

This Customer Agreement (this "Agreement") is a contract among Royal Alliance Associates, Inc. ("Royal Alliance") and Royal Alliance's clearing agent, National Financial Services LLC ("NFS"), and you, the Account holder(s), whose name and personal information were submitted during the Application Process preceding the Agreement ("Agreement").

Please read this Agreement and contact Royal Alliance if you have any questions. By signing and returning the Agreement, you are agreeing that (a) you have received, read, understood and are legally bound by the terms and conditions of this Agreement; (b) you acknowledge having read Royal Alliance's Privacy Statement; (c) we can use your information to run a credit and other background check on each named applicant (see Section IV, Paragraph 1 below); and (d) **that in accordance with Section I entitled "Arbitration," you are agreeing in advance to arbitrate any controversies which may arise with, among others, Royal Alliance and its clearing agent in accordance with the terms outlined therein.**

You also agree that, upon execution of the Account Application and Customer Agreement, you will have supplied all of the information requested in the Account Application, and you declare it as true and accurate and further agree to promptly notify Royal Alliance in writing of any material changes to any or all of the information contained in the Account Application, including, but not limited to, information relating to your financial situation or investment objectives.

If you are not willing to be bound by these terms and conditions, you should not apply to open an Account with Royal Alliance. In consideration of Royal Alliance opening and carrying your Account and effecting transactions in the Account, you hereby acknowledge and agree to be legally bound by the following:

I. ARBITRATION

1. Arbitration Disclosures

This Agreement contains a pre-dispute arbitration clause. By signing an arbitration agreement the parties agree as follows:

- All parties to this Agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed;
- Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited;
- The ability of the parties to obtain documents, witness statements and other discovery is generally more limited in arbitration than in court proceedings;
- The arbitrators do not have to explain the reason(s) for their award unless, in an eligible case, a joint request for an explained decision has been submitted by all parties to the panel at least 20 days prior to the first scheduled hearing date;
- The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry;
- The rules of some arbitration forums may impose time limits for bringing a claim in arbitration. In some cases, a claim that is ineligible for arbitration may be brought in court;
- The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this agreement.

2. Agreement to Arbitrate Controversies

All controversies that may arise between you, Royal Alliance, and/or any of our employees, agents or officers, and NFS (including, but not limited to, controversies concerning any account, order or transaction, or the continuation, performance, interpretation or breach of this or any other agreement between you and us, whether entered into or arising before, on, or after the date this account is opened) shall be determined by arbitration in accordance with the rules then prevailing of the Financial Industry Regulatory Authority ("FINRA") and/or any other securities self-regulatory organization or securities exchange of which the entity against whom the claim is made is a member, as you may designate. If you do not notify us then you authorize us to make such designation on your behalf. Any arbitration pursuant to this Agreement shall be governed by the rules of the organization convening the arbitration panel. The award of the arbitrators, or of the majority of them, shall be final, and judgment on the award rendered may be entered in any court of competent jurisdiction. A party's ability to have a court reverse or modify an arbitration award is very limited.

3. Class Actions

No person shall bring a putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class action who has not opted out of the class with respect to any claims

encompassed by the putative class action until: (i) the class certification is denied; or (ii) the class is decertified; or (iii) the customer is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this agreement except to the extent stated herein.

II. MASTER AGREEMENT

Introduction

This Agreement includes terms and conditions governing your relationship with Royal Alliance, any brokerage Account opened herewith, and any other accounts opened for you by Royal Alliance in connection with an assignment of this Agreement or otherwise. Establishing an account in one of our investment programs may require additional applications and agreements. Those documents supplement this Agreement and all, collectively, govern your relationship with Royal Alliance.

Definitions

Account or Account(s): Any account or accounts opened by you with us, and any other account(s) with Royal Alliance and NFS in which you may have or acquire an interest.

Affiliates: Any entity that directly or indirectly controls, is controlled by or is under common control with Royal Alliance Associates, Inc. For purposes of determining whether an entity is an Affiliate, the term "control" means possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of an entity, whether through ownership of securities, by contract or otherwise.

Application: This Agreement and the application form signed by you and containing your acknowledgement of receipt and review of this Agreement.

Clearing Agent: National Financial Services LLC ("NFS") is retained by Royal Alliance to provide certain recordkeeping and operational services.

Property: This includes, but is not limited to, cash in any currency, securities, options, bonds, notes, and other instruments, obligations, contracts and products, tangible or intangible, in which you have or acquire an interest and are customarily dealt in by brokerage firms.

You, your, Client or Account Holder(s): Each person whose personal information is submitted in an Application and each person who signs and returns this agreement.

We, us, our, or ours: Royal Alliance and its Clearing Agent.

1. Request to Establish Account

You further request to establish an account(s) for the undersigned to be introduced to our clearing agent, National Financial Services LLC. You appoint Royal Alliance your agent for the purposes of buying and selling securities in your account. You authorize Royal Alliance to open or close brokerage account(s), to place and withdraw orders, and to take such other steps as are reasonable to carry out your directions or to protect itself and NFS in the event you breach any of your obligations. You understand that Royal Alliance will accept orders from you for execution by NFS. Royal Alliance and NFS reserve the right to refuse your orders.

2. Clearing Relationship

Royal Alliance and NFS have entered into an Agreement whereby NFS will perform certain functions and responsibilities with respect to clearing and servicing securities transactions. Royal Alliance, pursuant to this agreement, is responsible for the opening, approving and monitoring of accounts, and the acceptance of orders for your account.

3. Governance

All matters under this agreement shall be subject to the constitution, rules, regulations, customs and usages of the applicable exchange market or clearinghouse that NFS may use, as well as any NFS trading policies and/or limitations that are in effect at the time, and, where applicable, to the provisions of the Securities Exchange Act of 1934, and the rules and regulations of the Securities and Exchange Commission and the Board of Governors of the Federal Reserve System.

4. Accuracy of Communication

Any telephone conversations with Royal Alliance and/or NFS may be recorded for accuracy.

5. Conclusive Nature of Communications

Confirmations of transactions and statements of your account(s) shall be conclusive if not objected to in writing within five (5) and ten (10) days, respectively, after the date of any transaction or statement.

6. Communications to the Investor

Communications may be sent to you at the address set forth on your application or at such other address as you instruct.

All communications sent to you or Royal Alliance, whether by mail, telegraph, messenger or otherwise, shall be deemed given to you personally whether actually received or not.

7. Lottery Allocation Participation

When bonds or preferred stocks are held on your behalf in street name or bearer form which are callable in part, you agree to participate in the impartial lottery allocation system of the called securities in accordance with the rules of the New York Stock Exchange, Inc.

8. Affirmation of Relationship

You represent that no one except yourself (and to the extent community property stands in your accounts, your spouse) has an interest in your accounts. You further represent that, except as noted on the account application, you are not an employee of any exchange, or of any corporation of which an exchange controls a majority of the capital stock, or of a member of any exchange, or of a member firm or member corporation of any exchange. You further represent that, except as noted on your account application, you are not an employee of any bank or trust company or insurance company or any corporation, firm or individual engaged in the business of dealing, as broker or principal, in securities, bills of exchange, acceptances or other forms of commercial paper. You further represent that prior to giving a buy or sell order for securities or other property issued by a corporation or other entity with which you are affiliated; you will disclose such affiliation to Royal Alliance.

9. Core Account (Sweep Account)

Your account includes a core account (also known as a "sweep account", which is further explained in Section XV) that is used for settling transactions and holding credit balances. Amounts credited to your core account will be invested in the core account investment vehicle you indicate on your account application. If you do not choose a core account investment vehicle, we may invest your credit balance in the money market fund or taxable interest-bearing credit account of our choice.

Your account also includes an income account, which receives all non-reinvested income produced by securities held in your account (such as interest, dividends, and mutual fund distributions). Income paid into this account will accrue until paid out according to your instructions.

10. Credits to Your Account

Any new deposits (including checks) and any proceeds from transactions are credited promptly to your core account.

If you have a money market fund for your core account, all core account credits will be swept automatically into that fund — daily for amounts of \$1.00 or more, weekly for lesser amounts. All core fund investments must meet the fund's investment minimums. Money in the core fund earns dividends, as described in the fund's prospectus. If in the future you have a different money market fund for your core account, these provisions will still apply.

If you have a taxable interest-bearing credit account for your core account, your core account credits (which are considered cash balances awaiting reinvestment) may earn interest, at our discretion. The rate of any interest paid, as well as any minimums that may apply, is determined by NFS or us and may change at any time without notice to you. To learn more, speak to one of our representatives.

Note that while incoming checks will begin to earn dividends or interest upon deposit, you may have to wait up to four days before being able to draw on the proceeds (regardless of your core account vehicle). Credit balances in your income account may earn taxable interest, the rate of which is determined by NFS or us and may change at any time without notice to you. Any income account interest will be based on the daily averaging of income account credit balances during the interest period and, as long as it amounts to at least one cent, is paid on the first business day following the 20th day of each month and reflected on your month-end statement. Note that free credit balances in your core account and income account will not be combined to determine your interest earnings in either account.

11. Debits to Your Account

All debits are accumulated daily to your account and are paid to the extent that sufficient funds are available. As an account owner, you are responsible for satisfying all debits on your account, including any debt still owed after all assets have been removed from an account, any interest (at prevailing margin rates) that has accrued on that debt, any late charges arising from your failure to pay for securities transactions in full by the settlement date, and any costs (such as legal fees) that we or NFS incur in collecting the debt.

When multiple debit items become payable at the same time, these items will be paid in the following order:

- Securities transactions (including any margin calls) and any account fees;

- Debit card transactions;
- Checks written against your account.

When settling debits against your account, it is NFS's policy to turn to the following sources (collectively called your "available balance") in this order:

- Any cash available in your account without incurring margin interest charges (including both core and income account balances);
- If you have a margin account, any margin credit available;
- Any shares in another money market fund, including any in another non-retirement account with the same registration (which you authorize us to sell for this purpose when you sign the application);
- Any securities in this or any other account furnished by us in which you have an interest.

Interest on any margin debt will accrue beginning the day credit is extended and is subject to the terms of the attached Margin Agreement and Disclosure of Credit Terms on Transactions. Money market fund shares used to pay debits are redeemed at the NAV in effect at the time (typically \$1.00). For disclosures concerning money market funds, see "Money Market Fund Investments" later in this agreement.

12. Resolving Unpaid Debts or Other Obligations

If your available balance is not enough to satisfy a given debit, we and NFS reserve the right to take action as we see fit, including any of the following:

- Decline to honor the debit, which may result in fees (such as a returned check fee) or other consequences for you;
- If you have a margin account and the unsatisfied debit is for a securities purchase, draw on the available balance of another account of yours that we hold.

If you have a margin account, we or NFS may transfer to that account any unresolved debit from other accounts of yours.

Note that at any time, we or NFS may reduce your available balance based on obligations that have been incurred but not yet debited.

It is important to understand that we and NFS have additional choices for resolving unsatisfied obligations. Like many other securities brokers, we and NFS reserve the right to sell, transfer, or otherwise use any assets or other property in which you have an interest — either currently or at any other time — to discharge any obligations you may have to us or NFS (including unmatured and contingent obligations), and to do so without further notice or demand. For example, if you have bought securities but not paid for them, we or NFS may sell them ourselves and use the proceeds to settle the purchase.

