RBC Investments

Professional Wealth Management

Automated Services Agreement ("Agreement")

Application Form follows on page 3

1. Definitions and Interpretation:

"Access Device" means any device I use to access an Automated Service, directly or indirectly, including, but not limited to, interactive voice response, cellular or portable phone, personal computer, intelligent terminal, television, modem, or similar device;

"Account(s)" means (each of) my account(s) with you;

"Automated Information" means any information provided through an Automated Service, in response to any request placed through an Access Device for account information, Quotations, or any other information or action, including without limitation, an Order Request;

"Automated Services" means any service offered by you now or in the future which permits me to access my Account or Automated Information, without limitation:

"Online Services" or any online, Internet, interactive voice response, or other electronic communication service, and all its components, offered by you now or in the future which provides access to the Account or Automated Information, including, Order Requests, Quotations or other services you provide;

"Applicant" means an applicant or any joint applicant or any person authorized by me to trade in connection with my account(s) who has signed and is governed by a currently valid general operation of account agreement with you ("General Operation of Account Agreement"). Examples of General Operation of Account Agreements include but are not limited to the following: Cash Account Agreement, Equity Creditline Agreement, Investment Management Account Agreement, Advisor Account Client Agreement or Access Manager Selection Program-Client Agreement;

"I","me","my","us" and "we" mean each applicant or any joint applicant or any person authorized by me to trade in connection with my account(s);

"External Information Provider" means any company or individual providing you, directly or indirectly, with securities or market data, including, but not limited to stock exchanges and other such securities markets;

"Order Request" means any buy, sell or trade request for stocks, mutual funds, options or other securities or financial instruments that is created, transmitted and received by you through an Access Device using an Automated Service if and when such service is provided by you;

"Password" means the personal password(s) I have selected or have been provided with from time to time to access the Account, enter Order Requests, obtain Quotations or otherwise access an Automated Service through an Access Device;

"Quotation" means any request made through an Access Device using an Automated Service for stock, option, index or other market quotation including bid/ask/last price/changes.

"Securities" includes all stocks, mutual funds, options, bonds, debentures, investment certificates or other similar property commonly known as securities and all other rights to property of any nature or kind;

"Trading" includes any buying, selling or other dealing in any interest in securities;

"You" or "Your" means RBC Dominion Securities Inc.

The provisions of this agreement (particularly sections 8. and 9.) shall be read with all grammatical changes required, if there is more than one investor, or if one or more of the investors is a corporation or other entity.

2. Terms and Conditions for Providing Automated Services:

As an Applicant for Automated Services, I hereby certify that I have signed a General Operation of Account Agreement with you and all information provided by me to you, now or previously, is true and complete. I agree to advise you in writing, or by such other manner as you may permit or direct from time to time, of any changes in such information;

In consideration for your acting as my agent for buying, selling and generally dealing with and trading in securities, I agree that this Agreement will govern all matters pertaining to Automated Services for my Account with you.

I further agree that if I use any of the Automated Services as defined below, such use is subject to the following terms and conditions as well as all other applicable terms and conditions of the General Operation of Account Agreement. By using any Automated Services, now or in the future, I acknowledge and agree that I have read, understood and agree to be bound by the following additional terms and conditions, including any charges, fees and commissions in effect from time to time for access to and use of the Automated Services, and any other terms, conditions or restrictions applicable from time to time to the Automated Services provided by you.

The following terms and conditions are in addition to and not in substitution for any other terms of this agreement. I agree that termination of this agreement shall result in immediate termination of the Automated Services provided to me and these additional terms and conditions except as expressly provided below.

3. Confidentiality of Password:

I agree to keep my Password confidential and separate from the Account number(s) and from any other information or documents relating to the Account. I acknowledge that I am solely responsible for all charges incurred through the use of my Password, maintaining the security of my Password and ensuring that it is used for myself only. I agree that you are not responsible for any unauthorized use of an Automated Service by any other person and I agree to accept responsibility for any loss caused as a result of or in connection with the use of my Password.

4. Security:

I will not attempt to enter restricted areas of any computer or telecommunications system of you or your affiliates or perform any functions not authorized pursuant to this agreement. You may, without notice, suspend my access to any or all Automated Services if you believe that I am using them to obtain unauthorized access to systems or information or am using them in any other inappropriate manner. In such event, access may be reinstated by you, at your sole discretion, following a review of the matter. You may terminate this agreement at any time without notice if you believe that I am using my Password, an Automated Service or Automated Information in an unauthorized or inappropriate manner or if there is unusual activity in or relating to the Account.

