.00.00)

When a Market Supervisor of the Bourse receives a transaction cancellation request to which the parties do not agree, he must send a warning message on the trading screens of both parties involved and to the organizations responsible to distribute quotes.

The message indicates for the concerned product, the price of the trade which is subject to the cancellation request.

Some organizations responsible to distribute quotes can choose not to distribute this message."

6383 Acceptable Market Price

(25.09.00, 24.09.01, 29.10.01, 00.00.00)

Before the cancellation of a trade, the Market Supervisor of the Bourse notes the spread between the price execution of the trade <u>that is requested to be cancelled</u> in the cancellation request and the acceptable market price <u>and determines</u>. The latter indicates the <u>estimated</u> price at which the trade should have been done in normal execution conditions.

The acceptable market price is determined by the Market Supervisor of the Bourse, on the basis of available market information at the time the trade, requested to be cancelled in the cancellation request was executed.

6384 Decision by the Market Supervisor of the Bourse (25.09.00, 24.09.01, 29.10.01, <u>00.00.00</u>)

A trade <u>willis</u> not <u>be</u> cancelled:

- if the <u>error and the request to cancel the resulting trade have been communicated to the</u> <u>Bourse by the approved participant cancellation request is made</u> outside the <u>prescribed</u> delay;
- if the spread <u>between the execution price of the trade to be cancelled and the acceptable</u> <u>market price</u> is inferior to the spread determined by a Market Supervisor of -the Bourse;
- if a Market Supervisor of the Bourse considers that he does not have sufficient information to determine the acceptable market price;
- if the information communicated to the Bourse by the approved participant is incomplete or insufficientrequest is irregularly made.

The Market Supervisor's decision is final and cannot be appealed.

6385 Delays of Decision and Notifications

(25.09.00, 24.09.01, 29.10.01, 00.00.00)

The Market Supervisor of the Bourse <u>will</u> decides to cancel or refuses to cancel a transaction <u>and</u> <u>will inform each party to the trade of this decision. This will be done</u> within thirty minutes following the <u>communication of the error and of the cancellation request to the Bourse by the</u> <u>approved participant</u> <u>cancellation request</u> and <u>he notifies this decision within the same delay to</u> <u>each party to the trade within the same delay</u>.</u>

However, a decision is not notified until the Market Supervisor of the Bourse receives the standard form.

In the absence of notification of the decision by the Market Supervisor of the Bourse within the above mentioned delay, the trade is maintained.

This decision is immediately distributed through a warning message on all trading screens and to organizations responsible to distribute quotes."



PROCEDURES FOR THE CANCELLATION OF TRADES

1. APPLICABLE RULES

"6303 Validation, alteration or cancellation of a trade

If certain urgent events require it or if certain extraordinary market conditions exist, and in order to maintain a fair and equitable market for all participants, a vice-president or senior vice-president of the Bourse can validate, alter or cancel_any trade and such trade will be <u>validatedrecorded</u>, altered or cancelled.

Furthermore, the vice-president or the senior vice-president of the Bourse may disallow any trade which he deems unreasonable.

These decisions are final and cannot be appealed.

In the case of a cancellation, the trade will have no standing whatsoever and shall be expunged from the records."

"6381 Cancellation of Trades

- a) A trade on the electronic trading system resulting from an input error can be cancelled by the parties agreeing to it within 15 minutes following its execution. A standard form must be remitted The error and the request to cancel the resulting transaction must be verbally communicated (by telephone) by the approved participant to a Market Supervisor of the Bourse for approval.
- b) The Bourse may at any time cancel a trade if it is judged to be detrimental to the normal operation or quality of the market or in any circumstance judged appropriate by a Market Supervisor.

The decisions are final and cannot be appealed."

"6382 Warning Message

When a Market Supervisor of the Bourse receives a transaction cancellation request to which the parties do not agree, he must send a warning message on the trading screens of both parties involved and to the organizations responsible to distribute quotes.

The message indicates for the concerned product, the price of the trade which is subject to the cancellation request.

Some organizations responsible to distribute quotes can choose not to distribute this message."