We or NFS may also use property to satisfy a margin deficiency or other obligation, whether or not we or NFS have made advances in connection with this property. This provision extends to any property held by you or carried for any account of yours, including any credit balances, assets, and contracts, as well as shares of any mutual funds or other investment companies for which we, NFS, or an affiliate of either one provide management or administrative services. Although we or NFS may use other methods when we determine they may be more appropriate, we or NFS reserve the right to use the provisions described in this section at any time, except in cases involving retirement accounts when these provisions would conflict with the Employee Retirement Income Security Act of 1974 (ERISA) or the Internal Revenue Code of 1986, both as amended.

13. Transaction Settlement Deadlines

Unless notified to the contrary, you need to pay for all transactions by

2 p.m. Eastern Time on the settlement date, and deliver all securities in time for us to receive them one business day before the settlement date.

We and NFS reserve the right to cancel or liquidate, at your risk, any transaction not settled in a timely way.

14. Bank Wires and EFT Transactions

Bank wire transactions are normally executed the business day after you request them. A wire normally may be for between \$10,000 and \$999,999.

EFT transactions are normally executed within three to seven business days of your request. An EFT transfer may be for between \$10 and \$99,999. The two accounts involved in an EFT transaction must have at least one owner's name in common (and that name must match exactly).

To send and receive EFT transactions, your bank must be a member of the Automated Clearing House (ACH) system.

For EFT transactions, you hereby grant us limited power of attorney for purposes of redeeming any shares in your account(s) (with the right to make any necessary substitutions), and direct us to accept any orders to make payments to an authorized bank account and to fulfill these orders through

the redemption of shares in your account. You agree that the above appointments and authorizations will continue until either the account is terminated, we receive written notice of any change, or we have sent 30 days' written notice to your account's address of record indicating that we will cease to act as agents to the above appointments.

15. Dividend Reinvestment

With this feature, all dividends paid by securities that you designate for reinvestment are automatically reinvested in additional shares of the same security. ("Dividends" here means cash dividends and capital gain distributions, but not cash-in-lieu payments, late ex-dividend payments, and special dividend payments.) In designating any security for re-investment, you authorize NFS to purchase shares of that security for your account.

To be eligible for this feature, a security must satisfy all of the following:

- Be a closed-end fund, domestic common stock, or ADR;
- Be margin-eligible (as defined by NFS);
- Be listed on the New York Stock Exchange or the American Stock Exchange, or traded on NASDAQ;
- Be held in street name by NFS (or at a securities depository on its behalf);
- Not be held as a short position.

Dividends are reinvested on shares that satisfy all of the following:

- The security is eligible;
- You own the shares on the dividend record date;
- You own the shares on the dividend payable date (or the posting date, for shares handled through the DTC program described below), even if you sell them that day;
- Your position in the security has been settled on or before the record date;
- The shares are designated for reinvestment as of 9:00 p.m. Eastern
- Time on the record date (or, if the record date is not a business day, then the last business day before the record date).

If you designate securities on an account-wide basis, any ineligible securities you own will automatically be designated if and when they become eligible.

If you designate securities individually, and want to designate a new security you are buying, you can do so when you place your order to buy the security; however, if you are buying through a limit order, you will have to reconfirm the designation at the end of every business week that your order remains unfilled.

If an issuer delays a dividend, the reinvestment will occur on the day the dividend is actually paid.

Automatic reinvestments often involve purchase of partial shares, calculated to three decimal places. Partial shares pay pro-rated dividends and can be sold if you sell your entire share position, and will be liquidated automatically in transfers and certain other situations, but otherwise typically cannot be sold.

Although for dividend reinvestments your regular account statement takes the place of a confirmation, you can obtain immediate information the day after the reinvestment date by contacting Royal Alliance.

If you transfer or reregister your account with Royal Alliance (for example, by changing from individual to joint registration), you need to re-designate any securities whose dividends you want reinvested.

Reinvestment shares may be purchased through a program offered by the Depository Trust Company (DTC) that offers a share price discount of up to 5%. To find out which securities are currently available through the DTC, contact Royal Alliance. Note that the availability through this program of any given security may change without notice. Also note that DTC program transactions take longer to process: although the transactions are effective as of the dividend payable date, they are generally not posted to your account until 10 to 15 days later. If you sell your dividend generating shares before the posting date, the dividend will not be reinvested.

To remove securities from the dividend reinvestment service, notify Royal Alliance in writing or during business hours, but not later than 9:00 p.m. Eastern Time one business day before the record date (or, if the record date is not a business day, then two business days before the record date).

Note that dividend reinvestment does not assure a profit on your investments and does not protect against loss in declining markets.

16. Precious Metals

Precious metals are not covered by SIPC account protection, but are insured by the depository at market value if stored through NFS. When trading precious metals, note that because they can experience sudden and rapid price changes, they are risky as investments, and you cannot be guaranteed an advantageous price when you trade them. If you take delivery of precious

metals, delivery charges and sales and use taxes will apply. Precious metals are not marginable.

17. Account Protection – Securities Investor Protection Corporation Disclosure

The securities in your account are protected in accordance with the Securities Investor Protection Corporation (SIPC).

For more details on SIPC, or to request a SIPC brochure, visit www.sipc.org or call 1-202-371-8300.

18. Money Market Fund Investments

An investment in a money market fund is neither insured nor guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other U.S. government agency. Although a money market fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in a money market fund.

19. Custodial Registration

For accounts opened under the Uniform Gifts/Transfers to Minors Acts, you, the account owner, are the custodian. By opening this type of account, you agree that all assets belong to the minor and that you will only use them for the minor's benefit — even after the assets have been removed from the account.

20. Negotiability of Rights

The failure of Royal Alliance or NFS to insist at any time upon strict compliance with these agreements or with any of their terms or any continued course of such conduct on their part shall not constitute a waiver by Royal Alliance or NFS of any of their rights. Royal Alliance and NFS may amend this agreement at any time. This may include changing, dropping, or adding fees and policies, changing features and services or the entities that provide them, and limiting the usage or availability of any feature or service, within the limits of applicable laws and regulations. Although it is Royal Alliance's policy to send notice to account owners of any material changes, neither Royal Alliance nor NFS is obligated to do so in most cases. Outside of changes originating in these ways, no provision of this agreement can be amended or waived except in writing by a representative of Royal Alliance or NFS.

Royal Alliance and NFS may transfer their interests in this account or agreement to any of their successors and assigns, whether by merger, consolidation, or otherwise. You may not transfer your interests in your account or agreement except with our prior written approval, or through inheritance, corporate dissolution, or similar circumstance, as allowed by law, in which case any rights and obligations in existence at the time will accrue to, and be binding on, your heirs, executors, administrators, successors, or assigns.

Royal Alliance and NFS may enforce this agreement against any and all account owners.

If for any reason (such as the termination of a contract between us and NFS) your account is held directly by NFS, it may be restricted, and there may be new or different fees and commissions. Examples of restrictions include the ability to place sell orders only and the loss of electronic trading.

21. Termination

Royal Alliance or NFS can terminate your account or this Agreement at any time, for any reason, upon written notice to you. You can close your account, or terminate any optional feature, by notifying Royal Alliance in writing or calling us on a recorded line. When an account is closed, all debit cards, checkwriting, and other features associated with it are terminated.

Regardless of how or when your account is closed, you will remain responsible for all unpaid obligations of your account. This includes charges, debit items, or other transactions you initiated or authorized, whether arising before or after termination, as well as any fees incurred but not yet charged to your account. Payment for these obligations will be deducted from your final account balance.

22. Applicability of State Law

Except for statutes of limitation applicable to claims, this Agreement and all the terms included herein shall be governed and construed in accordance with applicable state law without giving effect to principles of conflicts of law. These Agreements shall cover individually and collectively all accounts which you may open or reopen with Royal Alliance and NFS, and shall inure to the benefit of the successors of Royal Alliance and NFS (whether by merger, consolidation or otherwise) and assigns, and shall be binding upon any of your heirs, executors, administrators and assigns. In addition, if you have already entered into any agreements concerning services or features that relate to this Account, or if you do so in the future, this Agreement incorporates by reference the terms, conditions, and policies of those agreements. In the case of any conflict between this Agreement and an agreement for a particular service or feature, the service or feature agreement will prevail.

23. Unenforceability of Individual Clauses

If any provision or condition of these agreements shall be held to be invalid or unenforceable by any court, regulatory or self-regulatory agency or body, that provision shall be enforced to the maximum extent allowable or made to conform; the validity of the remaining provisions and conditions shall not be affected thereby, and these agreements shall be carried out as if any such invalid or unenforceable provision or condition were not contained herein.

24. Broker/Dealer Liabilities

Neither Royal Alliance nor NFS shall be liable for loss caused directly or indirectly by government restrictions, exchange or market ruling, suspension of trading, war, terrorist incident, strike, interruption of transportation, communication or data processing services, or other condition beyond our control. Royal Alliance and/or NFS may seek damages pursuant to applicable state law in those instances wherein Royal Alliance is presented with a check drawn upon insufficient funds or the checking account has been closed. These damages may be in excess of those damages so notated above and may include an amount no greater than twice the face amount of the check or \$750.00, whichever is less. In such a situation, criminal penalties may also apply.

25. Joint Obligations

If the undersigned consists of more than one individual, your obligations under these agreements shall be joint and several.

26. Inactive Fee

Royal Alliance will assess an annual fee assessed to all inactive accounts.

27. Lost Securities

If your periodic customer statement indicates that securities were forwarded to you and you have not received them, you should notify Royal Alliance immediately. If notification is received within 120 days after the mailing date, as reflected on your periodic statement, replacement will be made free of charge. Thereafter, a fee for replacement may apply.

28. Investor Responsibilities

Please take responsibility in preventing unauthorized acts within your control by adhering to all of the following:

- Always make payment for the purchase of securities to a partnership escrow agent as instructed in the Offering Memorandum;
- Always make payment for the purchase of stocks or bonds to our clearing firm, NFS;
- Always make payment for the purchase of a mutual fund or unit investment trust to NFS or Royal Alliance;
- Never make payment to any person or entity not named above including your representative unless your representative is a registered investment adviser and payment is being made for advisory services;
- Pay for a security purchase by utilizing a traceable instrument (i.e., personal check). Never pay cash, money order, cashier's check or foreign check for a security purchase;
- Representatives are not custodians, and therefore cannot take personal possession of your securities, stock powers, monies or any other personal or real property in which you may have an interest;
- Representatives are not permitted to act as trustees, executors, etc.;
- Do not obtain credit or otherwise borrow money to purchase securities except through a properly approved margin account;
- Do not accept any commission rebate or any other inducement with respect to your purchase or sale of securities;
- Do not enter into an understanding whereby you agree to buy or sell securities directly to your Representative;
- Do not agree to enter into any other business relationship with your representative, including, but not limited to, helping to capitalize or finance the business of your Representative.

29. Investor Acknowledgement

You acknowledge that this Agreement includes a pre-dispute arbitration clause. You acknowledge receiving a copy of this Agreement, and you have had the opportunity to read it and you understand it. Furthermore, you acknowledge that you have read all information on the Account Application, you have reviewed the terms and conditions of this Agreement, including all information contained herein. You hereby verify that all the information provided is true and correct and may be relied upon by us for the purposes of evaluating your suitability and sophistication in relation to making securities recommendations (including but not limited to investment objectives, risk tolerance, income and net worth.) Further, you indemnify us for any loss, claims or damages, including legal fees, which we may incur as a result of any

securities recommendation or any securities-related violations resulting from our reliance upon the information you have provided. You acknowledge your responsibility to read the prospectus or offering brochure of any mutual fund, direct participation program, variable annuity and/or new issue offering.

