



Account Number (for Fidelity use only)

--	--	--	--	--	--	--	--	--	--

To help the government fight money laundering and the funding of terrorism, federal law requires Fidelity to obtain your name, date of birth, address, and a government-issued id number before opening your account, and to verify the information. In certain circumstances, Fidelity may obtain and verify comparable information for any person authorized to make transactions in an account or beneficial owners of certain entities. Further documentation is required for certain entities such as trusts, estates, corporations, partnerships, and other organizations.

Your account may be restricted or closed if Fidelity cannot obtain and verify this information. Fidelity will not be responsible for any losses or damages (including, but not limited to, lost opportunities) that may result if your account is restricted or closed.

Brokerage Account Application Personal and trust registrations.

For Authorized agent/Advisor Use Only		G NUMBER	For electronic confirms DTC NUMBER
Primary Authorized agent/Advisor LVZ ADVISORS		G 1 1 9 7 9 0 3 7	
Additional Authorized agent/Advisor LVZ ADVISORS		G 1 2 5 2 2 5 6 6	
Additional Authorized agent/Advisor		G	
Additional Authorized agent/Advisor		G	
Additional Authorized agent/Advisor		G	

To provide information on more Authorized agent(s)/Advisor(s), owners, etc., make additional copies of necessary page(s).

For Advisor Use Only: Account referred through Wealth Advisor Solutions program (Use WAS specific G Number in Primary Authorized agent/Advisor G Number field above)

Account Set-Up

Type of Registration Check one type only and fill in applicable blanks.

Consult your Authorized agent(s)/Advisor(s) or state tax officials for information on state account ownership laws.

INDIVIDUAL **JOINT** For these accounts, "you" means all owners. **UGMA/UTMA**

Joint Tenants with Rights of Survivorship
 Tenants in the Entirety
 Community Property
 Tenants in Common

Indicate where gift/transfer was made. *Default:* state where account is registered.

OTHER These registration types require an Omnibus Account Certification form to be attached, as well as other applicable documentation. If your Advisor does not complete and submit the Omnibus form, we will establish the account but will block the purchase of any Fidelity and applicable IFN funds with short-term redemption fees.

Trust In addition to the information below, complete the Certification of Trustee section at the end of this application. If organized outside of the U.S. please complete Beneficial Owner section and provide appropriate supporting documentation as requested.

Estate Attach copy of court order of appointment or letter testamentary, dated within the past 60 days. Other documents may be required.

Other Non-Trust Fiduciary You do not need to provide state/country or beneficiary information below.

Name of Trust, Estate, Ward, etc.		Date of Trust (MM-DD-YYYY)	State/Country Where Organized*
Grantor/Trustor/Settlor/Donor*	Beneficiary	Required <input type="checkbox"/> SSN or <input type="checkbox"/> TIN	Social Security / Taxpayer ID Number**

* Non-U.S. Trusts please complete the Beneficial Ownership for Foreign Trusts at the end of this application. ** Trusts: tax reporting number for trust. Estates: TIN of estate. Other fiduciary: SSN of ward.

Fund Through Fidelity Account Transfer Check below if funding new account through transfer from an existing Fidelity account.

Both accounts must have identical registrations. All assets will be transferred. Shares of Fidelity Cash Reserves and Fidelity U.S. Government Reserves will be sold and proceeds transferred. All other securities will be transferred unsold.

Transfer Assets from Existing Fidelity Account

Account Number

Address of Record Required for all accounts. Unless you request otherwise on page 4, account information will be mailed to the mailing address below. The mailing address should not be your Authorized agent's/Advisor's address.

PERMANENT ADDRESS OF ACCOUNT

Address (Cannot be a Post Office Box)		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

MAILING ADDRESS OF ACCOUNT Complete if different than Permanent Address of Account.

Address		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

Joint Owner/Minor/Additional Trustee If three or more owners/trustees, fill out a duplicate of this page. Also duplicate pages 6-7 for additional signatures.

First Name		Middle Name		Last Name	
Required	Social Security / Taxpayer ID Number			Date of Birth (MM-DD-YYYY)	
<input type="checkbox"/> SSN or <input type="checkbox"/> TIN					
Institution Name			Evening Phone		U.S. Driver's License Number (if applicable) State
E-Mail Address*			Daytime Phone Ext.		
			US Mail - Please send the following document types to me by U.S. mail instead of electronically: <input type="checkbox"/> Monthly Account Statements <input type="checkbox"/> Immediate and Quarterly Trade Confirms <input type="checkbox"/> Prospectuses, other financial reports, etc.		

* Fidelity will use this e-mail address for electronic delivery of account documents. Unless U.S. Mail is checked for all document types, you will receive a follow-up e-mail from Fidelity and will need to consent to begin receiving documents electronically. See page 5 for more information regarding eDelivery.

YOUR PERMANENT ADDRESS Complete if different than Permanent Address of Account on Page 1.

Address (Cannot be a Post Office Box)		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

YOUR MAILING ADDRESS Complete if different than Mailing Address of Account on Page 1.

Address		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

TAX RESIDENCE AND CITIZENSHIP

Citizenship U.S. Other Country of Citizenship
UNITED STATES

Permanent U.S. Resident Non-Permanent U.S. Resident Non-Resident of U.S.

Country of Birth UNITED STATES	City of Birth	State/Province of Birth
-----------------------------------	---------------	-------------------------

Country of Tax Residence U.S. Other Country
UNITED STATES

Government Identification (Required for non-U.S. citizens) ID must include reference number and photo. Attach copy of ID.

U.S. Driver's License Passport with U.S. Visa Foreign National Identity Document
 DHS Permanent Resident Alien Card Employment Authorization Document (EAD) Passport without U.S. Visa

ID Number (Not Required for U.S. Driver's License)	Country of Issuance UNITED STATES
--	--------------------------------------

EMPLOYMENT STATUS Employed Not Employed Retired (List source of income if Retired or Not Employed)

Employer/Source of Income (required for margin privileges)		Occupation		
Employer's Address	City	State/Province	Zip/Postal Code	Country UNITED STATES

AFFILIATIONS Answer for both types of affiliations. Report any additional affiliations on a separate page.

Securities Industry Affiliations

Check this box if you are affiliated with, or employed by, a stock exchange or a member firm of an exchange or FINRA, a municipal securities dealer or Fidelity. If you checked the box, obtain and attach the compliance officer's letter of approval ("407 letter") and indicate your company's name and address below. Failure to include an approval letter may delay the processing of your request. We must tell your employer you have applied for this account.

Same as employer above.

Name of Company or Other Entity		
Address		City
State/Province	Zip/Postal Code	Country UNITED STATES

Public Company Affiliations

Check this box if you are a control person or affiliate or an immediate family/household member of a control person or affiliate of a publicly traded company under SEC Rule 144 (this would include, but is not limited to, a director, 10% shareholder, policy-making officer, and members of the board of directors).

Name of Company	Trading Symbol
Name of Company	Trading Symbol
Name of Company	Trading Symbol
Name of Company	Trading Symbol

Account Characteristics

These features can be modified or withdrawn upon written notice to Fidelity. For Cash Management or Options Trading, obtain the appropriate form(s) from your Authorized agent(s)/Advisor(s).

Trading and Asset Movement Authorizations

Trading Authorization

Authorizes Fidelity to accept trades, servicing, account-related, or other instructions on your account from your Authorized agent(s)/Advisor(s), without direct instructions from you. Trading authorization is a feature of all accounts opened with this application; you grant trading authorization when you sign the application. By granting trading authorization to your Authorized agent(s)/Advisor(s), you understand and agree that your Authorized agent(s)/Advisor(s) will have the ability to instruct Fidelity to initiate transfers of cash from your bank account to your Fidelity account, based on standing written funds transfer instructions provided by you to Fidelity. See the Client Agreement for more complete information.

Asset Movement Authorization

Not available on Estate and other Non-Trust Fiduciary accounts.

Authorizes Fidelity to accept instructions from your Authorized agent(s)/Advisor(s) to move assets in and out of your account, without direct instructions from you. If no Asset Movement option below is chosen, your Authorized agent(s)/Advisor(s) will not be able to move money from this account without your signature. See the Client Agreement for more complete information. Fidelity may require direct instructions from you for transactions over a certain amount.

By checking Level 1 or Level 2 below, you direct Fidelity to accept instructions from your Authorized agent(s)/Advisor(s) concerning the types of transactions indicated for that level. In the Level 1 and Level 2 descriptions below, "same-registration" means the same owner or owners and the same registration type.

- Level 1** This includes one time disbursements and the establishment of, and changes to, periodic disbursements (Periodic Distribution Plans) from your account, including:
 - checks made payable to you and sent to your address
 - bank wires or electronic funds transfers (EFTs) to any account you have authorized through standing written instructions and check disbursements to any payee and address You have authorized through standing written instructions.
 - transfers of cash or securities from this account to other same-registration accounts at Fidelity, if this account is an Individual or Transfer on Death Individual (TODI) account, contributions from this account to any IRA You own at Fidelity, or from this account to any third-party account at Fidelity You have authorized through standing written instructions.

- Level 2** This includes all Level 1 authorizations, plus:

- bank wires to any same-registration account outside Fidelity, without direct instructions from you

Note that you agree that Fidelity cannot confirm the account registration at the receiving bank and will rely solely on the representations of your Authorized agent(s)/Advisor(s) as to the registration of the receiving account.

Core Transaction Account Check one only. The core account is used for settling transactions in your account, and for holding balances awaiting investment. Availability of core account options may change. If you have not chosen a fund or if the one you have selected is not available, Fidelity taxable interest-bearing cash account (FCASH) will be the core account. You understand and agree that Fidelity may change your core account selection with notice to you. You may make a different core account selection from available options. Contact your advisor to change your core account option.

Available to all investors.

- Taxable Cash Account**
FCASH (Interest-bearing account)
Default if no choice is indicated
- Fidelity Municipal Money Market Fund** FTEXX
- Fidelity Tax-Free Money Market Fund** FMOXX

Available only to legal residents of the state indicated.

- Arizona** Fidelity Arizona Municipal Money Market Fund *FSAXX*
- Michigan** Fidelity Michigan Municipal Money Market Fund *FMIXX*
- California** Fidelity California Municipal Money Market Fund *FCFXX*
- New Jersey** Fidelity New Jersey Municipal Money Market Fund *FNJXX*
- Connecticut** Fidelity Connecticut Municipal Money Market Fund *FCMXX*
- New York** Fidelity New York Municipal Money Market Fund *FNYYX*

- Ohio** Fidelity Ohio Municipal Money Market Fund *FOMXX*
- Massachusetts** Fidelity Massachusetts Municipal Money Market Fund *FDMXX*
- Pennsylvania** Fidelity Pennsylvania Municipal Money Market Fund *FPTXX*

Available to Authorized Investors: If you have authorization from Fidelity to use a different core fund option, select the checkbox below, and then select a fund from the drop-down list.

- Other**

Dividend and Capital Gain Payments

 Check one only.

These choices concern handling of any dividends, capital gains, and similar payments made by securities you own. Any payments that you choose to have reinvested will be used to purchase additional shares of the security that is making the payment. Any payments that you choose to have paid into your core account (along with any interest from debt securities that you own) will be invested in the core account vehicle for your account. Note that only certain domestic stocks and closed-end funds held in a Fidelity brokerage account are eligible for dividend reinvestment. For more information on reinvestment policies, see Dividend Reinvestment section in Client Agreement.

- Reinvest:** Payments from all mutual funds
- Pay to Core Account:** Payments from all eligible U.S. equities and closed-end funds (3)
Default choice if you make no indication
- Reinvest:** Payments from all eligible U.S. equities and closed-end funds
- Pay to Core Account:** Payments from all mutual funds (5)
- Reinvest:** Payments from all eligible securities; any payments from ineligible securities will be paid to your core account (D)
- Pay All to Core Account**
Do not distribute by check (4)
- Pay All to Core Account**
Send checks **every week** (1)
- Pay All to Core Account**
Send checks **twice a month** (5)
- Pay All to Core Account**
Send checks **every month** (2)
- Pay All to Core Account**
Send checks **every quarter** (6)

Margin Privileges

 Subject to approval by Fidelity; involves additional costs and risks.

Margin allows you to borrow money from Fidelity using certain securities in your account as collateral. Not available on UGMA/UTMA, estate, and non-trust fiduciary accounts.

- Apply for Margin Privileges**

Note: Employment status is required for each account owner in order to be considered for margin.

Document Delivery and Frequency

Electronic Delivery

By providing your e-mail address in this application, you have elected to receive Statement, Trade Confirmation, Prospectuses, Financial Reports and other documents electronically. If you do not want any of these document types to be delivered to you electronically, you can choose US Mail delivery for that document type.

By receiving documents electronically, you may be eligible for reduced trading commissions. Please consult your Authorized agent/Advisor for more details.

In order to begin receiving documents electronically, you will need to read the Electronic Delivery Agreement and agree to its terms. You will receive this agreement at the e-mail address you provide unless you are applying via eSignature.

Please note:

- Your delivery preferences are applied across all eligible Fidelity accounts owned by you based upon your most recent election. Therefore, your choice of electronic or paper delivery for this new account will be applied to all eligible accounts unless you elect otherwise in the future.
- For trust accounts, all trustees must consent to Electronic Delivery to suppress mailed documents for this account. For joint accounts, any or all owners can consent to Electronic Delivery.
- The e-mail address provided should not be your Authorized agent/Advisor's e-mail address.
- This e-mail address will replace any existing e-mail address already on our system.
- If you are applying using eSignature you have already agreed to these terms and will be enrolled without receiving this agreement again via e-mail.

Document Redirection (election to redirect the document below to your advisor will supercede electronic delivery selection above)

	Send to My Advisor	OR	Send to Me
Proxies¹ Includes all proxy voting materials.	<input type="checkbox"/>		<input type="checkbox"/>
Reports Includes annual reports and information statements	<input type="checkbox"/>		<input type="checkbox"/>
Prospectuses	<input type="checkbox"/>		<input type="checkbox"/>
Corporate Actions²	<input type="checkbox"/>		<input type="checkbox"/>

For Agent/Advisor Use Only									
Proxy Voting G Number (Agent/Advisor or Administrator)									
G									
Name (Administrator Only)									

	Quarterly	OR	Immediate
Trade Confirmation Frequency	<input type="checkbox"/>		<input type="checkbox"/>

Duplicate Materials Check any desired. Account profiles include ownership and investment objectives information. Individuals or entities receiving account statements or trade confirmations will also be granted access to all account information.

