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**CIRCULAR**  
October 6, 2004

## **REQUEST FOR COMMENTS**

### **MARGIN AND CAPITAL REQUIREMENTS FOR POSITIONS IN AND OFFSETS INVOLVING LONG OPTIONS AMENDMENTS TO ARTICLES 11202, 11205, 11227 AND 11228**

#### **Summary**

The Rules and Policies Committee of Bourse de Montréal Inc. (the Bourse) has approved amendments to articles 11202, 11205, 11227 and 11228 of the Rules of the Bourse, which deal with long option positions. The objective of the proposed amendments is to allow a reduction in the margin and capital requirements for a long option when its “in-the-money” value is greater than the margin or capital required on the underlying interest or when the option expiry date is nine months or more away. The proposed amendments also aim to harmonize the margin requirements applicable to long option positions held in client accounts with those applicable to approved participant accounts.

#### **Process for Changes to the Rules**

Bourse de Montréal Inc. is recognized as a self-regulatory organization (SRO) by the Autorité des marchés financiers (the Autorité). In accordance with this recognition, the Bourse carries on activities as an exchange and as a SRO in Québec. In its SRO capacity, the Bourse assumes market regulation and broker-dealers regulation responsibilities. The broker-dealers regulated by the Bourse are 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.

Circular no.: 128-2004

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 and Policies of the Bourse governing approved participants, among which, the Rules and Policies 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 and Policies with recommendation from the Special Committee. These changes are submitted to the Autorité for approval.

Comments on the proposed amendments to articles 11202, 11205, 11227 and 11228 of the Rules of the Bourse 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](mailto: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, 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](mailto:consultation-en-cours@lautorite.qc.ca)*

## **Appendices**

For your information, you will find in appendices an analysis document of the proposed rule amendments as well as the proposed regulatory text. The implementation date of the proposed amendments will be determined, if applicable, with the other Canadian self-regulatory organizations following approval by the "Autorité des marchés financiers".



### MARGIN AND CAPITAL REQUIREMENTS FOR POSITIONS IN AND OFFSETS INVOLVING LONG OPTIONS

#### – AMENDMENTS TO ARTICLES 11202, 11205, 11227 AND 11228

## I OVERVIEW

Bourse de Montréal Inc. (the Bourse) wishes to amend articles 11202, 11205, 11227 and 11228 of the Rules of the Bourse dealing with margin and capital requirements for positions in and offsets involving long options.

The purpose of the proposed amendments is to allow a loan value to any “in-the-money” portion of a long option market value when it is greater than the margin or capital required on the underlying interest. A loan value would also be given to any “time value<sup>1</sup>” portion of the long option market value when the period to expiry is equal to or greater than nine months. The proposed amendments are also aimed at making sure that the margin requirements for long options held in a client account are identical to the capital requirements applicable to long options held in an approved participant account.

The proposed amendments will also permit a new margin offset strategy (long call – long put spread) for positions held in client accounts. Also, amendments are proposed to margin and capital requirement calculations for short call – short put spreads. Since these amendments were

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<sup>1</sup> An option’s “time value” is the excess, if any, of an option’s market value over its “in-the-money” value.

presented in a previous proposal<sup>2</sup>, the present analysis document focuses essentially on the allocation of a loan value to the “in-the-money” portion and to the “time value” portion of a long call or long put.

## II DETAILED ANALYSIS

### A) Current Rules

Under the current rules of the Bourse, unhedged long call option or unhedged long put option positions held in a client account are granted no loan value i.e., the margin requirement must be the market value of the option. The treatment is different to determine the capital required for unhedged long call option or unhedged long put option positions held in an approved participant account. In this case, the market value of the option (i.e. the capital required) may be reduced by 50% of any “in-the-money” amount associated with the option if the option premium is \$1 or more.

### B) The Issue

The current margin and capital requirements for long options are inconsistent in their treatment of positions held in approved participant and

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<sup>2</sup> The analysis document entitled “Margin and Capital Requirements for Options, Futures Contracts and Other Derivative Instruments” was published for comments on February 17, 2004 (circular no. 022-2004) and submitted to the AMF for approval on February 25, 2004 (the proposal is currently under review by AMF staff). The objectives of the proposed amendments were to simplify, broaden the application of and correct known errors in the existing rules as well as expand the number of permissible reduced margin offset strategies.