NFS takes instructions from Royal Alliance with respect to transactions in your account. You agree to indemnify NFS from and hold it harmless against any losses resulting from your actions or failures to act, whether intentional or not, including losses resulting from actions taken by third parties. Beyond taking reasonable steps to verify the authenticity of instructions, NFS has no obligation to inquire into the purpose, wisdom or propriety of any instruction that it receives.

30. Governing Laws and Policies

This Agreement and its enforcement are governed by the laws of the Commonwealth of Massachusetts, except with respect to its conflicts-of-law provisions.

III. PRIVACY NOTICE REGARDING CLIENT PRIVACY**1. Protecting Your Privacy**

Maintaining the trust and confidence of our clients is a high priority. That is why we want you to understand how we protect your privacy when we collect and use information about you, and the steps that we take to safeguard that information. This notice is provided to you on behalf of Royal Alliance Associates, Inc.

2. Information We Collect

In connection with providing investment products, financial advice, or other services, we obtain non-public personal information about you, which may include:

- Information we receive from you on account applications, such as your address, date of birth, Social Security Number, occupation, financial goals, assets and income;
- Information about your transactions with us, our affiliates, or others; and
- Information received from credit or service bureaus or other third parties, such as your credit history, or employment status.

3. Categories of Parties to Whom We Disclose

We will not disclose information regarding you or your account with us, except that we may disclose under the following circumstances:

- To your authorized Financial Advisor and his or her manager;
- To our parent companies or affiliates, to the extent permitted by law.
- To entities that perform services for us or function on our behalf, including financial service providers, such as clearing broker-dealer, investment company, or insurance company;
- To consumer reporting agencies;
- To third parties who perform services on our behalf;
- To your attorney, trustee or anyone else who represents you in a fiduciary capacity;
- To our attorneys, accountants or auditors; and
- To government entities or other third parties in response to subpoenas or other legal process as required by law or to comply with regulatory inquiries.
- Royal Alliance Associates, Inc. does not sell customer lists or customer information to third parties.
- We may disclose non-public personal information about you in connection with the transfer of your account to another financial institution at your request or the request of your advisor. Royal Alliance Associates, Inc. permits Financial Advisors and Investment Advisers that terminate their affiliation with Royal Alliance Associates, Inc. to make copies of their client files.* If you do not want Royal Alliance Associates, Inc. to disclose your non-public personal information with your advisor's new financial institution, please contact **Royal Alliance Associates, Inc., Attn: Legal Department, 10 Exchange Place, Suite 1410, Jersey City, NJ 07302.***

4. How We Use Information

Information may be used among affiliate companies that perform support services for us, such as data processors, technical systems consultants and programmers, or companies that help us market products and services to you for a number of purposes, such as:

- To protect your accounts from unauthorized access or identity theft;
- To process your requests, such as securities purchases and sales;

- To establish or maintain an account with an unaffiliated third party, such as a clearing broker-dealer providing services to you and/or Royal Alliance Associates, Inc.;
- To service your accounts, such as by issuing checks and account statements;
- To comply with Federal, State, and Self-Regulatory Organization requirements; and
- To keep you informed about information of interest to you.

5. Our Security Policy

We restrict access to nonpublic personal information about you to those individuals who need to know that information to provide products or services to you and perform their respective duties. We maintain physical, electronic, and procedural security measures to safeguard confidential client information.

6. Closed or Inactive Accounts

If you decide to close your account(s) or become an inactive customer, our Privacy Policy will continue to apply to you.

7. Complaint Notification

Please direct complaints, questions, or issues regarding the Privacy Policy to: Chief Privacy Officer, 10 Exchange Place, Suite 1410, Jersey City, NJ 07302.

8. Changes to This Privacy Policy

If we make any substantial changes in the way we use or disseminate confidential information, we will notify you.

**If you reside part-time in a state that requires your affirmative consent before we provide your non-public personal information to certain third-parties – such as in connection with the transfer of your advisor to another financial institution – we will obtain such consent as required.*

IV. REGULATORY REQUIREMENTS PERTAINING TO EXCHANGE OF PERSONAL INFORMATION

1. Use of Personal Information; Credit Investigation

You understand and agree that we exchange personal and credit information about you with others, including our Affiliates, for verification purposes, including verifying your identity, for the purposes of determining whether we want to open an Account for you and, if so, under what financial terms and conditions. All other uses of your personal and credit information are governed by our Privacy Policy.

You authorize us and our Agents to investigate your background and credit standing (and the credit standing of your spouse if you reside in a community property jurisdiction) and to request a consumer or similar report to verify information about your identity and the source of your payments to enable us to determine your eligibility for an Account, for certain credit-related features of the Service or for any other legitimate business purpose. You also authorize us, in this connection, to contact such financial institutions (including our Affiliates) and to employ such reporting agencies or services as we deem appropriate.

If any adverse credit or other determination is made on the basis of information contained in a report furnished by a reporting agency or other information source, we will supply you with the name of the reporting agency and/or our supervisory employee, as applicable, and, at your request, with the information contained in the report or the statement or reasons, as applicable. If we extend, update or renew your credit, process requests by you for other Accounts or requests by you for changes in services provided for your existing Account, we may request new credit reports without notifying you.

You are hereby notified that any negative credit data reflecting on your credit record may be submitted to a credit-reporting agency if you fail to fulfill the terms of your credit obligations.

V. CUSTOMER IDENTIFICATION PROGRAM NOTICE

To help the government fight the funding of terrorism and money laundering activities, federal law requires financial institutions to obtain, verify, and record information that identifies each person who opens an account.

When you open an account, we will ask for your name, address, date of birth and other information that will allow us to identify you. We may also ask to see your driver's license or other identifying documents.

If your identity cannot be established, Royal Alliance may not be able to open an account or carry out transactions for you.

VI. KNOW YOUR CUSTOMER

The FINRA Rule 2090 (Know Your Customer) requires the Firm to use reasonable diligence and to know and retain the essential facts concerning each

customer with regard to the opening and maintenance of every account. Additionally, to comply with FINRA Rule 2090, the Firm must understand the authority of each person acting on behalf of the customer to effectively service the customer's account and act in accordance with any special handling instructions for the account. To comply with the regulation, the Firm will ask for the name, address, date of birth, social security number and other information for control persons/authorized parties associated with the account (i.e. authorized party, trustee, power of attorney, executors, guardians, and conservators). Control persons/authorized parties have a level of control over, or entitlement to, the funds or assets in the account that enable them, directly or indirectly, to control, manage or direct the account. If your identity or the identity of the individuals described above cannot be established, our Firm may not be able to open an account for you.

VII. NET WORTH AND LIQUID NET WORTH

Royal Alliance defines Net Worth as Assets minus Liabilities (excluding primary residence and any mortgage or other loan on the primary residence).

Royal Alliance defines Liquid Net Worth as that portion of Net Worth that is comprised of cash and cash equivalents, which includes marketable securities, treasury bills, bank deposits and any other asset readily convertible into cash within 3 business days of liquidation.

VIII. ANNUAL EXPENSES, SPECIAL EXPENSES, AND TIMEFRAME FOR SPECIAL EXPENSES

For purposes of completing the client account paperwork:

The Firm defines Annual Expenses as expenses that may include, but not be limited to mortgage payments, rent, long-term debts, utilities, alimony or child support payments, etc.

The Firm defines Special Expenses as expenses that may include, but not be limited to, a down payment for a home purchase, remodeling a home, a car purchase, education, medical expenses, etc.

The Timeframe for Special Expenses is defined as the amount of time you anticipate to utilize funds to pay for any special expenses.

IX. INVESTMENT TIME HORIZON AND LIQUIDITY NEEDS

The Firm defines investment time horizon as the expected period of time you plan to invest in order to achieve your financial goals.

The Firm defines liquidity needs as the ability to quickly and easily convert to cash all or a portion of the investments in your account(s) without experiencing significant loss in value from, for example, the lack of a ready market, or incurring significant costs or penalties.

X. RISK TOLERANCE AND INVESTMENT OBJECTIVE DEFINITIONS

1. Risk Tolerance

Aggressive. The aggressive portfolio should be constructed to help maximize long-term annual returns rather than to minimize possible short-term losses.

Moderately Aggressive. Moderately aggressive investors are willing to assume more short-term risk in an attempt to maximize long-term annual returns.

Moderate. The moderate investor is willing to accept more risk than the conservative or the moderately conservative investor, but is probably not willing to accept the short-term risk associated with the goal of achieving a long-term return dramatically above the inflation rate.

Moderately Conservative. The moderately conservative investor is sensitive to short-term losses, but can tolerate some risk in an attempt to achieve a higher rate of return.

Conservative. The conservative investor is particularly sensitive to short-term losses, but is seeking to outperform inflation over the long run.

2. Investment Objectives

Capital Appreciation. These types of investments refer to a greater increase in an investment's value than Growth investments over a shorter period of time. Investments in this category include common shares listed on the NASDAQ SmallCap market and also stocks of companies whose fundamentals are weak and/or deteriorating, i.e., decreasing revenue, net income, or earnings per share.

Capital Preservation. These types of investments are the most conservative in nature with the primary goal being a return of the investor's principal. The types of investments that meet this criterion are FDIC-insured CD's, insured municipal bonds and U.S. Treasury bonds, bills, and notes.

Income. These types of investments have the primary characteristic of generating periodic income. The types of investments that meet this criterion are corporate bonds, municipal bonds, government agency bonds, preferred stocks, utility stocks, REITs, UITs, bond mutual funds and money market funds.

Growth/Long Term Growth. These types of investments refer to an increase in an investment's value over an extended period of time. Stocks that meet this criterion are generally issued by seasoned and established companies.

Speculation. These types of investments are the most risky in nature and generally provide the largest potential for price appreciation and depreciation with the highest likelihood of volatility. Securities in this category include stocks issued by companies with a brief corporate history, new or untested management, and products merely in the development stage. Also included in this category are OTC stocks, IPOs, emerging growth mutual funds, alternate investments and high-yield bond mutual funds.

Tax-advantage. These types of investments/investment plans refer to tax benefits to the investor such as tax deferral, the ability to get a tax-deduction or in some cases, tax-free interest. Investors should note that certain securities, such as municipal bonds are often marketed as tax-free or tax-exempt. However, each municipal bond is unique and may in some cases be subject to state and local taxes, alternative minimum tax as well as capital gains tax. Royal Alliance does not provide tax advice. Investors should seek a qualified tax professional when making investment decisions.

All investments involve risk, including the potential loss of principal invested. Please contact your investment professional if you have any questions concerning this document. Securities:

- Are not FDIC or NCUA insured;
- May Lose Value;
- Are not obligations of a Bank, nor do Banks guarantee them.

XI. ROUTING OF ORDERS

1. Routing of Orders

Brokerage orders (including those generated by reinvested dividends) are routed through NFS, who in turn sends orders to various exchanges or market centers for execution. In deciding where to send an order, NFS looks at a number of factors, such as size of order, trading characteristics of the security, favorable execution prices (including the opportunity for price improvement), access to reliable market data, availability of efficient automated transaction processing, and execution cost. Some market centers may execute orders at prices superior to the publicly quoted market. Although you can give instructions with a written order (though not an order placed through any telephone, electronic, or online trading system) that the order be sent to a particular marketplace, NFS's order-routing policies are designed to result in transaction processing that is favorable for you.

2. Requirements per Rule 11Ac1-3

The following statement is provided to you as required by Rule 11Ac1-3 of the Securities and Exchange Commission.

Royal Alliance or NFS may receive remuneration for directing equity order flow to particular broker/dealers or market centers for execution. The source and amount of any such compensation received by Royal Alliance in connection with your transaction(s) will be disclosed upon request.