Send Copies to All Owners/Trustees: Trade Confirmations Account Profiles Account Statements

Send Copies to Third Party/Parties:

Trade Confirmations Account Statements

Name			
Address (Not Required if Providing G Number)			
City	State/Province	Zip/Postal Code	
Country UNITED STATES	G Number G		

Trade Confirmations Account Statements

Name			
Address (Cannot be a Post Office Box)			
City	State/Province	Zip/Postal Code	
Country UNITED STATES	G Number G		

¹ In choosing this option, you also direct Fidelity to accept votes regarding these proxies from your Primary Authorized agent/Advisor. If your Primary Authorized agent/Advisor has a Proxy Voting G Number or uses a proxy administrator, provide the G Number and administrator name as appropriate.

² Notwithstanding your election to receive Corporate Actions/Reorganization Notices at your account's mailing address, Fidelity will accept decisions on the corporate actions/reorganization notices from your Primary Authorized agent/Advisor.

Agreement Signatures

All owners must read and sign. Your signature binds you to the terms in "All Accounts" and any other applicable sections.

All Accounts

By signing below, you acknowledge and agree that:

- You are asking Fidelity to establish the account(s) in your name(s) as described in this application.
- You are at least 18 years of age, of full legal age in the state in which you reside, and fully authorized to apply for this account.
- All information about you and any other applicant is true, accurate, and complete, to the fullest extent of your knowledge, including information about securities industry affiliations, which you answer under penalties of perjury.
- If you have not checked the box for Affiliations, you represent and warrant that you are not affiliated with or employed by a stock exchange or a broker/dealer or you are not a control person or affiliate of a public company under SEC Rule 144 (such as a director, 10% shareholder, or a policy-making officer), or an immediate family or household member of such a person.
- The terms and conditions set forth in this application and the Client Agreement govern this brokerage account. Your Authorized agent(s)/Advisor(s) has provided you with a complete copy of the application and Client Account Agreement and you have read, understood and agree to terms as they are today and as they may be amended in the future, including, but not limited to:
 - your commitments to Fidelity
 - you authorizations and statements concerning your Authorized agent(s)/Advisor(s), including your agreement to grant your Authorized agent(s)/Advisor(s) discretion over your account (as described in a written advisory contract) and, if indicated, asset movement authority
 - the policies governing your account and any optional features you may have requested, such as cash management, margin, options, or separately managed accounts
 - your agreement to indemnify us (jointly and severally, for accounts with more than one owner or trustee)
 - our policies on gathering information and recording phone calls
 - our privacy policy and other notices and disclosures
- You grant your Authorized agent(s)/Advisor(s) trading authority, as defined in the Client Agreement, and agree that Fidelity may accept instructions on your account (such as orders to buy and sell securities) from your Authorized agent(s)/Advisor(s).
- With respect to the fees associated with your account:
 - you authorize your Authorized agent(s)/Advisor(s) to set the fees you pay for their services and the fees you pay for Fidelity's services
 - you authorize Fidelity to accept instructions from your Authorized agent(s)/Advisor(s) to deduct Authorized agent/Advisor fees directly from your account
 - you authorize brokerage commissions and termination fees to be deducted from your account (see the Client Agreement for more complete information on fees)

Trust Accounts Only

By signing below, you certify that:

- All individuals signing this application are trustees of the trust applying for this account, and all trustees are signing the application (for trusts with only one trustee, plural references should be read as singular).
- The trustees may enter into the transactions and issue the instructions that will be made in this account, for and at the risk of the trust, and may delegate trading authorization to the Authorized agent(s)/Advisor(s).
- The trustees grant Fidelity the authority to accept orders and other instructions relative to this account from any trustee, or any other authorized individual or entity. This includes the authority to deliver any assets in the account to any trustee (personally or otherwise), or according to any trustee's instructions (but note that Fidelity, at its option and for its protection, may require approval of other trustees before executing any order.)
- Any trustee may execute any documents on behalf of the trust that Fidelity may require.
- All instructions given on this account will be in full compliance with the terms of the trust and all applicable account agreements.
- The trustees will inform Fidelity in writing of any circumstance that could alter these certifications (such as a change of trustees).
- Fidelity may verify all information provided in connection with this application and account, and may obtain credit or other financial responsibility reports with respect to the trust and any authorized individual. All individuals who may be the subject of these reports have been notified of this possibility.

- If you direct Fidelity to deliver your prospectuses, proxies, related materials or corporate actions/reorganization notifications to your Primary Authorized agent/Advisor instead of delivering these documents to you, and you authorize Fidelity to accept votes from your Authorized agent/Advisor on proxies you represent and agree to the following:
 - Fidelity has no responsibility to verify any of the representations you make with respect to these instructions.
 - If your Primary Authorized agent/Advisor has identified a proxy related third-party administrator on this form, you represent that you have separately authorized your Primary Authorized agent/Advisor to use such an administrator, your Primary Authorized agent/Advisor may not delegate to the proxy administrator the right to determine your proxy vote and Fidelity may honor instructions from your Primary Authorized agent/Advisor to forward proxy materials to the administrator and may accept your Primary Authorized agent's/Advisor's proxy voting decisions when communicated to Fidelity by the administrator.
 - Any and all Authorized agents/Advisors you have designated and authorized is either a state or SEC registered investment advisor, a bank, a bank holding company or trust company and has discretion over your account pursuant to a separate written advisory contract.
- Fidelity will provide your names to issuers of securities held in this account so that you might receive any important information regarding them, unless you notify us otherwise in writing.
- You will notify Fidelity in writing of any material changes to any designation or authorization you have granted to your Authorized agent(s)/Advisor(s) or to any representations you have made to Fidelity concerning your Authorized agent(s)/Advisor(s), and understand that any changes in account features or instructions (including rescinding authorizations relating to asset movement authorization, proxy voting or quarterly account statements) will be effective as soon as Fidelity receives written notice from you.
- If requested in this application, you will receive quarterly confirmation statements in place of transaction confirmations, and you acknowledge and accept the limitations this arrangement may place on your ability to closely and promptly monitor activity in your account.
- Fidelity is not affiliated with your Authorized agent(s)/Advisor(s).
- Fidelity will act only on authorized instructions, and has no responsibility to monitor or review your account, to determine the suitability of any investment, or to judge the appropriateness of any instruction placed on the account so long as it appears to be authorized. You can revoke this authorization any time by giving written notice to Fidelity.

Margin Privileges Applicants Only

- **SUBJECT TO MARGIN APPROVAL, YOU AUTHORIZE US (FIDELITY) TO LEND SEPARATELY, OR WITH THE PROPERTY OF OTHERS, EITHER TO OURSELVES OR TO OTHERS, ANY PROPERTY WE MAY BE CARRYING FOR YOU ON MARGIN. THIS AUTHORIZATION APPLIES TO ALL YOUR ACCOUNTS WE CARRY AND WILL REMAIN IN FORCE UNTIL WE RECEIVE WRITTEN NOTICE OF REVOCATION.**

Certification of Trust

This section applies to domestic trusts only. If you do not wish to complete this certification or if your account is in the name of a foreign trust you must attach the first and signature pages of your trust document. Notary and/or trust document are not required for applications signed electronically.

We have attached the first and signature pages of trust document or will with evidence of probate for trusts created by will in lieu of completing the section below.

Trust Information

Name of Trust		<input type="checkbox"/> Social Security Number	<input type="checkbox"/> Taxpayer ID Number*
Date of Trust (MM-DD-YYYY)	Grantor/Trustor/Settlor/Donor		
Name of Trustee		Name of Trustee	

Revocable Trusts Only - Complete if applicable

By whom can the trust be amended or revoked:

* Tax reporting number for Trust

Trustee Certification

- a. The trust exists under applicable state laws.
- b. We understand and acknowledge that the above-referenced agreement may be terminated in the event that Fidelity or any of its agents or affiliates has reasonable grounds to believe the foregoing is untrue, or the form have been altered.
- c. We, the Trustees, certify to Fidelity that we are the currently acting trustees and the trust has not been revoked, modified, or amended in any manner that would cause the representations contained in this trust certification to be incorrect.
- d. We, the Trustee(s), have the power under the trust and applicable law to enter into the transactions and issue the instructions that we make in this account. We further certify any and all transactions effected and instructions given on this account will be in full compliance with the trust.

Certified to Fidelity by Trustees All Trustees must sign and date below. For three or more trustees, make a copy of this page.

Signature X	Date (MM-DD-YYYY)	Signature X	Date (MM-DD-YYYY)
-----------------------	-------------------	-----------------------	-------------------

Trustee(s) signature(s) must be notarized below. The following is to be completed by a Notary Public.

Trust is a Revocable Living Trust where the Grantor(s)/Trustor(s)/Settlor(s)/Donor(s), Trustee(s) and Beneficiary(ies) are all the same individual(s). **No notarization is required. In order to check this box, you must provide the Grantor(s)/Trustor(s)/Settlor(s)/Donor(s) and Beneficiary(ies) name(s) on page one of this application.**

On the dates indicated below, the following Trustee(s) appeared before me consistent with their authority:

Name of Trustee	Name of Trustee
-----------------	-----------------

Statement of Notary Public

You certify that the individual(s) signing above appeared before you on the date indicated below, that they are known to you to be the individuals they claim to be, and that they represented to you that they made the certifications above their signature(s) of their own free will.

State	County
Notarization Date (MM-DD-YYYY)	Commission Expires (MM-DD-YYYY)
Name of Notary Public	
Signature X	Date (MM-DD-YYYY)

STAMP OR SEAL

Statement of Notary Public

You certify that the individual(s) signing above appeared before you on the date indicated below, that they are known to you to be the individuals they claim to be, and that they represented to you that they made the certifications above their signature(s) of their own free will.

State	County
Notarization Date (MM-DD-YYYY)	Commission Expires (MM-DD-YYYY)
Name of Notary Public	
Signature X	Date (MM-DD-YYYY)

STAMP OR SEAL

Beneficial Ownership For Foreign Trusts (i.e., trusts organized outside of the U.S.)

If this trust account is organized outside of the U.S., complete the information below for the Grantor/Trustor/Settlor/Donor and any additional individual(s) named in the Trust other than the Grantor/Trustor/Settlor/Donor or the Trustee who can make changes to the Trustees. These individuals will not have any authority or be able to take any action on this account. Please make duplicates of this page for additional individuals.

Grantor/Trustor/Settlor/Donor

Please complete this section for the Grantor of the Foreign Trust. If the Grantor is deceased, please attest to that by checking here, and fill in the name and date of death fields. Grantor is deceased.

First Name			Middle Name			Last Name		
If applicable <input type="checkbox"/> SSN or <input type="checkbox"/> TIN	Social Security / Taxpayer ID Number				Date of Birth / Date of Death (MM-DD-YYYY)			

PERMANENT ADDRESS

Address (Cannot be a Post Office Box)		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

CITIZENSHIP INFORMATION

Citizenship U.S. Other Country of Citizenship
UNITED STATES

Permanent U.S. Resident Non-Permanent U.S. Resident Non-Resident of U.S.

Country of Birth UNITED STATES	City of Birth	State/Province of Birth
-----------------------------------	---------------	-------------------------

Government Identification (Required for non-U.S. citizens) ID must include reference number and photo. Attach copy of ID.

- U.S. Driver's License Passport with U.S. Visa Foreign National Identity Document
- DHS Permanent Resident Alien Card Employment Authorization Document (EAD) Passport without U.S. Visa

ID Number (Not Required for U.S. Driver's License)	Country of Issuance UNITED STATES
--	--------------------------------------

Additional Individual with Appoint/Remove Authority

If there is someone named in the Trust other than the Grantor/Trustor/Settlor/Donor or Trustee who can make changes to the Trustees, please provide the information below for each such person.

First Name			Middle Name			Last Name		
If applicable <input type="checkbox"/> SSN or <input type="checkbox"/> TIN	Social Security / Taxpayer ID Number				Date of Birth (MM-DD-YYYY)			

PERMANENT ADDRESS

Address (Cannot be a Post Office Box)		
City	State/Province	Zip/Postal Code
Country UNITED STATES		

CITIZENSHIP INFORMATION

Citizenship U.S. Other Country of Citizenship
UNITED STATES

Permanent U.S. Resident Non-Permanent U.S. Resident Non-Resident of U.S.

Country of Birth UNITED STATES	City of Birth	State/Province of Birth
-----------------------------------	---------------	-------------------------

Government Identification (Required for non-U.S. citizens) ID must include reference number and photo. Attach copy of ID.

- U.S. Driver's License Passport with U.S. Visa Foreign National Identity Document
- DHS Permanent Resident Alien Card Employment Authorization Document (EAD) Passport without U.S. Visa

ID Number (Not Required for U.S. Driver's License)	Country of Issuance UNITED STATES
--	--------------------------------------



Account Number

Account Number input boxes: [][][] - [][][][][][][][]

Omnibus Account Certification

Authorized agent(s)/Advisor(s) should complete this form and return with all new account applications when establishing an account with one of the following registration types: Non-Fidelity Prototype Retirement, Corporate, Limited Liability Company, Unincorporated Business, Trust, Non-trust Fiduciary or Estate. NOTE: the applicable registration types may change. Complete a form for each account requiring certification.

Advisor Name input box

G Number

G Number input box: [G][][][][][][][][]

Fidelity Investments has a policy requiring Authorized agent(s)/Advisor(s) (including Retirement Plan Administrators) to track and remit short-term redemption fees at the sub-account level from omnibus accounts that hold Fidelity funds and certain Institutional Funds Network funds (collectively "IFN funds") that impose these types of fees.

Any omnibus account¹ held with Fidelity for which a short-term redemption fee in a Fidelity or applicable IFN fund cannot be collected and remitted at the sub-account level will not be allowed to purchase (including through periodic investment plans) shares of any Fidelity or applicable IFN fund that imposes these types of fees. Accordingly, Authorized agent(s)/Advisor(s) must certify and agree to the following:

Omnibus Account Type - Required (Check only one):

- 01 = **Not** an omnibus account. Account is a Trust or a Non-Fidelity Prototype Retirement AND is for the benefit of a single individual ("FBO" must be present in the registration).
- 02 = **Not** an omnibus account. All other non-omnibus accounts not listed in "01" (Examples include DVP/RVP accounts, Allocation and Proprietary accounts, Error accounts, and Trustee-directed retirement plans).
- 03 = **An omnibus account** (as defined by Fidelity) and advisor **can** and **will** track, collect, and remit short-term redemption fees at the sub-account level for **all** applicable Fidelity and IFN funds. Omnibus Certification Form is on file with Fidelity Registered Investment Advisor Group.