With regard to the addition of a long call – long put spread strategy to reduce the margin required for client accounts, this offset strategy is currently available to approved participant accounts. The analysis concluded “that it does not make sense to prohibit client account use of offset strategies that are currently available for approved participant account use”.

With regard to the proposed amendments to margin and capital requirement calculations for short call – short put spreads, excerpt from the analysis is reproduced in Appendix 1 of the present document.

client accounts and in some instances may not address adequately the risk associated with the option position.

As mentioned previously, the current rules grant a loan value to long options held in an approved participant account to the extent they are “in-the-money”. Specifically, an amount equivalent to 50% of the “in-the-money” value may be deducted from the capital required (i.e., the market value of the option). Granting such a loan value may not be appropriate in situations where the option is not “deep-in-the-money” because an option is a leverage instrument whose risk is directly related to the risk associated with the option’s underlying interest.

The current rules also assume that an option’s “time value” should not be given a loan value. For a long dated option<sup>3</sup> this can be an overly punitive assumption since time value tends to be the least volatile component of a long dated option’s market value.

**C) Proposed Rules**

The proposed amendments focus mainly on the loan value related to any “in-the-money” value of an option and on the loan value related to any “time value” of an option:

▪ **“In-the-money” value of an option**

For positions held in approved participant accounts, instead of allowing the capital required to be reduced systematically by 50% of the “in-the-money” value as soon as the price of the underlying interest is greater than the exercise price of the call option (or when the price of the underlying interest is lower than the exercise price of the put option) and with the objective to more accurately reflect the risk relation between the option and its underlying interest, a loan value will be given to the “in-the-money” value of the option only when this “in-the-money” value is greater than the capital required on the underlying interest. The following table

presents the effects of the proposed amendments in comparison with the current rules:

Effects of proposed amendments dealing with capital requirements for long options held by approved participants	
Options	Effects
Out-of-the-money or at-the-money	No impact. The capital required is still the market value of the option i.e., the “time value” of the option.
In-the-money	The capital required is greater because the loan value of the “in-the-money” amount is not considered as soon as the option is “in-the-money”.
Deep-in-the-money	The capital required is lower when 50% of the “in-the-money” amount is greater than the capital required on the underlying interest.

Currently, an option that is considered “deep-in-the-money” has a capital requirement significantly greater than the capital required on the underlying interest. Because the risk of a “deep-in-the-money” option is almost identical to the risk of the underlying interest, the capital requirements should be fairly similar. The proposed amendments allow rectifying this situation.

To permit the same treatment, regarding margin and capital requirements, the same amendments are proposed for long options held in client accounts. Because there is currently no margin reduction on these positions, the proposed amendments will result, in some instances, in lower margin requirements but under no circumstances the margin required will be greater than the margin currently required.

▪ **“Time value” of an option**

Currently, no margin or capital reduction in relation to the expiry date of an option is allowed for a long option position. Since the “time value” of a long dated option tends generally to be the least volatile component of its market value, it is proposed to allow a margin and capital reduction equivalent to 50% of this “time value” for options with an expiry date equal to or greater than nine months. For option positions held in client accounts as well as option positions held in approved participant accounts, the proposed amendments will result

<sup>3</sup> A long dated option for the purposes of this analysis document is an option with nine or more months to expiry.

in lower margin and capital requirements whether the option is “out-of-the-money” or “in-the-money”.

Finally, it is also proposed to amend the margin and capital requirement calculations for long call – long put spreads to be consistent with the proposed amendments to margin and capital requirements for unhedged long call options or unhedged long put options. As mentioned previously, the addition of this offset strategy to reduce margin requirements for positions held in client accounts has been analyzed in a previous request for approval by the AMF. This previous request included also the proposed amendments to margin and capital requirement calculations for a short call – short put spread.

### **D) Objective**

The objective of the proposed amendments to articles 11202, 11205, 11227 and 11228 of the Rules of the Bourse is to allow a reduction in the margin and capital requirements for a long option when its “in-the-money” value is greater than the margin or capital required on the underlying interest or when the option expiry date is nine months or more away. The proposed amendments also aim to standardize the margin treatment of approved participant account and client account positions in long options.

### **E) Effect of Proposed Rules**

The proposed amendments will not have any impact on market structure and will promote fairness by permitting the same margin treatment of approved participant account and client account positions in long options. As mentioned previously, the proposed amendments will not result in any increase in margin requirements for positions held in client accounts and in some cases they will result in a margin reduction. For positions held in approved participant accounts, in most cases the amendments will have no effect on capital requirements and there will be an increase of these requirements only in a limited number of

situations<sup>4</sup>. However, it should be noted that, with the eventual implementation of SPAN and TIMS systems to determine capital requirements for derivative instrument positions held by approved participants, the proposed amendments will have no effect on the capital required of approved participants using these systems<sup>5</sup>.