XII. REVENUE SHARING PROGRAM and Conflicts

Royal Alliance Associates, Inc. (Royal) maintains revenue sharing arrangements with certain mutual funds, annuities, life insurance, direct participation programs (DPPs), real estate investment trusts (REITs), 529 plan providers, and third party money managers. These sponsors have greater access to our advisors to provide training and other educational presentations and product information so that they can serve investors better. Please visit the "Client Information and Disclosures" section of our Web site www.royalalliance.com to see a list of sponsors who participate in these revenue sharing arrangements.

Financial advisors of Royal do not receive additional compensation from Royal in connection with sales of certain sponsors' products as opposed to other sponsors, including some mutual fund families, insurance companies, DPP sponsors, REIT sponsors or third party money managers. In connection with sales of the sponsors' mutual funds, however, Royal often absorbs all or part of the nominal "ticket charge," which is normally borne by your advisor.

Because of these revenue sharing arrangements, though they do not impact advisor compensation, advisors may prefer recommending products offered by a sponsor who is participating in the revenue sharing program over other mutual funds, variable products, DPPs, REITs or third party money managers available through Royal. You should feel free to ask your advisor how he or she will be compensated for any transaction involving a sponsor's products.

Royal will update information regarding sponsors who participate in revenue sharing arrangements with Royal on its website on a regular basis. You can access this updated information, and our Disclosure Document For Mutual Fund and Variable Product, Real Estate Investment Trust, Direct Participation Program and Third Party Money Manager Investors at www.royalalliance.com

and click on "Client Information and Disclosures".

XIII. BUSINESS CONTINUITY DISCLOSURE STATEMENT

Royal Alliance is providing you with this document to inform you of its ability to respond to certain business disruptions at your registered representative's local office or at the main office of Royal Alliance. Your registered representative is associated with Royal Alliance and, as a result, all transactions that you place through him or her are processed through Royal Alliance's systems. Royal Alliance's ability to respond to business disruptions is therefore important to your relationship with your representative.

In general, Royal Alliance maintains a business continuity plan and intends to continue business in the event of a significant business disruption. Royal Alliance is an introducing broker/dealer and, as such, it relies on its correspondent-clearing firm to perform certain functions on its behalf, including the execution of securities transactions and the maintenance of customer funds and securities. Accordingly, Royal Alliance's ability to respond to certain business disruptions is partially dependent on our clearing firm.

In the event of a significant business disruption at either the local or main office, Royal Alliance may route calls to an office location in a separate geographic location, and, if necessary, transfer operations to a facility maintained by a third-party vendor. Although Royal Alliance intends to continue business in the event of a significant business disruption, there are some disruptions that may render Royal Alliance or your registered representative unable to continue business. Under such circumstances,

Royal Alliance will ensure that clients will be able to access their funds and securities within a reasonable time.

To provide clients with up-to-date information during a significant business disruption to your registered representative's local office or the main office of Royal Alliance, clients may call Royal Alliance's emergency telephone number at 1-619-471-3712 or visit our emergency information Web page at www.royalalliance.com.

1. Royal Alliance's Response to Events of Varying Scope

The following sections describe specific events and Royal Alliance's corresponding general response to those events. Clients, however, should note that these responses are subject to modification and, depending on the severity of a specific event; Royal Alliance cannot guarantee that it will be able to follow the stated course of action. If these responses are modified, Royal Alliance will post the updated disclosure statement on its Web site. In the alternative, you may request from your registered representative that Royal Alliance send you, by mail, a copy of the updated disclosure statement.

Under the following scenarios, Royal Alliance intends to continue its business:

- **A Disruption to a Single Building or Firm-Only Business Disruption**

These disruptions may be caused by physical damage, technology problems, or an inability to have personnel arrive at an office. In the event that there is a significant business disruption to a single building or Royal Alliance's internal primary systems, Royal Alliance may, if necessary, transfer its operations or route incoming calls to another office in a separate geographic location. From this separate location,

Royal Alliance will accept client orders. In this process, clients may experience a minor delay in reaching Royal Alliance due to increased client calls, technology delays, or other minor difficulties arising from the transfer of operations. Royal Alliance expects that operations could be disrupted for up to one (1) hour. If Royal Alliance's trading platform is affected, there may be a more significant delay. Royal Alliance, however, will be able to place orders outside the trading platform.

- **A Business-District, Citywide, or Regional Disruption**

In the event that there is a significant business disruption that affects the business district, city, or region where any of Royal Alliance's primary systems are located, Royal Alliance may, if necessary, transfer its operations or route incoming calls to another office in a separate geographic location office. In this process, clients may experience a minor delay in reaching Royal Alliance due to increased client calls, technology delays, or other minor difficulties arising from the transfer of operations. If the disruption is significant, Royal Alliance may transfer its operations to a third-party service provider. In addition, if our clearing firm is affected by the business-district, citywide, or regional disruption, clients may experience additional delays. Nevertheless, Royal Alliance expects that operations could be disrupted for up to four (4) hours.

2. Our Clearing Firm may be contacted in Limited Situations

In the unlikely event that Royal Alliance is unable to continue business, clients may directly contact National Financial Services LLC ("NFS"), our clearing firm, to process limited trade-related transactions, cash disbursements, and security transfers. Please call the NFS Customer Service Line at 1-617-563-5977. However, please note that if a Customer of Royal Alliance calls when Royal

Alliance is still in operation, the Customer will be redirected to Royal Alliance.

3. Variable Product Holdings and Certain Mutual Fund Holdings

Royal Alliance does not place its variable annuity transactions through its clearing firm; rather, transactions are placed directly through the variable annuity provider. Accordingly, in the unlikely event that Royal Alliance is unable to continue business, clients may directly contact their variable annuity provider, as indicated on their periodic account statements, to process limited trade-related transactions. Certain mutual fund transactions also may not be placed through our clearing firm. If this is the case, in the unlikely event that Royal Alliance is unable to continue business, clients may directly contact their mutual fund provider, as indicated on their periodic account statements, to process limited trade-related transactions. Please contact your representative to determine whether your mutual fund transactions are placed through our clearing firm or directly through a mutual fund provider.

XIV. CONTACT US

You may contact us with questions about this policy, to instruct us not to share certain information about you within our affiliates, or to inform us that you prefer not to receive information about our services by doing one of the following:

Calling: 1-800-821-5100
Writing: Royal Alliance Associates, Inc.
 10 Exchange Place, Suite 1410
 Jersey City, NJ 07302

Complaint Notification

Please direct complaints to:
 Royal Alliance Associates, Inc.
 Attn: Legal Department
 10 Exchange Place, Suite 1410
 Jersey City, NJ 07302

XV. Treatment of Free Credit Balances

Royal Alliance offers its customers a service called a "Sweep Program," pursuant to which we may, upon receiving your affirmation to participate via execution of the Client Signature Page, automatically transfer available cash (called "Free Credit Balances") to one or more Money Market Mutual Fund(s) ("Money Fund(s)"), depending on your account type.

By entering your signature on the Client Signature Page, you (i) are providing affirmation for your account(s), as well as all subsequent and future account(s) opened with Royal Alliance, to participate in the Royal Alliance Sweep Program; (ii) consent to having Free Credit Balances in your account(s) included in the Royal Alliance Sweep Program; (iii) acknowledge that you have been notified of the general terms and conditions of the products made available through Royal Alliance's Sweep Program; (iv) understand that Royal Alliance may change the list of eligible products made available to you within the Sweep Program; and (v) should you in the future decide to remove your account(s) from participating in Royal Alliance's Sweep Program, you may do so by notifying your Financial Advisor.

For all account(s) that participate in Royal Alliance's Sweep Program we are obligated to provide you: (i) the disclosures and notices regarding the Sweep Program required by each self-regulatory organization of which Royal Alliance is a member; (ii) quarterly statements of account(s) notifying you that the shares of any money fund(s) in which you have a beneficial interest, can be liquidated upon your order and the proceeds returned to your securities account or remitted back to you; and (iii) written notice at least 30 calendar days before changing the terms and conditions of the Sweep Program; changing the terms and conditions of a product currently available through the Sweep Program; or changing your investment in the Sweep Program from one money fund to another. If we are required to provide notice to you, the notice will describe the new terms and conditions of the Sweep Program, product(s), or the new product(s), as applicable, and the options available to you if you do not accept the new terms and conditions or product(s).

XVI. MONEY MARKET MUTUAL FUND ("MONEY FUND") OPTIONS AVAILABLE IN THE SWEEP PROGRAM

Upon establishment of your account(s) with Royal Alliance and execution of the Client Signature Page, your account(s) will automatically default to the sweep product(s) indicated in the Sweep Product Table below. As indicated in the Sweep Product Table, all retail brokerage accounts (non-IRAs) and Individual Retirement Accounts (IRAs) with NFS as custodian will have Free Credit Balances swept to a money fund. Your account type will determine eligibility to the proper money fund. Upon execution of the Client Signature Page, you hereby appoint Royal Alliance's clearing firm, NFS, as your authorized agent to establish and maintain your sweep account.

1. Account Type Eligibility

If you are opening a taxable retail brokerage account (non-IRA) your free credit balances will be automatically swept to the Fidelity Government Capital Reserves Fund (ticker symbol: FZAXX). An alternative money fund product may be selected as the sweep product for these account types. You must contact your Financial Advisor for a complete list of alternative money fund products that may be used as your sweep product for such account types.

If you are opening a non-qualified account, such as an Individual Retirement Account (IRA) in which NFS serves as the IRA Custodian, your free credit balances will be automatically swept to the Fidelity Government Fund - Daily Money Class (ticker symbol: FZBXX). Please note, no alternative money fund products may be selected for these account types.

Additional Information on the Fidelity Government Capital Reserves Fund (FZAXX)

The Fidelity Government Capital Reserves Fund is a money market mutual fund issued and administered by Fidelity Investments and managed by Fidelity Management & Research Company. The Fund's investment objective is to obtain as high a level of current income as is consistent with preservation of capital and liquidity. Invests in US government securities and repurchase agreements for same and enters into reverse repurchase agreements. Invests in compliance with industry-standard agreements for money market funds.

Additional Information on the Fidelity Government Fund - Daily Money Class (FZBXX)

The Fidelity Government Fund - Daily Money Class is a money market mutual fund issued and administered by Fidelity Investments and managed by Fidelity Management & Research Company. The Fund's investment objective is to obtain as high a level of current income as is consistent with preservation of capital and liquidity. Invests in US government securities and repurchase agreements for same and enters into reverse repurchase agreements. Invests in compliance with industry-standard agreements for money market funds.

2. Important Money Fund Information

Investments in money funds are not guaranteed or insured by the Federal Deposit Insurance Corporation (FDIC) or any other government agency. Although money funds seek to preserve a net asset value of \$1.00 per share, there is no guarantee that this will occur; it is possible to lose money by investing in a money fund, including loss of principal. Investors should carefully consider the investment objectives, risks, charges, and expenses of money funds before investing. The prospectus contains important information on the Fund. Please contact your Financial Advisor for further details and additional information, including a free prospectus, for any of the money funds made available within the Sweep Program.

3. Fees Received by Royal Alliance

Royal Alliance, NFS, and your Financial Advisor may receive compensation, in the form of distribution assistance, from participating money funds made available within the Sweep Program. For additional information on such distribution assistance payments, please refer to the money funds' prospectus or the "Sweep Program Terms and Conditions" document. You may also contact your Financial Advisor for such information. In an effort to maintain a positive yield to a customer on one or more money funds, a fund company (such as Fidelity Investments) may reduce or waive a portion or all of the money funds' fees. Please consult the money fund prospectus for additional information related to fee waivers.

