

RBC Direct Investing Inc.

RISK DISCLOSURE STATEMENT FOR FUTURES AND OPTIONS

ORIGINAL SIGNATURE REQUIRED

This brief statement does not disclose all of the risks and other significant aspects of trading in futures and options. In light of the risks, you should undertake such transactions only if you understand the nature of the contracts (and contractual relationships) into which you are entering and the extent of your exposure to risk. Trading in futures and options is not suitable for many members of the public. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

FUTURES

1. Effect of "Leverage" or "Gearing"

Transactions in futures carry a high degree of risk. The amount of initial margin is small relative to the value of the futures contract so that transactions are "leveraged" or "geared". A relatively small market movement will have a proportionately larger impact on the funds you have deposited or will have to deposit: this may work against you as well as for you. You may sustain a total loss of initial margin funds and any additional funds deposited with the firm to maintain your position. If the market moves against your position or margin levels are increased, you may be called upon to pay substantial additional funds on short notice to maintain your position. If you fail to comply with a request for additional funds within the time prescribed, your position may be liquidated at a loss and you will be liable for any resulting deficit.

2. Risk reducing Orders or Strategies

The placing of certain orders (e.g. "stop-loss" order, where permitted under local law, or "stop-limit" orders) which are intended to limit losses to certain amounts may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions such as "spread" and "straddle" positions may be as risky as taking simple "long" or "short" positions.

OPTIONS

3. Variable Degree of Risk

Transactions in options carry a high degree of risk. Purchasers and sellers of options should familiarize themselves with the type of options (i.e. put or call) which they contemplate trading and the associated risks. You should calculate the extent to which the value of the options must increase for your position to become profitable, taking into account the premium and all transaction costs.

The purchaser of options may offset or exercise the options or allow the options to expire. The exercise of an option results either in a cash settlement or in the purchaser acquiring or delivering the underlying interest. If the option is on a future, the purchaser will acquire a futures position with associated liabilities for margin (see the section of Futures above). If the purchased options expire worthless, you will suffer a total loss of your investment which will consist of the option premium plus transaction costs. If you are contemplating purchasing deep out-of-the-money options, you should be aware that the chance of such options becoming profitable ordinarily is remote.

Selling ("writing" or "granting") an option generally entails considerably greater risk than purchasing options. Although the premium received by the seller is fixed, the seller may sustain a loss well in excess of that amount. The seller will be liable for additional margin to maintain the position if the market moves unfavourably. The seller will also be exposed to the risk of the purchaser exercising the option and the seller will be obligated to either settle the option in cash or to acquire or deliver the underlying interest. If the option is on a future, the seller will acquire a positioning a future with associated liabilities for a margin (see the section on Futures above). If the option is "covered" by the seller holding a corresponding position in the underlying interest or a future or another option, the risk may be reduced. If the option is not covered, the risk of loss can be unlimited.

Certain exchanges in some jurisdictions permit deferred payment of the option premium, exposing the purchaser to liability for margin payments for exceeding the amount of the premium. The purchaser is still subject to the risk of losing the premium and transaction costs. When the option is exercised or expires, the purchaser is responsible for any unpaid premium outstanding at that time.

ADDITIONAL RISKS COMMON TO FUTURES AND OPTIONS

4. Terms and Conditions of Contracts

You should ask the firm with which you deal about the terms and conditions of the specific futures or options which you are trading and associated obligations (e.g., the circumstances under which you may become obligated to make or take delivery of the underlying interest of a futures contract and, in respect of options, expiration dates and restrictions on the time for exercise). Under certain circumstances the specifications of outstanding contracts (including the exercise price of an option) may be modified by the exchange or clearing house to reflect changes in the underlying interest.

5. Suspension or Restriction of Trading and Pricing

Relationships Market conditions (e.g. illiquidity) and/or the operation of the rules of certain markets (e.g. the suspension of trading in any contract or contract month because of price limits or "circuit breakers") may increase the risk of loss by making it difficult or impossible to effect transactions or liquidate/offset positions. If you have sold options, this may increase the risk of loss.