"6383 Acceptable Market Price

Before the cancellation of a trade, the Market Supervisor of the Bourse notes the spread between the price execution of the trade <u>that is requested to be cancelled</u>in the cancellation request and the acceptable market price, <u>and determines</u>. The latter indicates the <u>estimated</u><u>rough</u> price at which the trade should have been done in normal execution conditions.

The acceptable market price is determined by the Market Supervisor of the Bourse, on the basis of available market information at the time the trade, requested to be cancelled in the cancellation request was executed."

"6384 Decision by the Market Supervisor of the Bourse

A trade <u>will</u>is not <u>be</u> cancelled:

- if the <u>error and the request to cancel the resulting trade have been communicated to the</u> <u>Bourse by the approved participant cancellation request is made</u> outside the <u>prescribed</u> delay;

- if the spread <u>between the execution price of the trade to be cancelled and the acceptable</u> <u>market price</u> is inferior to the spread determined by a Market Supervisor of the Bourse;

- if a Market Supervisor of the Bourse considers that he does not have sufficient information to determine the acceptable market price;
- if the <u>information communicated to the Bourse by the approved participant is incomplete</u> <u>or insufficientrequest is irregularly made</u>.

The Market Supervisor's decision is final and cannot be appealed."

"6385 Delays of Decision and Notifications

The Market Supervisor of the Bourse <u>will</u> decides to cancel or refuses to cancel a transaction and will inform each party to the trade of this decision. This will be done within thirty minutes following the <u>communication of the error and of the cancellation request to the</u> Bourse by the approved participant cancellation request and he notifies this decision within the same delay to each party to the trade.

However, a decision is not notified until the Market Supervisor of the Bourse receives the standard form.

In the absence of notification of the decision by the Market Supervisor of the Bourse within the above mentioned delay, the trade is maintained.

This decision is immediately distributed through a warning message on all trading screens and to organizations responsible to distribute quotes."

2. SUMMARY

Trades may be cancelled by <u>athe</u> vice-president or <u>athe</u> senior vice-president <u>of the Bourse</u> if they are unreasonable or <u>by athe</u> Market Supervisor if <u>suchthe</u> transactions <u>areis</u> detrimental to the normal operation or quality of the market or in any <u>other</u> circumstance <u>deemedjudged</u> appropriate considering market <u>conditions</u> at the time of the trade or if the parties involved in the trade agree to the cancellation.

3. OBJECTIVE

The objective of the procedures described herein is:

• To ensure that all transactions are executed at a price coherent with prevailing market conditionsircumstances (integrity) and to ensure that input errors can be corrected.

4. **DESCRIPTION**

4.1. DETECTION AND DELAYS

Market participants have the responsibility to identify <u>without delay</u> erroneous trades. <u>As soon as anOnce</u> the erroneous transaction <u>resulting from an entry error</u> is identified, the <u>market approved</u> participant must advise a Market Supervisor of the Bourse by <u>faxing the standard form</u> telephoning the Market Operations <u>Department of the Bourse at (514) 871-3592 at 514-871-7871</u>, following the occurrence of the error or <u>1-888-693-6366</u>. This will enable <u>A</u> Market Supervisors <u>will</u> to then contact the <u>opposite counter</u> parties to the trade to reach an agreement within 15 minutes as prescribed by <u>Aa</u>rticle 6381 of the Rules<u>of the Bourse</u>. In all cases, if a trade resulting from an entry error is not brought to the attention of the Market Supervisor within 15 minutes of the trade will be maintained.

4.2. VALIDATION – NO CANCEL RANGE

In order to maintain market integrity, when a transaction outside the No Cancel Range is identified by Market Supervisors, the parties involved will be contacted within a reasonable delay by the Market Operations Department of the Bourse in order to adjust the trade within the No Cancel Range.