- 04 = An omnibus account (as defined by Fidelity) and Authorized agent(s)/Advisor (s) **cannot** and **will not** track, collect, and remit short-term redemption fees at the sub-account level. Accounts with this code will be blocked from future purchases of Fidelity and applicable IFN funds with short-term redemption fees. Redemptions and sell exchanges are allowed.
- 06 = **An omnibus account** (as defined by Fidelity) and advisor **can** and **will** track, collect, and remit short-term redemption fees at the sub-account level, for **all** applicable IFN funds. Advisor **cannot** and **will not** track, collect, and remit short-term redemption fees at the sub-account level for Fidelity funds. Accounts with this code will be blocked from future purchases of Fidelity funds with short-term redemption fees. Redemptions and sell exchanges are allowed. IFN Omnibus Certification Form is on file with Fidelity.

Please Note: If you do not select one of the above "account" options (01, 02, 03, 04, or 06) the account will be established but will be blocked from the purchase of Fidelity and IFN funds with short-term redemption fees.

- Based on the certification of the account above, Authorized agent(s)/Advisor(s) will notify the omnibus account holder if the account is blocked from purchasing applicable Fidelity and/or IFN funds.
 - If the Authorized agent(s)/Advisor(s) has certified that the account is "03" or "06" then the Authorized agent(s)/Advisor(s) agrees to the following:
- Authorized agent(s)/Advisor(s) will ensure its processes can support the tracking, collection and/or remittance of short-term redemption fees on Fidelity and/or applicable IFN funds. Authorized agent(s)/Advisor(s) shall determine, in accordance with the provisions of the appropriate Fidelity and/or IFN fund prospectus, whether a redemption fee is applicable to such transaction. If a redemption fee is applicable, Authorized agent(s)/Advisor(s) shall calculate the amount of such fee in accordance with the provisions of the appropriate Fidelity and/or IFN fund prospectus and the fee shall be remitted to the Fidelity and/or IFN fund pursuant to procedures provided to Authorized agent(s)/Advisor(s) by Fidelity.
- Authorized agent(s)/Advisor(s) represents that it has the capability to track, account for, and facilitate the remittance of redemption fees and that the terms and conditions of the redemption fee, as set forth in each Fidelity and/or IFN fund's prospectus, subject to such guidelines, if any, that Fidelity and/or IFN fund family may from time to time issue to Authorized agent(s)/Advisor(s), will be applied uniformly to all transactions.
- Authorized agent(s)/Advisor(s) will maintain or ensure the omnibus account holder maintains records at the sub-account level and will provide to Fidelity or secure from omnibus account holder, upon request of Fidelity or IFN fund family, the underlying shareholder transaction information related to the assessment of fees which is necessary to ensure that remittance is properly occurring. Authorized agent(s)/Advisor(s) grants Fidelity and IFN fund family the right to audit Authorized agent(s)/Advisor(s) and/or will secure for Fidelity and IFN fund family the right to audit the omnibus account holders' records to ensure these accounts are being reported accurately and remittance is properly occurring. Fidelity reserves the right, at its discretion, to verify Authorized agent (s')/Advisor(s') compliance with its obligations hereunder by auditing or otherwise inspecting Authorized agent(s')/Advisor(s') policies, procedures, and systems. In conjunction therewith, Authorized agent(s)/Advisor(s) shall grant to Fidelity or to IFN fund family, at Fidelity's request, access to such information, including, but not limited to, books, records, systems and personnel of Authorized agent(s)/Advisor(s). Such audit or inspection may be performed, at the option of Fidelity, by representatives of Fidelity or IFN fund family, an affiliate of Fidelity, an affiliate of IFN fund family or independent auditors selected and retained by Fidelity, and may be performed at any time during regular business hours of Authorized agent(s)/Advisor(s).
- Authorized agent(s)/Advisor(s) will follow the remittance process in accordance with Fidelity and/or IFN fund family policies and procedures as outlined in the "Omnibus Client Trading Guidelines" as may be amended from time to time regarding the remittance of short-term redemption fees from omnibus accounts on a periodic basis.
- Authorized agent(s)/Advisor(s) represents and warrants that it will comply with all applicable rules and regulations regarding the tracking and remitting of mutual fund short-term redemption fees in omnibus accounts. Authorized agent(s)/Advisor(s) will immediately notify Fidelity if it is unable or unwilling to comply with such rule or regulation.
- Authorized agent(s)/Advisor(s) has received all representations and agreements from the omnibus account holder as it deems necessary in order to make the representations and agreements set forth in this Certification.
- **The person named below is duly authorized to execute and submit this Certification on behalf of the Authorized agent(s)/Advisor(s).**

X _____
Signature of Authorized agent/Advisor

_____ Date (MM-DD-YYYY)

_____ Print Name

Authorized agent/Advisor Title

¹ Omnibus accounts are defined as a single account that pools the holdings of more than one beneficial owner, whose identity is not disclosed to Fidelity and who has the ability to affect transactions, and for which sub-accounting is performed by the

omnibus account holder or a third-party. This may include, but is not limited to, retirement plans, bank pooled accounts and wrap programs. Pooled accounts offer the convenience of combining the buy and sell trades for the sub-accounts to arrive at the net trades for a given day.

Brokerage Account Client Agreement



Client Agreement

Please retain for your records

To: Fidelity Brokerage Services LLC and National Financial Services LLC (collectively, "Fidelity" or "you").

1. Important Aspects of the Account

Upon approval by Fidelity, I understand that Fidelity will maintain an account for me and buy, sell or exchange securities or other products in accordance with instructions from me or my Authorized agent(s)/Advisor(s). Certain administrative services will be provided to me or my Authorized agent(s)/Advisor(s) by Fidelity. I understand that this Brokerage Account Client Agreement governs my account and my relationship with Fidelity and its affiliates. Without limiting any other provision of this Agreement, I understand and agree that as among me, my Authorized agent(s)/Advisor(s) and Fidelity:

1. I have selected my Authorized agent(s)/Advisor(s) based on criteria I deem appropriate for my investment needs and without any advice or recommendation from Fidelity;
2. all decisions relating to my investment or trading activity shall be made solely by me or my Authorized agent(s)/Advisor(s) identified on my Brokerage Account Application or my Brokerage Account Application for Business Registrations (collectively, Fidelity Brokerage Application) or subsequently in writing; my Authorized agent(s)/Advisor(s) has collected from me such information as is required to determine the suitability of my investment or trading activity;
3. Fidelity is authorized to accept and act upon the instruction of my Authorized agent(s)/Advisor(s) with respect to my account in accordance with this Agreement until you receive written notice revoking such authority;
4. my Authorized agent(s)/Advisor(s) is not affiliated with or an agent of Fidelity and is not authorized to act or make representations on Fidelity's behalf; Fidelity and my Authorized agent(s)/Advisor(s) have no relationship except as described in this agreement;
5. I understand deposits by check shall be made payable to Fidelity Brokerage Services LLC. Deposits to fund a new account may be attached to my account application. Subsequent deposits should be mailed directly to Fidelity Investments. Overnight mail may be sent to: 100 Crosby Parkway, Mailzone KC1J, Covington, KY 41015. Regular mail may be sent to: P.O. Box 770002, Cincinnati, OH 45277-0075;
6. Fidelity has no responsibility and will not undertake to review, monitor or supervise the suitability of the trading decisions made by me or my Authorized agent(s)/Advisor(s) or the frequency of the investment or trading activity in my account. My Authorized agent(s)/Advisor(s) has collected from me such information as is required to determine the suitability of my investment or trading activity;
7. Fidelity will have no duty to inquire into the authority of the Authorized agent(s)/Advisor(s) to engage in particular transactions or investment strategies or to monitor the terms of any oral or written agreement between me and the Authorized agent(s)/Advisor(s);
8. I acknowledge that if I reside outside the United States I have received this application and agreement as a result of my express request for them. I further acknowledge that nothing herein is an offer or solicitation of any security, product or service in any jurisdiction where its offer or sale would be contrary to local law or regulation;
9. I shall indemnify and hold harmless Fidelity and Fidelity Management Trust Company and its officers, directors, employees, agents and affiliates from and against any and all losses, claims or financial obligations that may arise from any act or omission of my Authorized agent(s)/Advisor(s) with respect to my account.
10. The Authorized agent(s)/Advisor(s) will comply with, and make all disclosure as required by all applicable state, federal, and industry securities laws and regulations, and interpretations promulgated thereunder, including, but not limited to, the Investment Advisers Act of 1940, the Securities Exchange Act of 1934, the Investment Company Act of 1940 and Financial Industry regulatory Authority (FINRA) Conduct Rules. Fidelity will not undertake to confirm or ensure that my Authorized agent(s)/Advisor(s) remains in compliance with its obligations.

How Fidelity Supports Your Advisor

Fidelity provides your investment advisor with a range of services and other benefits to help them conduct their business and serve you. For instance, Fidelity may pay for or provide your advisor with technology solutions to help facilitate their integration with Fidelity's brokerage system and streamline their operations. These may include Fidelity's proprietary integrated analysis, trading, and reporting system that allows advisors to communicate electronically with Fidelity. We also offer investment research to help your advisor make well-informed investment decisions for your account. Trained Fidelity representatives are available to provide administrative support to your advisor. We may assist your advisor in its marketing activities, including by providing marketing toolkits and other forms of marketing materials your advisor may use or adapt for its purposes, co-sponsor events sponsored by your advisor, or engage in joint marketing initiatives with your advisor. We may assist your advisor in joining our platform and in completing documentation to enroll clients to receive our services, and this may include providing or paying for clerical staff to assist and, in some cases, paying account transfer fees or other charges you or other clients may have to pay when changing custodians or service providers.

In limited circumstances, we may also make direct payments to your advisor. For example, we may reimburse your advisor for reasonable travel expenses incurred when reviewing our business and practices. We also may pay your advisor for performing certain back-office, administrative, custodial support and clerical services for us in connection with client accounts for which we act as custodian. These payments may create an incentive for your advisor to favor certain types of investments over others.

These and other services we furnish will provide benefits to your advisor and may be made available to your advisor, at no fee or at a discounted fee, and the terms may vary among advisors depending on the business they and their clients conduct with us and other factors. Fidelity's provision of these services and other benefits to your advisor may be based on clients of your advisor placing a certain amount of assets in accounts with us within a certain period of time. Your advisor may be influenced by this in recommending or requiring that its clients establish accounts with us. These products and services may not necessarily benefit your account.

Fidelity and your advisor may agree to pricing (including commissions and transaction account and service fees) for your advisor's client accounts at Fidelity, including your own account, based on the nature and scope of business your advisor does with us, including the current and future expected amount of your advisor's client assets in our custody, the types of securities managed by your advisor, and expected frequency of your advisor's trading. We may change this pricing and the services and other benefits we provide if the nature or scope of business of your advisor's business with us changes or does not reach certain levels, in which case pricing for your advisor's client accounts, including your own account, may increase to an amount we decide but not to exceed our standard pricing for advisors that custody with Fidelity.

Your investment advisor may be required to disclose information pertaining to its receipt of the services and benefits to you. Fidelity has no responsibility to monitor, nor will it undertake to review your advisor's practices or disclosures to determine if they are consistent with applicable law.

For further information about the programs and incentives available to your advisor in managing your account through Fidelity, please feel free to contact us or your advisor directly.

To help the government fight money laundering and the funding of terrorism, federal law requires Fidelity to obtain my name, date of birth, address, and a government-issued id number before opening my account, and to verify the information. In certain circumstances, Fidelity may obtain and verify comparable information for any person authorized to make transactions in an account or beneficial owners of certain entities. Further documentation is required for certain entities such as trusts, estates, corporations, partnerships, and other organizations. My account may be restricted or closed if Fidelity cannot obtain and verify this information. Fidelity will not be responsible for any losses or damages (including, but not limited to, lost opportunities) that may result if my account is restricted or closed. Any information I provide to Fidelity may be shared with third parties for the purpose of validating my identity and may be shared for other purposes in accordance with Fidelity's Privacy Policy. Any information I give to Fidelity may be subject to verification, and I authorize Fidelity to obtain a credit report about me at any time. Upon written request, I will be provided the name and address of the credit reporting agency used. You also may monitor or tape-record conversations with me in order to verify data about any transactions I request, and I consent to such monitoring or recording.

As used in this Agreement, "I" refers to any and all account holder(s) or duly Authorized agent (s)/Advisor(s).

I hereby acknowledge Fidelity Brokerage Services LLC ("FBS") as my broker and National Financial Services LLC ("NFS" together with FBS "Fidelity"), an affiliate of FBS, as custodian of the securities held in the account opened with this application, of which I am the beneficial owner. I also understand that my account is carried by NFS and that all terms of this Agreement also apply between me and NFS.

Industry regulations require that FBS and its clearing firm, NFS, allocate between them certain functions regarding the administration of your account. The following is a summary of the allocation of those functions performed by FBS and NFS.

FBS is responsible for:

- (1) Obtaining and verifying account information and documentation;
- (2) Opening and approving my account;
- (3) Acceptance of orders and other instructions from me or my Authorized agent/Advisor regarding my account, and for promptly and accurately transmitting those orders and instructions to NFS;
- (4) Determining that those persons placing instructions for my account are authorized to do so. Neither NFS nor FBS will give me advice about my investments or evaluate the suitability of investments made by me, my Authorized agent/Advisor or any other party;
- (5) Operating and supervising my account and its own activities in compliance with applicable laws and regulations, including compliance with federal, industry and NFS margin rules pertaining to my margin account and for advising me of margin requirements;
- (6) Maintaining the required books and records for the services it performs;
- (7) Investigating and responding to any questions or complaints I have about my account(s), confirmations, my periodic statement or any other matter related to my account(s). FBS will notify NFS with respect to matters involving services performed by NFS.

NFS is responsible, at the direction of FBS, for:

- (1) The clearance and settlement of securities transactions;
- (2) The execution of securities transactions, in the event NFS accepts orders from FBS;
- (3) Preparing and sending transaction confirmations and periodic statements of my account (unless FBS has undertaken to do so);
- (4) Acting as custodian for funds and securities received by NFS on my behalf;
- (5) Following the instructions of FBS with respect to transactions and the receipt and delivery of funds and securities for my account;
- (6) Extending margin credit for purchasing or carrying securities on margin;
- (7) Maintaining the required books and records for the services it performs.

If I have so indicated on the application, I authorize and instruct Fidelity to accept such votes regarding proxies from my Authorized agent/Advisor on my behalf.