Further, normal pricing relationships between the underlying interest and the future, and the underlying interests and the option may not exist. This can occur when, for example, the futures contract underlying the option is subject to price limits while the option is not. The absence of an underlying reference price may make it difficult to judge "fair" value.

6. Deposited Cash and Property

You should familiarize yourself with the protections accorded money or other property you deposit for domestic and foreign transactions, particularly in the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specific legislation or local rules. In some jurisdictions, property which had been specifically identifiable as your own will be prorated in the same manner as cash for purposes of distribution in the event of a shortfall.

7. Commission and Other Charges

Before you begin to trade, you should obtain a clear explanation of all commission, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

8. Transactions in Other Jurisdictions

Transactions on markets in other jurisdictions, including markets formally linked to a domestic market, may expose you to additional risk. Such markets may be subject to regulation which may offer different or diminished investor protection. Before you trade you should inquire about any rules relevant to your particular transactions. Your local regulatory authority will be unable to compel the enforcement of the rules of regulatory authorities or markets in other jurisdictions where your transactions have been effected. You should ask the firm with which you deal for details about the types of redress available in both your home jurisdiction and other relevant jurisdictions before you start to trade.

9. Currency Risks

The profit or loss in transactions in foreign currency-denominated contracts (whether they are traded in your own or another jurisdiction) will be affected by fluctuations in currency rates where there is a need to convert from the currency denomination of the contract to another currency.

10. Trading Facilities

Most open-outcry and electronic trading facilities are supported by computer-based component systems for the order-routing, execution, matching, registration or clearing or trades. As with all facilities and systems, they are vulnerable to temporary disruption or failure. Your ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, the clearing house and/or member firms. Such limits may vary; you should ask the firm with which you deal for details in this respect.

11. Electronic Trading

Trading on an electronic trading system may differ not only from trading in an open-outcry market but also from trading on other electronic trading systems. If you undertake transactions on an electronic trading system, you will be exposed to risks associated with the system including the failure of hardware and software. The result of any system failure may be that your order is either not executed according to your instructions or is not executed at all. Your ability to recover certain losses which are particularly attributed to trading on a market using an electronic trading system may be limited to less than the amount of your total loss.

12. Off-exchange Transactions

In some jurisdictions, and only then in restricted circumstances, firms are permitted to effect off-exchange transactions. The firm with which you deal may be acting as your counterparty to the transaction. It may be difficult or impossible to liquidate an existing position, to assess the value, to determine a fair price or to assess the exposure to risk. For these reasons, these transactions may involve increased risks.

Off-exchange transactions may be less regulated or subject to a separate regulatory regime. Before you undertake such transactions, you should familiarize yourself with applicable rules.

READ AND KEEP FOR YOUR RECORDS



RBC Direct Investing Inc.

OPTIONS TRADING AND MARGIN AGREEMENT

To: RBC Direct Investing Inc. ("RBC Direct Investing®")

In consideration of RBC Direct Investing opening or maintaining one or more accounts for the customer executing this Agreement (the "Customer"). The Customer agrees to the following terms and conditions for the operation of each Account.

1. APPLICABLE BY LAWS, CUSTOMS, ETC.

Each transaction executed for the Account will be subject to, and the customer will abide by the prevailing by-laws, rules, regulations, policies and customs of the Regulatory Authorities.

2. SETTLEMENT, COMMISSIONS AND INTEREST.

Full and timely settlement will be made of each transaction. The Customer will pay to RBC Direct Investing commissions and other transaction charges in respect of each transaction or option exercised (including any transaction pursuant to section 8) and interest, calculated daily and compounded monthly, on outstanding indebtedness. Such commissions and other charges shall be at RBC Direct Investing's customary rates in the circumstances or as negotiated from time to time. The interest rate shall be the interest rate designed from time to time by RBC Direct Investing to its branches as being its effective rate for determining interest on debit balances. The Customer waives notices of all changes in such rates.

3. OPERATION OF THE ACCOUNT.

(a) RBC Direct Investing will credit to the Account any interest, dividends or other monies received in respect of Securities held in the Account and any monies (net of all charges) received as proceeds from the sale or other disposition of Securities from the Account, and will debit to the Account any amounts owing, including interest, by the Customer to RBC Direct Investing pursuant to this Agreement. RBC Direct Investing will maintain a record of receipts and deliveries of Securities and the Customer's resulting positions in the Account.