When any potential erroneous trade is brought to the attention of a Market Supervisor, he will determine whether the trade price is in the No Cancel Range for the particular derivative instrument. The No Cancel Range is defined as the price interval within which a trade cannot be cancelled. To establish the No Cancel Range, Market Supervisors:

- Determine, in accordance with article 6383 of the Rules, what the acceptable market price for that derivative instrument was before the trade occurred. In making that determination, the Market Supervisor will consider all relevant information, including the last trade price, a better bid or offer, a more recent price in a related derivative instrument (for example a different expiry month) and the prices of similar derivatives instruments trading in other markets;
- apply (add and deduct) the <u>following</u> increments <u>detailed below</u> to the acceptable market price:

DERIVATIVE INSTRUMENT		INCREMENT
Three-month Canadian Banker's Acceptance		5 basis points
Futures - BAX 1 st 8 quarterly and serial months		
Three-month Canadian Banker's Acceptance		10 basis points
Futures BAX (all quarterly and serial 9 th -months)		
and on out		
Three-month Canadian Banker's Acceptance		
Futures - BAX SPREADS;		
- Regular ⁽¹⁾ spread orders		<u>5</u> 3 basis points
- Implied ⁽²⁾ spread orders		10 to 20 basis points; sum of the spread's individual
		legs' increments.
Options on Three-month Canadian Banker's		5 basis points
Acceptance Futures - OBX		
Ten-year Government of Ca	anada Bonds Futures -	20 basis points
CGB		
Five-year Government of Canada Bonds Futures -		20 basis points
CGF		
Options on Ten-year Governement of Canada		20 basis points
Bonds Futures - OGB		
S&P Canada 60* Index Futures - SXF		4 index points
S&P Canada 60* Index Options - SXO 1 st 3 serial		0.5 index point
months		
S&P Canada 60* Index Options - SXO next 2		1 index point
quarterly months)		
EQUITY OPTIONS		
PRICE RANGES:	\$0.00 to \$5.00	\$0.10
	\$5.01 to \$10.00	\$0.25
	\$10.01 to \$20.00	\$0.50
	\$20.00 up	\$0.75
SPONSORED OPTIONS		
PRICE RANGES	\$0.001 to \$0.99	\$0.25
	\$1.00 up	\$0.50
SINGLE STOCK FUTURES		\$2.00
* Products based on the S&P/TSXE 60 Index		

4.3. IMPLIED SPREAD ORDERS

⁽¹⁾ **"Regular orders":** Outright orders entered through any given certified independent software vendor (ISV) or proprietary trading solution and routed by approved participants directly into the Bourse trading system.

⁽²⁾ **"Implied orders":** Orders that are synthetically generated (derived) and registered in the order book by the trading engine using regular orders.

A spread trade resulting from an implied spread order is in reality constituted from each of the individual legs regular outright orders. For the purpose of this procedure, an erroneous trade occurring on an implied spread order will be treated as if the spread trade was executed using regular posted orders of each individual leg separately.

As a result, the prescribed increment utilized to establish the No Cancel Range to adjust an erroneous spread trade resulting from an implied spread order will be at least the increment on one of the individual legs (10 basis points) and at the most, the sum of each individual legs' increments (20 basis points).

4.3.4.4. TRADE PRICE INSIDE <u>THE</u> NO CANCEL RANGE

If the Market Supervisor determines that the price of the reported erroneous trade was inside the No Cancel Range, then the trade will be maintained and no further action will be taken<u>unless the</u> counterparty to the erroneous trade has agreed to cancel it.

4.4.<u>4.5.</u> TRADE PRICE OUTSIDE <u>THE</u> NO CANCEL RANGE

If the Market Supervisor determines that the price of the erroneous trade is outside the No Cancel Range, then:

•a warning indicating that the trade is under investigation will be disseminated (article 6382 of the Rules). A market participant who does not agree with the cancellation of the trade must contact a Market Supervisor at 1-866-576-8836 within 10 minutes after the message was disseminated;

<u>**a**</u> all parties involved in the transaction will be contacted <u>and advised of the situation</u>.

The <u>entire</u> transaction will be cancelled if <u>+</u>

all <u>involved</u> parties agree to cancel the<u>ir</u> trade<u>s</u>.