### **F) Comparison with Similar Provisions**

#### **United States**

Pursuant to SEC Rule 240.15c3-1<sup>6</sup> the capital required for long option positions in a firm account is 50% of the option market value. NASD Rule 2520(f)(2) indicates that the margin required for long option positions in a client account is 75% of the market value for long dated options and warrants and 100% of the market value for short dated options and warrants.

#### **United Kingdom**

The Financial Services Authority specifies that firms must treat a long call option or a short put option as a long equity equivalent position and a short call option or a long put option as a short equity equivalent position.

### **G) Public Interest Objective**

This proposal was designed to facilitate fair and open competition in securities transactions generally by permitting equal margin treatment of approved participant account and client account positions in long options. The proposal does not permit unfair discrimination among

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<sup>4</sup> About 10% of call options and put options currently listed are considered as being “deep-in-the-money” and/or have an expiry date greater or equal to nine months and have a “time value” greater than their “in-the-money” value. These options will have a lower capital required.

<sup>5</sup> The AMF already approved (decision no. 2003-C-0021) the use of SPAN and TIMS systems to determine capital requirements on derivative instruments held by approved participants, but other amendments have been proposed before the rules were in effect. These amendments have been presented in the analysis document discussed in footnote 2 of the present document.

<sup>6</sup> Specifically, the Alternative Strategy Based Method set out in Appendix A to SEC Rule 240.15c3-1.

customers, issuers, brokers, dealers, approved participants or others. It does not impose any burden on competition that is not necessary or appropriate in furtherance of the above purposes. Consequently, the proposed amendments are considered to be in the public interest.

### III COMMENTARIES

#### A) Effectiveness

The proposed amendments are believed to be effective in revising margin and capital requirements for positions in and offsets involving long options in order to more accurately reflect the risk associated with such positions.

#### B) Process

The first step of the approval process for the regulatory amendments proposed in the present document consists in having the proposed amendments approved by the Special Committee – Regulatory Division of the Bourse. The second step consists in submitting the proposed amendments to the approval of the Rules and Policies Committee of the Bourse. Once the approval of the Rules and Policies Committee has been obtained, the project is simultaneously published by the Bourse for a 30-day comment period and submitted to the Autorité des marchés financiers for approval, and to the Ontario Securities Commission for information.

### IV REFERENCES

- Rule Eleven of Bourse de Montréal Inc.;
- Security Exchange Act of 1933, Alternative Strategy Based Method set out in Appendix A to SEC Rule 240.15c3-1;
- NASD Rule 2520(f)(2);
- The Interim Prudential Sourcebook for Investment Businesses, Chapter 10: Financial Resources for Securities and Futures Firms, which are Investment Firms, Rule 10-82(7).

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**Excerpt of the analysis document entitled:**  
**“MARGIN AND CAPITAL REQUIREMENTS FOR OPTIONS, FUTURES CONTRACTS  
 AND OTHER DERIVATIVE INSTRUMENTS”**  
**published for comments**  
**February 17, 2004 (circular no.: 022-2004)**

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**PROPOSED AMENDMENTS TO MARGIN AND CAPITAL REQUIREMENT CALCULATIONS**

<b>Position/Offset</b>	<b>Current Rule</b>	<b>Proposed Rule</b>	<b>Justification</b>
Short call – short put spreads*†	The margin required is the one required on the put or call, whichever is greater, <b>plus the loss on the option having the lesser margin requirement.</b>  [article 11205 paragraph b] [article 11228 paragraph b]	The minimum margin required must be <b>the greater of:</b>  i) the greater of: A) the margin required on the call option; or B) the margin required on the put option; and; ii) <b>the excess of the aggregate exercise value of the put option over the aggregate exercise value of the call option.</b>  [proposed article 9105 paragraph b] [proposed article 9205 paragraph b] [proposed article 9108 paragraph b] [proposed article 9208 paragraph b]	There is an anomaly in the current rule for spreads where both options are in-the-money and the calculated margin requirement for each individual short option is the same. The proposed amended rule assumes both options will be exercised if they are in-the-money and determines a margin requirement in this instance based on the difference between the exercise values of both options.
* The same calculation applies to positions held by approved participants. † The same calculation applies to positions in index-related derivatives.			