(b) For the purpose of this Agreement "indebtedness" at any time means the indebtedness of the Customer to RBC Direct Investing represented by the debit balance, if any, of the Account at the time.

4. PAYMENT OF INDEBTEDNESS.

The Customer will promptly pay indebtedness when due except to the extent covered by a margin facility.

5. MARGIN.

RBC Direct Investing will open or maintain the Account and grant a margin facility to the Customer provided that RBC Direct Investing may, without notice, at any time and from time to time;

(a) reduce or cancel any margin facility made available to the Customer or refuse to grant any additional margin facility to the Customer; or

(b) require the Customer to provide margin in addition to the margin requirement of the Regulatory Authorities.

The Customer acknowledges that for certain option strategies producing a credit, the Regulatory Authorities may require significant additional margin. The customer will provide RBC Direct Investing with any margin which is requested by RBC Direct Investing and will promptly pay any Indebtedness due as a result of any reduction or cancellation of any margin facility.

6. PLEDGE OF SECURITIES.

As continuing collateral security for the payment of any Indebtedness, the customer hereby pledges to RBC Direct Investing all of the Customer's Securities which may now or hereafter be held by RBC Direct Investing, whether or not such Indebtedness relates to the Securities pledged.

7. USE OF COLLATERAL BY RBC DIRECT INVESTING.

So long as any indebtedness remains unpaid, RBC Direct Investing is hereby authorized to the extent permitted by law, without notice, to use at any time and from time to time the Customer's Securities in the conduct of RBC Direct Investing's business, including the right to:

(a) combine any of the Customer's Securities with the property of RBC Direct Investing or other customers or both;

(b) pledge any of the Customer's Securities which are held in RBC Direct Investing's possession as security for its own indebtedness;

(c) loan any of the Customer's Securities to RBC Direct Investing for its own purposes; or

(d) use any of the Customer's Securities for making delivery against a sale, whether a short sale or otherwise and whether such sale is for the Account or the account of any other RBC Direct Investing's customers.

8. ELIMINATION OR REDUCTION OF INDEBTEDNESS BY RBC DIRECT INVESTING IF:

(a) the Customer fails to pay any Indebtedness when due;

(b) RBC Direct Investing deems the margin held by it to be insufficient for its protection;

(c) On or before any settlement date the Customer fails to provide to RBC Direct Investing any required Securities or certificates in acceptable delivery form; or

(d) The Customer fails to comply with any other requirement contained in this Agreement; then, in addition to any other right or remedy to which RBC Direct Investing is entitled, RBC Direct Investing may at any time and from time to time without notice or demand to the Customer:

(e) Apply monies held to the credit of the Customer in any other account with RBC Direct Investing to eliminate or reduce Indebtedness;

(f) Sell, contract to sell or otherwise dispose of any or all of the Securities held by RBC Direct Investing for the Customer and apply the net proceeds therefrom to eliminate or reduce Indebtedness;

(g) Purchase or borrow any Securities necessary to cover short sales or any other sales made on the Customer's behalf in respect of which delivery or certificates in an acceptable delivery form has not been made; or

(h) Cancel any outstanding orders.

Such rights may be exercised separately, successively or concurrently. RBC Direct Investing shall not be required by this Agreement to exercise any such rights nor shall it be required to exercise any right prior to exercising any other right. The failure to exercise any or all of such rights of the granting of any indulgence shall not in any way limit, reduce or discharge any Indebtedness or part thereof. Any such sales or purchases for the Account may be made upon any exchange or market or at a public or private sale upon such terms and in such manner as RBC Direct Investing deems advisable. If demand is made or notice given to the Customer by RBC Direct Investing, it shall not constitute a waiver of any of RBC Direct Investing's rights to act hereunder without demand or notice. Any and all expenses (including any legal expenses) reasonably incurred by RBC Direct Investing, in connection with exercising any right pursuant to this section 8 may be charged to the Account. The Customer acknowledges that the Customer shall remain liable to RBC Direct Investing for any deficiency remaining following the exercising by RBC Direct Investing of any or all of the foregoing rights and that the rights which RBC Direct Investing is entitled to exercise pursuant to this section are reasonable and necessary for its protection having regard to the nature of securities markets, including in particular, their volatility.