The <u>entire</u> transaction will not be cancelled if :-

one of the parties involved in the <u>erroneous</u> transaction does not agree to cancel <u>his</u> trade. <u>The residual</u> trades (the ones not cancelled) will be readjusted to the limit of the No Cancel Range. In this circumstance, if the transaction involved a linked implied order, the initiator of the original error trade will take responsibility for the outcome. The error initiator may therefore have to take ownership of market positions for the directly resulting trades in the other linked contracts.

The Market Operations Department of the Bourse will adjust erroneous transactions in the best possible way. The main objective when adjusting erroneous trades is to minimize the impact for all market participants involved in the erroneous transaction and more particularly those who had a regular order in the order book.

4.5.<u>4.6.</u> OTHER SITUATIONS JUSTIFYING THE CANCELLATION OF TRANSACTIONS

The <u>Market Operations Department of the Bourse</u> will review all circumstances surrounding <u>a</u> transaction to determine whether the trade occurred in accordance with the rules of the Bourse. The factors that will be considered include; <u>among other things</u>, the market conditions immediately before and after the trade was executed; the volatility of the market; the prices of related instruments in other markets <u>and the fact</u> that one or many parties to the transactions consider that it was executed at a valid price.

In the case of a system failure, it is possible that the Montreal Automated System (SAM) will freeze with orders queued and waiting to be processed. Once the problem is resolved, the market <u>will</u> be put into a pre-opening phase by halting <u>trading in each derivative instrument in order to modify the opening time</u> parameters. This <u>pre-opening phase</u> will allow market participants to modify orders and will ensure that

the <u>system</u> failure does not impact the integrity of the market.- Nevertheless, when the system is <u>not</u> frozen, the pending orders could be unreasonably executed before the Bourse can halt the instruments. Accordingly, Market Supervisors <u>could</u> cancel trades resulting from executions in these circumstances.

4.6.4.7. MULTIPLE MARKET MAKER TRANSACTIONS ON EQUITY, INDEX AND BOND OPTIONS

A Market Supervisor may also cancel transactions under the following conditions:

- 1. Multiple consecutive transactions can be cancelled if they consist of four (4) or more transactions against one market maker provided <u>that</u>:
 - all transactions were executed within a one (1) second interval;
 - the opposite side of the transactions consists of one or several market makers.
- 2. The market maker involved in the four (or more) transactions contacted a Market Supervisor at (514) 871-7877 or 1-866-576-8836 within one (1) minute of the execution time of the multiple consecutive transactions, to request the<u>ir</u> cancellation.

4.7.<u>4.8.</u> DECISION

A decision to cancel or to refuse to cancel will be rendered by a Market Supervisor within 30 minutes following the cancellation request.

If the decision is to cancel the trade, the Market Supervisor will remove the trade from the records. Furthermore, if stop orders were triggered and therefore executed as a result of the cancelled trades, then these "stop" trades will also be cancelled and the orders will have to be re-instated in the order book by the initiators of such orders. —Trade cancellation messages will be disseminated.

When a transaction is cancelled, if it originated from a regular order posted in the order book, the original price/time priority (FIFO) will not be maintained if the initiator of the original order wishes to re-instate his order after the cancellation. This cancelled order must then be re-entered in the trading system by the initiator of the original order. This subsequent order entry moment will be the official recorded time of the re-instated order.

If the <u>Market Supervisor's</u> decision is to not cancel the trade, the parties to the transaction <u>canmay</u> not <u>themselves decide to cancel itreverse themselves the transaction</u> by <u>makingusing</u> a position transfer through the Canadian Derivatives Clearing Corporation (CDCC).



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.

DEFINITIONS:

Regular orders: Outright orders entered through any given certified independent software vendor (ISV) or proprietary trading solution and routed by approved participants directly into the Bourse trading system.

Implied orders: Orders that are synthetically generated (derived) and registered in the order book by the trading engine using regular orders. directly approved

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. Trades resulting from both regular and implied orders will be accounted for in the process.

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. <u>Implied orders (as defined above) constituting bids and offers (during the required closing period) will not be taken into consideration to establish the daily settlement prices. Only regular orders will be used for this purpose.</u>

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:

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

Interest rate:

• 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.