Fidelity does not promote day-trading strategies. I understand that trading in volatile markets can present increased challenges and risks which may include:

- the risk of market orders being executed at unexpectedly high prices. If I have limited assets to pay for a transaction, such as in a retirement account with contribution restrictions, I will consider placing a limit order. If I cannot pay for a transaction, Fidelity may be required to liquidate account assets at my risk.
- delays in quotes, order execution and reporting. In volatile markets, transmission of quotes, orders and execution reports may be delayed, even for information which appears to be real time. Security prices can change dramatically during such delays.
- it may not be possible to cancel an order previously submitted, even if I have received a confirmation that you have received my cancellation order. As a result, I understand that I will be sure my prior order is actually cancelled before entering a replacement order.
- certain securities, such as IPOs trading in the secondary market and Internet and other technology-related stocks are subject to particular volatility. I will consider managing market risk with limit orders.
- access to Fidelity or my account can be delayed by factors such as high telephone volume or systems capacity limitations. I may have alternative ways of reaching Fidelity such as the Web and telephone representatives in addition to the automated telephone system.
- the effect of using margin is amplified during periods of high price volatility. If I am a margin investor, I will periodically examine how the use of margin fits within my investment objectives, risk tolerance and financial resources.

For more complete information regarding this topic, please contact Fidelity.

If there are more than two account owners/holders, make a copy of the Joint Owner/Minor/Trustee Personal Information page and complete with the additional account holders' information. All account holders must sign the application in the Signature section. In order to establish your account, we are required to request the information in the Personal Information section for all account owners. Failure to provide this information will restrict your account, including transfer of assets.

Estate or Other Non-Trust Fiduciary account registrations types are not eligible for either Margin or Asset Movement Authorization.

Estate Accounts require a court appointment/letter of testamentary. Additional paperwork may be required.

2. Custodial Accounts

(Uniform Gifts to Minors Act or Uniform Transfers to Minors Act)

If this is a custodial account, I understand Fidelity will maintain an account established under Uniform Gifts to Minors Act or Uniform Transfers to Minors Act and for which I act as custodian. I understand that I represent and warrant the assets in the account belong to the minor and all such assets, whether or not transferred out of the Fidelity UGMA/UTMA accounts, will only be used by me for the benefit of the minor. As used herein, "I" or "my" shall refer to the custodian or to the minor as the context may require. As Custodian, I am required to sign the application.

These accounts are not eligible for Margin.

3. Joint Accounts

If this is a joint account, "I" also refers to all account holders, jointly and severally. All account holders agree that any account holder has authority on behalf of the joint account to:

- Buy, sell (including short sales) and otherwise deal in stock, bonds, options, and other eligible securities or other investments on margin or otherwise.
- Receive demands, notices, confirmations, report statements of account and communications of every kind on behalf of the joint account.
- Receive money, securities and property of every kind and dispose of the same on behalf of the joint account.
- Make agreements relating to any of the foregoing matters and terminate, modify or waive any of the provisions of the Agreement on behalf of the joint account.
- Deal with Fidelity as fully and completely as if he (she) alone were interested in this account and without notice to the other account participants.
- Elect and terminate account-related products and services.

All obligations and liabilities arising under this account are joint and several and may be enforced by Fidelity against any or all account holders.

Fidelity is authorized to follow the instruction in every respect of any joint account holder without notice to any other account holder, and to deliver any or all monies, securities or other property to any joint account holder upon the instructions of any joint account holder, or to any other duly authorized person upon such instructions, even if such delivery or payment is to that joint account holder personally and not to the other(s). Fidelity will be under no obligation to inquire into the purpose or propriety of such delivery or payment and is not bound to inquire into the disposition or application of such delivery or payment. This authority remains in force until written notice to the contrary is addressed and delivered to Fidelity. Fidelity, in its sole discretion and for its sole protection, may terminate the account upon receipt of such notice and may require the written consent of all account holders prior to acting upon the instruction of any account holder. Laws governing joint ownership of property vary from state to state. I understand that I am responsible for verifying that the joint registration I select is valid in my state. Generally, however, for **joint tenants with rights of survivorship**, in the event of the death of either tenant, the entire interest in the joint account shall be vested in the surviving joint tenant(s) on the same terms and conditions. For **tenants in common**, joint tenants are responsible for maintaining records of the percent of ownership. In the event of death of either tenant, the interest in their shares of the tenancy shall vest in the decedent's legal representative. Fidelity will take instruction from any joint tenants as if from all joint tenants, but Fidelity reserves the right to require all parties to authorize a transaction. State laws regulating **community property** vary. Consult your own legal advisor.

4. Trust and Business Accounts

For most trust accounts, a notarized certification of trust or copies of the first page and signature page of the trust documents are required to establish the account.

If this account is a trust or business account, or this account is not owned by individual person (s), "I" also refers to all account holders, trustees, corporate officers, partners, club members, custodians, guardians, executors, and any other authorized person(s) who hold(s) any position of ownership or fiduciary responsibility for this account.

Trustee powers include, without limitation, the authority to buy, sell (including short sales), exchange, convert, tender, redeem and withdraw assets (including delivery of securities to and from the account) and to trade securities on margin or otherwise (including the purchase and/or sale of option contracts) for and at the risk of the Trust. All orders and transactions will be governed by the terms and conditions of all other account agreements applicable to this account.

For Corporate, LLC and Unincorporated Accounts, the authorized individuals are authorized to purchase, trade, sell, assign, transfer and/or deliver any and all stocks, bonds, options, or any other securities, listed or unlisted, in said account and to execute any and all instruments necessary, proper and desirable for the purpose, including executing any and all documentation necessary to establish cash, margin and/or option account(s); further, that any past action in accordance herewith is hereby ratified and confirmed.

For Partnership Accounts, the authorized individuals jointly and severally agree that each shall have authority on behalf of the partnership to establish and maintain one or more accounts (including, but not limited to, margin accounts) to buy, sell, trade and otherwise deal in, through you as brokers, stocks, bonds, options and any other securities, listed or unlisted on margin or otherwise (including short sales); to receive on behalf of the partnership account demands, notices, confirmations, reports, statements of account, and communications of every kind; to receive on behalf of the partnership account money, securities and property of every kind, and to dispose of same; to make on behalf of the partnership 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 you on behalf of the partnership account as fully and completely as if he alone were interested in said account, all without notice to the other or others interested in said account.

5. For Corporate and LLC Accounts: Corporate and LLC Resolution and Authorization

Copy of certain resolutions (certified in the Business Information section of the Brokerage Account Application for Business Registrations) adopted by the Board of Directors whereby the establishment and maintenance of trading accounts have been authorized.

RESOLVED

FIRST: That the individuals listed in the Personal Information section of the Brokerage Account Application for Business Registrations are, and each of them hereby is, authorized and empowered, for and on behalf of this entity (herein called the "Entity"), to establish and maintain one or more accounts (which may be margin accounts) with Fidelity Brokerage Services LLC and National Financial Services LLC (herein called the "Brokers") for the purpose of purchasing, investing in, or otherwise acquiring, selling (including shortsales), possessing, transferring, exchanging, or otherwise disposing of, or turning to account of, or realizing upon, and generally dealing in and with any and all forms of securities including, but not by way of limitation, shares, stocks, bonds, debentures, notes, scrip, participation certificates, rights to subscribe, options, warrants, certificates of deposit, mortgages, evidences of indebtedness, commercial paper, certificates of indebtedness and certificates of interest of any and every kind and nature whatsoever, secured or unsecured, whether represented by trust, participating and/or other certificates or otherwise.

The fullest authority at all times with respect to any such commitment or with respect to any transaction deemed by any of the said officers and/or agents to be proper in connection therewith is hereby conferred, including authority (without limiting the generality of the foregoing) to give written or oral instructions to the Brokers with respect to said transactions; (to borrow money and securities and to borrow such money and securities from or through the Brokers, and to secure repayment thereof with the property of the Entity); to bind and obligate the Entity to and for the carrying out of any contract, arrangement, or transaction, which shall be entered into by any such officer and/or agent for and on behalf of the Entity with or through the Brokers; to pay by checks and/or drafts drawn upon the funds of the Entity such sums as may be necessary in connection with any of the said accounts; (to deliver securities and contracts to the Brokers); to deliver securities to/and deposit funds with the Brokers; to order the transfer or delivery of securities to any other person whatsoever, and/or to order the transfer of record of any securities, to any name selected by any of the said officers or agents; to affix the corporate seal to any documents or securities to any name selected by any of the said officers or agents; to affix the corporate seal to any documents or agreements, or otherwise; to endorse any securities and/or contracts in order to pass title thereto; to direct the sale or exercise of any rights with respect to any securities; to sign for the Entity all releases, powers of attorney, and/or other documents in connection with any such account, and to agree to any terms or conditions to control any such account; to direct the Brokers to surrender any securities to the proper agent or party for the purpose of effecting any exchange or conversion, or for the purpose of deposit with any protective or similar committee, or otherwise; to accept delivery of any securities; to appoint any other person or persons to do any and all things which any of the said officers and/or agents is hereby empowered to do, and generally to do and take all action necessary in connection with the account, or considered desirable by such officer and/or agent with respect thereto.

SECOND: That the Brokers may deal with any and all of the persons directly or indirectly by the foregoing resolution empowered, as though they were dealing with the Entity directly.

THIRD: For Corporate accounts that the Secretary of the Corporation or a duly appointed authorized officer of an LLC be and he hereby is authorized, empowered and directed to certify, under the seal of the Corporation, or otherwise, to the Brokers:

- (a) a true copy of these resolutions;

- (b) specimen signatures of each and every person by these resolutions empowered;
- (c) a certificate (which, if required by the Brokers, shall be supported by an opinion of the general counsel of the Corporation, or other counsel satisfactory to the Brokers) that the Entity is duly organized and existing, that its charter empowers it to transact the business by these resolutions defined, and that no limitation has been imposed upon such powers by the By-Laws or otherwise.

FOURTH: That the Brokers may rely upon any certification given in accordance with these resolutions, as continuing fully effective unless and until the Brokers shall receive due written notice of a change in or the rescission of the authority so evidenced and the dispatch or receipt of any other form of notice shall not constitute a waiver of this provision, nor shall the fact that any person hereby empowered ceases to be an officer of the Entity or becomes an officer under some other title, in any way affect the powers hereby conferred. The failure to supply any specimen signature shall not invalidate any transaction if the transaction is in accordance with authority actually granted.

FIFTH: That in the event of any change in the office or powers of persons hereby empowered, the Secretary shall certify such changes to the Brokers in writing to the manner herein above provided, which notification, when received, shall be adequate both to terminate the powers of the persons theretofore authorized, and to empower the persons thereby substituted.

SIXTH: That the foregoing resolutions and the certificates actually furnished to the Brokers by the Secretary of the Corporation or duly appointed officer of an LLC pursuant thereto, be and they hereby are made irrevocable until written notice of the revocation thereof shall have been received by the Brokers.

6. Applicable Rules and Regulations

All transactions through Fidelity 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.

I am aware that various federal and state laws or regulations may be applicable to transactions in my account regarding the resale, transfer, delivery or negotiation of securities, including the Securities Act of 1933 ("Securities Act"), The Securities Act of 1934, and Rules 144, 144A, 145 and 701 there under. I agree that it is my responsibility to notify you of the status of such securities and to ensure that any transaction I effect with you will be in conformity with such laws and regulations. I will notify you if I am or become an "affiliate" or "control person" within the meaning of the Securities Act with respect to any security held in my account. I will comply with such policies, procedures and documentation requirements with respect to "restricted" and "control" securities (as such terms are contemplated under the Securities Act) as you may require. In order to induce you to accept orders with respect to securities in my account, I represent and agree that, unless I notify you otherwise, such securities or transactions therein are not subject to the laws and regulations regarding "restricted" and "control" securities. I understand that if I engage in transactions which are subject to any special conditions under applicable law, there may be a delay in the processing of the transaction pending fulfillment of such conditions. I acknowledge that if I am an employee or "affiliate" of the issuer of a security, any transaction in such security may be governed by the issuer's inside trading policy, and I agree to comply with such policy.

7. Commissions/Fees/Pricing

I hereby authorize my Authorized agent(s)/Advisor(s) to enter into such schedule of interest rates, commission rates and any other fee schedules for my account as may be determined between my Authorized agent(s)/Advisor(s) and Fidelity, and I hereby certify that my Authorized agent(s)/Advisor(s) has informed me of such interest rates, commission rates and other fee schedules, and I agree to be bound thereby.

8. Security Interest

Any credit balances, securities, assets or related contracts, and all other property in which I may have an interest held by Fidelity or carried for my accounts shall be subject to a general lien for the discharge of my obligations to Fidelity, and Fidelity may sell, transfer, or assign any such assets or property to satisfy a margin deficiency or other obligation whether or not Fidelity has made advances with regard to such property.

Shares of any investment company in which I have an interest and for which Fidelity Management & Research Company serves as investment advisor and which are custodied, recordkept, or otherwise administered by an affiliate of Fidelity or NFS, also are subject to a general lien for the discharge of my obligations to Fidelity and NFS, and Fidelity and NFS may redeem any such shares to satisfy my obligation without further notice or demand. However, no provision of this agreement concerning liens or security interests shall apply to any account to the extent such application would be in conflict with any provisions of ERISA or the Internal Revenue Code relating to retirement accounts.

9. Settlement of Transactions

In the absence of a specific demand, all transactions in any of my accounts are to be paid for, securities delivered or required margin deposited no later than 2 p.m. Eastern Time on the settlement date. Fidelity reserves the right to cancel or liquidate, at my risk, any transaction not timely settled. Margin calls are due on or before the date indicated regardless of the settlement date of any transaction.

10. Account Protection

Securities in accounts carried by NFS, a Fidelity Investments company, are protected in accordance with the Securities Investor Protection Corporation ("SIPC") up to \$500,000. For claims filed on or after July 22, 2010, the \$500,000 total amount of SIPC protection is inclusive of up to \$250,000 protection for claims for cash, subject to periodic adjustments for inflation in accordance with terms of the SIPC statute and approval by SIPC's Board of Directors. NFS also has arranged for coverage above these limits. Neither coverage protects against a decline in the market value of securities, nor does either coverage extend to certain securities that are considered ineligible for coverage. For more details on SIPC, or to request a SIPC brochure, visit www.sipc.org or call 1-202-371-8300.