9. OPTION TRADING.

With respect to any trading for the Account in options:

(a) Rights of RBC Direct Investing - RBC Direct Investing may from time to time:

(i) reject any order placed by the Customer

(ii) act through its market maker or options attorney as principal on the other side of any transaction executed for the Customer;

(iii) require any transaction to be on a cash-only basis, particularly during the last 10 days prior to expiry of an option;

(iv) limit or restrict short positions of, or short sales by, the Customer;

(v) limit or restrict the timing by which options orders or exercise instructions must be placed; or

(vi) disclose the Customer's trading and positions to any responsible exchange or clearing corporation.

(b) Customer Obligations. The Customer will:

(i) whether acting alone or in concert with others, comply with the position and exercise limits set by any relevant exchange or clearing corporation; and

(ii) give RBC Direct Investing timely instructions regarding the exercise or disposition of any option position.

(c) Amendments to Rules. The customer acknowledges that rules may be enacted, amended or repealed by any relevant exchange or clearing corporation which will affect existing positions or subsequent transactions.

(d) Exercise Assignment Notices. The Customer acknowledges that exercise assignment notices are allocated by the relevant clearing corporation at any time during the day. RBC Direct Investing will allocate such notices when received on a "first in, first out" basis unless the customer is notified otherwise by prior written notice. RBC Direct Investing is not responsible for any delay with respect to the assignment by the clearing corporation or the receipt by RBC Direct Investing of such notices. The Customer confirms that the Customer will accept an allocation on this basis.

(e) Liability of RBC Direct Investing. Errors or omissions with respect to any transaction for the Account which are caused by RBC Direct Investing will be adjusted by RBC Direct Investing. RBC Direct Investing will not be liable to the Customer in any way for errors or omissions caused by persons, or by conditions, over which RBC Direct Investing has no control.

(f) Instructions and Absence of Instructions. The accountholder will instruct RBC Direct Investing regarding any option transaction by no later than 3:30 p.m. Eastern time on the last trading day of the option. If the last day of trading of the option occurs on a day where the market closes early, the accountholder will instruct RBC Direct Investing by no later than thirty (30) minutes before the market closes.

If the accountholder fails to give RBC Direct Investing timely instruction, then RBC Direct Investing may take any action with respect to an option that it in its sole discretion determines should be taken, including but not limited to: (i) exercising, buying or selling any valuable option on behalf of the accountholder in which case the accountholder will pay any resulting transaction costs; and (ii) exercising for the account and risk of the accountholder, buying, selling or closing out any expiring valuable option.

(g) Writing Covered Options. If the Customer is authorized to write (sell) covered Call options, then the Customer must have the underlying Securities covered by any such option in the Account, or an acceptable escrow receipt made available to RBC Direct Investing evidencing ownership of such Securities and their availability to RBC Direct Investing upon exercise of the option, at the time of writing such options. The Customer will not sell or withdraw from the Account such Securities or any Securities accruing thereto during the term of such options and acknowledges that RBC Direct Investing may prohibit the withdrawal from the Account of any cash dividends or other cash distributions accruing thereon during the term of such options.

10. HOLDING AND RETURN OF SECURITIES.

RBC Direct Investing may hold the Customer's Securities at its head office or any of its branches or at any other location where it is customary for RBC Direct Investing to keep its Securities and RBC Direct Investing's responsibilities to the Customer for so holding the Customer's Securities shall be limited to the same degree of care exercised by RBC Direct Investing in the custody of its own Securities. Certificates for Securities for the same issue and for the same aggregate amounts may be delivered to the Customer in lieu of those originally deposited by the Customer.

11. FREE CREDIT BALANCES

Any monies held by RBC Direct Investing from time to time to the Customer's credit are payable on demand. Except to the extent required by law, such monies need not be segregated and may be used by RBC Direct Investing in the ordinary conduct of its business. The Customer acknowledges that the relationship of the Customer and RBC Direct Investing with respect to such monies is one of debtor and creditor only.