Sweep Product Tables

Account Types	All Retail Accounts (non-IRA)
Default Sweep Product Name	Fidelity Government Capital Reserves Fund
Registered Ticker Symbol	FZAXX
Type of Product	Money Market Mutual Fund
Alternative Products Allowed	Yes
Brief Description: The Fund seeks as high a level of current income as is consistent with preservation of capital and liquidity. Invests in US government securities and repurchase agreements for same and enters into reverse repurchase agreements. Invests in compliance with industry-standard agreements for money market funds.	

Account Types	National Financial Services IRAs
Default Sweep Product Name	Fidelity Government Fund - Daily Money Class
Registered Ticker Symbol	FZBXX
Type of Product	Money Market Mutual Fund
Alternative Products Allowed	No
Brief Description: The Fund seeks as high a level of current income as is consistent with preservation of capital and liquidity. Invests in US government securities and repurchase agreements for same and enters into reverse repurchase agreements. Invests in compliance with industry-standard agreements for money market funds.	

XVII. RULE 382 DISCLOSURE**Account Administration**

New York Stock Exchange Rule 382 requires that we identify the various account administration functions that we and NFS each agree to perform.

Below is a summary of this information; for a more complete description, contact us.

As your broker/dealer, we will:

- Open, approve, and monitor your brokerage account;
- Transmit accurate, timely instructions to NFS regarding your brokerage account;
- Determine the suitability of any investment recommendations and advice;
- Operate your brokerage account in compliance with applicable laws and regulations;
- If you have a margin account, advise you of margin requirements and ensure that your account remains in compliance with all applicable federal, industry, and NFS margin requirements;
- Maintain proper books and records of all services we perform for you.
- At our direction, NFS, as clearing agent, will:
- Execute, clear, and settle transactions that we process through them;
- Send you transaction confirmations and periodic brokerage account statements, if we don't do this ourselves;
- Act as custodian for all funds and securities they receive on your behalf;
- Carry out our instructions regarding the transactions, and the receipt and delivery of securities, on your brokerage account;
- Extend margin credit, if you have applied and been approved for margin borrowing;
- Maintain proper books and records of all services they perform in connection with your account.

Note that NFS may not have verified certain pricing information that we or third parties provide to you.

For more information on the allocation of services, speak with one of our representatives.

XVIII. JOINT ACCOUNT**1. Instructions to Investor**

In consideration of our carrying a Cash Account or Margin Account for the undersigned, in the form and names listed on the Account Application, you have executed Royal Alliance's standard form of agreement for such account (the Joint Account) and jointly and severally agree that each of you shall have authority on behalf of the Joint Account to buy, sell (including short sales) and otherwise deal in stocks, bonds, listed options and other securities on margin or otherwise; to receive on behalf of the Joint Account demands, notices, confirmations, reports, statements of account and communications of every kind; to receive on behalf of the Joint Account money, securities and property of every kind and to dispose of same; to make on behalf of the Joint Account agreements relating to any of the foregoing matters and to terminate or modify same or waive any of the provisions thereof; and generally to deal with Royal Alliance and/or NFS on behalf of the Joint Account as fully and completely as if each of you alone were interested in said account, all without notice to the other or others interested in said account. Royal Alliance and/or NFS is authorized but not required to follow the instructions of any of the undersigned in every respect concerning the said Joint Account with Royal Alliance and/or NFS and to make deliveries to any of the undersigned, or upon his/her instructions, of any or all securities in said Joint Account, and to make payments to any of the undersigned, or upon his/her order, of any or all monies at any time or from time to time in the said Joint Account as he/she may order and direct, even if such deliveries and/or payments shall be made to him/her personally, and not for the Joint Account of the undersigned.

In the event of any such deliveries of securities or payments of monies to any of the undersigned as aforesaid, Royal Alliance and/or NFS shall be under no duty or obligation to inquire into the purpose or propriety of any such demand for delivery or securities or payment of monies, and Royal Alliance and/or NFS shall not be bound to see the application or disposition of the said securities and/or monies so delivered or paid to any of the undersigned or upon his/her order. The authority hereby conferred shall remain in force until written notice of the revocation addressed to Royal Alliance is delivered at our main office. This agreement shall inure to the benefit of the successors of Royal Alliance and/or NFS, whether by merger, consolidation or otherwise, and assigns. It is the express intention of the undersigned that ownership of this

account be vested in them as Joint Tenants with rights of survivorship and not as tenants in common or as tenants by the entirety. In the event of the death of either or any of the undersigned, the entire interest the Joint Account shall be vested in the survivor or survivors on the same terms and conditions as theretofore held, without in any manner releasing the undersigned or their estates from the liability provided for in this agreement.

2. Community Property

All securities purchased by the undersigned for the account covered by this agreement, and all securities, monies and/or other property deposited with Royal Alliance or held by Royal Alliance for the account of the undersigned, shall be deemed to be community property of the undersigned subject to appropriate state law. You are responsible for verifying that the joint registration that you choose is valid for your state.

3. Transfer on Death (TOD)

All states, except for Louisiana, have now adopted Transfer on Death (sometimes referred to as payable on death) statutes which permit a security owner to designate a beneficiary upon registration of securities or opening an account. This enables securities to pass directly to the beneficiary(ies) without probate. It does not, however, avoid estate tax if otherwise applicable. A new TOD account agreement is required to add or delete a beneficiary. Since a TOD account involves a distribution of assets upon the death of an account owner, customers are advised to consult with their tax and/or legal advisors before proceeding. A separate TOD form is required when opening this type of account.

XIX. OPTIONS

1. All transactions shall be subject to the constitutions, rules, regulations, customs and usages of The Options Clearing Corporation and any exchange or other marketplace where executed. In addition, you are aware of, and agree to be bound by, the rules of FINRA, the New York Stock Exchange, Inc. (NYSE) and The Options Clearing Corporation applicable to option contracts.

2. Any securities, cash and money market funds held by Royal Alliance in any of your accounts may be held and used by Royal Alliance as security for the performance of your obligations to Royal Alliance under this agreement.

3. In case of your insolvency, death or the attachment of your property,

Royal Alliance may, with respect to any open options contract position, take such steps as Royal Alliance may consider necessary or appropriate to protect itself against loss. All obligations and liabilities arising under this account are joint and several and may be enforced by Royal Alliance against any or all account holders.

4. You will not enter any order for options until you have received, read and understood the appropriate Options Disclosure Document(s) of The Options Clearing Corporation. You specifically affirm the following disclosures as set forth in said Document(s):

- A. That both the purchase and the writing of options contracts involve a high degree of risk, are not suitable for many investors and, accordingly, should be entered into only by Investors who understand the nature and extent of their rights and obligations and are fully aware of the inherent risk involved, especially during extreme market volatility or trading volumes.
- B. That you should not purchase any option unless you are able to sustain a total loss of the premium and transaction costs and (i) that you should not write a call option unless you either own the underlying security (or a security convertible, exchangeable or exercisable into such underlying security) or are able to sustain substantial financial losses and (ii) that you should not write a put option unless you are able to sustain the loss resulting from purchasing the underlying security at the exercise price.
- C. That the price of an options contract is affected by various factors such as the relationship between the exercise price and the market price of the underlying security, the expiration date of the option and the price fluctuations or other characteristics of the underlying stock.
- D. That the exchanges or other regulatory bodies may restrict transactions in particular options or the exercise of options contracts in their discretion from time to time.
- E. That all index option exercises are settled by cash payment and not by the delivery of securities; and that all index option exercises are based on the closing index value and that any "in the money" index options exercised prior to the availability of the closing index value face the risk of closing out of the money due to a subsequent adverse change in the index value.

5. You have noted particularly those sections of The Options Clearing Corporation Disclosure Document(s) which summarize the risk factors involved in options trading and you have determined that, in view of your financial

situation and investment objectives, options trading is suitable for you. You shall advise Royal Alliance of any changes in your investment objectives, financial situation and needs insofar as such changes are material to your options transactions. The financial and other information listed on this application is accurate.

6. The exercise and assignment of options will be subject to the rules of The Options Clearing Corporation and NFS as may be in effect from time to time. You are aware of Royal Alliance's requirements and time limitations for accepting instructions from you or your authorized agent with respect to your options positions. Manual exercise by customers: In the event that you fail to instruct Royal Alliance by 4:20 p.m. (ET) on the business day immediately preceding the expiration date to exercise an equity option which is in-the-money by less than \$0.05, you hereby agree to waive any and all claims for damage or loss that you might have against Royal Alliance, at the time or any time thereafter, arising out of the fact that an in-the-money option is not exercised. Automatic exercise by The Options Clearing Corporation: You are aware that you must notify NFS no later than 4:20 p.m. (ET) on the business day immediately preceding the expiration date if you do not want The Options Clearing Corporation to exercise on your behalf an equity option which is "in-the-money" by \$0.05 or more, or an index option which is in-the-money by \$0.01 or more. In the event your option contract(s) are exercised, you understand that all resulting positions will be maintained in your account and you must instruct Royal Alliance to close such positions if you wish to do so. If the position(s) that arises from an exercise cannot be maintained (e.g., short stock in a retirement account, no shares available for a short sale, etc.), you understand that Royal Alliance will liquidate the position at your sole risk, for which you shall be charged two commissions. You agree to make full and timely settlement for any underlying security covered by the exercised option contract(s).

7. You understand that before writing any option you must have in your account a minimum equity or appropriate position in such amounts as Royal Alliance may specify from time to time, and that no withdrawals of cash or securities will be permitted from the account which would reduce either the equity or position below Royal Alliance's requirements. You further understand that any orders to sell any securities held in your account pursuant to such minimum maintenance requirements may be refused by Royal Alliance at its sole discretion, and you shall not hold Royal Alliance liable for any loss that you may sustain due to Royal Alliance's refusal to permit the sale of said securities during such period.

8. Regarding any margin transactions you may make and supplementing the terms and conditions of your Margin Account Agreement, in the event you do not meet your margin calls promptly, Royal Alliance is authorized at its sole discretion, and without notification to you, to take any and all steps necessary to protect itself in connection with put or call transactions made for your account, including without limitation the right to buy or sell short, or short exempt, for your account and risk any part or all of the shares represented by options endorsed by Royal Alliance for your account, or to buy, sell or exercise any put or call options as Royal Alliance may deem necessary to fully protect itself. Any and all losses and expenses, including attorneys' fees, incurred by Royal Alliance in this connection will be reimbursed by you.

9. You shall have the sole responsibility to exercise, in a proper and timely manner, any right, privilege or obligation of any put option, call option or other option which Royal Alliance may purchase, handle, endorse or carry for your account(s). Royal Alliance shall not be liable in connection with the execution, handling, selling, purchasing, or endorsing of options for your account.

10. You, alone or in concert with others, will not violate the position limits or the exercise limits of the options exchanges and FINRA or NYSE as set forth in The Options Clearing Corporation Disclosure Document(s).

11. You understand and acknowledge that, when transactions on your behalf are to be executed in options traded in more than one marketplace, in the absence of your specific instructions, Royal Alliance may use its discretion in selecting the market in which to enter your orders.

12. Except to the extent to which they conflict with this Agreement, the provisions of your Margin Account Agreement are incorporated herein by reference. In the event of a conflict, the provisions of this Agreement shall control.