**11202 Long Option Positions in Options**  
(28.01.02, 00.00.04)

- a) Subject to paragraph b) hereunder, ~~all purchases of options shall be for cash and long positions shall have no value for margin purposes.~~ the margin requirement for long options must be the sum of:
- i) where the period to expiry is greater or equal to 9 months, 50% of the option's time value, 100% of the option's time value otherwise; and
  - ii) the lesser of
    - A) the normal margin required on the underlying interest; or
    - B) if any, the in-the-money value associated with the option.

For the purpose of the present article, "the option's time value" means any excess of the market value of the option over the in-the-money value of the option.

- b) Where, in the case of ~~stock equity~~ options, the underlying security in respect of a long call option is the subject of a legal and binding cash take-over bid for which all ~~the~~ conditions have been met, the margin required on such call option shall must be the market value of the call option, less the amount by which the amount offered exceeds the exercise price of the call option. Where such ~~cash a~~ take-over bid is made for less than 100% of the issued and outstanding securities, ~~the reduced this~~ margin requirement shall must be applied pro-rata in the same proportion as the offer and paragraph a) shall must apply to the balance.
- c) The margin requirements for options apply to sponsored options.
- d) In the case of sponsored options, a client of an approved participant is prohibited to hold a short position with the exception of sponsors for which the capital rules applicable are those defined in articles 11226 and following.



**11205 Margin Required for Paired Option Positions (Spreads, etc.)**

(15.08.86, 28.01.02, 00.00.04)

a) ~~Except in the case of Treasury bill options, where the short option expires on or before the expiration date of the long option, in a pairing of~~ Where a client account contains one of the following spread pairings:

~~• a short-long call option and a long-short call option; or of,~~

~~• a short-long put option and a long-short put option;~~

~~and the short option expires on or before the date of expiry of the long option, the minimum margin required for each short option shall~~ the spread pairing must be the lesser of:

- i) the margin required on the short option; or
- ii) ~~the spread loss amount, if any, which that would result from the difference between the exercise prices of the short and long option~~ if both options were exercised.

In the case of pairings involving ~~e~~European-style or cash settlement sponsored options, the required margin must not be less than five percent (5%) of the underlying security market value.

~~In the case of Treasury bill options, the above margin requirements shall apply only when the short and long option both have the same expiration date (vertical spread).~~

b) ~~Except in the case of Treasury bill options, w~~ Where a short call option is carried short for a client's account and the account is also and short a put option on the same number of units of trading on the same underlying interest are paired, the minimum margin required is that required on the put or the call, whichever is greater, under article 11203 a) or b), plus the loss on the option having the lesser margin requirement. must be the greater of:

i) the greater of

A) the margin required on the call option; or

B) the margin required on the put option;

and

ii) the excess of the aggregate exercise value of the put option over the aggregate exercise value of the call option.

~~In the case of Treasury bill options, the above margin requirements shall apply only when the short call and short put both have the same expiration date.~~

c) Where a call option is carried long for a client's account and the account is also long a put option on the same number of units of trading on the same underlying interest, the minimum margin required must be the lesser of:

i) the sum of

A) the margin required for the call option; and

B) the margin required for the put option;

and

ii) the sum of:

A) 100% of the market value of the call option; plus

B) 100% of the market value of the put option; less

C) the amount by which the aggregate exercise value of the put option exceeds the aggregate exercise value of the call option.

In the case of pairings involving European-style or cash settled sponsored options, the required margin must not be less than five percent (5%) of the underlying security market value.

11227 ~~Capital Required - Unpaired Long or Short Option Positions in options~~  
(08.08.86, 01.01.87, 30.09.87, 11.02.00, 00.00.04)

~~Aa) Subject to paragraph Bb) hereunder, the capital required to carry for a long options must be the sum of: call or long put is the market value of the option, but this amount may be reduced by 50% of the amount by which the option is in the money when the premium is equal to or greater than \$1, or in the case of T-bill options 20 basis points.~~

~~i) where the period to expiry is greater or equal to 9 months, 50% of the option's time value, 100% of the option's time value otherwise; and~~

~~ii) the lesser of:~~

~~A) the normal capital required on the underlying interest; or~~

~~B) if any, the in-the-money value associated with the option.~~

~~For the purpose of the present article, "the option's time value" means any excess of the market value of the option over the in-the-money value of the option.~~