READ AND KEEP FOR YOUR RECORDS

RBC Direct Investing Inc. and Royal Bank of Canada are separate corporate entities which are affiliated. RBC Direct Investing Inc. is a wholly owned subsidiary of Royal Bank of Canada and is a Member of the Investment Industry Regulatory Organization of Canada and the Canadian Investor Protection Fund. Royal Bank of Canada and certain of its issuers are related to RBC Direct Investing Inc. RBC Direct Investing Inc. does not provide investment advice or recommendations regarding the purchase or sale of any securities. Investors are responsible for their own investment decisions. RBC Direct Investing is a business name used by RBC Direct Investing Inc. ® / ™ Trademark(s) of Royal Bank of Canada. RBC and Royal Bank are registered trademarks of Royal Bank of Canada. Used under licence. © Royal Bank of Canada 2022. All rights reserved.



RBC Direct Investing Inc.

OPTIONS TRADING AND MARGIN AGREEMENT

12. TRANSFER TO OTHER ACCOUNTS

RBC Direct Investing may at any time and from time to time take any monies or securities in the Account and any proceeds from the sale or other disposition of such Securities to pay or cover any obligations of the Customer to RBC Direct Investing including obligations of the Customer in respect of any other account with RBC Direct Investing whether such account is a joint account or is an account guaranteed by the Customer.

13. DECLARATION OF SHORT SALES

Whenever the Customer orders a short sale, the Customer will declare it as a short sale.

14. GOOD DELIVERY OF SECURITIES

Except for any declared short sale, the Customer will not order any sale or other disposition of any Securities not owned by the Customer or of which the Customer will be unable to make delivery in acceptable delivery form on or before the settlement date.

15. CUSTOMER INFORMATION

The Customer will from time to time advise RBC Direct Investing if the Customer acquires a controlling interest in or otherwise becomes an insider of any reporting issuer.

16. ACCOUNT STATEMENTS

Every confirmation, statement or other communication sent by RBC Direct Investing to the Customer shall be deemed to have been acknowledged as correct, approved and consented to by the Customer unless RBC Direct Investing shall have received written notice to the contrary within fifteen days after it is sent to the Customer.

17. COMMUNICATION TO THE CUSTOMER

Any notice or communication to the Customer may be given by prepaid mail, facsimile, telegraph or telex to any address of record of the Customer with RBC Direct Investing, or may be delivered personally to the Customer or to any such address of record and shall be deemed to have been received, if mailed, on the second business day after mailing or, if sent by facsimile, telegram or telex, on the day sent or, if delivered, when delivered. Nothing in this section shall be interpreted as requiring RBC Direct Investing to give any notice to the Customer which is not otherwise required to be given by RBC Direct Investing.

18. ACKNOWLEDGEMENT

The Customer acknowledges receipt of a copy of, and agrees to the terms and conditions of, the Account Opening Application and the Operation of Account Agreement. The terms of this Agreement shall prevail in case of inconsistency with such terms and conditions.

19. CAPACITY

The Customer, if a married woman, represents that she is not a "married woman not separate as to property" under the laws of Quebec (if she is, her husband must also sign this Agreement). The Customer, if a corporation, represents that it has the power and capacity to enter into this Agreement and to effect the transactions contemplated herein and that the execution and delivery of this Agreement have been duly authorized.

20. GENERAL

(a) This Agreement expresses the complete understanding between the Customer and RBC Direct Investing and none of the terms and conditions of this Agreement may be waived or changed without the approval in writing of the Customer and a duly authorized officer of RBC Direct Investing. If any statute or any statutory regulation or any by-law, rule, regulation, policy or custom of the Regulatory Authorities is enacted, made, amended or otherwise changed with the result that any term or condition of this Agreement is, in whole or in part, invalid, then such term or condition will be deemed to be varied or superseded to the extent necessary to give effect to such statute, regulation, by-law, rule, policy or custom. Any term or condition of this Agreement which notwithstanding any such variation is invalid shall not invalidate the remaining terms and conditions hereof.