13. With reference to the allocation of exercise notices assigned, you understand that Royal Alliance will use the random selection method of allocation. This method randomly selects from all customers' short option positions, including positions established on the day of assignment, those option contracts which are subject to exercise. You further understand that all American-style option positions are liable for assignment at any time after it has been written until the option expires. By contrast, the writer of a European-style option is subject to exercise assignment only during the exercise period. A detailed description of this method is available upon written request.

14. SPECIAL STATEMENT FOR UNCOVERED OPTION WRITERS

There are special risks associated with uncovered option writing which expose the investor to potentially significant loss. Therefore, this type of strategy may not be suitable for all customers approved for options transactions.

- A. The potential loss of uncovered call writing is unlimited. The writer of an uncovered call is in an extremely risky position, and may incur large losses if the value of the underlying instrument increases above the exercise price.
- B. As with writing uncovered calls, the risk of writing uncovered put options is substantial. The writer of an uncovered put option bears a risk of loss if the value of the underlying instrument declines below the exercise price. Such loss could be substantial if there is a significant decline in the value of the underlying instrument.
- C. Uncovered option writing is thus suitable only for the knowledgeable investor who understands the risks, has the financial capacity and willingness to incur potentially substantial losses, and has sufficient liquid assets to meet applicable margin requirements. In this regard, if the value of the underlying instrument moves against an uncovered writer's options position, the investor's broker may request significant additional margin payments. If an investor does not make such margin payments, the broker may liquidate stock or options positions in the investor's account, with little or no prior notice in accordance with the investor's margin agreement.
- D. For combination writing, where the investor writes both a put and a call on the same underlying instrument, the potential risk is unlimited.
- E. If a secondary market in options were to become unavailable, investors could not engage in closing transactions, and an option writer would remain obligated until expiration or assignment.
- F. The writer of an American-style option is subject to being assigned an exercise at any time after he has written the option until the option expires. By contrast, the writer of a European-style option is subject to exercise assignment only during the exercise period.

To: My Broker/Dealer, Royal Alliance Associates, Inc. and National Financial Services LLC ("NFS" or "you")

1. I agree as follows with respect to all of my brokerage accounts, in which I have an interest alone or with others, which I have opened or will open in the future, with you through Royal Alliance for the purchase and sale of securities. I hereby acknowledge that I have read, understand and agree to the terms set forth below. Upon acceptance of my application(s); I understand Royal Alliance will maintain an account for me at NFS, and Royal Alliance may buy or sell securities or other products according to my instructions. All decisions relating to my investment or trading activity shall be made by me, Royal Alliance or my duly authorized representative. Any information provided in this brokerage account application and agreement will be subject to verification, and I authorize you and/or Royal Alliance to obtain a credit report about me at any time. Upon written request, NFS or Royal Alliance will provide the name and address of the credit reporting agency used. I authorize NFS and Royal Alliance to exchange credit information about me. You and/or Royal Alliance also may tape record conversations with me in order to verify data concerning any transactions I request, and I consent to such recording. I also understand that my brokerage account(s) is carried by NFS, and that all terms of this Agreement also apply between me and NFS. I have carefully examined my financial resources, investment objectives, tolerance for risk along with the terms of the margin agreement and have determined that margin financing is appropriate for me. I understand that investing on margin involves the extension of credit to me and that my financial exposure could exceed the value of securities in my account. I agree to notify Royal Alliance in writing of any material changes in my financial circumstances or investment objectives. NFS may use certain securities in your account in connection with short sales and may receive compensation in connection therewith. For the purposes of this Agreement, assets in any FDIC-Insured Bank Deposit Sweep Program are deemed to be part of your brokerage account and are treated as cash deposits.

2. I am of legal age in the state in which I reside and represent that, except as otherwise disclosed to you in writing, I am not an employee of any Exchange or of a Member Firm of any Exchange or the NASD, and I will promptly notify you if I become so employed. I am not employed as a director, 10% shareholder, or policy making executive officer of a publicly traded company, and I will promptly notify you if I become so employed.

3. All transactions are subject to the constitution, rules, regulations, customs, and usages of the exchange, market or clearinghouse where executed, as well as to any applicable federal or state laws, rules and regulations.

4. Any credit balances, including, but not limited to, any funds held at any Bank pursuant to any FDIC-Insured Bank Deposit Sweep Program, as described in the Customer Brokerage Agreement, or any amendment thereto, securities, assets or related contracts, and all other property in which I may have an interest held by you or carried for my brokerage accounts, shall be subject to a general lien for the discharge of my obligations to you (including unmatured and contingent obligations) and you may sell, transfer, or assign such assets or property to satisfy a margin deficiency or other obligation whether or not you have made advances with respect to such property. Securities and other property held in my retirement account(s) maintained by you, which may include IRAs or qualified plans, are not subject to this general lien and such securities or other property may only be used to satisfy my indebtedness or other obligations to Royal Alliance and/or NFS related to my retirement account(s). Without notice to me, such property may be carried in your general loans, and all your securities may be pledged, repledged, hypothecated or rehypothecated, separately or in common with other securities or any other property, for the sum due to you or for a greater sum, and without retaining in your possession and control for delivery a like amount of similar securities or other property. At any time in your discretion, you may, without notice to me, apply and/or transfer any securities, related contracts, cash or any other property, interchangeably between my brokerage accounts, including, but not limited to, any funds held at any Bank pursuant to any FDIC-Insured Bank Deposit Sweep Program, as described in the Customer Brokerage Agreement, and any amendment thereto whether individual or joint, from any of my brokerage accounts to any brokerage account guaranteed by me. You are specifically authorized to transfer to my cash account, on the settlement day following a purchase made in that brokerage account, excess funds available in any of my brokerage accounts, including, but not limited to, any free balances in any margin account, sufficient to make full payment of this cash purchase. I agree that any debit occurring in any of my brokerage accounts may be transferred by you at your option to my margin account. In return for your extension or maintenance of credit in connection with my account, I acknowledge that the securities in my margin account, together with all attendant rights of ownership, may be lent to you or lent by you to others. In connection with such loans and in connection with securities loans made to me to facilitate short sales, you may receive and retain certain benefits to which I will not be entitled. Such loans

may limit, in whole or in part, my ability to exercise voting rights and/or my entitlement to interest, dividends, and/or other distributions with respect to the securities lent. I understand that, while a security in my account is lent to you or to others, the borrower or the party to whom the borrower has sold the security may be entitled to interest, dividends, and/or other distributions and I may be allocated and receive substitute payments in lieu of such interest, dividends, and/or other distributions. I understand that substitute payments may not be afforded the same tax treatment as actual interest, dividends, and/or other distributions, and that I may incur additional tax liability for substitute payments that I receive. NFS may allocate substitute payments in any manner permitted by law, rule, or regulation, including, but not limited to, by means of a lottery allocation method. I acknowledge that I am not entitled to any compensation in connection with securities lent from my account or for additional taxes I may be required to pay as a result of any tax treatment differential between substitute payments and actual interest, dividends, and/or other distributions.

5. I will maintain such margins as you require in your discretion at any time and will pay on demand any debit balance owing on any of my brokerage accounts. If any brokerage account is liquidated in whole or in part by you or me to satisfy the debt, I will be liable to you for any deficiency and shall make payment of such deficiency on demand. Whenever in your discretion you deem it desirable for your protection (and without the necessity of a margin call), including, but not limited to, extreme market volatility or trading volumes, an instance where a petition in bankruptcy or for the appointment of a receiver is filed by or against me, or an attachment is levied against my brokerage account, or in the event of notice of my death or incapacity, or in compliance with the orders of the Exchange, you may, without prior demand, tender, and without any notice of the time or place of sale, all of which are expressly waived, sell any or all of securities or related contracts that may be in your possession, at your selection, or which you may be carrying for me, or buy any securities, or related contracts relating thereto of which my brokerage account or brokerage accounts may be short, in order to close out in whole or in part any commitment in my behalf. You may also place stop orders with respect of such securities and such sale or purchase be made at your discretion on any exchange, including before or after hours markets or other markets where such business is then transacted, or at public auction or private sale, with or without advertising, and neither any demands, calls, tenders or notices which you may make or give in any one or more instances nor any prior course of conduct or dealings between us shall invalidate the aforesaid waivers on my part. You shall have the right to purchase for your own account any or all of the aforesaid property at such sale, discharged of any right of redemption which is hereby waived.

6. In the absence of a specific demand, all transactions in any of my brokerage accounts are to be paid for, securities delivered or required margin deposited, no later than 2 p.m. Eastern Time on the settlement date, and I agree to deliver my securities I have in my possession in sufficient time to be received by Royal Alliance one day before settlement date. Royal Alliance and NFS reserve the right to cancel or liquidate at my risk any transaction not timely settled. Margin calls are due on the date indicated regardless of the settlement date of the transaction. For most stocks and bonds, the settlement date is the third business day following the trade date. Settlement dates for U.S. government issues vary. Options settle on the next business day. Interest will be charged on any debit balance which remains in my brokerage account past the settlement date as explained in the Disclosure of Credit Terms on Transactions section of this Agreement.

7. Royal Alliance or NFS transmits customer orders for execution to various exchanges or market centers based on a number of factors. These include: size of order, trading characteristics of the security, favorable execution prices (including the opportunity for price improvement), access to reliable market data, availability of efficient automated transaction processing and reduced execution costs through price concessions for the market centers. Certain of the market centers may execute orders at prices superior to the publicly quoted market in accordance with their rules or practices. While a customer may specify that an order be directed to a particular market center for execution,* the order-routing policies, taking into consideration all of the factors listed above, are designed to result in favorable transaction processing for customers.

Royal Alliance and/or NFS receive remuneration, compensation or other consideration for directing customer orders for equity securities to particular broker/dealers or market centers for execution. Such consideration, if any, takes the form of financial credits, monetary payments, or reciprocal business.

**Please note: Orders placed through any telephone, electronic or online trading systems cannot specify a particular market center for execution.*

8. I agree to be charged interest on any credit you extend to or maintain for me for purchasing, carrying or trading securities. The calculation methodology for the annual rate of interest I will be charged is described in the attached

Disclosure of Credit Terms.

Interest on U.S. Dollar balances is calculated monthly according to my average debit balance for the month, and a base rate, set at the discretion of NFS with references to commercially recognizable interest rates, industry conditions regarding the extension of margin credit and general credit conditions. Interest rates will vary according to changes to my average debit balance and my base rate, and therefore may change without notice to me. If rates change during the month, separate charges will be shown for each interest period under the different rate.

Interest on International balances is calculated daily according to actual daily debit balances during the month and the interest rate applicable to each currency in the account. Interest rates will vary according to actual daily debit balances and applicable international interest rates, and therefore may change without notice to me. Separate charges will be shown for each currency in the account at the end of the month.

Calculated by computer, the interest on combined balances from all cash and margin accounts (except Type 3 Short and Type 9 Income accounts) is arrived at by multiplying the average debit balance for U.S. dollar balances by the effective rate of interest, dividing by 360, and multiplying by the number of days a daily debit balance was maintained during the interest period. Interest from International balances are calculated by multiplying the daily debit of International balances by the effective rate of interest, dividing by 360 and summing for each day a daily debit balance was maintained. You may request additional collateral in the form of marginable securities or cash whenever you deem it necessary or advisable in your sole discretion, or if there is a decline in the market value of securities in the margin account. All assets in any of my brokerage accounts, including, but not limited to, any funds held at any Bank pursuant to any FDIC-Insured Bank Deposit Sweep Program, as described in the Customer Brokerage Agreement, or any amendments thereto, are collateral for debit balances in this brokerage account, and a lien is created by these debits to secure the amount owed you. This means assets in these brokerage accounts can be sold, withdrawn, transferred, or converted by you to redeem or liquidate any debit balances in this brokerage account. You reserve the right to increase maintenance requirements and to request additional collateral at any time at your discretion. The Federal Equal Credit Opportunity Act prohibits creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age (provided the applicant has the capacity to enter into a binding contract); because all or part of the applicant's income derives from a public assistance program, or because the applicant has, in good faith, exercised any right under the Consumer Credit Protection Act. The Federal agency that administers compliance with this law concerning this creditor is: Securities and Exchange Commission, 450 Fifth Street NW, Washington, DC 20549.