5. Use of Information:

Unless I choose not to share my information with Royal Bank Financial Group (see application form), from time to time,

(a) You may collect credit and other financially-related information about me ("Information") from me, from service arrangements (including transactions) I have made with or through you, from credit bureau and other financial institutions, and from references I have provided to you;

(b) You may use Information as follows:

(i) You may give it to credit bureau and other financial institutions and, with my consent, to other parties,

(ii) You may use it to determine my financial situation or to verify my identity,

(iii) You may use it for any purpose related to the provision to me of services I request from you. You may also give it to anyone who works with or for you, but only as needed for the provision of those services, and

(iv) You may use my social insurance number for income tax reporting purposes;

(c) You may also use Information for the following purposes:

(i) You may share it with other members of Royal Bank Financial Group (where the law allows this) so that they may promote their services to me, and

(ii) You may also use my social insurance number as an aid to identify me with credit bureau and other financial institutions for credit history file matching purposes.

I may tell you to stop using Information in the ways described in (c) at any time by contacting you. You acknowledge that the use of Information in the ways described in (c) is at my option and that I will not be refused other services just because I have told you to stop using it in those ways.

For the purposes of (c)(i), other members of Royal Bank Financial Group include your affiliates which are engaged in the business of providing any one or more of the following services to the public in Canada: deposits, loans and other personal financial services; credit, charge and payment card services; trust and custodial services; securities and brokerage services; insurance services.

If I am no longer your client or this agreement terminates, you may keep Information in your records so long as it is needed for the purposes described in (b) above or as long as it may be required by law.

6. Information/Liability:

I may receive Automated Information from you or as provided through the Automated Services which has been independently obtained from you or from various External Information Providers through sources believed to be reliable. I acknowledge that the Automated Information may include views, opinions and recommendations of individuals or organizations that may be of interest to investors generally. You do not endorse the views or opinions of External Information Providers. You are not liable for Automated Information I receive from an External Information Provider pertaining to investment, tax, accounting or legal advice, or recommendations for the purchase or sale of any security. Neither you nor any External Information Provider guarantees or shall have any liability, contingent or otherwise, to me or any other person, for the accuracy, completeness, timeliness or correct sequencing of any Automated Information, or for any decision made or action taken by me in reliance upon any Automated Information, or the Automated Services, or for interruption of any data, information or aspect of the Automated Services, whether due to any negligent act or omission or to any "force majeure", including without limitation communications or power failure, equipment or software malfunction or any cause beyond your reasonable control of or that of an Information Provider. In no event will you be liable to me or to others for any damages, direct, indirect, consequential or special, including without limitation all losses, costs, expenses, loss of profits, loss of business revenue or failure to realize expected savings arising from or out of the existence, furnishing or functioning of the Automated Services. Nor shall you nor any of your affiliates be responsible for any loss, damage or personal injury suffered by any person by reason of any act or omission in the course of or in connection with my operation of any computer or Access Device used to access the Automated Services or in connection with the furnishing or performance of any software you provide.

7. Use of Market Information:

The securities and market data provided through the Automated Services are proprietary to the Information Providers. Accordingly, I agree to use such data only for my individual benefit (or that of the investor if I am the person authorized to trade on the investor's Account) and not to reproduce, sell, distribute, circulate or commercially exploit the data in any manner or furnish it to any other person without your express written consent, and, where applicable, the express written consent of the Information Providers.

8. Order Requests (If and When Provided):

I hereby authorize you to accept all Order Requests for the Account through any Automated Service and I agree to be responsible for the accuracy of any instructions given for the Account or in connection with an Automated Service using an Access Device. All Order Requests are subject to your verification and acceptance, and further will only be processed if: the Account is in good order, the investor has sufficient funds to complete the transaction ordered and any such Order Request is consistent with the investor's stated objectives and trading practices. I understand that execution of any Order Request is subject to your prior approval and to confirmation by me of the Order Request in such manner as you may require from time to time.

9. Submission of Orders (If and When Provided):

I agree to accept responsibility for any loss caused as a result of or in connection with the submission of an Order Request using the Automated Services or an Access Device. You may maintain a database or other means to keep a record of all my instructions using the Automated Services. You may, at your sole discretion, act upon all instructions actually received by you, which have been given or purported to be given by me or on my behalf in respect of an Order Request using the Automated Services. You shall not incur any liability by reason of acting or failing to act due to an error in such Order Request actually received by you, or as a result of an Order Request not being received by you. I agree that it shall be my responsibility to ensure that Order Requests are actually received by you. Order requests given to or through an Automated Service as defined in this Agreement, including, without limitation, any interactive voice recognition system, personal computer system, Internet or other electronic or telecommunication device, shall be deemed to be correct as received by your systems.

10. Service Modifications and Interruptions:

You may modify any or all of the Automated Services at any time, with or without notice to me and any or all of the Automated Services may periodically be unavailable to me in order to allow for maintenance, updates or other reasonable cause, including periods of increased market activity.

11. Charges:

I agree to pay you, when requested, your usual charges, fees and commissions for access to and use of the Automated Services. Such charges, fees and commissions are subject to change from time to time by you upon at least 30 days prior written notice to me, which may include communication through an Automated Service.