11. Fidelity Dividend Reinvestment Service Agreement

Upon my enrollment, I agree to the following terms and conditions governing the Fidelity Dividend Reinvestment Service (the "Service") to be provided by Fidelity ("you" or "Fidelity") and its affiliate, National Financial Services LLC ("NFS"):

Provision of Fidelity Dividend Reinvestment Service

My enrollment in the Service will be activated on the day I notify you by telephone, or within 24 hours after receipt of any written notification, that I wish to enroll an eligible security. Upon activation of my enrollment, I agree to be bound by this Fidelity Dividend Reinvestment Service Agreement (this "Agreement") as well as any other agreements between us that apply to my brokerage account.

I may direct you to add the Service to either all eligible securities in my account or selected eligible individual securities. My enrollment authorizes you to automatically reinvest cash dividends and capital gain distributions paid on such eligible securities held in my account (collectively, "dividends") in additional shares of the same security.

To add or remove the Service with respect to securities in my account, I must notify you of my election on or before 9 p.m. Eastern Standard Time (EST) on the dividend record date for such security. If the dividend record date falls on a non-business day, then I must notify you on or before 9 p.m. EST one business day prior to the dividend record date for such security. Dividends will be reinvested on any shares of all enrolled securities provided that I own such shares on both the dividend record date and the dividend payable date.

Dividend reinvestment does not assure profits on my investments and does not protect against loss in declining markets. You reserve the right to terminate or amend the Service and this Agreement at any time, including instituting commissions or transaction fees. Prior to the effective date of any such amendments, you shall send prior written notice thereof to me.

Eligible Accounts

The Service is available to Fidelity Brokerage customers who maintain cash, margin, or retirement brokerage accounts.

Eligible Securities

To be eligible for the Service, the enrolled security must be a closed-end fund or domestic common stock (including ADRs), which is margin eligible (as defined by NFS), and listed on the New York Stock Exchange or the American Stock Exchange, or traded on the National Association of Securities Dealers Automated Quotation System (NASDAQ). In order for my enrollment to be in effect for a given security, my position in that security must be settled on or before the dividend record date. Foreign securities and short positions are not eligible for the Service. Eligible securities must be held in street name by NFS or at a securities depository on behalf of NFS.

If I attempt to enroll a security for which I have placed a buy limit order which has not been filled, my enrollment election will be held for five (5) consecutive business days, at which point I must notify Fidelity of my desire to re-enroll the security for another five (5) consecutive business days.

If I am holding a security in my account that is ineligible for enrollment, and the security subsequently becomes eligible, any existing account-level reinvestment instructions will take effect for that security.

Eligible Cash Distributions for Reinvestment

Most cash distributions from eligible securities selected for participation in the Service may be reinvested in additional shares of such securities, including cash dividends and capital gain distribution. Cash-in-lieu payments, late ex-dividend payments, and special dividend payments, however, may not be automatically reinvested. If I enroll a security in the Service, I must reinvest all of its eligible cash distributions. I understand that I cannot partially reinvest cash distributions. I also understand that I cannot use any other funds in my brokerage account to make automatic reinvestment purchases.

Dividend Reinvestment Transactions in Eligible Securities

On the dividend payable date for each security participating in the Service, you will credit my account in the amount of the cash dividend to be paid (less any amounts required by law or agreement to be withheld or debited). Three (3) business days prior to the dividend payable date, you will combine cash distributions from my account with those from other customers requesting dividend reinvestment in the same security and use these funds to purchase securities for me and the other customers on a best efforts basis. You will credit to my account the number of shares equal to the amount of my funds to be reinvested in a particular security divided by the purchase price per share. If several purchase transactions are required in order to reinvest my and other customers' eligible cash distributions in a particular security, the purchase price per share will be the weighted average price per share for all such shares purchased. Under certain conditions a dividend may be put on hold by the issuing company. If a dividend is on hold on the payable date, reinvestment will not be performed. If a dividend is released from hold status after dividend payable date, dividend reinvestment will be performed on the day the dividend is actually paid.

If I liquidate shares of an enrolled security between the dividend record and the business day prior to the payable date, such shares will not participate in the Service, and I will receive the dividend as cash in my core account. If I liquidate shares of an enrolled security on dividend payable date, such shares will participate in the Service.

I will be entitled to receive proxy voting materials and voting rights for an enrolled security based on my proportionate shares. For mandatory reorganizations, I will receive cash in lieu of my partial shares. For voluntary reorganizations, instructions I give you will be applied to my whole shares and the partial shares will be liquidated at market price.

Partial Shares

Automatic reinvestment of my eligible cash distributions may give me interests in partial shares of securities, which you will calculate to three decimal places. I will be entitled to receive dividend payments proportionate to my partial share holdings. If my account is transferred, if a stock undergoes a reorganization, or if stock certificates are ordered out of an account, partial share positions, which cannot be transferred, reorganized, or issued in certifi-

cate form, will be liquidated at the closing price on the settlement date. The partial share liquidation transaction will be posted to my account on the day following the settlement date. I may not liquidate partial shares at my discretion. If I enter an order to sell my entire whole share position, any remaining partial share position will be liquidated at the execution price of the sell and will be posted to my account on the settlement day. No commission will be charged for the liquidation of the partial share position.

Confirmations and Monthly Statements

In lieu of separate immediate trade confirmation statements, all transactions made through the Service will be confirmed on my regular monthly brokerage account statement. I may obtain immediate information regarding a dividend reinvestment transaction on the day after the reinvestment date by calling my local Fidelity Investor Center or Fidelity's 24-hour toll-free number.

Continuing Effect of Authorization; Termination

I authorize you to purchase, for my account, shares of the securities I have selected for the Service. Authorizations under this section will remain in effect until I give you notice to the contrary on or before 9 p.m. EST on the dividend record date. If the dividend record date falls on a non-business day, then notice must be given on or before 9 p.m. EST at least one business day prior to the dividend record date. Such notice will not affect any obligations resulting from transactions initiated prior to your receipt of the notice. I may withdraw completely or selectively from the program. If I transfer my account within Fidelity, I must re-enroll my securities for reinvestment. Enrollment elections for securities that become ineligible for the Service will be canceled after 90 days of continuous ineligibility.

Automatic Dividend Reinvestment Transactions through the Depository Trust Company

I understand that if I elect to participate in the Service, reinvestment for certain securities may occur through the Depository Trust Company dividend reinvestment service (the "DTC program"). DTC and the issuer determine which securities participate in the DTC program. Only certain eligible DTC program securities will participate in the Service, and such eligibility is determined by you. I can obtain immediate information regarding DTC-eligible securities by calling my Fidelity Representative.

Securities eligible for reinvestment through the DTC program portion of the Service cannot participate in the cash reinvestment portion of the Service. If a DTC-eligible security subsequently becomes DTC-ineligible, and I have elected dividend reinvestment for that security, I will automatically continue to participate in the cash reinvestment portion of the Service for that security, provided that it is eligible for the Service. If a DTC-ineligible security subsequently becomes DTC-eligible, and I have elected dividend reinvestment for that security, then I will continue to participate in the Service through the DTC program portion of the Service for that security. No communication regarding these changes will be provided to me.

You will post the DTC program transaction to my account when the details, including determination of any discounts, are made available to you by DTC. Such transactions, although not posted to my account on the dividend payable date, will be effective as of such date. If I liquidate my shares after the dividend record date but before the DTC program reinvestment is posted to my account, then I will receive the dividend in cash.

12. Receipt of Communications

Communications may be sent to me at the U.S. postal or electronic mail address of record listed on my application or at such other address I may hereafter give Fidelity and all communications so sent, whether by mail, electronic means, telegraph, messenger or otherwise, shall be deemed given to me personally, whether actually received or not. I understand that I should promptly and carefully review the transaction confirmations and periodic statements and notify Fidelity of any errors. Information contained on transaction confirmations and account statements is conclusive unless I object in writing within five and ten days, respectively, after being transmitted to me or my Authorized agent(s)/Advisor(s).

Account mailings may include: confirmation of the new account profile, confirmations of changes to the investment objectives, and the tri-annual account profile confirmation.

All account mailings of the account being established with this application will be sent to the account level mailing address and be deemed to have been received by all account holders at such address.

13. Periodic Reports

I will receive a statement of all transactions quarterly, and monthly in the months where there is activity in my account, unless I have authorized on the application to direct all written trade confirmations to my Authorized agent(s)/Advisor(s) in lieu of sending them to me directly. If I have elected to receive quarterly account statements detailing all trade confirmations in lieu of immediate trade confirmations, I understand that receiving quarterly account statements impacts my ability to monitor as promptly the trading activity and investment decisions made by my Authorized agent(s)/Advisor(s). I acknowledge my Authorized agent(s)/Advisor(s) is my fiduciary and has investment discretion over the account, that Fidelity has no responsibility for the trading activity in the account or for monitoring the trading in my account, and that Fidelity's role is limited to carrying out my Authorized agent's/Advisor's instructions relating to the trading activity and investments in my account. I can revoke these instructions with written notice to you. The brokerage statement will detail: securities bought or sold in my securities account, whether on margin or on a fully paid basis; all purchases of merchandise, services and cash advances made with the check or debit card; redemption checks; margin loans and repayments and interest charges, if any; the number of fund shares that were purchased or redeemed for me; and electronic funds transfers and monthly fees assessed.

By authorizing Fidelity to deliver prospectuses to my Authorized agent(s)/Advisor(s) in lieu of sending them to me, I acknowledge that I will not receive prospectuses on securities held in my account and that it is my responsibility to evaluate the appropriateness of trading decisions made by my Authorized agent(s)/Advisor(s).

14. Extraordinary Events

Fidelity shall not be liable for loss caused directly or indirectly by government restrictions, exchange or market rulings, suspension of trading, war, strikes or other conditions beyond its control, including, but not limited to, extreme market volatility or trading volumes.

15. Choice of Marketplace

I understand and acknowledge that when securities can be traded in more than one marketplace, in the absence of specific instructions from me, Fidelity may use its discretion in selecting the market in which to enter my orders.

16. Payment for Order Flow

Fidelity transmits customer orders for execution to various exchanges or market centers based on a number of factors. Such factors include: size of order, trading characteristics of the security, favorable execution prices (including the opportunity for price improvement), access to reliable market data, speed of execution, liquidity enhancement opportunities, availability of efficient automated transaction processing, and reduced execution costs through price concessions from 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. Fidelity will furnish payment for order flow and order routing policies to you on an annual basis.

Fidelity receive(s) 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 Fidelity's telephone, electronic, wireless or online trading systems cannot specify a particular market center for execution.

17. Purchase of Precious Metals

If I direct Fidelity to purchase precious metals for me, I understand: a) the Securities Investor Protection Corporation (SIPC) does not provide protection for precious metals, but if stored through Fidelity, they are insured by the depository at market value; b) precious metals are not marginable; c) precious metal investments can involve substantial risk due to rapid and abrupt price changes and, therefore, Fidelity cannot guarantee an advantageous purchase or liquidation price; and d) if I take delivery of my metals, I am subject to delivery charges and applicable sales and use taxes.

18. Callable Securities Lottery

When street name or bearer securities held for me are subject to a partial call or partial redemption by the issuer, Fidelity may or may not receive an allocation of called/redeemed securities by the issuer, transfer agent and/or depository. If Fidelity is allocated a portion of the called/redeemed securities, Fidelity utilizes an impartial lottery allocation system, in accordance with applicable rules, that randomly selects the securities within customer accounts that will be called/redeemed. Fidelity's allocations are not made on a pro rata basis and it is possible for me to receive a full or partial allocation, or no allocation. I have the right to withdraw unallocated fully paid securities at any time prior to the cutoff date and time established by the issuer, transfer agent and/or depository with respect to the partial call, and also to withdraw excess margin securities provided my account is not subject to restriction under Regulation T or such withdrawal will not cause an undermargined condition.

19. Modification and Miscellaneous

I understand that no provision of this Agreement can be amended or waived except by Fidelity and I agree to the terms and conditions set forth in the Client Agreement as they are today and as they may be amended in the future. If any provision of this Agreement becomes inconsistent with any present or future law or regulation of any entity having regulatory jurisdiction over it, that provision will be superseded or amended to conform with such law and regulation, but the remainder of this Agreement remains in full force and effect.

The failure of Fidelity at any time to require performance by me or my Authorized agent(s)/Advisor(s) of any provision of these terms and conditions will not limit the right to require such performance at any time thereafter. Fidelity reserves the right, at its sole discretion and without prior notice, to restrict or limit any transaction or series of transactions in any investment company advised or managed by Fidelity or its affiliates that Fidelity determines may adversely affect the investment company or its shareholders. Any failure to provide accurate trading or allocation instruction, including options transactions, may result in losses in my account. I may not assign this or any related agreement without the prior written consent of Fidelity.

This Agreement and its enforcement shall be governed by the laws of the Commonwealth of Massachusetts; shall cover individually and collectively all accounts that I may open or reopen with Fidelity; and shall inure to the benefit of Fidelity's successors and assigns, whether by merger, consolidation or otherwise. Fidelity may transfer my account to your successors and assigns, and this agreement shall be binding upon my heirs, executors, administrators, successors and assigns.

20. Core Transaction Account

Amounts contributed and received will be invested while awaiting reinvestment in an income-earning account or in the money market mutual fund I choose, or any other fund Fidelity makes available (the "Core Transaction Account") subject to prior payment by you, and on my behalf, of any outstanding margin loan balances or other debit items or authorized payments of securities account settlements. I authorize Fidelity to change my core transaction account option at its discretion with notice to me. I agree to indemnify and hold Fidelity harmless for any actions that might result from Fidelity changing my core transaction account option. Your account statement details all activity in the Core Transaction Account. This is provided in lieu of a confirmation that might otherwise be provided by you with respect to those transactions. Any free credit balances in the securities account (i.e., any cash that may be transferred out of the securities account without giving rise to interest charges) automatically will be invested on

a daily basis in my Core Transaction Account and be paid monthly. A variable rate of interest may be paid on cash balances awaiting reinvestment (excluding any short credit balances) providing that accrued interest for any particular day equals or exceeds \$.0050. The variable rate of interest paid will be determined by the daily balance in the account. Fidelity reserves the right to increase or decrease the rate at any time without notice.

An investment in any money market mutual fund is not guaranteed by the FDIC or any other government agency. Although money market funds seek to preserve the value of my investment at \$1.00 per share, I understand that it is possible to lose money by investing in the Fund.

Investments by check* may be promptly credited to my Core Transaction Account and will earn interest on the Core Transaction Account prior to final collection of such checks. I understand that access to the redemption proceeds of Core Transaction Account shares purchased with monies so advanced may be withheld for up to 4 business days to assure that such checks have been collected. Such withholding may result in dishonor of checks or other debit items if monies are not otherwise available to me within the account.