9. I agree that, in giving orders to sell, all "short" sale orders will be designated as "short" and all "long" sale orders will be designated as "long," and that the designation of a sell order as "long" is a representation on my part that I own the security and that I have delivered or will deliver by settlement date such security to you.

10. Communications by mail, telegraph, messenger or otherwise sent to me at the address of record listed on the application or any other address I may give Royal Alliance in writing, are presumed to be delivered and received by me, whether actually received or not. A statement of all transactions will be mailed to the address of record, monthly or quarterly, depending on activity. I understand that I should promptly and carefully review the transaction confirmations and periodic brokerage account statements and notify Royal Alliance of any errors. Information contained on transaction confirmations and periodic brokerage account statements is conclusive unless I object in writing within five and ten days respectively, after transmitting to me.

11. I am liable for payment upon demand of any debit balance or other obligation owed in any of my accounts or any deficiencies following a whole or partial liquidation, and I agree to satisfy any such demand or obligation. Interest will accrue on any such deficiency at prevailing margin rates until paid. I agree to reimburse Royal Alliance and NFS for all reasonable costs and expenses incurred in the collection of any debit balance or unpaid deficiency in any of my brokerage accounts, including, but not limited to, attorneys' fees.

By signing this Agreement, I hereby grant to NFS and its affiliates, to secure the payment and performance in full of all of the Obligations (as hereinafter defined), a security interest in and pledge and assign to NFS and its affiliates the following properties, assets and rights, whether now owned or hereafter acquired or arising, whether individually or jointly owned and/or held by me with others, and all proceeds and products thereof (all of the same being hereinafter called the "Property"): any

and all securities other investment properties (including investment company securities and securities accounts), monies, credit balances, assets or related contracts and deposit accounts, including, but not limited to, any funds held at any Bank pursuant to any FDIC-Insured Bank Deposit Sweep Program, as

described in the Customer Brokerage Agreement, and any amendment thereto, to the extent any of the foregoing may now or hereafter be (i) held, carried and/or maintained by NFS and/or any of its affiliates, (ii) held, carried or maintained by NFS and/or any of its affiliates through any correspondent broker/dealer of NFS ("broker/dealer"), (iii) in the possession or control of NFS or any of its affiliates for any purpose, including for safekeeping, or (iv) held, carried or maintained or in the possession or control of the Fidelity Group of Funds Fidelity Service Company, Inc., as a transfer agent for the

Fidelity Group of Funds or any sub transfer agent of the Fidelity Group of Funds. All terms defined in the Uniform Commercial Code of the Commonwealth of Massachusetts and used herein shall have the same definitions herein as specified therein; however, if a term is defined in Article 9 of the Uniform Commercial Code of the Commonwealth of Massachusetts differently than in another Article of the Uniform Commercial Code of the Commonwealth of Massachusetts, the term has the meaning specified in Article 9. For purposes hereof, the term "Obligations" shall mean any and all indebtedness, liabilities or other obligations (including unmatured and contingent obligations) now or hereafter owed by me to NFS, any of NFS's affiliates or any broker/dealer, including, but not limited to, any such indebtedness liabilities or other obligations arising under this Agreement.

If a default shall have occurred and be continuing, NFS and its affiliates, without any other notice to or demand upon me, shall have in any jurisdiction in which enforcement hereof is sought, in addition to all other rights and remedies, the rights and remedies of a secured party under Article 9 of the Uniform Commercial Code of the Commonwealth of Massachusetts and any additional rights and remedies as may be provided to a secured party in any jurisdiction in which Property is located, including, without limitation the right to take possession of the Property. Without limiting the foregoing, I understand that in the event any Obligation remains unpaid after payment is requested of me, NFS shall have the right to sell, liquidate, transfer, withdraw, convert, or assign such Property to satisfy any such Obligation whether or not NFS has made advances with respect to such Property. No further demand or notice shall be required prior to taking such an action. NFS shall have the discretion to determine which Property is to be sold, liquidated, transferred, withdrawn, converted, or assigned. Neither NFS nor any of its affiliates shall be required to marshal any present or future collateral security (including but not limited to the Property) for, or other assurances of payment of, the Obligations or any of them or resort to such collateral security or other assurances of payment in any particular order.

I agree to cooperate with NFS and its affiliates and to execute such further instruments and documents as NFS or its affiliates shall reasonably request to carry out to their satisfaction the transactions contemplated by this Agreement.

12. Royal Alliance and NFS are not liable for any losses caused directly or indirectly by government restrictions, exchange or market rulings, suspension of trading, war, strikes or other conditions beyond their control, including, but not limited to, extreme market volatility or trading volumes.

13. No waiver of any provision of this Agreement shall be deemed a waiver of any other provision, nor a continuing waiver to the provision or provisions so waived.

14. No provision of this Agreement can be amended or waived except in writing signed by an officer of NFS. This Agreement will remain in effect until its termination by me is acknowledged in writing by an authorized representative of NFS, or until written notice of termination by you shall have been mailed to me at my address last given to you. I will remain responsible for all charges, debit items, or other transactions initiated or authorized by me, whether arising before or after termination.

15. This Agreement and its enforcement shall be governed by the laws of the Commonwealth of Massachusetts; shall cover individually and collectively all brokerage accounts that I may maintain with NFS; shall inure to the benefit of Royal Alliance's or your successors and assigns whether by merger, consolidation or otherwise and Royal Alliance and you may transfer my account to Royal Alliance's or your successors and assigns; and shall be binding on my heirs, executors, administrators, successors, and assigns.

16. If any provision of this Agreement is or at any time should become inconsistent with any present or future law, rule or regulation of any entity having regulatory jurisdiction over it, that provision will be superseded or amended to conform with such law, rule or regulation, but the remainder of this Agreement shall continue and remain in full force and effect.

17. If the undersigned shall consist of more than one brokerage account holder, their obligations and liabilities under this Agreement shall be joint and several and may be enforced by Royal Alliance or NFS against any or all brokerage account holders.

18. I understand that you may deliver margin calls and other notices to Royal Alliance for the sole purpose of collection of my obligations under this

Agreement. I agree to the foregoing and further understand that Royal Alliance may act on your behalf with respect to margin calls in your discretion.

19. I represent that I have read and understand the Disclosure of Credit Terms on Transactions. I further understand that they may be amended from time to time.

20. Pre-Dispute Arbitration Agreement

This agreement contains a pre-dispute arbitration clause. By signing an arbitration agreement, the parties agree as follows:

- (A) All parties to this agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed.
- (B) Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited.
- (C) The ability of the parties to obtain documents, witness statements and other discovery is generally more limited in arbitration than in court proceedings.
- (D) The arbitrators do not have to explain the reason(s) for their award unless, in an eligible case, a joint request for an explained decision has been submitted by all parties to the panel at least 20 days prior to the first scheduled hearing date;
- (E) The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry.
- (F) The rules of some arbitration forums may impose time limits for bringing a claim in arbitration. In some cases, a claim that is ineligible for arbitration may be brought in court.
- (G) The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this agreement.

All controversies that may arise between us concerning any subject matter, issue or circumstance whatsoever (including, but not limited to controversies concerning any account, order or transaction, or the continuation, performance, interpretation or breach of this or any other agreement between us, whether entered into or arising before, on or after the date this account is opened) shall be determined by arbitration in accordance with the rules then prevailing of the Financial Industry Regulatory Authority (FINRA) or any United States securities self-regulatory organization or United States securities exchange of which the person, entity or entities against whom the claim is made is a member, as I may designate. If I designate the rules of a United States self-regulatory organization or United States securities exchange and those rules fail to be applied for any reason, then I shall designate the prevailing rules of any other United States securities self-regulatory organization or United States securities exchange of which the person, entity or entities against whom the claim is made is a member. If I do not notify you and/or Royal Alliance in writing of my designation within five (5) days after such failure or after I receive from you a written demand for arbitration, then I authorize Royal Alliance and/or NFS to make such designation on my behalf. The designation of the rules of a United States self-regulatory organization or United States securities exchange is not integral to the underlying agreement to arbitrate. The award of the arbitrators, or of the majority of them, shall be final, and judgment on the award rendered may be entered in any court of competent jurisdiction. A party's ability to have a court reverse or modify an arbitration award is very limited.

No person shall bring a putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class action who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the class certification is denied; or (ii) the class is decertified; or (iii) the customer is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this Agreement except to the extent stated herein.

YOU ARE HEREBY AUTHORIZED TO LEND, HYPOTHECATE OR REHYPOTHECATE SEPARATELY OR WITH THE PROPERTY OF OTHERS, EITHER TO YOURSELVES OR TO OTHERS, ANY PROPERTY YOU MAY BE CARRYING FOR ME ON MARGIN. NFS MAY USE CERTAIN SECURITIES IN YOUR ACCOUNT IN CONNECTION WITH SHORT SALES AND MAY RECEIVE COMPENSATION IN CONNECTION THEREWITH. THIS AUTHORIZATION SHALL APPLY TO ALL MY BROKERAGE ACCOUNTS YOU CARRY AND SHALL REMAIN IN FULL FORCE UNTIL YOU RECEIVE FROM MY BROKER/DEALER WRITTEN NOTICE OF MY REVOCATION AT YOUR PRINCIPAL OFFICES.

I UNDERSTAND THAT IF I HAVE ELECTED TO ESTABLISH THIS BROKERAGE ACCOUNT AS A TRANSFER ON DEATH ACCOUNT WITH MARGIN PRIVILEGES, NFS SHALL, UPON MY DEATH, LIQUIDATE ANY SECURITIES NECESSARY TO SATISFY THE MARGIN DEBIT BALANCE IN MY ACCOUNT PRIOR TO THE DISTRIBUTION OF THIS BROKERAGE ACCOUNT'S ASSETS TO MY DESIGNATED BENEFICIARIES. THE TERMS

OF THIS APPLICATION SHALL BE BINDING ON MY HEIRS AND SUCCESSORS.

I REPRESENT THAT I HAVE READ THE TERMS AND CONDITIONS CONCERNING THIS ACCOUNT AND AGREE TO BE BOUND BY SUCH TERMS AND CONDITIONS AS CURRENTLY IN EFFECT AND AS MAY BE AMENDED FROM TIME TO TIME. THIS ACCOUNT IS GOVERNED BY A PRE-DISPUTE ARBITRATION CLAUSE WHICH APPEARS IN PARAGRAPH 20 ON PAGES 13 OF THIS AGREEMENT. I ACKNOWLEDGE RECEIPT OF THE PREDISPUTE ARBITRATION CLAUSE, THE DISCLOSURE OF CREDIT TERMS ON TRANSACTIONS, AND MARGIN DISCLOSURE STATEMENT.

Important Information About Using Margin

This document is being furnished to you to provide some basic information about purchasing securities on margin, and to alert you to the risks involved with trading securities in a margin account. Before trading securities in a margin account, you should carefully review the margin terms in your account application and agreement. Please contact Royal Alliance regarding any questions or concerns you may have with your margin accounts.