(b) This Agreement shall enure to the benefit of and shall be binding upon RBC Direct Investing and the Customer and their respective personal representatives, heirs, successors and assigns. This Agreement shall survive and remain in effect notwithstanding any incidental, temporary or intermittent closing out, reopening or renumbering of any Account.

(c) In this Agreement where the singular is used, it shall include the plural.

(d) It is the express wish of the parties that this agreement and all documents, notices and other communication relating to the operation of the Account be in English. Il est de la volonté expresse des parties que ce contrat et tous les documents, avis et autres communications qui concernent l'opération du Compte soient rédigés en langue anglaise.

(e) The headings used in this Agreement are for convenience of reference only and shall not in any way affect the interpretation of this Agreement.

(f) This Agreement shall be construed in accordance with the laws of the jurisdiction in which the Customer's Account is maintained or, where the Customer has more than one Account, this Agreement shall be construed separately for each Account in accordance with the laws of the jurisdiction on which the Account is maintained.

(g) Whenever this Agreement entitles RBC Direct Investing to alternative courses of action, RBC Direct Investing shall be entitled to choose any, none or all such alternatives in its sole and unfettered discretion.

21. EFFECTIVE TIME

This Agreement will be effective and binding upon the Customer and RBC Direct Investing for option trading only after approval by RBC Direct Investing has been given for the granting of any margin facility from the time at which RBC Direct Investing first acts upon the instructions of the Customer.

22. DEFINED TERMS

For the purpose of this Agreement:

(a) "Securities" includes shares, share certificates, scrip certificates, deposit receipts, warrants, rights, bonds, debentures, notes and any other securities of any kind whatsoever, commodities and futures contracts, options on securities and options on commodities and futures contracts.

(b) « Regulatory Authorities » means any relevant securities commission, exchange, market, clearing corporation or association of brokers or dealers; and

(c) "RBC Direct Investing Approval" means the approval in writing given on behalf of RBC Direct Investing by any one of the following persons: RBC Direct Investing's qualified local Branch Manager, the Designated Registered Options Principal of RBC Direct Investing or any of his or her alternates, or any designated director of RBC Direct Investing.

23. CERTIFICATION BY CUSTOMER

(a) the Customer has read and understood this Agreement and acknowledges receipt of a copy of this Agreement and the Risk Disclosure Statement for Futures and Options;

(b) **the Customer is aware of the nature of the risks involved in both the purchase and the writing of options, whether or not undertaken in combination with the purchase or sale of other options or securities, understands the rights and obligations associated with put and call option contracts and is financially able to assume such risks and to sustain any losses resulting from such trading; and**

(c) **the Customer acknowledges that using borrowed money to finance the purchase of securities involves a greater risk than using cash resources only. If the Customer borrows money to purchase securities, their responsibility to repay the loan and pay interest as required by its terms remains the same even if the value of the securities purchased declines.**

24. ACCOUNT APPROVAL

The Customer is approved to buy or sell (closing sales only) options and write covered call options. The Customer may NOT write uncovered options or covered put options; engage in spreads combinations or straddles; write options against convertible securities; nor buy or sell futures.

ADDITIONAL INFORMATION (Please print clearly in large block letters)

1. Do you have past experience trading options? Yes No

2. Do you plan to trade options with other brokers? Yes No

(An options position established with one Member firm may not be closed out through another Member firm)

CUSTOMER NAME

NO. AND STREET

CITY PROVINCE POSTAL CODE (A1A 1A1)

TELEPHONE NUMBER (DAY)

RBC Direct Investing Account Number

I acknowledge and accept this as notice and give RBC Direct Investing Inc. consent to obtain a credit bureau report on the Applicant(s) or the Entity, as applicable.

X CUSTOMER SIGNATURE (APPLICANT) DATE (MM/DD/YYYY)

X CUSTOMER SIGNATURE (CO-APPLICANT) DATE (MM/DD/YYYY)

RBC DIRECT INVESTING USE		
RBC DIRECT INVESTING AUTHORIZED NAME	RBC DIRECT INVESTING AUTHORIZED SIGNATURE	DATE (MM/DD/YYYY)

Complete and Return to RBC Direct Investing.