I agree that the Core Transaction Account shall be automatically redeemed to satisfy debit balances in the securities account, check usage, electronic funds transfers, overdrafts and other authorized debit items.

If I so elect, and upon my instructions, monies representing the redemption of Core Transaction Account shares may be transferred to a bank account designated by me. Such monies shall be submitted, at Fidelity's election, via the Federal Reserve wire system or an automated clearinghouse system.

I hereby ratify any instructions given on this account and any account of another Fidelity fund into or from which I exchange and agree that neither you nor the fund's transfer agent will be liable for any loss, cost or expense for acting upon such instructions (by telephone or writing) believed by you or them to be genuine and in accordance with the procedures described in the fund prospectus. I understand that it is my responsibility to read the prospectus of any other Fidelity or non-Fidelity fund into which I purchase or exchange.

I understand certain fees may be applicable for services, that you may change the amount of the fees, and that the Core Transaction Account will assume various charges in connection with the account.

Fidelity Management & Research Company will receive a fee for serving as investment adviser to the Fidelity Funds. I further understand that for any special services that are not part of your regular account and that are requested by me or my Authorized agent(s)/Advisor(s) and performed by you, I will pay your customer service charges. I have received and read a copy of the prospectus of the fund selected by me for the Core Transaction Account, containing a more complete description of the fund and its fees, charges and operations.

*Fidelity will not accept for deposit, checks in non-U.S. currency or checks drawn on non U.S. bank accounts.

21. Payment of Items

I understand that all debit items including checks, debit card transactions, securities account transactions and electronic funds transfers will be accumulated daily and that Fidelity will promptly pay each on my behalf to the extent sufficient funds are available. I will maintain sufficient assets in my account to satisfy all obligations as they become due. I understand that payment of any debit item in my account will be made; first, from amounts contributed by me or on my behalf and available that day, second, from the proceeds of redemption of Core Transaction Account shares which you are authorized to redeem to pay such items; third, should these sources prove insufficient, and I have selected the margin option, from margin loans made by Fidelity within the available margin loan value of my securities account, fourth, any shares in another Fidelity money market fund, including any in another non-retirement account with the same registration which you are authorized to redeem to pay such items, and fifth, any securities in any other account Fidelity in which you have an interest. As used in this Agreement, the total cash and margin loan value shall be the "Collected Balance." Any such amount will be a loan by Fidelity to me and will be secured by the securities in my account. If Fidelity extends credit to me, interest will be charged from the date credit is extended, and is subject to the terms of the Margin Account Agreement. Payments for debit items will be made on my behalf in the following order as they become due:

First, securities transactions (including margin calls) and other account fees;

Second, my checks, if this account has checkwriting.

Fidelity shall not be responsible for the dishonor of any transaction due to insufficient Collected Balance. Other transactions that I initiate or to which I have consented may also reduce my Collected Balance. I understand that if funds in my account are insufficient to pay any item, such items will not be honored. I will promptly return to Fidelity any assets that Fidelity distributes to me but to which I am not entitled.

Note that at any time, Fidelity may reduce my available balance to cover obligations that have occurred but not yet been debited, including but not limited to withholding taxes that should have been deducted from my account.

22. Liability for Costs of Collection

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. I agree to reimburse Fidelity for all reasonable costs and expenses incurred in the collection of any debit balance or unpaid deficiency in any of my accounts, including, but not limited to, attorneys' fees.

23. Trading Authorization

A. I have indicated on the Fidelity Brokerage Application that I have authorized one or more Authorized agent(s)/Advisor(s) to execute trades on my account, and Fidelity is authorized and directed to accept any trading, servicing, account-related, or other instruction of the Authorized agent(s)/Advisor(s) on my behalf. Fidelity reserves the right, but is not obligated, to confirm with me any of my Authorized agent(s)/Advisor(s)' instructions prior to acting

on such instructions, **including requests to change the address on my account.** The Authorized agent(s)/Advisor(s) may inquire in and trade in my account as specified, and Fidelity is authorized and directed to accept the instructions of the Authorized agent(s)/Advisor(s). The authorization shall be applicable to all assets I hold in the specified account. Except as otherwise provided, the Authorized agent(s)/Advisor(s) is not authorized to withdraw, or direct the withdrawal of, assets from my account.

B. I understand and agree that:

1. Fidelity is authorized and directed to accept the instructions of my Authorized agent(s)/Advisor(s) on my behalf. This authorization shall be applicable to all assets I hold in the specified account. Fidelity reserves the right but is not obligated to confirm with me any of my Authorized agent(s)/Advisor(s)' instructions prior to acting on such instructions **including requests to change the address on my account.**
2. By granting trading authorization to my Authorized agent(s)/Advisor(s), I understand and agree that my advisor will have the ability to instruct Fidelity to initiate transfers of cash from my bank account to my Fidelity account, based on standing written funds transfer instructions provided by me to Fidelity.
3. Fidelity is further authorized to act upon my Authorized agent(s)/Advisor(s)' instructions to aggregate transaction orders for my Account with orders for one or more other accounts over which the Authorized agent(s)/Advisor(s) has trading authorization or to accept or deliver assets pursuant to a separately executed authorization I have granted to my Authorized Agent(s)/advisor(s), in transactions executed by other Broker/Dealers where Authorized agent(s)/Advisor(s) has so aggregated orders. I agree that if any such aggregated order is executed in more than one transaction, my portion of such order may be deemed to have been at the weighted average of the prices at which all of such transactions were executed.

24. Asset Movement Authorization

I understand that if I do not select Level I or Level II asset movement authority or if I choose to have no asset movement authority on this account, each cashing or money movement request will require my signature.

Level I

By selecting Level I asset movement authorization on my account application, I authorize and direct Fidelity to accept instructions from my Authorized agent(s)/Advisor(s) for one time disbursements and the establishment of, and changes to, periodic disbursements (Periodic Distribution Plans) from your account, including: (1) for redemptions and payment of monies from my account by check made payable to me and sent to me at my address (2) to disburse funds electronically, including bank wires and Electronic Funds Transfers (EFTs), to any bank account pursuant to a standing written instruction provided to Fidelity and signed by me, and check disbursements to any payee and address I have authorized through standing written instructions provided to Fidelity and signed by me, and (3) transfers of cash or securities from this account to other same-registration accounts at Fidelity, if this account is an Individual Transfer on Death (TODI) account, contributions from this account to any IRA I own at Fidelity, or from this account to any third-party account at Fidelity I have authorized through standing written instructions. A Periodic Distribution Plan is a plan which enables scheduled recurring distributions of predetermined amounts from your account as described above.

Level II

By Selecting Level II asset movement authorization on my account application, I authorize and direct Fidelity to accept instructions from my Authorized agent(s)/Advisor(s) as described in Level I, and in addition, to accept instructions from my Authorized agent(s)/Advisor(s), without receiving instructions directly from me, to transfer monies from my Fidelity account by wire or EFTs to accounts at banks or other financial institutions that my Authorized agent (s)/Advisor(s) represents to Fidelity have the same account owner or owners and the same registration type as this account. **By granting this authorization, I understand and agree that Fidelity will not undertake to confirm my Authorized agent(s)/Advisor(s)' representations and cannot confirm the account registration at the receiving bank or financial institution. Therefore, Fidelity will not undertake to monitor my Authorized agent(s)/Advisor(s)' compliance with my instructions to him or her and will rely solely upon the instructions of my Authorized agent(s)/Advisor(s) for these transfers. I understand that I should carefully review my account documentation and monitor all activity on my account. Fidelity may require direct instructions from me for transactions over a certain amount.**

A. Upon requests for any account-related activity on my account from my Authorized agent (s)/Advisor(s), including, but not limited to, requests for bank wires or EFTs, Fidelity reserves the right, but is not obligated to confirm with me any of my Authorized agent(s)/Advisor(s)' instructions prior to acting on them and to restrict or not accept requests for these transfers, at its own discretion. The Authorized agent(s)/Advisor(s) is authorized to act for me and on my behalf in the same manner and with the same force and effect as I might or could do to the extent necessary or incidental to the furtherance or conduct of the account, in accordance with this agreement or my separate standing instructions. This authorization shall apply only with respect to my brokerage account opened with this application. The Authorized agent(s)/Advisor(s) will place no trading orders or conduct activity in my account that exceeds its authority under this authorization or any other agreement governing the account.

B. I understand and agree that Fidelity is authorized and directed to accept the instructions of the Authorized agent(s)/Advisor(s) on my behalf. This authorization shall be applicable to all assets I hold in the specified account. Fidelity reserves the right, but is not obligated, to confirm with me any of my Authorized agent(s)/Advisor(s)' instructions, at its own discretion.

25. Authorization to Pay Fees to Advisor

By signing the account application, I authorize Fidelity to pay management fees to my Authorized agent(s)/Advisor(s), or his/her agent. I authorize Fidelity to pay Authorized agent (s)/Advisor(s) from my account. Fidelity may use money from the Core Transaction Account and/or cash in my account to the extent necessary to pay such fees. Fidelity may rely on the fee calculation submitted by Authorized agent(s)/Advisor(s) to Fidelity to deduct from my account. I understand that it is my responsibility to verify the fee and the accuracy of the fee calculation and that Fidelity will not determine whether the fee or the calculation is accurate and appropriate. I indemnify and hold Fidelity and its directors, employees and control persons harmless from all liabilities and costs, including attorneys' fees, that Fidelity may incur by relying upon the Authorized agent's(s)/Advisor's(s) representations or upon the above authorization.

Fidelity, Authorized agent(s)/Advisor (s) or I may terminate any fee deduction authorization at any time by giving written notice to the others, but such termination shall not affect any obligation or liabilities arising prior to termination. This agreement may be modified or amended only pursuant to a written agreement signed by a duly authorized representative of Fidelity.

26. Assignment

Authorized agent(s)/Advisor(s) may not assign this or any related agreement without the prior written consent of me and Fidelity. All authorizations granted to my Authorized agent(s)/Advisor(s) shall inure to the benefit of my Authorized agent's(s)/(Advisor's(s) successors, whether by merger, consolidation or otherwise, and assigns and you may transfer the Authorized agent's(s)/(Advisor's(s) authorizations to the successor and assigns.

27. Termination of Account

My account may be terminated by me or Fidelity at any time. This agreement will remain in effect until its termination is acknowledged in writing by an authorized representative of Fidelity. I will remain responsible for all charges, debit items, or other transactions initiated or authorized by me, whether arising before or after termination. I understand that Fidelity reserves the right to charge an account liquidation termination fee whether the account is terminated by Me or by Fidelity.

If my Fidelity brokerage account is terminated whether by me or you, I will promptly return all unused checks and cards to you. I understand that failure to return such checks and cards may result in a delay in complying with my instructions as to the disposition of assets in my account. Fidelity reserves the right to charge a service fee or close any account that fails to maintain minimum activity or balance requirements, and further reserves the right to close an account or remit credit balances because of insufficient investment-related activity. Fidelity may periodically review my account activity, and reserves the right to charge reasonable inactivity fees or to close or change the optional account features, fees, and services or to cease paying interest on account credit balances for any reason including, but not limited to, insufficient investment activity in accordance with the regulations of the New York Stock Exchange and Securities Investor Protection Corporation. Fidelity will notify me if any changes or charges are imposed. Termination will result in cancellation of my account and other features or privileges.

My account balance and certain uncashed checks issued from my account may be transferred to a state unclaimed property administrator if no activity occurs in the account or the check remains outstanding within the time period specified by the applicable state law.

28. Termination of Authorizations

The authorizations I have granted in this Application and Agreement is a continuing one and shall remain in full force and effect until Fidelity is notified in writing of my death, disability or incapacity or unless revoked through written notice actually received by Fidelity. Such revocation, however, shall not affect any prior liability or obligation resulting from any transaction initiated before receipt of the revocation. Furthermore, it is understood that the authorizations and indemnity is in addition to, and in no way restricts, any rights that may exist at law or under any other agreement(s) between me and Fidelity.

The authorizations and indemnity shall be construed, administered and enforced according to the laws of the Commonwealth of Massachusetts. It shall inure to the benefit of Fidelity and of any successor firm or firms (whether by merger, consolidation or otherwise) irrespective of any change(s) at any time in the personnel thereto for any cause whatsoever and to the benefit of the affiliates and the assigns of Fidelity or any successor firm. It is further understood that Fidelity reserves the right, but is not obligated, to request authorization from me prior to executing any transaction requested from my Authorized agent/Advisor, and to cease accepting instructions from my Authorized agent/Advisor at Fidelity's sole discretion and for its sole protection. I understand that if Fidelity terminates this account agreement with my Authorized agent(s)/Advisor(s), Fidelity will not be obligated to honor the authorization I have granted to my Authorized agent(s)/Advisor(s) in this Agreement, and I will have exclusive control over, and responsibility for, my account; and unless Fidelity notifies me otherwise, my account will become a Fidelity retail brokerage account.

29. 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 me, my Authorized agent/Advisor, and you, 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 me, my Authorized agent, and you, 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 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 you to make such designation on my behalf. The designation of the rules of a self-regulatory organization or securities exchange is not integral to the underlying agreement to arbitrate. I understand that judgment upon any arbitration award may be entered in any court of competent jurisdiction.

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; 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.

Margin Account Agreement

Please retain for your records.

To: Fidelity Brokerage Services LLC ("FBS") and National Financial Services LLC ("NFS," together with FBS "Fidelity" or "You")

In consideration of Fidelity accepting one or more accounts, I acknowledge that I have read, understood and agree to the terms set forth below.

BROKERAGE MARGIN ACCOUNT

I understand that I must qualify for margin privileges before I am eligible for margin trading. The settlement of securities purchases and other debit items in my account comes first from Core Transaction Account balances and second from any margin availability. Any cash or money market fund balance in my Core Transaction Account will then be automatically applied to my margin debit balance. Further, I have carefully examined my financial resources, investment objectives, and 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 my securities. Any information I give you on this account agreement will be subject to verification, and I authorize you to obtain a credit report about me at any time. Upon written request, you will provide the name and address of the credit reporting agency used.

If my account is approved for margin, all marginable assets will be held in a margin account, unless I or my Authorized agent(s)/Advisor(s) instructs you to the contrary.