When you purchase securities, you may pay for the securities in full or you may borrow all or part of the purchase price from your brokerage firm. If you choose to borrow funds from Royal Alliance, you will open a margin account with National Financial Services LLC ("NFS"). The securities in your accounts are NFS's collateral for the loan to you. If the securities in your account decline in value, so does the value of the collateral supporting your loan, and, as a result, Royal Alliance and NFS can take action, such as issue a margin call and/or sell securities or other assets in any of your accounts held with NFS through Royal Alliance, in order to maintain the required equity in the account. NFS may also take action to sell securities or other assets in your accounts held with NFS and with certain NFS affiliates.

It is important that you fully understand the risks involved in trading securities on margin. These risks include the following:

- **You can lose more funds than you deposit in the margin account.**

A decline in the value of securities you purchased on margin may require you to provide additional funds or margin-eligible securities to NFS to avoid the forced sale of any securities or assets in your account(s).

- **Royal Alliance and NFS can force the sale of securities or other assets in your account(s).** If the equity in your account falls below the maintenance margin requirements or NFS's higher "house" requirements, Royal Alliance or NFS can sell the securities or other assets in any of your accounts held at NFS through Royal Alliance to cover the margin deficiency. NFS may also take action to sell securities or other assets in your accounts held with NFS and certain NFS affiliates. You also will be responsible for any shortfall in the account after such a sale, possibly including Royal Alliance's and/or NFS's costs related to collecting the shortfall. If you are a director, officer or 10% shareholder of an issuer whose securities NFS sells to cover a margin deficiency in your account, you could be liable to this issuer for profits from the forced sale, as compared with any purchases you may have made of securities of the same issuer within six months of the sale (Note that you could receive such a profit even if a shortfall remains in the account after the sale).
- **Royal Alliance and NFS can sell your securities or other assets without contacting you.** Some investors mistakenly believe that a firm must contact them for a margin call to be valid, and that Royal Alliance cannot liquidate securities or other assets in their accounts to meet the call unless Royal Alliance has contacted them first. This is not the case. Most firms will attempt to notify their customers of margin calls, but they are not required to do so. In addition, even if Royal Alliance has contacted a customer and provided a specific date by which the customer can meet a margin call, Royal Alliance can still take necessary steps to protect its financial interests prior to that date, including immediately selling the securities without notice to the customer.
- **You are not entitled to choose which securities or other assets in your account(s) are liquidated or sold to meet a margin call.** Because the securities and any other assets in your account(s) is collateral for the margin loan, Royal Alliance or NFS has the right to decide which assets to sell in order to protect its interests.
- **NFS can increase its "house" maintenance margin requirements at any time and is not required to provide you advance notice.** These changes in firm policy often take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause Royal Alliance or NFS to liquidate or sell securities or any other assets in your account(s).
 - **You are not entitled to an extension of time on a margin call.**

While an extension of time to meet margin requirements may be available to customers under certain conditions, a customer does not have a right to the extension.

- **Short selling is a margin account transaction and entails the same risks as described above.** Royal Alliance or NFS can buy in your account securities to cover a short position without contacting you, and may use all or any portion of the assets in your account to make such a purchase. If the assets in your account are not sufficient to cover the cost of such a purchase, you will be responsible for any shortfall, possibly including Royal Alliance's and/or NFS's costs in collecting the shortfall.
- **NFS can loan securities held in your margin account which collateralize your margin borrowing.** In connection with the extension or maintenance of margin credit, NFS may loan securities in your margin account to itself or to others. As a result of these loans, you may not be entitled to receive certain benefits of a securities owner, such as the ability to exercise voting rights and/or receive interest, dividends, and/or other distributions with respect to the securities lent. While a security in your account is lent, you may only be allocated and receive substitute payments in lieu of such interest, dividends, and/or other distributions. Substitute payments may not be afforded the same tax treatment as actual interest, dividends, and/or other distributions, and you may incur additional tax liability for substitute payments that you receive. NFS may allocate substitute payments in any manner permitted by law, rule, or regulation, including, but not limited to, means of a lottery allocation method. You are not entitled to any compensation in connection with securities lent from your account or for additional taxes you may be required to pay as a result of any tax treatment differential between substitute payments and actual interest, dividends, and/or other distributions.
- **In addition to market volatility, the use of bank card, checkwriting and similar features with your margin account may increase the risk of a margin call.**
- **NFS may use certain securities in your account in connection with short sales and may receive compensation in connection therewith.**

Disclosure of Credit Terms on Transactions

Please keep this document for your records.

Customer Copy

Dear Customer:

Securities and Exchange Commission Rule 10b-16 requires a broker who extends credit to a customer in connection with any security transaction to furnish the customer specified information describing the terms, conditions and methods pursuant to which interest charges are made to customers' accounts. This statement is sent to you in conformity with that rule.

Interest will be charged on all accounts for any credit extended to or maintained for customers by Royal Alliance for the purpose of purchasing, carrying or trading in securities or otherwise. The annual rate of interest you will be charged may vary from a minimum of .50% to a maximum of 2.50% above the National Financial Base Lending Rate ("NFBLR"), depending upon the amount of your average debit balance. The NFBLR is set at the discretion of NFS with references to commercially recognized interest rates, industry conditions regarding the extension of margin credit, and general credit conditions.

Current rates are as follows:

Average Debit Balance	Interest to be Charged Above NFBLR
\$0 — \$9,999	2.50%
\$10,000 — \$24,999	2.25%
\$25,000 — \$99,999	1.25%
\$100,000 — \$499,999	0.75%
\$500,000 and over	0.50%

In determining the daily debit balance and the resulting rate of interest, we will combine the margin account balances in all accounts, except Type 3-Short Accounts and Type 9-Income Accounts. Interest is then computed for each account based on the rate resulting from averaging the daily debit balances during the interest period.

Your rate of interest will be changed without notice in accordance with changes in the NFBLR and in your average debit balance. When your interest rate is to be increased for any other reason, you will be given at least 30 days' written notice. If NFBLR is expressed as a range, NFS may apply the highest end of the range.

Your monthly statement will show the dollar amount of interest and the interest rate charged to your account. There will be no interest charge reflected on your statement if your monthly charge is less than \$1.00. An interest cycle will cover the period beginning with the first business day following the 20th of each month.

All securities or other property held by us in any of your accounts are collateral for any debit balances. A lien is created by those debits to secure the amount of money owed to us. This means securities in any of your accounts can be sold to reduce or liquidate entirely any debit balances in your accounts, as authorized in your Margin Account Agreement.

If there is a decline in the market value of the securities which are collateral for your debits, it may be necessary for us to request additional margin. Ordinarily, a request for additional margin will be made when the equity in the margin account (the market value of the securities in the account in excess of the debit balances) falls below our margin maintenance requirements, which may change from time to time without notice.

We retain the right to require additional margin any time we deem it desirable. Margin calls can be met by delivery of cash or additional securities.

Other Charges. Separate charges at an annual rate of 2.5% above NFBLR may be made in the Type 1-Cash Account in connection with:

- a) **Prepayments (by approval only)** — payments to a customer of the proceeds of a security sale before the regular settlement date.
- b) **"When-Issued" transactions** — when the market price of the "when-issued" security deteriorates from the customer's contract price by an amount that exceeds the customer's cash deposit, interest may be charged on such excess.
- c) **Late payments** — payments for securities purchased which are received past settlement date.

Interest Computation. Interest on debit balances is computed by multiplying the average daily debit balance of the account by the applicable interest rate in effect and dividing by 360, times the number of days a daily debit balance was maintained during the interest period. Interest charged during the interest period is the total of such daily computations. The daily debit balance of the account is the aggregate daily debit balance for all accounts other than your Type 3-Short and Type 9-Income Accounts.

Example: NFBLR of 8%

Applicable Interest Rate 10.5%

Date	Daily Debit Balance
June 17	\$0
June 18	\$5,000
June 19	\$10,500
June 20	\$8,000
Total of 3 Days	\$23,500

\$23,500 divided by 3 equals \$7,833 (daily average balance), times 10.5% (applicable rate) divided by 360 equals \$2.28 (the daily interest charge), times 3 (the number of days account had a net debit balance during the interest period) equals an interest charge of \$6.85.

Marking to Market. The credit balance in the Type 3-Short Account will be decreased or increased in accordance with the corresponding market values of all short positions. Corresponding debits or credits will be posted to the Type 2-Margin Account. These entries in the Type 2-Margin Account will, of course, affect the balance on which interest is computed. Credits in your Type 3-Short Account, other than Marking to Market, will not be utilized to offset your Type 2-Margin Account balance for interest computation.

Notice to Customers

New York Stock Exchange Rule 382 requires that Royal Alliance and NFS allocate between them certain functions regarding the administration of your brokerage account. The following is a summary of the allocation services performed by Royal Alliance and NFS. A more complete description is available upon request.

Royal Alliance is responsible for: (1) obtaining and verifying brokerage account information and documentation, (2) opening, approving and monitoring your brokerage account, (3) transmitting timely and accurate instructions to NFS with respect to your brokerage account, (4) determining the suitability of investment recommendations and advice, (5) operating and supervising your brokerage account and its own activities in compliance with applicable laws and regulations, including compliance with margin rules pertaining to your margin account, and (6) maintaining of required books and records for the services it performs.

NFS shall, at the direction of Royal Alliance: (1) execute, clear and settle transactions processed through NFS by Royal Alliance, (2) prepare and send transaction confirmations and periodic statements of your brokerage account (unless Royal Alliance has undertaken to do so). Certain pricing and other information may be provided by Royal Alliance or obtained from third parties, which has not been verified by NFS, (3) act as custodian for funds and securities received by NFS on your behalf, (4) follow the instructions of Royal Alliance with respect to transactions and the receipt and delivery of funds and securities for your brokerage account, and (5) extend margin credit for purchasing or carrying securities on margin. Royal Alliance is responsible for ensuring that your brokerage account is in compliance with federal, industry and NFS margin rules, and for advising you of margin requirements. NFS shall maintain the required books and records for the services it performs.

XX. SECURITIES INVESTOR PROTECTION CORPORATION DISCLOSURE

Information regarding the Securities Investor Protection Corporation (SIPC®), including a SIPC brochure, may be obtained by contacting SIPC via its web site at www.sipc.org or by telephone at (202)371-8300.

XXI. INVESTOR EDUCATION AND PROTECTION DISCLOSURE

The FINRA BrokerCheck system provides professional background information of current and former financial advisors and broker-dealers. To obtain information about the BrokerCheck program, a brochure is available on the FINRA website www.finra.org. For questions regarding BrokerCheck, call (800) 289-9999.

XXII. TRUSTED CONTACT PERSON DISCLOSURE

In order to address concerns regarding certain senior customers or other vulnerable investors, FINRA Rule 4512 requires, as of February 5, 2018, that Royal Alliance ask customers to provide contact information for a Trusted Contact person. If the Customer chooses to provide this information, we are authorized to contact the Trusted Contact person and disclose nonpublic personal information about the customer and their account to confirm the specifics of the customer's current contact information; if concerns are raised regarding the Customer's whereabouts or health status (i.e., if Royal Alliance becomes concerned that I might need assistance in handling my financial affairs); in the event that Royal Alliance becomes concerned that I may be a victim of fraud or exploitation; or to ascertain the identity of any legal guardian, executor, trustee or holder of a power of attorney, or as otherwise permitted under applicable law or regulations.

Royal Alliance is not required to reach out to the Trusted Contact person under any particular circumstances, and the Customer may change or withdraw their authorization regarding their Trusted Contact person or persons at any time by notifying Royal Alliance at the address shown on the Customer's account statement.