12. Access:

I acknowledge that I have no ownership in or title to the software, technology, information and related documentation (collectively, the "Proprietary Information") provided to me in connection with the use of the Automated Services or Online Services and that they are proprietary to you. I agree to be bound by the terms of any software license agreement provided to me and to use the Proprietary Information only for my individual benefit (or that of the investor if I am the person authorized to trade on such investor's Account) and to take all reasonable measures to ensure that no unauthorized person shall have access to it. I shall not alter or reverse engineer the software, nor shall I disclose, lease, loan, duplicate or otherwise reproduce the Proprietary Information in it in whole or in part, directly or indirectly, except as may be permitted. I shall return the Proprietary Information promptly upon request, including upon termination for any reason of this agreement or of the Automated Services.

13. Conflict with Other Documents:

The terms, rules, procedures, fees and charges set out in any written or computer generated instructions, software, manuals, schedule of fees or other such documents relating to the Automated Services provided under this Agreement form part of this Agreement. This Agreement does not replace my General Operation of Account Agreement with you and merely supplements it by providing certain Automated Services to me. In the event of a conflict, between this Agreement and the General Operation of Account Agreement, the terms of the General Operation of Account Agreement will prevail.

14. Amendment and Termination:

You may amend any provision of this Agreement upon giving me at least (30) days prior written notice. You may cancel any or all Automated Services and terminate this Agreement at any time without notice to me. Notwithstanding any other terms and conditions of any other agreement, in the event that I wish to cancel an Automated Service, I agree to provide you with written notice at least 30 days in advance of the effective date of cancellation.

15. Waiver:

No provision of this Agreement can be waived except by agreement in writing between RBC DS and me. No action taken by RBC DS, nor any failure to take any action or exercise any right, remedy or power available to RBC DS under this Agreement or otherwise shall be deemed to constitute a waiver or other modification of any of its rights, remedies or powers.

16. Survival:

My obligations, representations and acknowledgments at sections 2., 3., 4., and 6. shall survive termination of this agreement.

17. Assignment:

This Agreement shall be binding upon my heirs, executors, administrators, successors and assigns. I may not assign this agreement or any rights hereunder without the consent in writing of RBC DS.

18. Severability:

If any provision of this Agreement is held to be invalid or unenforceable, such invalidity or unenforceability shall attach only to such provision, and the validity of the remainder of this agreement shall not be affected, and this Agreement shall be carried out as if such invalid or unenforceable provision were not contained herein.

19. Language:

You and I have expressly requested that this Agreement and all related documents, including notices, be drawn up in the English language. Vous et moi avons expressément demandé que ce contrat et tout document y afférent, y compris tout avis, soient rédigés en langue anglaise.

Automated Services Application Form

IMPORTANT. YOU MUST SIGN THIS FORM IN ORDER TO ACTIVATE ONLINE SERVICES.

Each individual requesting online account access must apply separately.

REQUIRED INFORMATION

☐ Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☐ Dr.

FIRST NAME

LAST NAME

ADDRESS

CITY PROV POSTAL CODE

SOCIAL INSURANCE NUMBER BIRTH DATE MM / DD / YYYY

(HOME/EVENING PHONE) (BUSINESS/DAY PHONE)

( ) ( )

(EMAIL ADDRESS)

4519-

ROYAL BANK OR ROYAL TRUST CLIENT CARD NUMBER (OPTIONAL)

NAME OF YOUR INVESTMENT ADVISOR

Your account numbers (for reference only)

I would like access to these additional accounts that are not under my name. (Please note that you must have proper authorization to access these accounts. i.e. Power of Attorney, Trading Authority, Letter of Authorization)

ACCOUNT NUMBER

NAME ON ACCOUNT

ACCOUNT NUMBER

NAME ON ACCOUNT

ACCOUNT NUMBER

NAME ON ACCOUNT

ACCOUNT NUMBER

NAME ON ACCOUNT

ACCOUNT NUMBER

NAME ON ACCOUNT

ACCOUNT NUMBER

NAME ON ACCOUNT

CONSENT – I acknowledge that I have read and understood the attached "Automated Services Agreement" and I agree to be bound by its terms and conditions.

SIGNATURE DATE

☐ I do not want my information shared with Royal Bank Financial Group. I understand that this means that I will not be able to see my accounts within Royal Bank Online Banking.

SIGNATURE DATE

OFFICE USE ONLY

INVESTMENT ADVISOR NAME (PRINT) I.A. CODE

BRANCH CODE PHONE NUMBER

☐ CLIENT FORM ☐ NON-CLIENT FORM

RBC Investments

RBC Dominion Securities Inc. is a member company under RBC Investments™. RBC Dominion Securities Inc. and Royal Bank of Canada are separate corporate entities which are affiliated. Investment Advisors are employees of RBC Dominion Securities Inc. Member CIPF. ®Registered trademark of Royal Bank of Canada. Used under licence. ™ Trademark of Royal Bank of Canada. Used under licence. ©Copyright 2004. All rights reserved. 04/01.