LOAN OF MARGIN SECURITIES: SECURITY INTEREST

Any and all credit balances, securities, or contracts relating thereto, and all other property of whatsoever kind belonging to me or in which I may have an interest held by you or carried for my accounts, shall be subject to a general lien for the discharge of my obligations to you (including un-matured and contingent obligations) however arising and without regard to whether or not you have made advances with respect to such property and without notice to me may be carried in your general loans and all securities may be pledged, re-pledged, hypothecated or re-hypothecated, separately or in common with other securities or any other property, for the sum due to you thereon or for a greater sum and without retaining in your possession and control for delivery a like amount of similar securities or other property. Fidelity may use certain securities in my Margin Account for, among other things, settling short sales and lending the securities for short sales, and as a result may receive compensation in connection therewith. At any time and from time to time you may, at your discretion, without notice to me, apply and/or transfer any securities, contracts relating thereto, cash or any other property therein, interchangeably between any of my accounts, whether individual or joint from any of my accounts, to any 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 other 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 accounts may be transferred by you at your option to my Margin Account.

Shares of any investment company in which the account holder(s) have an interest and for which Fidelity Management & Research Company serves as investment advisor also are subject to a general lien for the discharge of my obligations to Fidelity, and Fidelity may redeem any such shares to satisfy my obligation without further notice or demand. However, no provision of this agreement concerning liens or security interests shall apply to any account to the extent such application would be in conflict with any provisions of ERISA or the Internal Revenue Code relating to retirement accounts.

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. Fidelity may allocate substitute payments in any manner permitted by law, rule, or regulation, including, but not limited to, 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.

PAYMENT UPON DEMAND

I will maintain such margins as you may in your discretion require from time to time and will pay on demand any debit balance owing with respect to any of my accounts. I will be liable to you for any deficiencies in such account in the event of the liquidation of such accounts, in whole or in part, by you or the undersigned. 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, or 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 any Stock 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 securities or contracts relating thereto that may be in your possession, or that you may be carrying for me, or buy any securities, or contracts relating thereto of which my account or

you may place short, in order to close out in whole or in part any commitment on my behalf, or you may place stop orders with respect to such securities and such sale or purchase may be made at your discretion on any Stock Exchange or other market, including before or after hours 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 that 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. I understand that my financial exposure could exceed the value of securities in my account.

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 Fidelity for all reasonable costs and expenses incurred in the collection of any debit balance or unpaid deficiency in any of my accounts, including, but not limited to, attorneys' fees.

By signing this Agreement, I hereby grant to Fidelity 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 Fidelity 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, to the extent any of the foregoing may now or hereafter be (i) held, carried and/or maintained by Fidelity and/or any of its affiliates, (ii) held, carried or maintained by Fidelity and/or any of its affiliates through any correspondent broker/dealer for NFS ("broker/dealer"), (iii) in the possession or control of Fidelity 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 un-matured and contingent obligations) now or hereafter owed by me to Fidelity, any of Fidelity'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 is continuing, Fidelity 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 Obligations remain unpaid after payment is requested of me, Fidelity shall have the right to sell, liquidate, transfer or assign such Property to satisfy any such Obligation whether or not Fidelity has made advances with respect to such Property. No further demand or notice shall be required prior to taking such an action. Fidelity shall have the discretion to determine which Property is to be sold, liquidated, transferred, or assigned. Neither Fidelity 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 of any of them, or resort to such collateral security or other assurances of payment in any particular order. I agree to cooperate with Fidelity and its affiliates and to execute such further instruments and documents as Fidelity or its affiliates shall reasonably request to carry out to their satisfaction the transactions contemplated by this Agreement.

SETTLEMENT OF TRANSACTIONS

In the absence of a specific demand, all transactions in any of my 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 Fidelity one day before the settlement date. Fidelity reserves the right to cancel or liquidate, at my risk, any transaction not timely settled. Margin calls are due on or before 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.

RECEIPT OF COMMUNICATIONS

Communications by mail, electronic means, messenger, telegraph or otherwise, sent to me at the U.S. postal mail address listed on the account application, or any other address I may give Fidelity, are presumed to be delivered to and received by me whether actually received or not. I understand that I should promptly and carefully review the transaction confirmations and monthly statements and notify you of any errors. Information contained on transaction confirmations and account statements is conclusive unless I object in writing within five and ten days, respectively, after being transmitted to me or my Authorized agent(s)/Advisor(s).

RATE OF INTEREST

I agree to be charged interest on any credit extended to, or maintained for, me by you for the purpose of purchasing, carrying, or trading in any security. The annual rate of interest that will

be charged on U.S. Dollar debit balances will be calculated by means of a formula based on the Fidelity Advisor Base Lending Rate ("FABLR"). This rate shall be made available to me through my Authorized agent(s)/(Advisor(s)). The rate of interest is subject to change without prior notice in accordance with changes in the FABLR. With the exception of credit balances in the type 3- short account and type 9- income accounts, all other balances in all of my accounts opened through my Authorized agent(s)/(Advisor(s)) are combined to determine the daily balance, and interest is charged to the Margin Account based on the average of any resulting daily debit balance. Interest is computed monthly on the average debit balances during the month. If during the month there is a change in interest rates, 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. The combining of balances, as well as the actual interest calculations, are done by computer, but the interest 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.

I agree that in giving orders to sell, all "short" sale orders will be designated as "short" and all "long" sale orders shall 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.

MAINTENANCE OF MARGIN REQUIREMENTS

In the event there is a decline in the market value of the securities in the margin account, Fidelity may have to request additional collateral. Fidelity retains the right to require additional margin at any time you deem it necessary or advisable. Any such call for additional collateral may be met by delivery of additional marginable securities or cash. Any securities in any of the accounts of the undersigned are collateral for any debit balances in the account with you. A lien is created by these debits to secure the amount of money owed you. This means that, in accordance with the terms of this agreement, securities in the said accounts can be sold by you to redeem or to liquidate any debit balances in these accounts. Fidelity reserves the right to increase maintenance requirements and to request additional collateral at any time at Fidelity's discretion. I understand that you may borrow securities in the amount and class for which I may be carrying a short position and that you may be forced to liquidate all or part of my short position if the lender recalls the borrowed securities, which liquidation may result in a loss to me. 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.

DISCLOSURE OF CREDIT TERMS ON MARGIN TRANSACTIONS

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 disclosure is provided to you, the customer, in conformity with that rule.

Interest on debit balances held in U.S. Dollars or International currency will be charged on all accounts for any credit extended to or maintained for customers by the firm for the purpose of purchasing, carrying or trading in securities or otherwise.

The annual rate of interest you will be charged may vary, depending upon the amount of your average debit balance and the applicable Fidelity Advisor Base Lending Rate, which is set at the discretion of Fidelity with references to commercially recognized interest rates, industry conditions regarding the extension of margin credit, and general credit conditions.

Current rates are as follows:

The annual rate of interest you will be charged on United States Dollar (USD) credit may vary from a minimum of 0.2% to a maximum of 2% above the Fidelity Advisor Base Lending Rate ("FABLR"), depending upon the amount of your average debit balance.

Daily Debit Balance	Interest to be Charged Above FABLR-USD
\$0 -- \$9,999	2.00%
\$10,000 -- \$24,999	1.50%
\$25,000 -- \$49,000	1.00%
\$50,000 -- \$249,999	0.75%
\$250,000 -- \$999,999	0.50%
\$1,000,000 -- \$4,999,999	0.25%
\$5,000,000 and over	0.20%

If your debit balance is in Australian Dollars, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Australian Dollars ("FABLR-AUD").

Daily Debit Balance	Interest to be Charged Above FABLR-AUD
\$0 -- \$124,999	2.0%
\$125,000 -- \$599,999	1.5%
\$600,000 -- \$1,499,999	0.5%
\$1,500,000 and over	0.0%

If your debit balance is in British Pounds, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for British Pounds ("FABLR-GBP").

Daily Debit Balance	Interest to be Charged Above FABLR-GBP
£0 -- £69,999	2.0%
£70,000 -- £349,999	1.5%
£350,000 -- £699,999	0.5%
£700,000 and over	0.0%

If your debit balance is in Canadian Dollars, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Canadian Dollars ("FABLR-CAD").

Daily Debit Balance	Interest to be Charged Above FABLR-CAD
\$0 -- \$99,999	2.0%
\$100,000 -- \$499,999	1.5%
\$500,000 -- \$999,999	0.5%
\$1,000,000 and over	0.0%

If your debit balance is in Danish Kroner, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Danish Kroner ("FABLR-DKK").

Daily Debit Balance	Interest to be Charged Above FABLR-DKK
0 kr -- 649,999 kr	2.0%
650,000 kr -- 2,999,999 kr	1.5%
3,000,000 kr -- 5,999,999 kr	0.5%
6,000,000 kr and over	0.0%

If your debit balance is in Euros, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Euros ("FABLR-EUR").

Daily Debit Balance	Interest to be Charged Above FABLR-EUR
€0 -- €99,999	2.0%
€100,000 -- €499,999	1.5%
€500,000 -- €999,999	0.5%
€1,000,000 and over	0.0%

If your debit balance is in Hong Kong Dollars, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Hong Kong Dollars ("FABLR-HKD").

Daily Debit Balance	Interest to be Charged Above FABLR-HKD
\$0 -- \$799,999	2.0%
\$800,000 -- \$3,999,999	1.5%
\$4,000,000 -- \$7,999,999	0.5%
\$8,000,000 and over	0.0%

If your debit balance is in Japanese Yen, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Japanese Yen ("FABLR-JPY").

Daily Debit Balance	Interest to be Charged Above FABLR-JPY
¥0 -- ¥9,999,999	2.0%
¥10,000,000 -- ¥49,999,999	1.5%
¥50,000,000 -- ¥99,999,999	0.5%
¥100,000,000 and over	0.0%

If your debit balance is in Mexican Pesos, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Mexican Pesos ("FABLR-MXN").

Daily Debit Balance	Interest to be Charged Above FABLR-MXN
\$0 -- \$1,499,999	2.0%
\$1,500,000 -- \$6,499,999	1.5%
\$6,500,000 -- \$12,999,999	0.5%
\$13,000,000 and over	0.0%

If your debit balance is in New Zealand Dollars, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for New Zealand Dollars ("FABLR-NZD").

Daily Debit Balance	Interest to be Charged Above FABLR-NZD
\$0 -- \$149,999	2.0%
\$150,000 -- \$799,999	1.5%
\$800,000 -- \$1,499,999	0.5%
\$1,500,000 and over	0.0%

If your debit balance is in Norwegian Kroner, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Norwegian Kroner ("FABLR-NOK").

Daily Debit Balance	Interest to be Charged Above FABLR-NOK
0 kr -- 699,999 kr	2.0%
700,000 kr -- 3,499,999 kr	1.5%
3,500,000 kr -- 6,499,999 kr	0.5%
6,500,000 kr and over	0.0%

If your debit balance is Polish Zlotys, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Polish Zlotys ("FABLR-PLN").

Daily Debit Balance	Interest to be Charged Above FABLR-PLN
0 zł -- 349,999 zł	2.0%
350,000 zł -- 1,699,999 zł	1.5%
1,700,000 zł -- 3,499,999 zł	0.5%
3,500,000 zł and over	0.0%

If your debit balance is Singapore Dollars, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Singapore Dollars ("FABLR-SGD").

Daily Debit Balance	Interest to be Charged Above FABLR-SGD
\$0 -- \$149,999	2.0%
\$150,000 -- \$6,999,999	1.5%
\$700,000 -- \$1,499,999	0.5%
\$1,500,000 and over	0.0%

If your debit balance is South African Rand, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for South African Rand ("FABLR-ZAR").

Daily Debit Balance	Interest to be Charged Above FABLR-ZAR
R 0 -- R 749,999	2.0%
R 750,000 -- R 3,999,999	1.5%
R 4,000,000 -- R 7,999,999	0.5%
R 8,000,000 and over	0.0%

If your debit balance is Swedish Kronor, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Swedish Kroner ("FABLR-SEK").

Daily Debit Balance	Interest to be Charged Above FABLR-SEK
0 kr -- 799,999 kr	2.0%
800,000 kr -- 3,999,999 kr	1.5%
4,000,000 kr -- 7,999,999 kr	0.5%
8,000,000 kr and over	0.0%

If your debit balance is in Swiss Francs, then the annual rate of interest you will be charged may vary from a minimum of 0% to a maximum of 2% above the FABLR for Swiss Francs ("FABLR-CHF").

Daily Debit Balance	Interest to be Charged Above FABLR-CHF
0 Fr. -- 99,999 Fr.	2.0%
100,000 Fr. -- 499,999 Fr.	1.5%
500,000 Fr. -- 999,999 Fr.	0.5%
1,000,000 Fr. and over	0.0%

If your debit balance is in a foreign currency not specified in this disclosure, then the annual rate of interest you will be charged will be 4% above the FABLR-EUR.

Daily Debit Balance	Interest to be Charged Above FABLR-EUR
\$0 -- and over	4.0%

In determining the daily debit balance for USD credit and the resulting rate of interest, Fidelity will combine the margin account balances in all accounts, except type 3- short accounts and type 9- income accounts. To determine the daily debit balance and the resulting rate of interest of international currency interest we will combine the margin account balances in all accounts of the same currency, 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.

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

My monthly statement will show the dollar amount of interest and the interest rate charged to my account. There will be no interest charge reflected on my statement if my monthly charge for U.S. Dollar Interest is less than \$1.00. An interest cycle will cover the period beginning with the first business day following the 20th of each month. If the last day of a margin period falls on a US holiday, then the prior day's interest rate will be used for calculations on that day.

All securities or other property held by Fidelity in any of my accounts are collateral for any debit balances. A lien is created by those debits to secure the amount of money owed to you. This means securities in any of my accounts can be sold to reduce or liquidate entirely any debit balances in my accounts, as authorized in the Margin Account Agreement. If there is a decline in the market value of the securities that are collateral for my debits, it may be necessary for you 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 your margin maintenance requirements, which may change from time to time without notice. You retain the right to require additional margin any time you deem it desirable. Margin calls can be met by delivery of cash or additional securities.

Other Charges

Separate interest charges at an annual rate of 2% above FABLR may be made in the type 1-cash account in connection with:

- Prepayments (by approval only) - payments to a customer of the proceeds of a security sale before the regular settlement date.
- "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.
- Late payments - payments for securities purchased that are received past settlement date.

Interest Computation

USD 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 my Type 3-Short and Type 9-Income Accounts.

Example for USD: FABLR of 8% - Applicable Interest Rate 10%.

Date	Daily Debit Balance
June 17	\$ 0
June 18	\$5,000
June 19	\$10,500
June 20	<u>\$ 8,000</u>
Total of 3 days	\$23,500

\$23,500 divided by 3 equals \$7,833 (daily average balance), times 10% (applicable rate) divided by 360 equals \$2.18 (daily interest charge) times 3 (the number of days the account had a net debit balance during the interest period) equals an interest charge of \$6.53.