~~Bb) Where, in the case of stock-equity options, the underlying security in respect of a long call option is the subject of a legal and binding cash take-over bid for which all the conditions have been met, the capital required on such call shall option must be the market value of the call option, less the amount by which the amount offered exceeds the exercise price of the call option. Where such cash-a take-over bid is made for less than 100% of the issued and outstanding securities, the reduced this capital requirement shall must be applied pro-rata in the same proportion as the offer, and paragraph Aa) shall must apply to the balance.~~

~~Cc) The minimum capital required which must be maintained in respect of each unpaired put or callan option carried short in an approved participant account, shall must be, the market value of such the option plus an amount in relation to the market value (marking price) of the underlying securities interest, as follows:~~

- |                                       |                  |
|---------------------------------------|------------------|
| a) stock options,                     | 15%              |
| b) index participation unit options   | 15%              |
| c) bond options                       |                  |
| ♦ maturing over 10 years              | 3%               |
| ♦ maturing over 3 years to 10 years   | 1.75%            |
| <del>d) Treasury bills options,</del> | <del>0.50%</del> |
| <del>ed) index options,</del>         | <del>5%</del>    |

~~minus the amount by which the option is out-of-the-money.~~

~~Dd) The capital required for each option shall must be calculated separately and the out-of-the-money amount of such option, if any, shall must be considered to be of value only in providing the amount of margin required for that particular option.~~

**11228 Capital Required for Paired Option Positions (Spreads)**

(15.08.86, 30.09.87, 01.01.89, 28.01.02, 00.00.04)

a) Where an approved participant account contains one of the following spread a position involved the pairings of:

~~• a short call and a long call option and short call option; or of~~

~~• a short put and a long put option and short put option;~~

~~the minimum capital required must be the lesser of: is the market value of the long option, plus the loss (up to the amount of capital required on the short option) or less the gain (up to 50% of the amount by which the long option is in the money), if both options were exercised.~~

~~i) the capital required on the short option; or~~

~~ii) the spread loss amount, if any, that would result if both options were exercised.~~

~~In the case of Treasury bill options, the above capital requirements shall apply only when the short and long option both have the same expiration date (vertical spread).~~

b) Where a short call option is carried short for an approved participant's account and the account is also and short a put option on the same number of units of trading on the same underlying interest, are paired, the minimum capital required must be the greater of: is that required on the put or the call, whichever is greater, under article 11227, plus the loss, if any, on the option having the lesser capital requirement.

i) the greater of:

A) the capital required on the call option; or

B) the capital required on the put option;

and

ii) the excess of the aggregate exercise value of the put option over the aggregate exercise value of the call option.

~~In the case of Treasury bill options, the above capital requirements shall apply only when the call option and put option both have the same expiration date.~~

c) Where a long call option is carried long for an approved participant's account and the account is also and a long a put option on the same number of units of trading on the same underlying interest are paired, the minimum capital required must be the lesser of: is the market value of the call plus the market value of the put less the higher of the following amounts:

~~i) either the excess of the exercise price of the put option over the exercise price of the call option; or~~

~~ii) either 50% of the total of the amount by which each option is in the money.~~

~~— Note: To recognize an in the money amount, the premium should be equal or greater than \$1 or 20 basis points in the case of options on T-Bills.~~

~~i) the sum of~~

~~A) the capital required on the call option; and~~

~~B) the capital required on the put option;~~

~~and~~

~~ii) the sum of:~~

~~A) 100% of the market value of the call option; plus~~

~~B) 100% of the market value of the put option; minus~~

~~C) the amount by which the aggregate exercise value of the put option exceeds the aggregate exercise value of the call option.~~

d) Where a ~~long~~ call option is carried long for an approved participant's account and the account is also ~~is paired with a short~~ a call option and ~~with a long~~ a put option on the same number of units of trading on the same underlying interest, the minimum capital required ~~is~~ must be:

i) the market value of the long call option plus the market of the long put option;

ii) less the gain or plus the loss if both call options ~~where were~~ exercised.

Note: The exercise price of the short call option to be used in determining the loss or the gain is the lower of the exercise price of the short call option or long put option.

The pairing could be done only when the exercise price of the put option is higher than the exercise price of the long call option.

In the case of sponsored options, the units of trading for call and put sponsored options must represent equivalent units of trading of any other options or an equivalent quantity of the underlying interest.

In the case of pairings involving European-style or cash settlement sponsored options, the required capital must not be less than five percent (5%) of the underlying security market value.