International Interest Computation. Interest on debits balances in foreign currencies is computed daily on the actual debit balance for that day. Depending on the index rate applicable to each currency in the account, rates may change on a daily basis. Calculated by computer, the interest on combined balances from all cash and margin accounts is arrived at by multiplying the daily debit of International balances by the applicable rate of interest, dividing by 360 and summing for each day.

Example for International Margin Interest Computation:

Date	CAD Daily Debit Balance	FABLR-CAD	Applicable Interest Rate	Interest to be Charged
June 17	\$0	5.3%	0.0%	\$ 0.00
June 18	\$90,000	5.2%	7.2%	\$18.00
June 19	\$120,000	5.2%	6.7%	\$22.33
June 20	<u>\$85,000</u>	5.1%	7.1%	<u>\$16.76</u>
Total for billing cycle				\$57.10

Total interested owed would be \$57.10 CAD.

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 used to offset your type 2- margin account balance for interest computation.

Margin Disclosure Statement

IMPORTANT INFORMATION ABOUT USING MARGIN

Fidelity is furnishing this document to you to provide some basic information about purchasing securities in a margin account 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 your investment advisor 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 part of the purchase price from your brokerage firm. If you choose to borrow funds from your firm, you will open a margin account with Fidelity. The securities in your accounts are Fidelity'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, Fidelity can take action, such as issue a margin call and/or sell securities or other assets in any of your accounts held with Fidelity, or with certain of Fidelity's affiliates, in order to maintain the required equity in the account.

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 Fidelity to avoid the forced sale of any securities or assets in your account(s).
- **Fidelity 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 Fidelity's higher "house" requirements, Fidelity can sell the securities or other assets in any of your accounts held at Fidelity, or with certain of Fidelity's affiliates, to cover the margin deficiency. You also will be responsible for any short fall in the account after such a sale, possibly including Fidelity's costs related to collecting the short fall. If you are a director, officer or 10% shareholder of an issuer whose securities Fidelity 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).
- **Fidelity 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 the firm cannot liquidate securities or other assets in their accounts to meet the call unless the firm 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 a firm has contacted a customer and provided a specific date by which the customer can meet a margin call, the firm 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) are collateral for the margin loan, Fidelity has the right to decide which assets to sell in order to protect its interests.
- **Fidelity 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 Fidelity 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.** Fidelity 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 Fidelity's costs in collecting the shortfall.
- **Fidelity can loan securities held in your margin account which collateralize your margin borrowing.** In connection with the extension or maintenance of margin credit, Fidelity 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. Fidelity 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. 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, check writing and similar features with your margin account may increase the risk of a margin call.**

Payment for Order Flow

NFS/FBS 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 from 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.

NFS/FBS may receive remuneration, compensation or other consideration for directing customer orders for equity securities to particular Broker/Dealers or market centers for execution. Such consideration may take the form of financial credits, monetary payments or reciprocal business.

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

I understand that you may deliver margin calls and other notices to my Authorized agent(s)/Advisor(s) for the sole purpose of collection of my obligations under this Agreement. I agree to the foregoing and further understand that my Authorized agent(s)/Advisor(s) and/or FBS may act on behalf of NFS with respect to margin calls in its discretion.

GOVERNING LAW

THIS AGREEMENT AND ITS ENFORCEMENT SHALL BE GOVERNED BY THE LAWS OF THE COMMONWEALTH OF MASSACHUSETTS; SHALL COVER INDIVIDUALLY AND COLLECTIVELY ALL FIDELITY BROKERAGE ACCOUNTS WHERE APPROPRIATE THAT THE UNDERSIGNED MAY OPEN OR REOPEN WITH FIDELITY; SHALL INURE TO THE BENEFIT OF FIDELITY'S SUCCESSORS AND ASSIGNS, WHETHER BY MERGER, CONSOLIDATION OR OTHERWISE, AND FIDELITY MAY TRANSFER THE ACCOUNT OF THE UNDERSIGNED TO YOUR SUCCESSORS AND ASSIGNS, AND THIS AGREEMENT SHALL BE BINDING UPON THE HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS AND THE ASSIGNS OF THE UNDERSIGNED.

Pre-Dispute Arbitration Agreement

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.

All controversies that may arise between me, my Authorized agent/Advisor, and you, 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 me, my Authorized agent, and you, 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 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 you to make such designation on my behalf. The designation of the rules of a self-regulatory organization or securities exchange is not integral to the underlying agreement to arbitrate. I understand that judgment upon any arbitration award may be entered in any court of competent jurisdiction.

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; 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.



Trade-Away Securities Transactions Supplement

To: Account Owner(s) ("I")

From: Fidelity Brokerage Services LLC and National Financial Services, LLC (collectively, "Fidelity")

Pursuant to the terms of my Client Agreement I have authorized Fidelity to accept any trading, servicing or account related instruction from my Authorized Agent(s)/Advisor(s), including authorizing my Authorized agent(s)/Advisor(s) to execute securities transaction directly with broker dealers that are not affiliated with Fidelity, including both domestic and foreign executing brokers ("Executing Brokers"). My Authorized agent (s)/Advisor(s) have indicated to Fidelity my Authorized agent(s)/Advisor(s) may engage in executing securities transactions with Executing Brokers. This notice is a supplement to my Brokerage Account Client Agreement and provides the details of the terms and conditions for Fidelity's role in securities transactions my authorized agent(s)/Advisor(s) execute with Executing Brokers. Defined terms have the same meaning as in my Client Agreement. I have read this information carefully and have contacted my Authorized agent(s)/Advisor(s) with any questions.

The terms of my Client Agreement authorize and direct Fidelity to accept any trading, servicing, account-related, or other instruction of my Authorized agent (s)/Advisor(s) on my behalf. This includes the execution of trade away securities transactions ("Trade Away Transactions") directly through Executing Brokers. If my Authorized agent(s)/Advisor(s) execute Trade Away Transactions directly through Executing Brokers, I understand that I and my Authorized agent(s)/Advisor(s) are solely responsible for the selection of any Executing Brokers. Fidelity will have no obligation to select, monitor or supervise the Executing Brokers.

The Executing Broker will be entirely responsible for the execution and clearance of Trade Away Transactions executed on my behalf. Fidelity, as custodian of my account, will act solely as settlement agent and will have no other responsibility whatsoever with regard to any Trade Away Transactions. Fidelity's duties in this regard will be further conditioned on Fidelity having custody of or receiving the subject securities or other property (including cash) in good deliverable form before settlement. I understand that Fidelity has the right to cancel any Trade Away Transaction if Fidelity does not receive subject securities or other property, including cash to settle the Trade Away Transaction by settlement date.

To facilitate settlement on my behalf, Fidelity may book Trade Away Transactions through its systems in a manner that makes them appear as though they are "buys" and "sells," and may reflect this activity as a "trade" on standardized communications, including but not limited to periodic account statements and trade confirmations. I understand that, notwithstanding the presentation of this information on communications I receive from you, Fidelity is acting solely as settlement agent connection—Trade Away Transactions.

I understand that I may be subject to additional trade-away fees for Trade Away Transactions executed by Executed Brokers and my Authorized agent(s)/Advisor(s) have informed me of the trade-away fees that may apply to my account and I agree to be bound thereby.

I understand that securities positions that are not in the possession or control of Fidelity are not covered by the SIPC protection or any additional insurance secured by Fidelity that covers positions held in my Fidelity brokerage account.

I understand that Fidelity may limit or restrict the number or volume of Trade Away Transactions in my account. I also understand that I may be required to maintain minimum net equity levels in my Fidelity brokerage account. I understand that any such limitations or requirements will be communicated to me on an initial and ongoing basis through my Authorized agent/Advisor.

I acknowledge that direct investments in foreign markets involve various investment risks, including foreign exchange risk (the possibility that foreign currency will fluctuate in value against the U.S. dollar), increased volatility as compared to the U.S. markets, political, economic and social events that may influence foreign markets or affect the prices of foreign securities, lack of liquidity (foreign markets may have lower trading volumes and fewer listed companies, shorter trading hours and restrictions on the types of securities that foreign investors may buy and sell) and less access to information about foreign companies. Emerging markets, in particular, can be subject to greater social, economic, regulatory, and political uncertainties and can be extremely volatile. Foreign securities trading also may be subject to various credit, settlement, operational, financial and legal risks that may affect the ability of my Authorized agent(s)/Advisor(s) to engage in foreign securities transactions on my behalf and may make it more costly to access foreign markets. These risks include:

- Physical Markets. Certain markets may have less regulated or less liquid securities markets. In addition, some countries still rely on physical markets that require delivery of properly endorsed share certificates to effect trades. As a result, the settlement process can be lengthy (and erratic in some markets) and carry an increased risk of fails.
- Misidentification of Securities. Foreign companies may have multiple classes of securities, including "foreign" and "local" shares. Inadequate understanding of a foreign company's capital structure or imprecision in placing orders with Foreign Executing Brokers can result in my Authorized agent(s)/Advisor(s) purchasing the wrong securities.
- Non-DVP Transactions. Local trading and settlement customs frequently require non-DVP ("delivery versus payment") transactions. Unlike DVP transactions, which involve a simultaneous exchange of securities and payment, non-DVP transactions can increase counterparty risk because the purchaser pays before securities are delivered or the seller delivers securities before payment is made.
- Trading Days and Hours. Differences in trading days and hours can also create operational issues and complicate clearance and settlement.
- Cross-Border Settlement. Cross-border settlement involves the interaction of different settlement systems and differing (and potentially inconsistent) laws in each of the affected countries.
- Trading Restrictions and Market Operations. Foreign markets often operate differently from U.S. markets. For example, there may different periods for clearance and settlement of securities transactions and investments in foreign securities may be subject to local market trading restrictions.
- Limited Recourse under Local Law. A U.S. investor may not be able to sue a foreign issuer or a Foreign Executing Broker or to enforce a judgment in U.S. courts. The only available remedy may be the legal remedies that are available under foreign law, and those remedies may be limited.

I agree to indemnify and hold harmless Fidelity, its affiliates and their respective officers, directors, employees and agents from and against any and all losses, claims or financial obligations ("Losses") that may arise from any act or omission of my Authorized agent(s)/Advisor(s) with respect to my account, including Losses arising out of or relating to Trade Away Transactions that my Authorized agent(s)/Advisor(s) may execute directly with Executing Brokers.

Business Continuity Statement for Customers

At Fidelity Brokerage Services LLC ('FBS') and National Financial Services LLC ('NFS') we recognize how heavily our clients rely on our systems and services. We also recognize that the unexpected can and does occur from simple situations to major outages. FBS and NFS have successfully supported critical business activities during disruptions of normal business processes resulting from hurricanes, tornados, blizzards, and other natural and man-made disasters. FBS and NFS have pre-established contingency and disaster recovery plans. Components of these plans are tested periodically to ensure effectiveness. FBS and NFS consider contingency planning to be an iterative process, requiring ongoing review, to assess various risks and appropriate responses.

Continuity Planning Guidelines

FBS and NFS plans include the ability to recover from situations, including, but not limited to, unplanned evacuations, power outages, major water leaks, fire, loss of water, severe weather, and any facilities failures that may cause business interruption. Plans are designed to account for business interruptions of various lengths and scope, and require that Fidelity business units are able to recover critical functions according to their time criticality. Key features of FBS's and NFS's corporate disaster recovery planning include annual reviews of the following:

- Identification of all mission-critical systems, and system backup and recovery for such systems.
- A review of financial and operational risks
- Alternate communications between FBS and NFS and our clients
- Employee safety strategies and communications
- Systems and telecommunications accessibility
- Alternate physical site location and preparedness

A corporate business continuity division articulates planning guidelines and coordinates response and event management across FBS and NFS. FBS and NFS also have dedicated business contingency planners to prepare and test its specific plans. FBS and NFS follow enterprise-wide guidelines for contingency planning and disaster recovery from various scenarios.

Contingency Planning and Business Recovery

FBS and NFS mitigate risks to reduce potential issues and impact. In the event of an outage, FBS and NFS have tested plans to support recovery of its critical business functions. In addition to following the guidelines stated above, FBS's and NFS's recovery plans also include the following:

- **Contingencies for Inclement Weather.** If there is a forecasted weather emergency, hotel rooms are obtained for essential personnel. If the weather emergency could result in an inability to access the primary site, the alternate site would be prepared for use, and personnel would be sent there prior to the event. A number of personnel have remote access so they can work from home. Employees can access phone mail and e-mail messages remotely.

- **Designated Contingency Site.** There are pre-established, tested processes for rerouting of critical hotline numbers in the event of a site outage. Clients should experience minimal downtime in their ability to contact FBS and NFS.
- **Notification to Clients.** Procedures for notifying your advisor have been established for FBS and NFS employees to follow in the event of an outage. Notification will include information regarding length of outage, instructions for your advisor to contact Fidelity, and support information (e.g., where to send faxes, issues pertaining to data transmissions and communications).
- **Access to Your Funds.** A site outage should not impact your ability to have access to your available funds, as FBS's and NFS's business contingency plans are designed to ensure sustained service. However, your ability to trade securities may be impacted by market events outside of FBS's and NFS's control, such as when the market was closed following the September 11 tragedy. Our tested business continuity plans result in necessary personnel being available to approve transactions that result in the disbursement of available funds. In the event that your advisor ceases operations due to a significant business interruption, you may call 1-800-343-3548 for emergency assistance.

Please note that FBS's and NFS's business continuity plans are reviewed as necessary, and at least annually, to ensure they account for technology, business and regulatory changes, operations, structure or location. The plans are subject to change. You may obtain a current written copy of this notice by contacting NFS directly.

Pandemic Planning

FBS's and NFS's Pandemic Strategy is designed to address preparedness and response to a pandemic, with the intent of (1) stopping, slowing or otherwise limiting the spread of a pandemic to Fidelity sites and its personnel; (2) sustaining infrastructure and (3) mitigating impact to FBS's and NFS's critical business functions and our clients. FBS and NFS continue to monitor and review the potential for a pandemic outbreak and the impacts that may result on the enterprise, including the design and testing of all possible workarounds and strategies.

The pillars of our strategy are:

- **Preparedness and Communication.** Activities that have been undertaken before a pandemic to ensure preparedness, and the communication of roles and responsibilities to all levels of the firm, management and individuals.
- **Surveillance and Detection.** Domestic and international monitoring that provides continuous situational awareness to ensure the earliest warning possible to protect the firm as a whole.
- **Roles, Responsibilities and Response.** Actions to limit the spread of the outbreak and to mitigate the health, social and economic impacts of a pandemic.